

User Manual

BTH UPS SNMP MONITOR v 11.05

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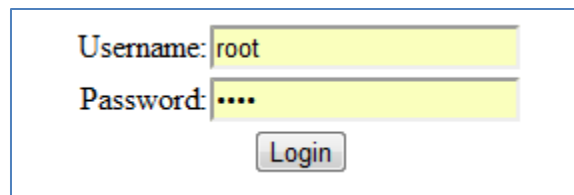
1 Install

Please see "README.TXT".

2 Users

There are three kinds of users, *viewer*, *admin* and *root*. Only one build-in *root* is allowed, they could control everything. *Root* is the special one from *admin* group as *root* has all the power of *admin* and other important authority. *Anyone* will be mentioned and it means any kind, any one of the users.

3 Login



A login form with two input fields. The first field is labeled 'Username:' and contains the text 'root'. The second field is labeled 'Password:' and contains four dots '....'. Below the password field is a button labeled 'Login'.

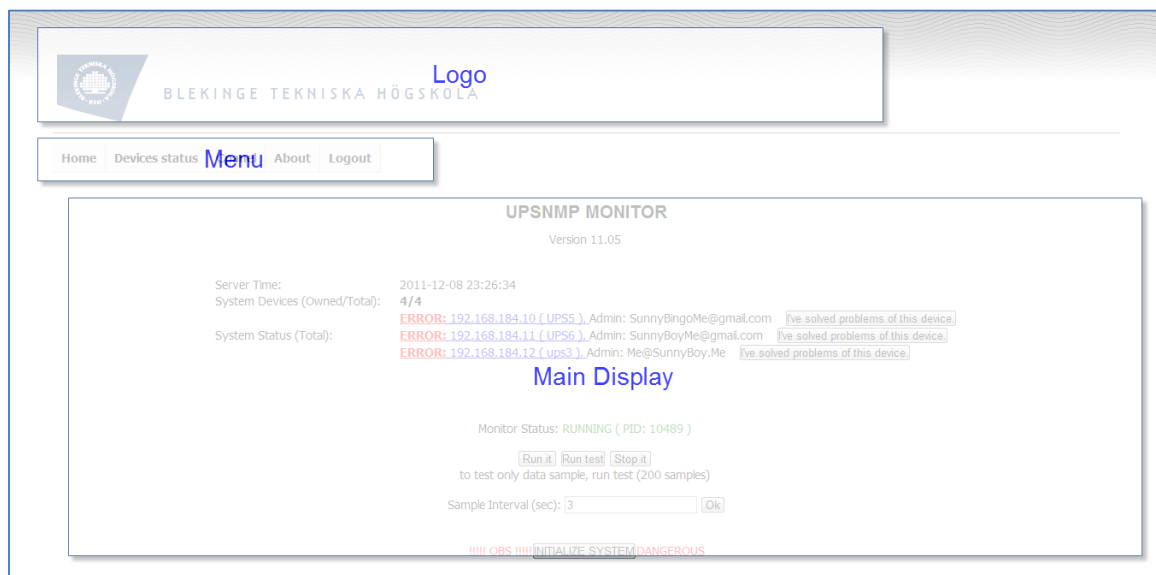
Anyone should login to manage or view system.

The default password for *root* is *root*. Three more users: *admin1*, *admin2* and *user1*. Their default passwords are the same as the usernames.

Please change it after logged in.

4 Display Overview

There are three areas: LOGO, MENU and Main Display.



5 Menu

5.1 Home (restricted authority)

Home Devices status Cpanel About Logout

UPSNMP MONITOR
Version 11.05

Server Time: 2011-12-08 23:39:45
System Devices (Owned/Total): 2/2
System Status (Total): All devices are OK.

Monitor Status: RUNNING (PID: 10489)
to test only data sample, run test (200 samples)
Sample Interval (sec): 3

[Initialize system \(Warning\)](#)
System Recovery (root)

5.1.1 System Summary (restricted authority)

At home, anyone could see *System Summary*. *System Devices* now showing: 2/2 which means there are 2 devices in the system, and this logged-in user could control all of them as this user is *root*. Normally, it would be 1/2 or 3/5 etc. For *viewer*, it should be 0/2 or 0/5.

