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# Xymon client Documentation

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<b>1 Xymon client - library</b>	<b>3</b>
1.1 Xymon	3
1.2 Xymon helpers	5
<b>2 Examples</b>	<b>7</b>
2.1 Main library	7
2.2 Helpers	7
<b>3 Alternatives</b>	<b>9</b>
3.1 skurfer/python-xymon	9
<b>4 Indices and tables</b>	<b>11</b>
<b>Python Module Index</b>	<b>13</b>



Contents:



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## Xymon client - library

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### Contents

- *Xymon client - library*
  - *Xymon*
    - \* *Examples*
  - *Xymon helpers*

## 1.1 Xymon

a minimalist Xymon client library in Python

### 1.1.1 Examples

Queries to one Xymon server:

```
>>> x = Xymon('xymonserver01.example.net')
>>> x.ping()
'xymond 4.3.18\n'
```

**class** xymon\_client.xymon.Xymon(*server='localhost'*, *port=1984*, *sender=None*)

Bases: `object`

thin library over Xymon protocol

Attempt to reflect `xymon(1)`<sup>1</sup>.

General concepts

**Colors** Valid colors are defined in `color_map`.

**Times** Called “duration”, “lifetime”. If given as a number followed by `s/m/h/d`, it is interpreted as being in seconds/minutes/hours/days respectively. For “until OK”, use `-1`.

**client** (*hostname*, *ostype*, *collectorid=None*, *hostclass=None*)

**clientlog** (*hostname*, *\*sectionname*)

**config** (*filename*)

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<sup>1</sup> <http://xymon.sourceforge.net/xymon/help/manpages/man1/xymon.1.html>

**data** (*hostname, dataname, text*=‘‘)  
**disable** (*hostname, testname*=‘\*, *duration*=-1, *text*=‘‘)

### Parameters

- **hostname** (*str*) –
- **testname** (*str*) – use an asterisk (\*) to disable all tests
- **duration** (*integer or str*) –
- **text** (*str*) –

**download** (*filename*)

**drop** (*hostname, testname*=None)  
remove all data stored about this status

When removing an *hostname* as whole, it is assumed that you have already deleted the host from the hosts.cfg configuration file.

### Parameters

- **hostname** (*str*) –
- **testname** (*str*) –

**enable** (*hostname, testname*)  
re-enables a test that had been disabled

### Parameters

- **hostname** (*str*) –
- **testname** (*str*) –

**ghostlist** ()

**headline**

**hostinfo** (*criteria*)

**modify** (*hostname, testname, color, source, cause*)

**notes** (*filename*)

**notify** (*hostname, testname, text*=‘‘)

**ping** ()

**pullclient** ()

**query** (*hostname, testname*)

query the Xymon server for the latest status reported for this particular test

### Parameters

- **hostname** (*str*) –
- **testname** (*str*) –

**rename** (*old, new, hostname*=None)

**schedule** (*timestamp*=None, *command*=None)

schedule command for execution at a later time

E.g. used to schedule disabling of a host or service at sometime in the future. If no parameters are given, the currently scheduled tasks are listed in the response.

**Parameters**

- **command** (*str or None*) – a complete Xymon command such as the ones listed above or ‘cancel JOBID’ to cancel a previously scheduled command
- **timestamp** – the Unix epoch time when the command will be executed
- **timestamp** – int or None

**status** (*hostname, testname, color, text=''*, *lifetime=None*, *group=None*)

**Parameters**

- **hostname** (*str*) –
- **testname** (*str*) –
- **color** (*str*) –
- **text** (*str*) –
- **lifetime** (*None or integer or str*) – defines how long this status is valid after being received by the Xymon server
- **group** (*str or None*) – direct alerts from the status to a specific group

**usermsg** (*identifier*)

**xymondboard** (*criteria=None, fields=None*)

**xymondlog** (*hostname, testname*)

**xymondxboard()**

**xymondxlog** (*hostname, testname*)

**class** `xymon_client.xymon.Xymons` (*servers, port=1984, sender='build-4504730-project-64104-python-xymon-client', thread=False*)  
Bases: `object`

## 1.2 Xymon helpers

helpers for the Xymon Python-based library

**class** `xymon_client.helpers.Color`

Bases: `float`

describe a Xymon color (status)

**name = None**

textual representation of the color

**class** `xymon_client.helpers.Helper` (*xymon, hostname=None, testname=None*)

Bases: `object`

Examples:

```
# create an object with default hostname and default service
>>> x = Helper(Xymon('xymon.example.net'), 'www.intra.example.net', 'http')
# add a message
>>> x+= '&red something gone pear shaped\n'
# send the content of the current buffer with text added at the end
# override the global color of the message (from red to yellow)
# clear the buffer
```

```
>>> x.status('but it is not *that* bad', color=yellow)
# now the buffer has been cleared
# send another message, same hostname but different service name
>>> x.status('do not shoot the messenger!', service='logs')
```

