

# Yamcs Command-Line Interface

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# Contents

<b>1</b>	<b>yamcs</b> . . . . .	<b>2</b>
1.1	Synopsis . . . . .	2
1.2	Description . . . . .	2
1.3	Options . . . . .	2
1.4	Commands . . . . .	2
<b>2</b>	<b>yamcs alarms</b> . . . . .	<b>4</b>
2.1	Synopsis . . . . .	4
2.2	Description . . . . .	4
2.3	Commands . . . . .	4
2.4	Options . . . . .	5
2.5	Timestamps . . . . .	5
<b>3</b>	<b>yamcs algorithms</b> . . . . .	<b>6</b>
3.1	Synopsis . . . . .	6
3.2	Description . . . . .	6
3.3	Commands . . . . .	6
<b>4</b>	<b>yamcs commands</b> . . . . .	<b>7</b>
4.1	Synopsis . . . . .	7
4.2	Description . . . . .	7
4.3	Commands . . . . .	7
4.4	Options . . . . .	7
4.5	Timestamps . . . . .	8
<b>5</b>	<b>yamcs config</b> . . . . .	<b>9</b>
5.1	Synopsis . . . . .	9
5.2	Description . . . . .	9
5.3	Commands . . . . .	9
5.4	Configuration File . . . . .	9
5.4.1	Example . . . . .	9
5.4.2	Properties . . . . .	10
<b>6</b>	<b>yamcs containers</b> . . . . .	<b>11</b>
6.1	Synopsis . . . . .	11
6.2	Description . . . . .	11
6.3	Commands . . . . .	11
<b>7</b>	<b>yamcs dbshell</b> . . . . .	<b>12</b>
7.1	Synopsis . . . . .	12
7.2	Description . . . . .	12
7.3	Options . . . . .	12
7.4	DB Shell Commands . . . . .	12
<b>8</b>	<b>yamcs events</b> . . . . .	<b>14</b>
8.1	Synopsis . . . . .	14
8.2	Description . . . . .	14
8.3	Commands . . . . .	14

8.4	Options	14
8.5	Timestamps	15
<b>9</b>	<b>yamcs instances</b>	<b>16</b>
9.1	Synopsis	16
9.2	Description	16
9.3	Commands	16
<b>10</b>	<b>yamcs links</b>	<b>17</b>
10.1	Synopsis	17
10.2	Description	17
10.3	Commands	17
<b>11</b>	<b>yamcs login</b>	<b>18</b>
11.1	Synopsis	18
11.2	Description	18
11.3	Options	18
11.4	Environment	18
<b>12</b>	<b>yamcs logout</b>	<b>19</b>
12.1	Synopsis	19
12.2	Description	19
<b>13</b>	<b>yamcs packets</b>	<b>20</b>
13.1	Synopsis	20
13.2	Description	20
13.3	Commands	20
13.4	Options	20
13.5	Timestamps	21
<b>14</b>	<b>yamcs parameter-archive</b>	<b>22</b>
14.1	Synopsis	22
14.2	Description	22
14.3	Commands	22
14.4	Options	22
14.5	Timestamps	22
<b>15</b>	<b>yamcs parameters</b>	<b>24</b>
15.1	Description	24
15.2	Description	24
15.3	Commands	24
15.4	Options	24
15.5	Timestamps	25
<b>16</b>	<b>yamcs processors</b>	<b>26</b>
16.1	Synopsis	26
16.2	Description	26
16.3	Commands	26
<b>17</b>	<b>yamcs rocksdb</b>	<b>27</b>
17.1	Synopsis	27
17.2	Description	27
17.3	Commands	27
17.4	Options	27
<b>18</b>	<b>yamcs services</b>	<b>28</b>
18.1	Synopsis	28
18.2	Description	28
18.3	Commands	28

<b>19</b>	<b>yamcs space-systems</b>	<b>29</b>
19.1	Synopsis	29
19.2	Description	29
19.3	Commands	29
<b>20</b>	<b>yamcs storage</b>	<b>30</b>
20.1	Synopsis	30
20.2	Description	30
20.3	Commands	30
20.4	Options	31
<b>21</b>	<b>yamcs streams</b>	<b>32</b>
21.1	Synopsis	32
21.2	Description	32
21.3	Commands	32
<b>22</b>	<b>yamcs tables</b>	<b>33</b>
22.1	Synopsis	33
22.2	Description	33
22.3	Commands	33
22.4	Options	33
22.5	Timestamps	34
<b>Index</b>		<b>35</b>

# About Yamcs Command-Line Interface

The Yamcs Command-Line Interface is written in Python and distributed separately from Yamcs Server.

Install with pip:

```
pip install --upgrade yamcs-cli
```

Run [yamcs login](#) (page 18) to initialize your environment:

```
yamcs login
```

# 1. yamcs

## 1.1 Synopsis

`yamcs` [--version] [-h, --help] <COMMAND> [<ARGS>]

## 1.2 Description

Command-line interface for Yamcs.