The *System Status* usually is “All devices are OK.” If there are some problems, it would be:

Server Time: 2011-05-30 00:23:35
System Devices (Owned/Total): 1/2
System Status (Total):
ERROR: 192.168.184.10 (UPS5). Admin: SunnyBingoMe@gmail.com
ERROR: 192.168.184.11 (UPS6). Admin: SunnyBoyMe@gmail.com

where anyone could see the *ERROR: device ip (Device Name) Admin's email.* of all devices, but only *admin* who own this device or *root* could click the url to see what happened in *Details of Device* window. The *admin* or *root* also could reset this flag after they solved problems. To make sure the problems will be noticed, the flag should be reset manually.

5.1.2 Monitor Control (root only)

Though anyone could see the status of monitor, only *root* could stop or start the background perl monitor. The probe/sample interval will be configured by *root* here, too.

5.1.3 System Recovery (root only)


You could initialize the whole system via this button. Take care to use it because all history and the operations/actions will be gone, while only the demo users, devices, OIDs and attached servers will stay.


5.2 Devices and Status (admin only)


5.2.1 Devices Table


[Home](#) [Devices status](#) [Cpanel](#) [About](#) [Logout](#)

Devices


[192.168.1.50](#)
ups50



[192.168.184.10](#)
UPS5



[192.168.184.11](#)
UPS6



[192.168.184.12](#)
ups3

[Home](#) [Devices status](#) [Cpanel](#) [About](#) [Logout](#)

UPS devices


[Add a new device](#)


[Remove a device](#)


[Edit a device](#)

OIDs and thresholds

Devices						
ID	Device IP	Device Name	Snmp Config	Admin Email	Status	Select to Delete
12	192.168.1.50	ups50	1 : public	Me@SunnyBoy.Me	OK	<input type="checkbox"/>
1	192.168.184.10	UPS5	2c : public	SunnyBingoMe@gmail.com	ERROR	<input type="checkbox"/>
2	192.168.184.11	UPS6	2c : public	SunnyBoyMe@gmail.com	ERROR	<input type="checkbox"/>
13	192.168.184.12	ups3	1 : public	Me@SunnyBoy.Me	ERROR	<input type="checkbox"/>

Total number of device records: 4
All info in monitor system about the deleted devices will be gone.

[Select None](#) [Delete Selected](#)

The *admins* and *root* could add or delete devices who's OIDs would be monitored by SNMP here. One device could be seen only by the *admin* who added it or the *root*.

The *Status* could be *ERROR* or *OK*, a user could click to see the details in *Details of Device* window.

5.2.2 Details of Device window

Home	Devices status	Cpanel	About	Logout
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Details of Device: 192.168.184.11 (UPS6) [View Errors](#)

Name	Status	Real time	Hourly history	Daily history	Monthly history	Yearly history
SystemName	UPS6	N/A	N/A	N/A	N/A	N/A
BatteryRemaining_10ms	300000	View	View	View	View	View
AttactedDevice_1	Device 1	N/A	N/A	N/A	N/A	N/A
AttactedDevice_2	Device 2	N/A	N/A	N/A	N/A	N/A
AttactedDevice_3		N/A	N/A	N/A	N/A	N/A
OutputVoltage	5.2.2.1	View	View	5.2.2.3	View	View
SystemUpTime_10ms	369993370	N/A	N/A	N/A	N/A	N/A
Description	APC Web/SNMP Management Card (MB:v3.8.6 PF:v3.5.5)	N/A	N/A	N/A	N/A	N/A
BatteryStatus	2	N/A	N/A	N/A	N/A	N/A
BatteryRemaining_percent	100	View	View	View	View	View
Temperature_C		View	View	View	View	View

Details of Device: 192.168.184.11 (UPS6) [View Errors](#)

