

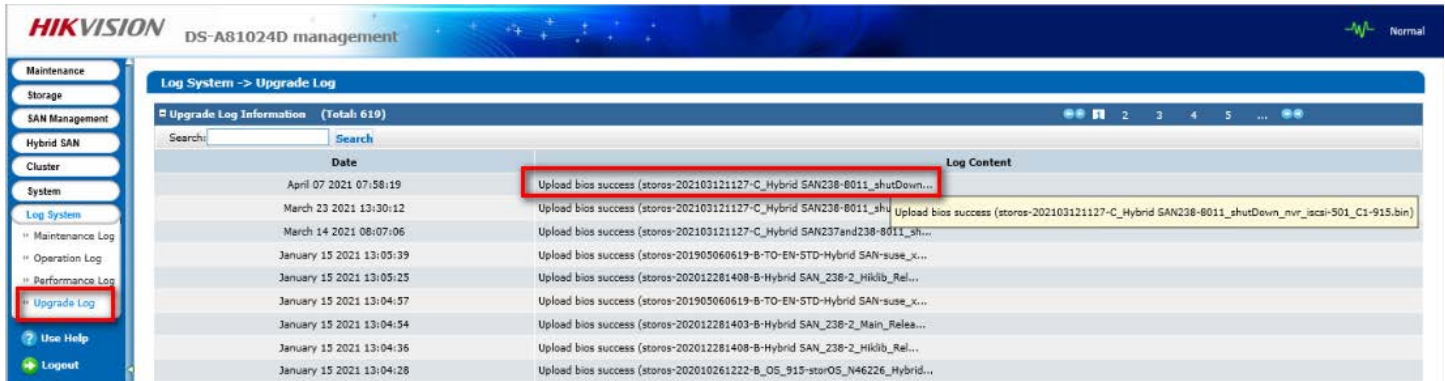
NAS storage safe shutdown using Smart-UPS

As per new rule, we need to shut down the device safely when the UPS battery low when online power cut.

We have customize the FW, which can support shutdown by Script (same like NVR).

FW – Support 2.3.8 Hybrid SAN version. Support Single Controller Device only (DS-A81016S DS-A80624S).

storos-202103121127-C_CVR238-8011_batchShutDown-501_C1-915



Script:

```

function Cgi_Request ()
    CGI_CMD = "shutDown"
    Rem NVR-CGI-URL
    NVR_CGI_URL ="http://ipaddress:8011/wps-cgi/RemoteControl.cgi?action=" + CGI_CMD
    Dim http_request
    Set http_request = CreateObject("Msxml2.ServerXMLHTTP")
    http_request.open "GET", NVR_CGI_URL, False
    http_request.send
End function

function Cgi_Request1 ()
    Rem Request NVR name first, make sure net status is ok
    CGI_CMD = "shutDown"
    Rem NVR-CGI-URL
    NVR_CGI_URL ="http://ipaddress:8011/wps-cgi/RemoteControl.cgi?action=" + CGI_CMD
    Dim http_request
    Set http_request = CreateObject("Msxml2.ServerXMLHTTP")
    http_request.open "GET", NVR_CGI_URL, False
    http_request.send
End function

function Cgi_Request2 ()
    Rem Request NVR name first, make sure net status is ok
    CGI_CMD = "shutDown"
    Rem NVR-CGI-URL
    NVR_CGI_URL ="http://ipaddress:8011/wps-cgi/RemoteControl.cgi?action=" + CGI_CMD
    Dim http_request
    Set http_request = CreateObject("Msxml2.ServerXMLHTTP")
    http_request.open "GET", NVR_CGI_URL, False
    http_request.send
End function

Cgi_Request ()
Cgi_Request1 ()
Cgi_Request2 ()
    
```