Run `yamcs login` to initialize your environment.

## 1.3 Options

`--version`

Prints the CLI version and quit.

`-h, --help`

Prints the synopsis and the list of commands.

## 1.4 Commands

[alarms](#) (page 4)

Read alarms. See `yamcs-alarms(1)`.

[algorithms](#) (page 6)

Read algorithms. See `yamcs-algorithms(1)`.

[commands](#) (page 7)

Read commands. See `yamcs-commands(1)`.

[config](#) (page 9)

Manage Yamcs CLI properties. See `yamcs-config(1)`.

[containers](#) (page 11)

Read containers. See `yamcs-containers(1)`.

[dbshell](#) (page 12)

Launch Yamcs DB Shell. See `yamcs-dbshell(1)`.

[events](#) (page 14)

Create events. See `yamcs-events(1)`.

[instances](#) (page 16)

Read Yamcs instances. See `yamcs-instances(1)`.

**links (page 17)**

Read and manipulate data links. See *yamcs-links(1)*.

**login (page 18)**

Login to a Yamcs server. See *yamcs-login(1)*.

**logout (page 19)**

Logout of a Yamcs server. See *yamcs-logout(1)*.

**packets (page 20)**

Read packets. See *yamcs-packets(1)*.

**parameters (page 24)**

Manage parameters. See *yamcs-parameters(1)*.

**parameter-archive (page 22)**

Manipulate the Parameter Archive. See *yamcs-parameter-archive(1)*.

**processors (page 26)**

Manage processors. See *yamcs-processors(1)*.

**rocksdb (page 27)**

Manage RocksDB storage engine. See *yamcs-rocksdb(1)*.

**services (page 28)**

Read and manipulate services. See *yamcs-services(1)*.

**space-systems (page 29)**

Read space systems. See *yamcs-space-systems(1)*.

**storage (page 30)**

Manage object storage. See *yamcs-storage(1)*.

**streams (page 32)**

Read and manipulate streams. See *yamcs-streams(1)*.

**tables (page 33)**

Read and manipulate tables. See *yamcs-tables(1)*.



## 2. yamcs alarms

### 2.1 Synopsis

```
yamcs alarms list [--processor <PROCESSOR>]
yamcs alarms acknowledge [--processor <PROCESSOR>]
    [-c <COMMENT>, --comment <COMMENT>] <ALARM> <SEQNO>
yamcs alarms shelve [--processor <PROCESSOR>]
    [-c <COMMENT>, --comment <COMMENT>] <ALARM> <SEQNO>
yamcs alarms unshelve [--processor <PROCESSOR>]
    [-c <COMMENT>, --comment <COMMENT>] <ALARM> <SEQNO>
yamcs alarms clear [--processor <PROCESSOR>]
    [-c <COMMENT>, --comment <COMMENT>] <ALARM> <SEQNO>
yamcs alarms log [-n <LINES>, --lines <LINES>]
    [-s <DATE>, --since <DATE>] [-u <DATE>, --until <DATE>]
```

### 2.2 Description

Manage alarms.

### 2.3 Commands

```
list [--processor <PROCESSOR>]
    Show active alarms
acknowledge [--processor <PROCESSOR>] [-c <COMMENT>,
--comment <COMMENT>] <ALARM> <SEQNO>
    Acknowledge an alarm
shelve [--processor <PROCESSOR>] [-c <COMMENT>, --comment <COMMENT>] <ALARM> <SEQNO>
    Shelve an alarm
unshelve [--processor <PROCESSOR>] [-c <COMMENT>, --comment <COMMENT>] <ALARM> <SEQNO>
    Unshelve an alarm
clear [--processor <PROCESSOR>] [-c <COMMENT>, --comment <COMMENT>] <ALARM> <SEQNO>
    Clear an alarm
log [-n <LINES>, --lines <LINES>] [-s <DATE>, --since <DATE>] [-u <DATE>,
--until <DATE>]
    Read alarm log
```

## 2.4 Options

**--processor** <PROCESSOR>

With list, acknowledge, shelve, unshelve or clear, specify the processor.

Default: realtime

**-c** <COMMENT>, **--comment** <COMMENT>

With list, acknowledge, shelve, unshelve or clear, attach a comment to the alarm change.

**<ALARM>**

With acknowledge, shelve, unshelve or clear, specify the alarm name.

**<SEQNO>**

With acknowledge, shelve, unshelve or clear, specify the alarm instance.

**-n** <LINES>, **--lines** <LINES>

With log, specify the number of alarms to show, or all to show all.

Default: 10, but only when **--since** and **--until** are unset.

**-s** <DATE>, **--since** <DATE>

With log, include alarms not older than the specified date.

The date should be specified in ISO format or as detailed under [Timestamps](#) (page 5).

**-u** <DATE>, **--until** <DATE>

With log, include alarms not newer than the specified date.

The date should be specified in ISO format or as detailed under [Timestamps](#) (page 5).