ID	OID	OID Name	Threshold	Select to Delete
5	1.3.6.1.2.1.1.5.0	SystemName	not statistic	<input type="checkbox"/>
6	1.3.6.1.4.1.318.1.1.1.2.2.3.0	BatteryRemaining_10ms	View/Edit	<input type="checkbox"/>
7	1.3.6.1.4.1.318.1.1.1.5.1.2.1.2.1	AttactedDevice_1	not statistic	<input type="checkbox"/>
8	1.3.6.1.4.1.318.1.1.1.5.1.2.1.2.2	AttactedDevice_2	not statistic	<input type="checkbox"/>
9	1.3.6.1.4.1.318.1.1.1.5.1.2.1.2.3	AttactedDevice_3	not statistic	<input type="checkbox"/>
81	1.3.6.1.4.1.318.1.1.1.4.2.1.0	OutputVoltage	View/Edit	<input type="checkbox"/>
82	1.3.6.1.2.1.1.3.0	SystemUpTime_10ms	not statistic	<input type="checkbox"/>
84	1.3.6.1.2.1.1.1.0	Description	not statistic	<input type="checkbox"/>
88	1.3.6.1.4.1.318.1.1.1.2.1.1.0	BatteryStatus	not statistic	<input type="checkbox"/>
91	1.3.6.1.4.1.318.1.1.1.2.2.1.0	BatteryRemaining_percent	View/Edit	<input type="checkbox"/>
92	1.3.6.1.4.1.318.1.1.1.2.2.2.0	Temperature_C	View/Edit	<input type="checkbox"/>

Here, a user could know the details of one device.


5.2.2.1 Current Values and Status

NOTE: If the *Status* of one device is *ERROR*, but the *statuses* of all OIDs of the same device are *OK*, it usually means *No response from remote host* when the monitor query this device. A user could click *View Errors* on the top to view the latest 1000 errors of this device.

5.2.2.2 Thresholds

Home Devices status **Panel** About Logout

OIDs and thresholds



[Add/Remove OIDs and thresholds](#)

Add or Delete Oids for Devices

ID	Device IP	Device Name	Admin Email	No. of Statistic Oid / Total	Select to Add Oids
12	192.168.1.50	ups50	Me@SunnyBoy.Me	0 / 0 View/Edit Details	<input type="checkbox"/>
1	192.168.184.10	UPS5	SunnyBingoMe@gmail.com	8 / 20 View/Edit Details	<input type="checkbox"/>
2	192.168.184.11	UPS6	SunnyBoyMe@gmail.com	7 / 19 View/Edit Details	<input type="checkbox"/>
13	192.168.184.12	ups3	Me@SunnyBoy.Me	0 / 1 View/Edit Details	<input type="checkbox"/>

Total number of device records: 4

Please type in new numeric oids here, separate them by newline("Enter").(Max 50 characters for each oid.)
 Make sure the names you wanted exist in the **Oid Namestable** table below, add new names first if they does not.

[Add to Selected](#)

Config Thresholds of OID: OutputVoltage
 for Device: 192.168.184.10 (UPS5)

Threshold 1

☒ Don't Use ☐ Use It

Threshold 2

☐ Don't Use ☒ Use It

If
 OutputVoltage >
 then
☒ Email Administrator
☐ Shutdown Attached Servers

Output Voltage of UPS5 is higher than 250.

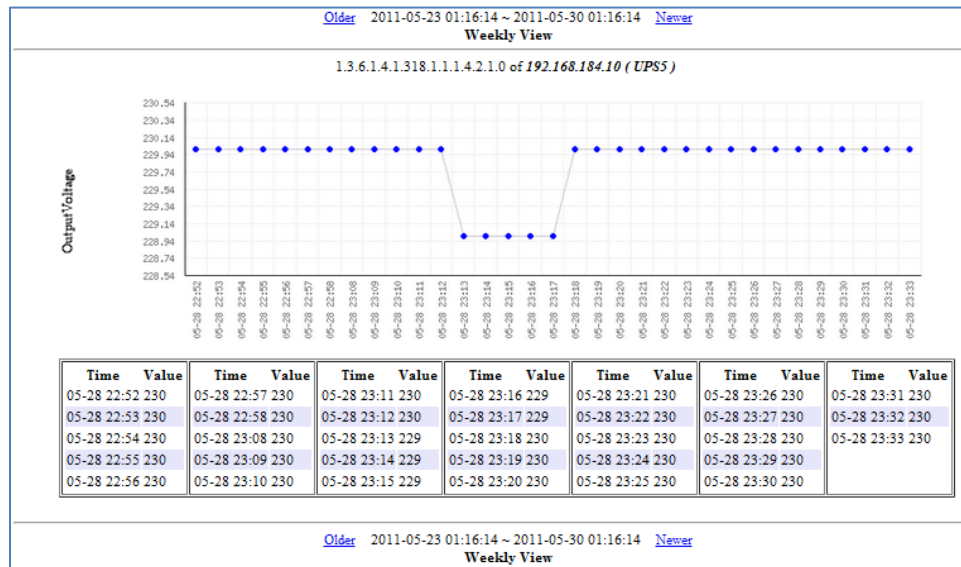
NOTE: If the threshold of the value (which is about time) smaller than sample interval, we can not handle the threshold correctly.