Storage 1 IP

Storage 2 and 3 IP

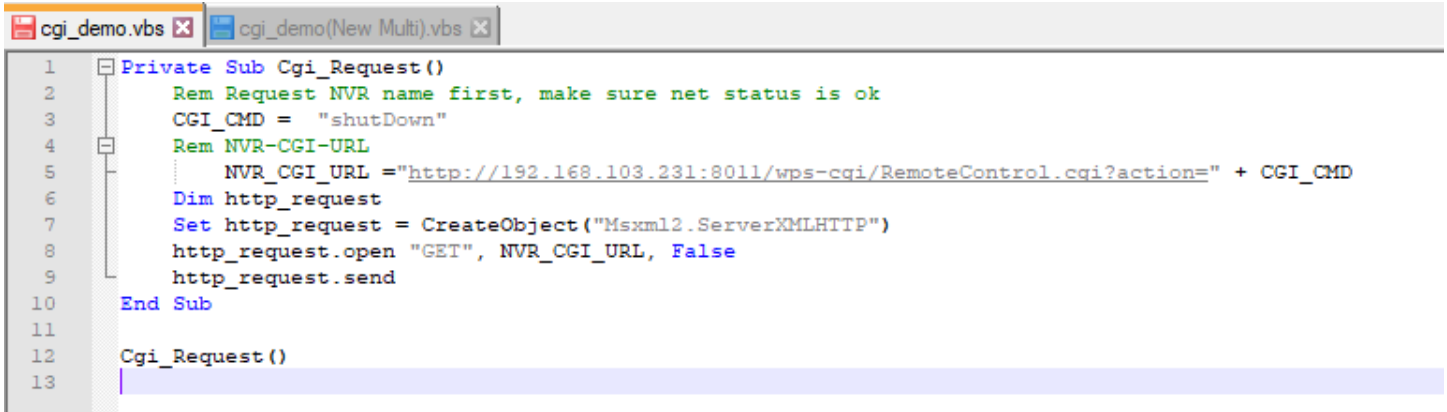
After Config the device IP in the script, we need to convert the script to EXE. So we can attach to UPS management software.

Step to Convert the VB Script to EXE.

Use the Visual basic or Use Online or conversion tool.

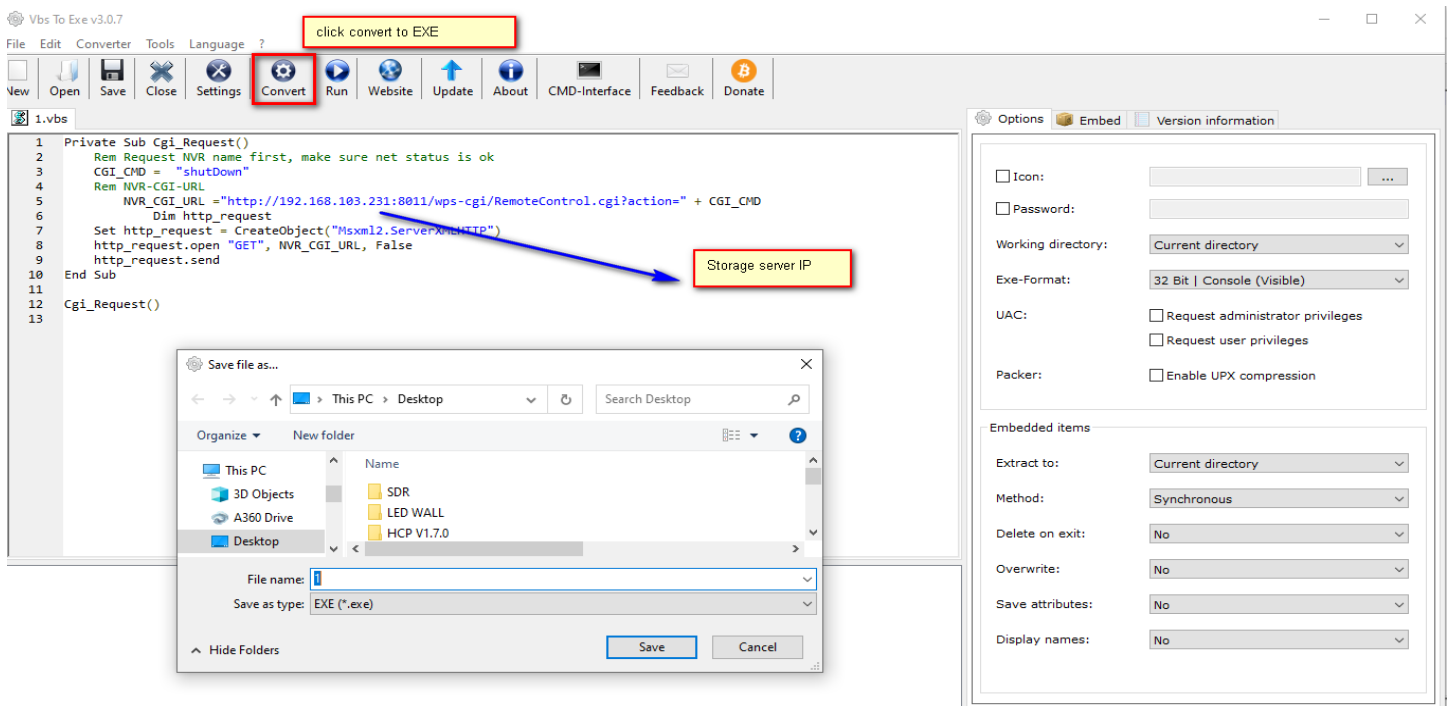
e.g.