## 2.5 Timestamps

When parsing timestamps, `yamcs-cli` accepts a specification in ISO format. The following special patterns are also recognised:

- `now`: current time
- `now UTC`: current UTC time
- `today`: 00:00:00 of the current day
- `today UTC`: 00:00:00 UTC of the current day
- `yesterday`: 00:00:00 of the day before
- `yesterday UTC`: 00:00:00 UTC of the day before
- `tomorrow`: 00:00:00 of the next day
- `tomorrow UTC`: 00:00:00 UTC of the next day

## 3. yamcs algorithms

### 3.1 Synopsis

`yamcs algorithms list`  
`yamcs algorithms describe <ALGORITHM>`

### 3.2 Description

Read algorithms.

### 3.3 Commands

`list`

List algorithms

`describe <ALGORITHM>`

Describe an algorithm

## 4. yamcs commands

### 4.1 Synopsis

```
yamcs commands list
yamcs commands describe <COMMAND>
yamcs commands run [--processor <PROCESSOR>] [--dry-run]
  [--sequence-number <SEQNO>] [--arg-file <FILE>]
  [--arg <KEY=VALUE> [<KEY=VALUE> ...]]
  <COMMAND>
yamcs commands log [-n <LINES>, --lines <LINES>]
  [-s <DATE>, --since <DATE>] [-u <DATE>, --until <DATE>]
```

### 4.2 Description

Manage commands.

### 4.3 Commands

```
list
  List commands
describe <COMMAND>
  Describe a command
run <COMMAND>
  Run a command
log [-n <LINES>, --lines <LINES>] [-s <DATE>, --since <DATE>] [-u <DATE>,
--until <DATE>]
  Read command log
```

### 4.4 Options

```
--processor <PROCESSOR>
  With run, specifies the name of the target processor.
  Default is realtime.
--dry-run
  With run, validate the command, but do not queue it.
```

**--arg-file** <FILE>

With run, read command arguments from a file

**--arg** <KEY=VALUE> [KEY=VALUE ...]

With run, set command arguments.

**--sequence-number** <SEQNO>

With run, set the sequence number of this command. This is used to determine unicity of commands at the same time and coming from the same origin. If not set Yamcs will automatically assign a sequential number as if every submitted command is unique.

**-n** <LINES>, **--lines** <LINES>

With log, specify the number of commands to show, or all to show all.

Default: 10, but only when **--since** and **--until** are unset.

**-s** <DATE>, **--since** <DATE>

With log, include commands not older than the specified date.

The date should be specified in ISO format or as detailed under [Timestamps](#) (page 8).

**-u** <DATE>, **--until** <DATE>

With log, include commands not newer than the specified date.

The date should be specified in ISO format or as detailed under [Timestamps](#) (page 8).

## 4.5 Timestamps

When parsing timestamps, `yamcs-cli` accepts a specification in ISO format. The following special patterns are also recognised:

- `now`: current time
- `now UTC`: current UTC time
- `today`: 00:00:00 of the current day
- `today UTC`: 00:00:00 UTC of the current day
- `yesterday`: 00:00:00 of the day before
- `yesterday UTC`: 00:00:00 UTC of the day before
- `tomorrow`: 00:00:00 of the next day
- `tomorrow UTC`: 00:00:00 UTC of the next day

## 5. yamcs config

### 5.1 Synopsis

```
yamcs config get <PROPERTY>
yamcs config list
yamcs config set <PROPERTY> <VALUE>
yamcs config unset <PROPERTY>
```

### 5.2 Description

Manage Yamcs CLI properties.

### 5.3 Commands

```
get <PROPERTY>
    Get value of CLI property
list
    List CLI properties
set <PROPERTY> <VALUE>
    Set CLI property
unset <PROPERTY>
    Unset CLI property
```

### 5.4 Configuration File

Configuration properties are stored to the file `$HOME/.config/yamcs-cli/config` and divided in sections. Properties affect the commands' behavior.

Currently all supported properties belong to the `core` section only.

#### 5.4.1 Example

```
[core]
url = http://localhost:8090
instance = simulator
```

## 5.4.2 Properties

### **url**

Yamcs Server URL

### **instance**

Yamcs instance name

### **enable\_utc**

If true, dates are printed in UTC format rather than using the system local time zone.

## 6. yamcs containers

### 6.1 Synopsis

`yamcs containers list`  
`yamcs containers describe <CONTAINER>`

### 6.2 Description

Read containers.

### 6.3 Commands

`list`

List containers

`describe <CONTAINER>`

Describe a container



## 7. yamcs dbshell

### 7.1 Synopsis

yamcs dbshell [*<OPTIONS>*]

### 7.2 Description

Launch Yamcs DB Shell.

### 7.3 Options

**-c** *<COMMAND>*, **--command** *<COMMAND>*  
Run a single SQL command string.

**-N**, **--skip-column-names**  
Don't print column names.

**-B**, **--batch**  
Print results using tab as the column separator.  
Use of this option disables interactive behavior such as prompt display or the history file.  
Any binary fields are printed raw instead of in hexadecimal notation.