[OK](#)

For a *Statistic OID* (see 5.3), a user could configure the thresholds for it. There are two thresholds for each OID at most. The alarm email could be sent or the *Attached Servers* (see 5.4) will be shut down when the battery is low or the voltage is too high etc. The *ERROR FLAG* will be set which the user could see in *Home* window or *Device and Status* window.

NOTE: Only one email will be sent for each device if the user does not reset the *ERROR FLAG* for the specific device.

5.2.2.3 History



A user could view the history of each OID by one of four *View Types*: Quarter-hourly, Daily, Weekly or Monthly. The resolution of Quarter-hourly view is 15 seconds (but not higher than the sample resolution) at most and only the last 1 hour is available. The resolutions of the other three are 1 hour at most. In the last three *View Types*, the user could click the specific time slot on the graph to see details and the data will be stored for 5 months.

5.2.2.4 Delete OIDs

After clicking 5.2.2.2, a user could select some OIDs and *Delete Selected OIDs* (To add OIDs, see 5.3.1).

5.3 OIDs and Thresholds (admin only)

Add or Delete Oids for Devices

ID	Device IP	Device Name	Admin Email	No. of Statistic Oid / Total	Select to Add Oids
12	192.168.1.50	ups50	Me@SunnyBoy.Me	0 / 0 View/Edit Details/Thresholds	<input type="checkbox"/>
1	192.168.184.10	UPS5	SunnyBingoMe@gmail.com	8 / 20 View/Edit Details/Thresholds	<input type="checkbox"/>
2	192.168.184.11	UPS6	SunnyBoyMe@gmail.com	7 / 19 View/Edit Details/Thresholds	<input type="checkbox"/>
13	192.168.184.12	ups3	Me@SunnyBoy.Me	0 / 1 View/Edit Details/Thresholds	<input type="checkbox"/>

Total number of device records: 4

Please type in new numeric oids here, separate them by newline ("Enter").(Max 50 characters for each oid.)
 Make sure the names you wanted exist in the ***Oid Namestable*** table below, add new names first if they does not.

[Add to Selected](#)

Oid Names			
ID	Oid Name	Statistic	Select to Delete
46	AlarmCondition	N	<input type="checkbox"/>
47	AlarmTimer	Y Config Threshold	<input type="checkbox"/>
14	AttactedDevice_1	N	<input type="checkbox"/>
15	AttactedDevice_2	N	<input type="checkbox"/>
16	AttactedDevice_3	N	<input type="checkbox"/>
44	BasicModel	N	<input type="checkbox"/>
12	BatteryRemaining_10ms	Y Config Threshold	<input type="checkbox"/>
38	BatteryRemaining_percent	Y Config Threshold	<input type="checkbox"/>
10	BatteryStatus	N	<input type="checkbox"/>

An *admin* could add OIDs here and *root* could configure the *OID Names*.

From 5.2.2.2, user could enter *Add/Remove OIDs and thresholds* :

5.3.1 Add OID(s)

Add or Delete Oids for Devices

ID	Device IP	Device Name	Admin Email	No. of Statistic Oid / Total	Select to Add Oids
1	192.168.184.10	UPS5	SunnyBingoMe@gmail.com	7 / 19 View/Edit Details/Thresholds	<input checked="" type="checkbox"/>
2	192.168.184.11	UPS6	SunnyBoyMe@gmail.com	7 / 19 View/Edit Details/Thresholds	<input checked="" type="checkbox"/>

Total number of device records: 2

Please type in new numeric oids here, separate them by newline("Enter").(Max 50 characters for each oid.)

1.3.6.1.4.1.318.1.1.1.5.1.2.1.2.1
 1.3.6.1.4.1.318.1.1.1.2.2.0

Type in numeric OIDs here.

[Add to Selected](#)

Type in the numeric OIDs which would be monitored and *Add to Selected* devices above.

Please config each oid

Numeric Oid	Assign a Name*
1.3.6.1.4.1.318.1.1.1.5.1.2.1.2.1	AttactedDevice_1
1.3.6.1.4.1.318.1.1.1.2.2.0	Temperature_C(STATISTIC)

*The name will affetc the graphic view, please be careful.
 **Statistic means this oid's value is a dynamic number and need a graphic view of history.

