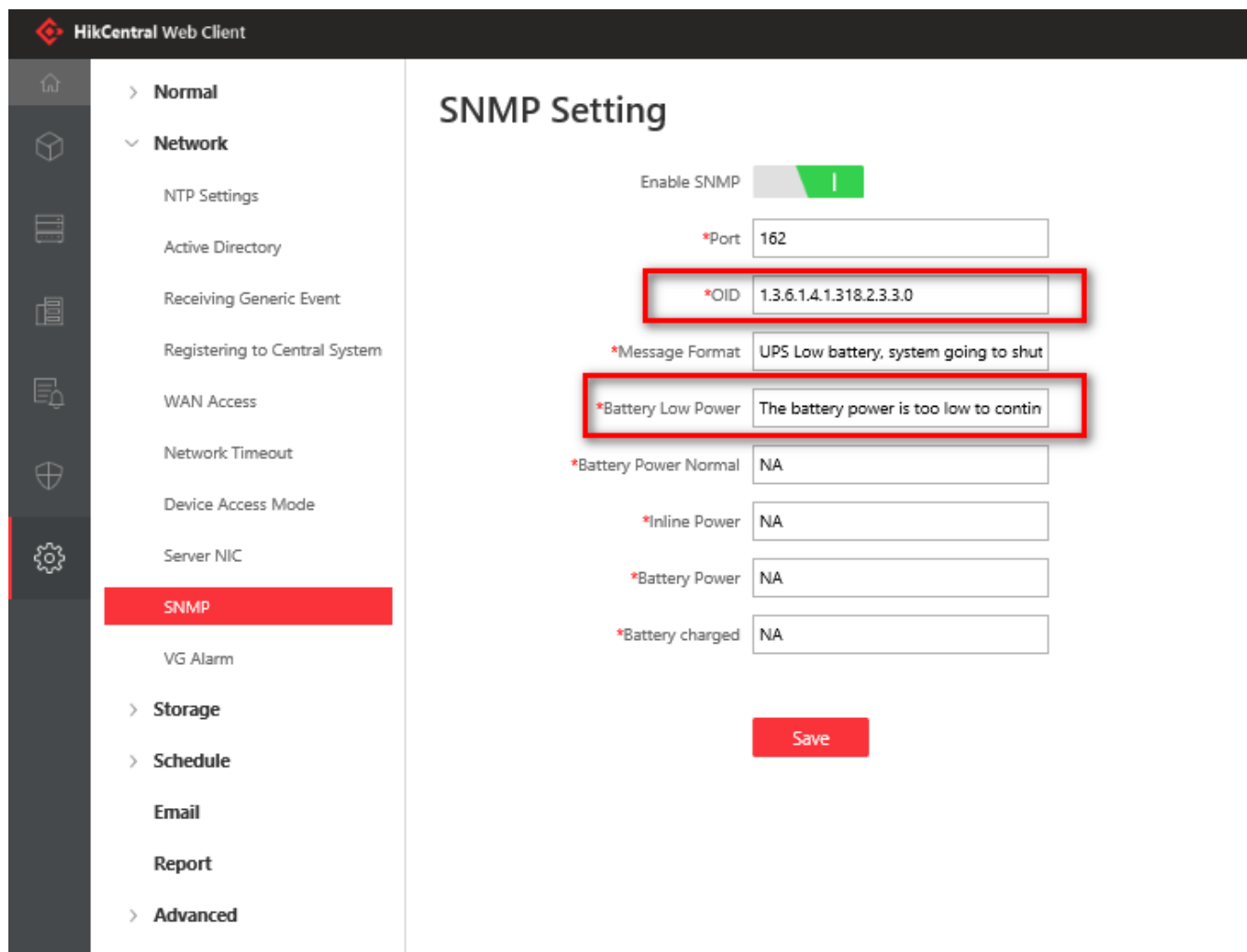


How to config to Shutdown HikCentral VMS safely when the UPS is LOW

As per the Regulation when the UPS battery is low to handle the load, all the Device (SERVER, NVR) shutdown safely. Therefore, we have integrated the HikCentral to monitor the UPS TRAP signal and Shutdown safely.