1, VB Script, edit in Notepad++



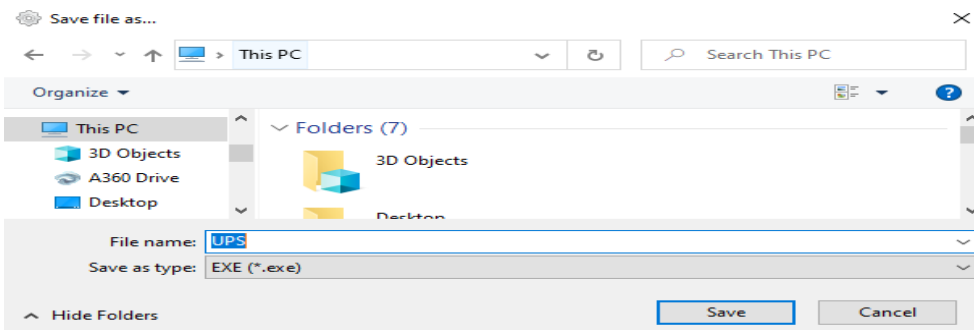
```
1 Private Sub Cgi_Request()  
2     Rem Request NVR name first, make sure net status is ok  
3     CGI_CMD = "shutDown"  
4     Rem NVR-CGI-URL  
5     NVR_CGI_URL ="http://192.168.103.231:8011/wps-cgi/RemoteControl.cgi?action=" + CGI_CMD  
6     Dim http_request  
7     Set http_request = CreateObject("Msxml2.ServerXMLHTTP")  
8     http_request.open "GET", NVR_CGI_URL, False  
9     http_request.send  
10 End Sub  
11  
12 Cgi_Request()  
13
```

2, Run the converter

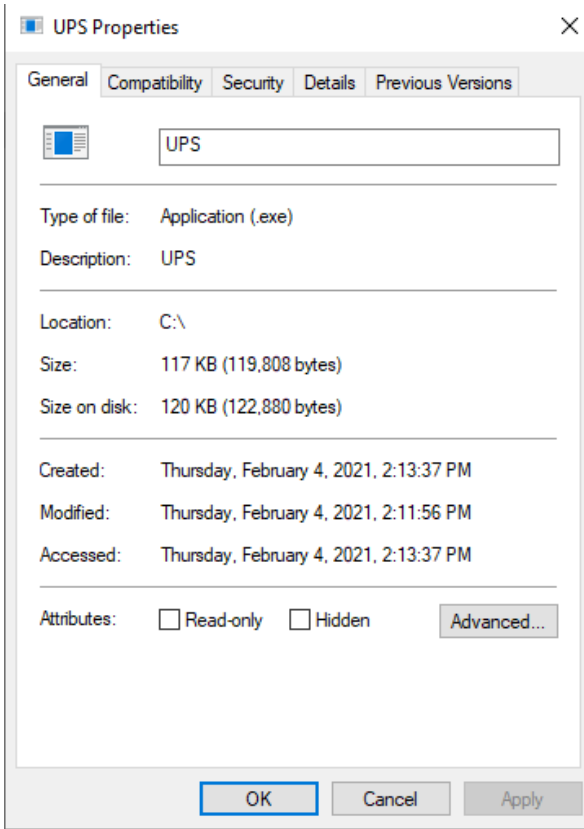


The screenshot shows the 'Vbs To Exe v3.0.7' application window. The 'Convert' button in the toolbar is highlighted with a red box and labeled 'click convert to EXE'. A blue arrow points from the 'Storage server IP' field in the options panel to the IP address '192.168.103.231' in the VB script code. A 'Save file as...' dialog box is open, showing the file being saved as 'EXE (*.exe)' on the Desktop.

