

RRDtool Wizard

- › Data Sources (DS) <#ds>
- › Archives (RRA) <#rra>
- › RRD create command <#cmd>
- › RRD graph wizard <#graph>

Next step

Please scroll down and fill in the forms. The end result is at the bottom of the page.

Step

Time interval in *seconds* with which data will be fed by an update script (**step**):

5min



300

Start time:

now



Data sources count:

5

Archives count:

10

Data Sources (DS)

<>

Name

Format: [a-zA-Z0-9_]{1,19}

Types

GAUGE: This is simple values, **not** rate per second. All others are **rate** per second types!

COUNTER: Continuous incrementing counters, **never** decreasing unless on overflow. Rate/second.

DERIVE: Counters which may decrease too. You cannot catch overflows. Could be used to measure the change rate of a GAUGE. Rate/second.

ABSOLUTE: Counters which get reset upon reading (ie. start from zero after the reading because you reset them). This is used for fast counters which tend to overflow. Rate/second.

COMPUTE: Storing the result of a formula applied to other data sources. This is not covered by this wizard.

Heartbeat

Maximum number of *seconds* that may pass between two updates of this data source before the value of the data source is assumed to be UNKNOWN.

A typical value is "2.0 x step".

Min/Max

Limit the *processed* value. You may leave this empty if you don't know the limits.

For GAUGE - the min/max **value**.

For the other types - the min/max **rate/second**.

Enter your values

| Name | Type | Heartbeat | Min | Max |
|-------------|---------|--------------------------|-----|------|
| PM25 | GAUGE ▼ | 1.0 step = 5min ▼ 300 | 0 | 2000 |
| PM10 | GAUGE ▼ | 1.0 step = 5min ▼ 300 | 0 | 2000 |
| Temperature | GAUGE ▼ | 1.0 step = 5min ▼ 300 | -30 | 60 |

| | | | | |
|----------|---------|--------------------------|-----|------|
| Humidity | GAUGE ▼ | 1.0 step = 5min ▼ 300 | 0 | 100 |
| hPa | GAUGE ▼ | 1.0 step = 5min ▼ 300 | 300 | 1100 |

Archives (RRA)

<>

Consolidation functions (CF):

AVERAGE: Average value for the *step* (Time interval with which data will be fed by an update script) period.

MIN: Min value for the *step* (Time interval with which data will be fed by an update script) period.

MAX: Max value for the *step* (Time interval with which data will be fed by an update script) period.

LAST: Last value for the *step* (Time interval with which data will be fed by an update script) period which got inserted by the update script.

xff

What percentage of UNKOWN data is allowed so that the consolidated value is still regarded as known: 0% - 99%. Typical is 50%.

Steps

How many *step* (Time interval with which data will be fed by an update script) values will be used to build a **single** archive entry. This defines the granularity of your archive, ie. its zoom level.

If you define a small number here, you will be able to see the details for every *step* (Time interval with which data will be fed by an update script).

If you define a large number here, you will have some aggregated info for the last year, for example, but with less details and much more "zoom out" in regards to **time** on the X-axis while visualising this.

Rows

How many rows will be kept back in the database. This determines how much disk space your RRD database will use and for how much time back you will have data.

Enter your values

| CF | xff | Steps (>=1) | Rows (>=1) | Calculated value (submit to refresh) |
|-----------|-------|-----------------------------|------------|--|
| AVERAGE ▾ | 50% ▾ | --- ▾ 12 | 87840 | Archive point is saved every 1hour , archive is kept for 10year 0month 10day back. |
| AVERAGE ▾ | 50% ▾ | 288.0 steps = 1day ▾ 288 | 3660 | Archive point is saved every 1day , archive is kept for 10year 0month 10day back. |
| MIN ▾ | 50% ▾ | --- ▾ 12 | 87840 | Archive point is saved every 1hour , archive is kept for 10year 0month 10day back. |
| MIN ▾ | 50% ▾ | 288.0 steps = 1day ▾ 288 | 3660 | Archive point is saved every 1day , archive is kept for 10year 0month 10day back. |
| MAX ▾ | 50% ▾ | --- ▾ 12 | 87840 | Archive point is saved every 1hour , archive is kept for 10year 0month 10day back. |
| MAX ▾ | 50% ▾ | 288.0 steps = 1day ▾ 288 | 3660 | Archive point is saved every 1day , archive is kept for 10year 0month 10day back. |
| AVERAGE ▾ | 50% ▾ | --- ▾ 0 | 1 | Archive point is saved every ---, archive is kept for --- back. |

| | | | | |
|-----------|-------|------------|---|---|
| AVERAGE ▾ | 50% ▾ | --- ▾ 0 | 1 | Archive point is saved every ---, archive is kept for --- back. |
| AVERAGE ▾ | 50% ▾ | --- ▾ 0 | 1 | Archive point is saved every ---, archive is kept for --- back. |
| AVERAGE ▾ | 50% ▾ | --- ▾ 0 | 1 | Archive point is saved every ---, archive is kept for --- back. |

RRD create command

<>

```
rrdtool create filename.rrd \
--step '300' \
'DS:PM25:GAUGE:300:0:2000' \
'DS:PM10:GAUGE:300:0:2000' \
'DS:Temperature:GAUGE:300:-30:60' \
'DS:Humidity:GAUGE:300:0:100' \
'DS:hPa:GAUGE:300:300:1100' \
'RRA:AVERAGE:0.5:12:87840' \
'RRA:AVERAGE:0.5:288:3660' \
'RRA:MIN:0.5:12:87840' \
'RRA:MIN:0.5:288:3660' \
'RRA:MAX:0.5:12:87840' \
'RRA:MAX:0.5:288:3660'
```

RRD graph wizard



Start graph wizard

If you have any comments, feel free to contact me.
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