**--binary-as-hex**  
Display binary data using hexadecimal notation. This the default when running in interactive mode, but can be used in combination with **--batch** (page 12) to show hexadecimal values also in batch mode.

### 7.4 DB Shell Commands

The shell sends each SQL statement that you issue to Yamcs. There is also a set of commands that are interpreted by dbshell itself. For a list of these, type help or h at the shell prompt:

```
simulator> help

List of dbshell commands:
?          (?) Show help.
delimiter (\d) Set statement delimiter.
edit      (\e) Edit a command with $EDITOR.
exit      (\q) Synonym for quit.
help      (\h) Display this help.
nopager   (\n) Disable pager. Results are printed to stdout.
pager     (\P) Print results to a pager.
quit      (\q) Quits the DB Shell.
```

(continues on next page)

```
rehash      (\#) Rebuild completion hash.
source      (\.) Execute an SQL script file, provided as argument.
status      (\s) Print status information.
system      (\!) Execute a system command.
use         (\u) Use another instance, provided as argument.
```

**help** [**<COMMAND>**], **\h** [**<COMMAND>**], **?** [**<COMMAND>**], **\?** [**<COMMAND>**]

Display a help message listing all available commands.

If you provide an argument, the help message for that specific command is shown.

**delimiter** **<STRING>**, **\d** **<STRING>**

Change the string that separates SQL statements. Default is the semicolon character: ;.

**edit**, **\e**

Open an editor for entering the next SQL statement. This uses the editor indicated by the \$EDITOR environment variable.

**nopager**, **\n**

Disable result paging. It is disabled by default.

**pager**, **\P**

Enable result paging. It is disabled by default.

**quit**, **\q**

Quits the DB Shell.

**rehash**, **\#**

Reload database objects, used for completion.

**source** **<FILENAME>**, **\.** **<FILENAME>**

Run statements from the provided file.

**status**, **\s**

Print information on the current state.

**system** **<COMMAND>**, **\!** **<COMMAND>**

Execute a local command in a subshell.

**use** **<INSTANCE>**, **\u** **<INSTANCE>**

Switch the prompt to another instance.

## 8. yamcs events

### 8.1 Synopsis

```
yamcs events create [-m <MESSAGE>, --message <MESSAGE>] [--date <DATE>]
    [--sequence-number <SEQNO>] [--severity <LEVEL>] [--source <SOURCE>]
    [--type <TYPE>] [--extra <KEY=VALUE> [<KEY=VALUE> ...]]
yamcs events log [-n <LINES>, --lines <LINES>]
    [-s <DATE>, --since <DATE>] [-u <DATE>, --until <DATE>]
```

### 8.2 Description

Add events to the Yamcs event log.

### 8.3 Commands

#### create

Create an event. This command shows an editor where you can enter the event message. Alternatively you can specify the message using the `--message` option.

```
log [-n <LINES>, --lines <LINES>] [-s <DATE>, --since <DATE>] [-u <DATE>,
--until <DATE>]
```

Read event log

### 8.4 Options

`-m <MESSAGE>`, `--message <MESSAGE>`

Event message.

`--date <DATE>`

Event time. If unspecified, defaults to mission time.

The date should be specified in ISO format or as detailed under [Timestamps](#) (page 15).

`--sequence-number <SEQNO>`

Sequence number of this event. This is used to determine unicity of events at the same time and coming from the same source. If not set Yamcs will automatically assign a sequential number as if every submitted event is unique.

`--severity <LEVEL>`

The severity level of the event. One of `info`, `watch`, `warning`, `distress`, `critical` or `severe`. Default is `info`.

**--source** <SOURCE>  
Source of the event. Defaults to User if unset.

**--type** <TYPE>  
Type of the event.

**--extra** <KEY=VALUE> [KEY=VALUE ...]  
Set additional event properties.

**-n** <LINES>, **--lines** <LINES>  
With log, specify the number of events to show, or all to show all.  
Default: 10, but only when **--since** and **--until** are unset.

**-s** <DATE>, **--since** <DATE>  
With log, include events not older than the specified date.  
The date should be specified in ISO format or as detailed under [Timestamps](#) (page 15).

**-u** <DATE>, **--until** <DATE>  
With log, include events not newer than the specified date.  
The date should be specified in ISO format or as detailed under [Timestamps](#) (page 15).

## 8.5 Timestamps

When parsing timestamps, `yamcs-cli` accepts a specification in ISO format. The following special patterns are also recognised:

- `now`: current time
- `now UTC`: current UTC time
- `today`: 00:00:00 of the current day
- `today UTC`: 00:00:00 UTC of the current day
- `yesterday`: 00:00:00 of the day before
- `yesterday UTC`: 00:00:00 UTC of the day before
- `tomorrow`: 00:00:00 of the next day
- `tomorrow UTC`: 00:00:00 UTC of the next day

## 9. yamcs instances

### 9.1 Synopsis

```
yamcs instances list  
yamcs instances start <INSTANCE>...  
yamcs instances stop <INSTANCE>...
```

### 9.2 Description

Read Yamcs instances.