### **color**

current highest level color or `clear` if none found

### **get\_colors (text, default=None)**

extract all colors from text

#### **Parameters**

- **text** (`str`) –
- **default** (None or `Color`) –

**Return type** list of `Color` instances

### **r\_color = <sre.SRE\_Pattern object>**

extract status identifiers

### **status (message='', \*\*kwargs)**

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## Examples

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## 2.1 Main library

### 2.1.1 Queries against a single Xymon server

```
from xymon_client.xymon import Xymon
xymon = Xymon('xymonserver01.example.net')
response = xymon.ping()
# response sample: 'xymond 4.3.18\n'

xymon.query('xymonserver02.example.net', 'fping')
# response sample: 'green Message generated by xymonserver01.example.net at mercredi 12 octobre 2016

xymon.ghostlist()
# response sample: 'xyz.example.net|10.234.71.190|1476254463\nabc.example.net|10.234.71.189|1476254463\n'
```

### 2.1.2 Queries to multiple Xymon servers at once

```
from xymon_client.xymon import Xymons # note the subtle difference
xymon = Xymons(
    ['xymonserver01.example.net', 'xymonserver02.example.net'],
)
response = xymon.ping()
# response sample: {'xymonserver02.example.net:1984': 'xymond 4.3.18\n', 'xymonserver01.example.net': 'xymond 4.3.18\n'}
```

## 2.2 Helpers

```
from xymon_client.xymon import Xymon
from xymon_client.helpers import *

# create an object with default hostname and default service
xc = Helper(Xymon('xymon.example.net'), 'www.intra.example.net', 'http')

# add a message
xc+= "I see something wrong, let's make it &yellow\n"
xc+= 'Oops, now &red, something gone pear shaped...\n'
```

```
# what is the current error level?  
xc.color # should be red  
  
# 1. send the content of the current buffer with text added at the end  
# 2. override the global color of the message (from red to yellow)  
# 3. clear the buffer  
xc.status('but it is not *that* bad', color=yellow)  
  
# now the buffer has been cleared  
  
# send another message, same hostname but different service name  
xc.status('do not shoot the messenger!', service='logs')
```

## Alternatives

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### 3.1 skurfer/python-xymon

**Homepage** <https://github.com/skurfer/python-xymon>

Pros:

- more mature
- Python 3 support
- use the Xymon appfeed

Cons:

- I didn't see a way to read responses from the server to passed commands
- only one server



## **Indices and tables**

---

- genindex
- modindex
- search



**X**

`xymon_client.helpers`, 5  
`xymon_client.xymon`, 3



## C

client() (xymon\_client.xymon.Xymon method), 3  
clientlog() (xymon\_client.xymon.Xymon method), 3  
Color (class in xymon\_client.helpers), 5  
color (xymon\_client.helpers.Helper attribute), 6  
config() (xymon\_client.xymon.Xymon method), 3

## D

data() (xymon\_client.xymon.Xymon method), 3  
disable() (xymon\_client.xymon.Xymon method), 4  
download() (xymon\_client.xymon.Xymon method), 4  
drop() (xymon\_client.xymon.Xymon method), 4

## E

enable() (xymon\_client.xymon.Xymon method), 4

## G

get\_colors() (xymon\_client.helpers.Helper method), 6  
ghostlist() (xymon\_client.xymon.Xymon method), 4

## H

headline (xymon\_client.xymon.Xymon attribute), 4  
Helper (class in xymon\_client.helpers), 5  
hostinfo() (xymon\_client.xymon.Xymon method), 4

## M

modify() (xymon\_client.xymon.Xymon method), 4

## N

name (xymon\_client.helpers.Color attribute), 5  
notes() (xymon\_client.xymon.Xymon method), 4  
notify() (xymon\_client.xymon.Xymon method), 4

## P

ping() (xymon\_client.xymon.Xymon method), 4  
pullclient() (xymon\_client.xymon.Xymon method), 4

## Q

query() (xymon\_client.xymon.Xymon method), 4

## R

r\_color (xymon\_client.helpers.Helper attribute), 6  
rename() (xymon\_client.xymon.Xymon method), 4

## S

schedule() (xymon\_client.xymon.Xymon method), 4  
status() (xymon\_client.helpers.Helper method), 6  
status() (xymon\_client.xymon.Xymon method), 5

## U

usermsg() (xymon\_client.xymon.Xymon method), 5

## X

Xymon (class in xymon\_client.xymon), 3  
xymon\_client.helpers (module), 5  
xymon\_client.xymon (module), 3  
xymondboard() (xymon\_client.xymon.Xymon method), 5  
xymondlog() (xymon\_client.xymon.Xymon method), 5  
xymondxboard() (xymon\_client.xymon.Xymon method), 5  
xymondxlog() (xymon\_client.xymon.Xymon method), 5  
Xymons (class in xymon\_client.xymon), 5