

## NAME

`rrdexport` – Export data in XML format based on data from one or several RRD

## SYNOPSIS

```
rrdtool xport [-s|--start seconds] [-e|--end seconds] [-m|--maxrows rows] [--step value] [--json]
[--enums] [--daemon|-d address] [DEF:vname=rrd:ds-name:CF] [CDEF:vname=rpn-expression]
[XPORT:vname[:legend]]
```

## DESCRIPTION

The **xport** function's main purpose is to write an XML formatted representation of the data stored in one or several **RRDs**. It can also extract numerical reports.

If no *XPORT* statements are found, there will be no output.

**-s|--start *seconds*** (default end-1day)

The time when the exported range should begin. Time in seconds since epoch (1970-01-01) is required. Negative numbers are relative to the current time. By default one day worth of data will be printed. See also AT-STYLE TIME SPECIFICATION section in the *rrdfetch* documentation for a detailed explanation on how to specify time.

**-e|--end *seconds*** (default now)

The time when the exported range should end. Time in seconds since epoch. See also AT-STYLE TIME SPECIFICATION section in the *rrdfetch* documentation for a detailed explanation of ways to specify time.

**-m|--maxrows *rows*** (default 400 rows)

This works like the **-w|--width** parameter of *rrdgraph*. In fact it is exactly the same, but the parameter was renamed to describe its purpose in this module. See *rrdgraph* documentation for details.

**--step *value*** (default automatic)

See *rrdgraph* documentation.

**--daemon|-d *address***

Address of the rrdcached daemon. If specified, a flush command is sent to the server before reading the RRD files. This allows **rrdtool** to return fresh data even if the daemon is configured to cache values for a long time. For a list of accepted formats, see the **-l** option in the rrdcached manual.

```
rrdtool xport --daemon unix:/var/run/rrdcached.sock ...
```

**--json**

produce json formatted output (instead of xml)

**--enums**

The generated xml should contain the data values in enumerated tags.

```
<v0>val</v0><v1>val</v1>
```

**DEF:vname=rrd:ds-name:CF**

See *rrdgraph* documentation.

**CDEF:vname=rpn-expression**

See *rrdgraph* documentation.

**XPORT:vname[:*legend*]**

At least one *XPORT* statement should be present. The values referenced by *vname* are printed. Optionally add a legend.

## Output format

The output is enclosed in an **xport** element and contains two blocks. The first block is enclosed by a **meta** element and contains some meta data. The second block is enclosed by a **data** element and contains the data rows.

Let's assume that the *xport* command looks like this:

```
rrdtool xport \
    --start now-1h --end now \
    DEF:xx=host-inout.lo.rrd:output:AVERAGE \
    DEF:yy=host-inout.lo.rrd:input:AVERAGE \
    CDEF:aa=xx,yy,+,8,* \
    XPORT:xx:"out bytes" \
    XPORT:aa:"in and out bits"
```

The resulting meta data section is (the values will depend on the RRD characteristics):

```
<meta>
  <start>1020611700</start>
  <step>300</step>
  <end>1020615600</end>
  <rows>14</rows>
  <columns>2</columns>
  <legend>
    <entry>out bytes</entry>
    <entry>in and out bits</entry>
  </legend>
</meta>
```

The resulting data section is:

```
<data>
  <row><t>1020611700</t><v>3.4000000000e+00</v><v>5.4400000000e+01</v></row>
  <row><t>1020612000</t><v>3.4000000000e+00</v><v>5.4400000000e+01</v></row>
  <row><t>1020612300</t><v>3.4000000000e+00</v><v>5.4400000000e+01</v></row>
  <row><t>1020612600</t><v>3.4113333333e+00</v><v>5.4581333333e+01</v></row>
  <row><t>1020612900</t><v>3.4000000000e+00</v><v>5.4400000000e+01</v></row>
  <row><t>1020613200</t><v>3.4000000000e+00</v><v>5.4400000000e+01</v></row>
  <row><t>1020613500</t><v>3.4000000000e+00</v><v>5.4400000000e+01</v></row>
  <row><t>1020613800</t><v>3.4000000000e+00</v><v>5.4400000000e+01</v></row>
  <row><t>1020614100</t><v>3.4000000000e+00</v><v>5.4400000000e+01</v></row>
  <row><t>1020614400</t><v>3.4000000000e+00</v><v>5.4400000000e+01</v></row>
  <row><t>1020614700</t><v>3.7333333333e+00</v><v>5.9733333333e+01</v></row>
  <row><t>1020615000</t><v>3.4000000000e+00</v><v>5.4400000000e+01</v></row>
  <row><t>1020615300</t><v>3.4000000000e+00</v><v>5.4400000000e+01</v></row>
  <row><t>1020615600</t><v>NaN</v><v>NaN</v></row>
</data>
```

### EXAMPLE 1

```
rrdtool xport \
    DEF:out=if1-inouts.rrd:outoctets:AVERAGE \
    XPORT:out:"out bytes"
```

### EXAMPLE 2

```
rrdtool xport \
    DEF:out1=if1-inouts.rrd:outoctets:AVERAGE \
    DEF:out2=if2-inouts.rrd:outoctets:AVERAGE \
    CDEF:sum=out1,out2,+ \
    XPORT:out1:"if1 out bytes" \
    XPORT:out2:"if2 out bytes" \
    XPORT:sum:"output sum"
```

### ENVIRONMENT VARIABLES

The following environment variables may be used to change the behavior of `rrdtool xport`:

**RRDCACHED\_ADDRESS**

If this environment variable is set it will have the same effect as specifying the `--daemon` option on the command line. If both are present, the command line argument takes precedence.

**AUTHOR**

Tobias Oetiker <tobi@oetiker.ch>