HikCentral (V1.3.1.50)

Fill the below two field correctly same as UPS send , you can get this from UPS Manufacture OID Document.



The screenshot shows the HikCentral Web Client interface. On the left is a navigation sidebar with a gear icon for settings. The main content area is titled "SNMP Setting".

SNMP Setting

- Enable SNMP:
- *Port: 162
- *OID: 1.3.6.1.4.1.318.2.3.3.0
- *Message Format: UPS Low battery, system going to shut
- *Battery Low Power: The battery power is too low to contin
- *Battery Power Normal: NA
- *Inline Power: NA
- *Battery Power: NA
- *Battery charged: NA

At the bottom of the form is a red "Save" button.

Config Trap receiver in UPS, IP is the VMS server IP

Schneider Electric UPS Network Management Card 2
Smart-UPS/Matrix Application

Home Status Control Configuration Tests

Trap Receiver

Trap Generation: Enable
NMS IP/Host Name:
Language: ▼
 SNMPv1
Community Name:
Authenticate Traps: Enable

Schneider Electric UPS Network Management Card 2
Smart-UPS/Matrix Application

apc | English | Log Off | Help | ✔ No Alarms

Home Status Control Configuration Tests Logs About

Trap Receivers

NMS IP/Host Name	Trap Type	Generation	Language
192.168.100.87	SNMPv1	Enabled	English
192.168.101.246	SNMPv1	Enabled	English

HikCentral Control client show the Popup message

HikCentral Control Client

Monitoring Public View

06-06-2022 11:03:11

Enter:0
Leave:0

Information

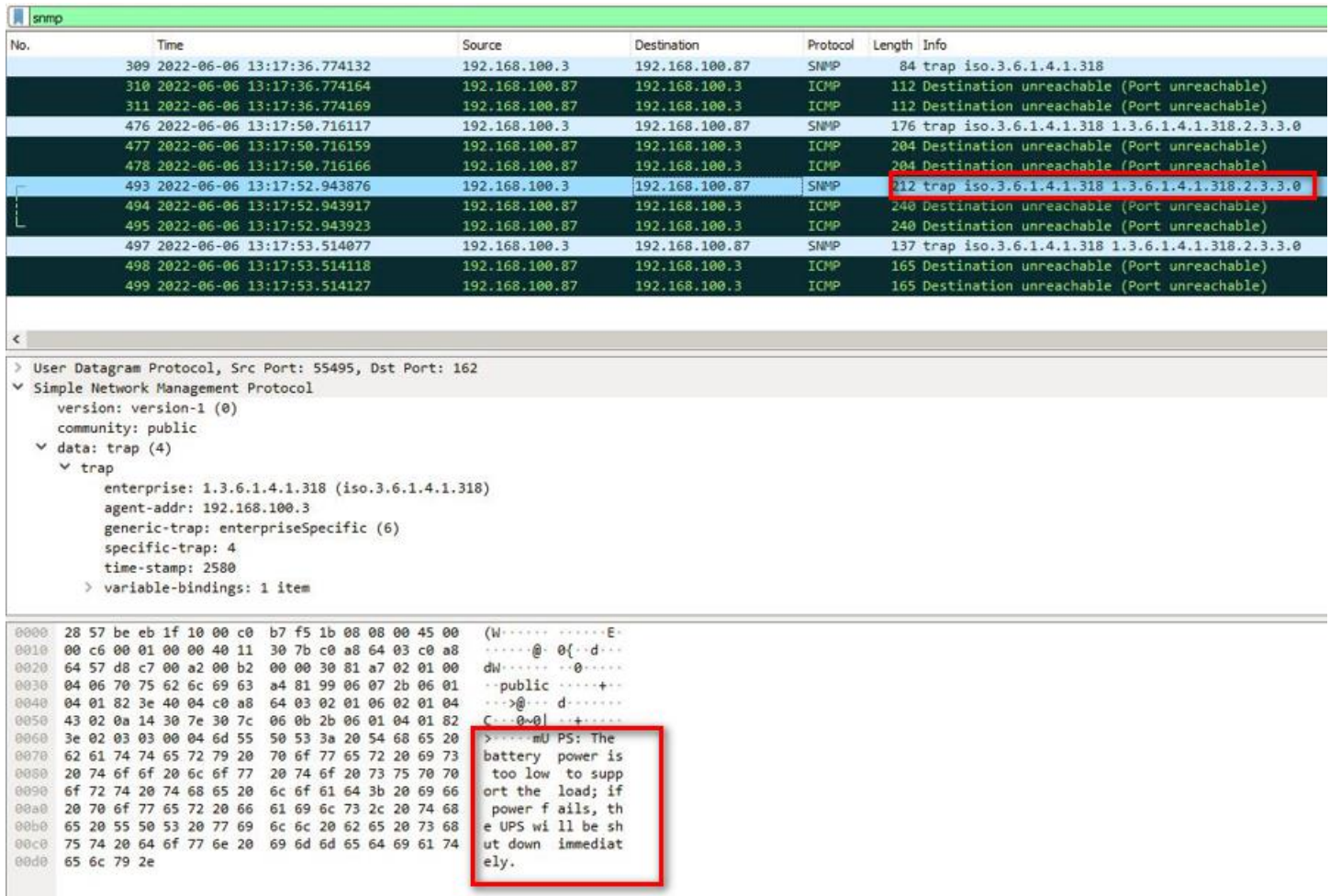
UPS Low battery, system going to shut down