### 9.3 Commands

```
list  
    List instances  
start <INSTANCE>...  
    Start an instance  
stop <INSTANCE>...  
    Stop an instance
```

# 10. yamcs links

## 10.1 Synopsis

**yamcs links** list  
**yamcs links** enable <LINK>...  
**yamcs links** disable <LINK>...  
**yamcs links** describe <LINK>  
**yamcs links** run-action <LINK> <ACTION>

## 10.2 Description

Read and manipulate data links.

## 10.3 Commands

### list

List links

### enable

Enable a link

### disable

Disable a link

### describe

Describe a link

### run-action

Run a custom action

# 11. yamcs login

## 11.1 Synopsis

```
yamcs login [-u <USERNAME>, --username <USERNAME>]
            [--instance <INSTANCE>] [<URL>]
```

## 11.2 Description

Login to a Yamcs server.

## 11.3 Options

<URL>

The server URL. Example: `http://localhost:8090`

**-u** <USERNAME>, **--username** <USERNAME>

Username

**--instance** <INSTANCE>

Initial instance.

This defaults to the first available instance on the target Yamcs server.

## 11.4 Environment

**YAMCS\_CLI\_PASSWORD**

Provide a password instead of prompting for input.

## 12. yamcs logout

### 12.1 Synopsis

yamcs logout

### 12.2 Description

Logout of a Yamcs server.



## 13. yamcs packets

### 13.1 Synopsis

```
yamcs packets log [-p <PACKET>, --packet <PACKET>]
    [-n <LINES>, --lines <LINES>] [-s <DATE>, --since <DATE>]
    [-u <DATE>, --until <DATE>]
yamcs packets rebuild-histogram [-s <DATE>, --since <DATE>]
    [-u <DATE>, --until <DATE>]
yamcs packets rebuild-ccsds-index [-s <DATE>, --since <DATE>]
    [-u <DATE>, --until <DATE>]
```

### 13.2 Description

Read packets.

### 13.3 Commands

```
log [-p <PACKET> --packet <PACKET>] [-n <LINES>, --lines <LINES>] [-s <DATE>,
--since <DATE>] [-u <DATE>, --until <DATE>]
```

Read packet log

```
rebuild-histogram [-s <DATE>, --since <DATE>] [-u <DATE>, --until <DATE>]
```

Rebuilds the packet histogram. This may be necessary for example after bulk loading data.

```
rebuild-ccsds-index [-s <DATE>, --since <DATE>] [-u <DATE>, --until <DATE>]
```

Rebuilds the CCSDS index. This may be necessary for example after bulk loading data.

This method is only applicable when a CcsdsTmIndex service is used to calculate completeness.

### 13.4 Options

**-p** <PACKET>, **--packet** <PACKETS>

With log, filter by packet name.

**-n** <LINES>, **--lines** <LINES>

With log, specify the number of packets to show, or all to show all.

Default: 10, but only when **--since** and **--until** are unset.

**-s** <DATE>, **--since** <DATE>

Include packets not older than the specified date.

The date should be specified in ISO format or as detailed under [Timestamps](#) (page 21).

**-u** <DATE>, **--until** <DATE>

Include packets not newer than the specified date.

The date should be specified in ISO format or as detailed under [Timestamps](#) (page 21).

## 13.5 Timestamps

When parsing timestamps, `yamcs-cli` accepts a specification in ISO format. The following special patterns are also recognised:

- `now`: current time
- `now UTC`: current UTC time
- `today`: 00:00:00 of the current day
- `today UTC`: 00:00:00 UTC of the current day
- `yesterday`: 00:00:00 of the day before
- `yesterday UTC`: 00:00:00 UTC of the day before
- `tomorrow`: 00:00:00 of the next day
- `tomorrow UTC`: 00:00:00 UTC of the next day

# 14. yamcs parameter-archive

## 14.1 Synopsis

```
yamcs parameter-archive rebuild <START> <STOP>  
yamcs parameter-archive purge
```

## 14.2 Description

Manipulate the Parameter Archive.

## 14.3 Commands

### rebuild

Rebuild the Parameter Archive.

This operation must be constrained by using the `START` and `STOP` options. These values are only hints to the Parameter Archive, which will extend the requested range based on archive segmentation.

Rebuild run as an asynchronous operation: this command will not await the outcome.

### purge

Remove all data from the Parameter Archive

## 14.4 Options

### <START>

With `rebuild`, date specification in ISO format or as detailed under [Timestamps](#) (page 22).

### <STOP>

With `rebuild`, date specification in ISO format or as detailed under [Timestamps](#) (page 22).