Total number of new oids: 2

Reset OK

When ask to assign a name to each numeric OID, choose the suitable name.

NOTE: Only the one with a *Statistic OID Name* will have the history graphs and values to view.

5.3.2 OID Names

Root could add/delete/change OID names here, just like what could be done in the *Details of Device* window. As the *OID Names* will affect the whole system, *admin* shall apply to *root* to add/delete/change OID names if needed.

NOTE: 1. When deleting an *OID Name*, all OIDs with the name will be deleted. 2. Every device could not have the same numeric OID or *OID Name* more than once.

5.4 Attached Servers (admin only)

Panel About Logout


Attached servers




[Attached servers management](#)

[Crane](#)
[About](#)
[Logout](#)


Devices




[192.168.1.50](#)
[ups50](#)



[192.168.184.10](#)
[UPS5](#)



[192.168.184.11](#)
[UPS6](#)



[192.168.184.12](#)
[ups3](#)

An *admin* could only choose one of the devices owned by the *admin*-self to configure the attached servers to shutdown (should be configured in thresholds, see 5.2.2.2).

Details of 192.168.184.11 (UPS6)

ID	Server IP	Server Name	Port	Secret Message	Select to Delete
4	127.0.0.4	server4	6666	testSecretMessage	<input type="checkbox"/>
5	127.0.0.5	server5	5555	testSecretMessage	<input type="checkbox"/>

Total number of servers records: 2

If one server is deleted,
all its thresholds will be deleted.

[Select None](#)
[Delete Selected](#)

Add a new server

Server IP

Server Name (NO Special Character)

newHpServer

Shutdown Port Number (of Shutdown Daemon)

9999

Secret Message (for Shutdown Daemon)
(NO Special Character/Space)

newSecretMessage

Reset

OK


An *admin* could delete/add new servers.


NOTE: To shut down the attached servers when an UPS going down, a daemon perl script (*shut.pl* in the folder *monitor*) should running on the *Shutdown Port Number* of the servers and the main monitor should have the permission to create a socket to send *Secret Message* to the specific *Shutdown Port Number* of the attached servers.


5.5 Users (root only)

[cpanel](#) [About](#) [Logout](#)

User accounts


[Add a new user](#)


[Remove a user](#)


[Change password](#)

Add New User

Username
(NO Special Character)

Password

Confirm Password

Email (Important)

User Type ☒ Viewer | ☐ Administrator

Remove a user				
ID	Username	User Type	Email	Select to Delete
1	admin1	Administrator	SunnyBingoMe@gmail.com	<input type="radio"/>
7	admin2	Administrator	SunnyBoyMe@gmail.com	<input type="radio"/>
12	root	Administrator	Me@SunnyBoy.Me	Undeleteable.
8	user1	Viewer	BinSun@mail.com	<input type="radio"/>

Total number of user records: 4

After deleted, handover devices and permission to:

admin1 : SunnyBingoMe@gmail.com

Root could add/delete users here (except the *root*-self).

NOTE: When deleting a user, the authority and devices of the user should be handover to an already-exist *admin*.

5.6 View Errors (root only)

1 ~ 3 / 3			
ID	Time Stamp	Device IP	Description
2886	2011-05-28 22:51:58	192.168.184.10	No response from remote host "192.168.184.10"
2885	2011-05-28 22:51:53	192.168.184.10	No response from remote host "192.168.184.10"
2884	2011-05-28 22:51:48	192.168.184.10	No response from remote host "192.168.184.10"
1 ~ 3 / 3			

Root could see all errors of the whole system here without any restrict to specific devices owned (all devices are owned by *root*).

5.7 Change Password (anyone)

Username:	root
Old password:	<input type="text"/>
New password:	<input type="text"/>
Confirm New password:	<input type="text"/>
<input type="button" value="Reset"/>	<input type="button" value="OK"/>

Anyone could change the password for themselves. All passwords will be encrypted by MD5.

5.8 Change Email (anyone)

Anyone could change the email for themselves.

5.9 About (anyone)

Anyone could find the information about the system here.

5.10 Logout (anyone)

Please logout on time to keep system and data in safe (Though the web session may expire after 24 minutes if there is not any operation).