Close

DS-2CD712660-I2S

To verify we receive trap signal

1, Check Capture packet and analyze



No.	Time	Source	Destination	Protocol	Length	Info
309	2022-06-06 13:17:36.774132	192.168.100.3	192.168.100.87	SNMP	84	trap iso.3.6.1.4.1.318
310	2022-06-06 13:17:36.774164	192.168.100.87	192.168.100.3	ICMP	112	Destination unreachable (Port unreachable)
311	2022-06-06 13:17:36.774169	192.168.100.87	192.168.100.3	ICMP	112	Destination unreachable (Port unreachable)
476	2022-06-06 13:17:50.716117	192.168.100.3	192.168.100.87	SNMP	176	trap iso.3.6.1.4.1.318 1.3.6.1.4.1.318.2.3.3.0
477	2022-06-06 13:17:50.716159	192.168.100.87	192.168.100.3	ICMP	204	Destination unreachable (Port unreachable)
478	2022-06-06 13:17:50.716166	192.168.100.87	192.168.100.3	ICMP	204	Destination unreachable (Port unreachable)
493	2022-06-06 13:17:52.943876	192.168.100.3	192.168.100.87	SNMP	112	trap iso.3.6.1.4.1.318 1.3.6.1.4.1.318.2.3.3.0
494	2022-06-06 13:17:52.943917	192.168.100.87	192.168.100.3	ICMP	248	Destination unreachable (Port unreachable)
495	2022-06-06 13:17:52.943923	192.168.100.87	192.168.100.3	ICMP	248	Destination unreachable (Port unreachable)
497	2022-06-06 13:17:53.514077	192.168.100.3	192.168.100.87	SNMP	137	trap iso.3.6.1.4.1.318 1.3.6.1.4.1.318.2.3.3.0
498	2022-06-06 13:17:53.514118	192.168.100.87	192.168.100.3	ICMP	165	Destination unreachable (Port unreachable)
499	2022-06-06 13:17:53.514127	192.168.100.87	192.168.100.3	ICMP	165	Destination unreachable (Port unreachable)

```
> User Datagram Protocol, Src Port: 55495, Dst Port: 162
Simple Network Management Protocol
  version: version-1 (0)
  community: public
  data: trap (4)
    trap
      enterprise: 1.3.6.1.4.1.318 (iso.3.6.1.4.1.318)
      agent-addr: 192.168.100.3
      generic-trap: enterpriseSpecific (6)
      specific-trap: 4
      time-stamp: 2580
      variable-bindings: 1 item
```

```
0000 28 57 be eb 1f 10 00 c0 b7 f5 1b 08 08 00 45 00 (W.....E
0010 00 c6 00 01 00 00 40 11 30 7b c0 a8 64 03 c0 a8 .....@.{.d...
0020 64 57 d8 c7 00 a2 00 b2 00 00 30 81 a7 02 01 00 dW.....@...
0030 04 06 70 75 62 6c 69 63 a4 81 99 06 07 2b 06 01 ..public.....+
0040 04 01 82 3e 40 04 c0 a8 64 03 02 01 06 02 01 04 ..>@...d.....
0050 43 02 0a 14 30 7e 30 7c 06 0b 2b 06 01 04 01 82 C...@...+....
0060 3e 02 03 03 00 04 6d 55 50 53 3a 20 54 68 65 20 >.....mUPS: The
0070 62 61 74 74 65 72 79 20 70 6f 77 65 72 20 69 73 battery power is
0080 20 74 6f 6f 20 6c 6f 77 20 74 6f 20 73 75 70 70 too low to supp
0090 6f 72 74 20 74 68 65 20 6c 6f 61 64 3b 20 69 66 ort the load; if
00a0 20 70 6f 77 65 72 20 66 61 69 6c 73 2c 20 74 68 power fails, th
00b0 65 20 55 50 53 20 77 69 6c 6c 20 62 65 20 73 68 e UPS wil l be sh
00c0 75 74 20 64 6f 77 6e 20 69 6d 6d 65 64 69 61 74 ut down immediat
00d0 65 6c 79 2e ely.
```