## 14.5 Timestamps

When parsing timestamps, `yamcs-cli` accepts a specification in ISO format. The following special patterns are also recognised:

- `now`: current time
- `now UTC`: current UTC time
- `today`: 00:00:00 of the current day

- today UTC: 00:00:00 UTC of the current day
- yesterday: 00:00:00 of the day before
- yesterday UTC: 00:00:00 UTC of the day before
- tomorrow: 00:00:00 of the next day
- tomorrow UTC: 00:00:00 UTC of the next day

# 15. yamcs parameters

## 15.1 Description

```
yamcs parameters list
yamcs parameters describe <PARAMETER>
yamcs parameters get [--date <DATE>] <PARAMETER>
yamcs parameters set [--next [--timeout <TIMEOUT>]] <PARAMETER> <VALUE>
yamcs parameters export-csv [--interval <INTERVAL>]
    [-s <DATE>, --since <DATE>] [-u <DATE>, --until <DATE>] <PARAMETER>
```

## 15.2 Description

Manage parameters.

## 15.3 Commands

```
list
    List parameters

describe <PARAMETER>
    Describe a parameter

get <PARAMETER>
    Get a parameter's value

set <PARAMETER> <VALUE>
    Set a parameter's value (unless this is a readonly parameter).

export-csv <PARAMETER>
    Export parameter values in CSV format
```

## 15.4 Options

```
--processor <PROCESSOR>
    With get and set, specifies the name of the target processor.
    Default is realtime.

--next
    With get, wait for the next parameter value to be processed by Yamcs.
    If not set, the latest received value is returned.
```

**--timeout** <TIMEOUT>

With `get`, this indicates the maximum time to wait for a new value if the next option is used.

**--date** <DATE>

Value time. If unspecified, defaults to mission time.

When parsing timestamps, `yamcs-cli` accepts a specification in ISO format. The following special patterns are also recognised:

- `now`: current time
- `now UTC`: current UTC time
- `today`: 00:00:00 of the current day
- `today UTC`: 00:00:00 UTC of the current day
- `yesterday`: 00:00:00 of the day before
- `yesterday UTC`: 00:00:00 UTC of the day before
- `tomorrow`: 00:00:00 of the next day
- `tomorrow UTC`: 00:00:00 UTC of the next day

**--interval** <INTERVAL>

With `export-csv`, limit values to max one per interval (in seconds).

**-s** <DATE>, **--since** <DATE>

With `export-csv`, include values not older than the specified date.

The date should be specified in ISO format or as detailed under [Timestamps](#) (page 25).

**-u** <DATE>, **--until** <DATE>

With `export-csv`, include values not newer than the specified date.

The date should be specified in ISO format or as detailed under [Timestamps](#) (page 25).

## 15.5 Timestamps

When parsing timestamps, `yamcs-cli` accepts a specification in ISO format. The following special patterns are also recognised:

- `now`: current time
- `now UTC`: current UTC time
- `today`: 00:00:00 of the current day
- `today UTC`: 00:00:00 UTC of the current day
- `yesterday`: 00:00:00 of the day before
- `yesterday UTC`: 00:00:00 UTC of the day before
- `tomorrow`: 00:00:00 of the next day
- `tomorrow UTC`: 00:00:00 UTC of the next day

# 16. yamcs processors

## 16.1 Synopsis

`yamcs processors list`  
`yamcs processors delete <PROCESSOR>`

## 16.2 Description

Manage processors.

## 16.3 Commands

`list`

List processors

`delete <PROCESSOR>`

Delete a processor

# 17. yamcs rocksdb

## 17.1 Synopsis

**yamcs rocksdb** tablespaces

**yamcs rocksdb** compact [--dbpath <DBPATH>] <TABLESPACE> <CF>

## 17.2 Description

Manage RocksDB storage engine.

## 17.3 Commands

**tablespaces**

List processors

**compact** [--dbpath <DBPATH>] <TABLESPACE> <CF>

Delete a processor

## 17.4 Options

**--dbpath** <DBPATH>

With **compact**, specify a path within the tablespace. Leave unspecified for the root database.



# 18. yamcs services

## 18.1 Synopsis

```
yamcs services list  
yamcs services start <SERVICE>...  
yamcs services stop <SERVICE>...
```

## 18.2 Description

Read and manipulate services.

## 18.3 Commands

```
list  
    List services  
start <SERVICE>...  
    Start a service  
stop <SERVICE>...  
    Stop a service
```

# 19. yamcs space-systems

## 19.1 Synopsis

```
yamcs space-systems list  
yamcs space-systems describe <SPACESYSTEM>  
yamcs space-systems export <SPACESYSTEM>
```

## 19.2 Description

Read space systems.

## 19.3 Commands

```
list  
    List space systems  
describe <SPACESYSTEM>  
    Describe a space system  
export <SPACESYSTEM>  
    Export an XTCE representation of a space system
```

## 20. yamcs storage

### 20.1 Synopsis

```
yamcs storage ls [-l] [-r, -R] [<BUCKET>]
yamcs storage mb <BUCKET>...
yamcs storage rb <BUCKET>...
yamcs storage cat <OBJECT>...
yamcs storage cp <SRC> <DST>
yamcs storage mv <SRC> <DST>
yamcs storage rm <OBJECT>...
```

### 20.2 Description

Manage object storage.

### 20.3 Commands

```
ls [-l] [-r, -R] [<BUCKET>]
```

List buckets or objects

Synonym: list

```
mb <BUCKET>...
```

Make buckets

```
rb <BUCKET>...
```

Remove buckets

```
cat <OBJECT>...
```

Concatenate object content to stdout

```
cp <SRC> <DST>
```

Copy a file or object

```
mv <SRC> <DST>
```

Move a file or object

```
rm <OBJECT>...
```

Remove objects

## 20.4 Options

**-l**

With `ls`, list in long format.

**-r, -R**

With `ls`, list recursively.

**<SRC>**

With `cp`, local file or an object in the format `ys://BUCKET/OBJECT`.

**<DST>**

With `cp`, local file, or an object in the format `ys://BUCKET/OBJECT`.

With `mv`, local file, local directory, or an object in the format `ys://BUCKET/OBJECT`.

# 21. yamcs streams

## 21.1 Synopsis

`yamcs streams list`  
`yamcs streams describe`  
`yamcs streams subscribe`

## 21.2 Description

Read and manipulate streams.

## 21.3 Commands

**list**

List streams

**describe**

Describe a stream

**subscribe**

Subscribe to a stream

## 22. yamcs tables

### 22.1 Synopsis

```
yamcs tables list  
yamcs tables describe <TABLE>  
yamcs tables dump [-d <DIR>, --dir <DIR>] [--gzip]  
    [-q <QUERY>, --query <QUERY> ] [--query-file <FILE>]  
    <TABLE>...  
yamcs tables load [-d <DIR>, --dir <DIR>] [--gzip] <TABLE>...  
yamcs tables rebuild-histogram [-s <DATE>, --since <DATE>]  
    [-u <DATE>, --until <DATE>] <TABLE>...
```

### 22.2 Description

Read and manipulate tables.

### 22.3 Commands

```
list  
    List tables  
describe <TABLE>  
    Describe a table  
dump [-d <DIR>, --dir <DIR>] [-q <QUERY>,  
--query <QUERY>] [--query-file FILE] [--gzip] <TABLE>...  
    Dump table data  
load [-d <DIR>, --dir <DIR>] [--gzip] <TABLE>...  
    Load data into a table  
rebuild-histogram [-s <DATE>, --since <DATE>] [-u <DATE>, --until <DATE>] <TABLE>...  
    Rebuilds the histogram for a table. This may be necessary for example after bulk loading data.
```

### 22.4 Options

```
-d <DIR>, --dir <DIR>  
    Specifies the directory where to locate dump files. Defaults to current directory.
```

**--gzip**

With `dump`, compress the output.

With `load`, decompress the dump.

**-q <QUERY>, --query <QUERY>**

With `dump`, provide a SQL WHERE search condition to limit the rows included in the output.

**--query-file <FILE>**

With `dump`, specify the path to a file containing a SQL WHERE search condition to limit the rows included in the output.

**-s <DATE>, --since <DATE>**

With `rebuild-histogram`, include records not older than the specified date.

The date should be specified in ISO format or as detailed under [Timestamps](#) (page 34).

**-u <DATE>, --until <DATE>**

With `rebuild-histogram`, include records not newer than the specified date.

The date should be specified in ISO format or as detailed under [Timestamps](#) (page 34).

## 22.5 Timestamps

When parsing timestamps, `yamcs-cli` accepts a specification in ISO format. The following special patterns are also recognised:

- `now`: current time
- `now UTC`: current UTC time
- `today`: 00:00:00 of the current day
- `today UTC`: 00:00:00 UTC of the current day
- `yesterday`: 00:00:00 of the day before
- `yesterday UTC`: 00:00:00 UTC of the day before
- `tomorrow`: 00:00:00 of the next day
- `tomorrow UTC`: 00:00:00 UTC of the next day