2, In th Hikcentral VSM Log

```
[2022-06-06 12:46:57.650][VSM][INFO][VSM::CRespTask::Exec][CVsmAccessControlTask::RequestProcess] HttpServerSynSend success, revalue = 0, handle = 9, url /ISAPI/Bumblebee/PTZCtrl/Cameras/99/lockPTZ[...]
[2022-06-06 12:47:00.302][SnmpTrapd][INFO][snmptrapd:callback]Error Index = 0, Error Status = 0, Requestid = 0, VbCount = 1, Type = 164[...][0x0000144c]
[2022-06-06 12:47:00.302][SnmpTrapd][INFO][snmptrapd:callback]UPS OID: 1.3.6.1.4.1.318.2.3.3.0, Web OID: 1.3.6.1.4.1.318.2.3.3.0f[...][0x0000144c]
[2022-06-06 12:47:00.302][SnmpTrapd][INFO][snmptrapd:callback]strValue: UPS: The battery power is too low to continue to support the load; the UPS will shut down if input power does not return to normal
[2022-06-06 12:47:00.302][SnmpTrapd][INFO][snmptrapd:callback]Web InlinePower: NA[...][0x0000144c]
[2022-06-06 12:47:00.302][SnmpTrapd][INFO][snmptrapd:callback]Web BatteryPower: NA[...][0x0000144c]
[2022-06-06 12:47:00.302][SnmpTrapd][INFO][snmptrapd:callback]Web BatteryCharged: NA[...][0x0000144c]
[2022-06-06 12:47:00.302][SnmpTrapd][INFO][snmptrapd:callback]Web BatteryLowPower: The battery power is too low to continue to support the load[...][0x0000144c]
[2022-06-06 12:47:00.302][SnmpTrapd][INFO][snmptrapd:callback]Web BatteryPowerNormal: NA[...][0x0000144c]
[2022-06-06 12:47:00.302][SnmpTrapd][INFO][snmptrapd:callback]Power Status: Battery Power, Battery Status: Battery Low Power[...][0x0000144c]
[2022-06-06 12:47:00.302][SnmpTrapd][INFO][snmptrapd:callback]Start Shut Down[...][0x0000144c]
[2022-06-06 12:47:00.302][SnmpTrapd][INFO][snmptrapd:callback][UPS] Push Msg [<?xml version="1.0" encoding="UTF-8"?>
<Msg><Data><Ups><BatteryLowPower></BatteryLowPower><Message>UPS Low battery, system going to shut down</Message></Ups></Data></Msg>
], Session ID : [4E17C07A1EE74842B5BAFC56A7D28601][...][0x0000144c]
[2022-06-06 12:47:00.302][SnmpTrapd][INFO][snmptrapd:callback][UPS] Push Msg [<?xml version="1.0" encoding="UTF-8"?>
<Msg><Data><Ups><BatteryLowPower></BatteryLowPower><Message>UPS Low battery, system going to shut down</Message></Ups></Data></Msg>
], Session ID : [60C096CD84E143B18E4EC0FD3151CF2D][...][0x0000144c]