# Index

## Symbols

- B
  - yamcs-dbshell command line option, 12
- N
  - yamcs-dbshell command line option, 12
- R
  - yamcs-storage command line option, 31
- arg
  - yamcs-commands command line option, 8
- arg-file
  - yamcs-commands command line option, 7
- batch
  - yamcs-dbshell command line option, 12
- binary-as-hex
  - yamcs-dbshell command line option, 12
- command
  - yamcs-dbshell command line option, 12
- comment
  - yamcs-alarms command line option, 5
- date
  - yamcs-events command line option, 14
  - yamcs-parameters command line option, 25
- dbpath
  - yamcs-rocksdb command line option, 27
- dir
  - yamcs-tables command line option, 33
- dry-run
  - yamcs-commands command line option, 7
- extra
  - yamcs-events command line option, 15
- gzip
  - yamcs-tables command line option, 33
- help
  - yamcs command line option, 2
- instance
  - yamcs-login command line option, 18
- interval
  - yamcs-parameters command line option, 25
- lines
  - yamcs-alarms command line option, 5
  - yamcs-commands command line option, 8
  - yamcs-events command line option, 15
  - yamcs-packets command line option, 20
- message
  - yamcs-events command line option, 14
- next
  - yamcs-parameters command line option, 24
- packet
  - yamcs-packets command line option, 20
- processor
  - yamcs-alarms command line option, 5
  - yamcs-commands command line option, 7
  - yamcs-parameters command line option, 24
- query
  - yamcs-tables command line option, 34
- query-file
  - yamcs-tables command line option, 34
- sequence-number
  - yamcs-commands command line option, 8
  - yamcs-events command line option, 14
- severity
  - yamcs-events command line option, 14
- since
  - yamcs-alarms command line option, 5
  - yamcs-commands command line option, 8
  - yamcs-events command line option, 15
  - yamcs-packets command line option, 20
  - yamcs-parameters command line option, 25
  - yamcs-tables command line option, 34
- skip-column-names
  - yamcs-dbshell command line option, 12
- source
  - yamcs-events command line option, 14
- timeout
  - yamcs-parameters command line option, 24
- type
  - yamcs-events command line option, 15
- until
  - yamcs-alarms command line option, 5
  - yamcs-commands command line option, 8
  - yamcs-events command line option, 15
  - yamcs-packets command line option, 21
  - yamcs-parameters command line option, 25
  - yamcs-tables command line option, 34
- username
  - yamcs-login command line option, 18
- version
  - yamcs command line option, 2
- c



- yamcs-alarms command line option, 5
- yamcs-dbshell command line option, 12
- d
  - yamcs-tables command line option, 33
- h
  - yamcs command line option, 2
- l
  - yamcs-storage command line option, 31
- m
  - yamcs-events command line option, 14
- n
  - yamcs-alarms command line option, 5
  - yamcs-commands command line option, 8
  - yamcs-events command line option, 15
  - yamcs-packets command line option, 20
- p
  - yamcs-packets command line option, 20
- q
  - yamcs-tables command line option, 34
- r
  - yamcs-storage command line option, 31
- s
  - yamcs-alarms command line option, 5
  - yamcs-commands command line option, 8
  - yamcs-events command line option, 15
  - yamcs-packets command line option, 20
  - yamcs-parameters command line option, 25
  - yamcs-tables command line option, 34
- u
  - yamcs-alarms command line option, 5
  - yamcs-commands command line option, 8
  - yamcs-events command line option, 15
  - yamcs-login command line option, 18
  - yamcs-packets command line option, 21
  - yamcs-parameters command line option, 25
  - yamcs-tables command line option, 34
- <ALARM>
  - yamcs-alarms command line option, 5
- <DST>
  - yamcs-storage command line option, 31
- <SEQNO>
  - yamcs-alarms command line option, 5
- <SRC>
  - yamcs-storage command line option, 31
- <START>
  - yamcs-parameter-archive command line option, 22
- <STOP>
  - yamcs-parameter-archive command line option, 22
- <URL>
  - yamcs-login command line option, 18

**Y**

- yamcs command line option
  - help, 2
  - version, 2
  - h, 2
- yamcs-alarms command line option
  - comment, 5
  - lines, 5
  - processor, 5
  - since, 5
  - until, 5
  - c, 5
  - n, 5
  - s, 5
  - u, 5
  - <ALARM>, 5
  - <SEQNO>, 5
- yamcs-commands command line option
  - arg, 8
  - arg-file, 7
  - dry-run, 7
  - lines, 8
  - processor, 7
  - sequence-number, 8
  - since, 8
  - until, 8
  - n, 8
  - s, 8
  - u, 8
- yamcs-dbshell command line option
  - B, 12
  - N, 12
  - batch, 12
  - binary-as-hex, 12
  - command, 12
  - skip-column-names, 12
  - c, 12
- yamcs-events command line option
  - date, 14
  - extra, 15
  - lines, 15
  - message, 14
  - sequence-number, 14
  - severity, 14
  - since, 15
  - source, 14
  - type, 15
  - until, 15
  - m, 14
  - n, 15
  - s, 15
  - u, 15
- yamcs-login command line option
  - instance, 18
  - username, 18
  - u, 18
  - <URL>, 18
- yamcs-packets command line option
  - lines, 20
  - packet, 20
  - since, 20

- until, 21
- n, 20
- p, 20
- s, 20
- u, 21

yamcs-parameter-archive command line option

- <START>, 22
- <STOP>, 22

yamcs-parameters command line option

- date, 25
- interval, 25
- next, 24
- processor, 24
- since, 25
- timeout, 24
- until, 25
- s, 25
- u, 25

yamcs-rocksdb command line option

- dbpath, 27

yamcs-storage command line option

- R, 31
- l, 31
- r, 31
- <DST>, 31
- <SRC>, 31

yamcs-tables command line option

- dir, 33
- gzip, 33
- query, 34
- query-file, 34
- since, 34
- until, 34
- d, 33
- q, 34
- s, 34
- u, 34