[2022-06-06 12:47:00.302][SnmpTrapd][INFO][snmptrapd:callback][UPS] Push Msg [<?xml version="1.0" encoding="UTF-8"?>
<Msg><Data><Ups><BatteryLowPower></BatteryLowPower><Message>UPS Low battery, system going to shut down</Message></Ups></Data></Msg>
], Session ID : [7335BFEC022449FE9480BAFA15487678][...][0x0000144c]
[2022-06-06 12:47:00.302][SnmpTrapd][INFO][snmptrapd:callback][UPS] Push Msg [<?xml version="1.0" encoding="UTF-8"?>
<Msg><Data><Ups><BatteryLowPower></BatteryLowPower><Message>UPS Low battery, system going to shut down</Message></Ups></Data></Msg>
], Session ID : [DC7693E415FC4A75A3EE90683C23EF1C][...][0x0000144c]
[2022-06-06 12:47:00.303][SnmpTrapd][INFO][snmptrapd:callback]Device type is [2][...][0x0000144c]
[2022-06-06 12:47:00.347][SnmpTrapd][INFO][snmptrapd:callback]Shut Down Success Because Battery LowPower[...][0x0000144c]
[2022-06-06 12:47:00.742][VSM][INFO][VSM::CvsmAccessControlTask::SessionTokenMode]IP=127.0.0.1, Url=/ISAPI/Bumblebee/KeepLive, SID=DC7693E415FC4A75A3EE90683C23EF1C[...][0x0000144c]
[2022-06-06 12:47:00.743][VSM][INFO][VSM::CRespTask::Exec][CVsmAccessControlTask:RequestProcess] HttpServerSynSend success, revalue = 0, handle = 9, url /ISAPI/Bumblebee/KeepLive[...][0x0000144c]
[2022-06-06 12:47:06.641][VSM][INFO][VSM::CvsmAccessControlTask::SessionTokenMode]IP=192.168.101.85, Url=/ISAPI/Bumblebee/KeepLive, SID=7335BFEC022449FE9480BAFA15487678[...][0x0000144c]
[2022-06-06 12:47:06.642][VSM][INFO][VSM::CRespTask::Exec][CVsmAccessControlTask:RequestProcess] HttpServerSynSend success, revalue = 0, handle = 9, url /ISAPI/Bumblebee/KeepLive[...][0x0000144c]
[2022-06-06 12:47:11.750][VSM][INFO][VSM::CvsmAccessControlTask::SessionTokenMode]IP=127.0.0.1, Url=/ISAPI/Bumblebee/KeepLive, SID=DC7693E415FC4A75A3EE90683C23EF1C[...][0x0000144c]
[2022-06-06 12:47:11.751][VSM][INFO][VSM::CRespTask::Exec][CVsmAccessControlTask:RequestProcess] HttpServerSynSend success, revalue = 0, handle = 9, url /ISAPI/Bumblebee/KeepLive[...][0x0000144c]
[2022-06-06 12:47:13.028][VSM][INFO][VSM::CVGAlarmCenter::UpdateEncodeDeviceMgrState]Storante Server State Not Init, Misss UpdateStorageServerManagerState[...][0x00001824]
```