3, Save as exe.

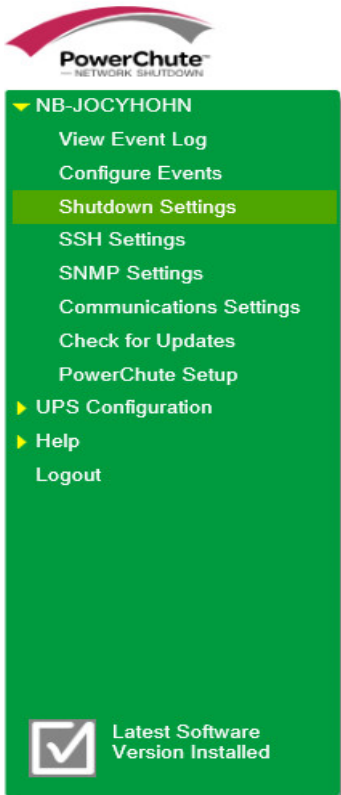


The screenshot shows the 'Save file as...' dialog box. The 'File name' field contains 'UPS' and the 'Save as type' is set to 'EXE (*.exe)'. The dialog is open to the Desktop location.



Step to config Smart-UPS software

E.g. APC –Schneider (Power Chute)



Shutdown Settings

?

When PowerChute starts a shutdown sequence it will use the settings below.

▶ UPS Shutdown ?	
Run Command	
Full path to command file	C:\Program Files\APC\PowerChute\user_file!
Duration	30 seconds ⓘ

Apply

Undo

- View Event Log
- Configure Events
- Shutdown Settings
- SSH Settings
- SNMP Settings
- Communications Settings
- Check for Updates
- PowerChute Setup
- ▶ UPS Configuration
- ▶ Help
- Logout

Click on an icon to configure a PowerChute event action in response to UPS events.

Events 1 to 16 of 16

Events	Logging	Command File	Shutdown
UPS On Battery			
Input Power Restored			
Runtime exceeded			
Runtime is sufficient			
Runtime remaining below threshold			
Runtime remaining above threshold			
Battery Discharged			

Low battery Trigger need to configure as per the site UPS battery Size and the LOAD.



- Home
- Status
- Control
- Configuration
- Tests
- Logs
- About

Shutdown

Start of Shutdown

Low Battery Duration: minutes [0 - 30]

Maximum Required Delay: 3 minutes

Basic Signaling Shutdown: Enable

Basic Low Battery Duration: seconds [120 - 1800]

-
- ▼ NB-JOCYHOHN
 - View Event Log
 - Configure Events
 - Shutdown Settings
 - SSH Settings
 - SNMP Settings
 - Communications Settings
 - Check for Updates
 - PowerChute Setup
 - ▶ UPS Configuration
 - ▶ Help
 - Logout
- Latest Software Version Installed

Event Log

Delete Log File Export Log

Display events

Events 1 to 20 of 44

Date	Time	Event
02/04/2021	15:04:21	PowerChute is attempting to access GDF port 5092.
02/04/2021	14:59:53	UPS critical event: Low Battery resolved.
02/04/2021	14:59:53	Low-battery condition solved.
02/04/2021	14:59:53	UPS is no longer running on battery power or output power has been turned on.
02/04/2021	14:59:25	Shutting down physical machine that PowerChute is running on.
02/04/2021	14:59:25	Shutdown Command File has completed.
02/04/2021	14:58:55	Running Shutdown Command File.
02/04/2021	14:58:55	Shutdown process started. Windows will shut down soon.
02/04/2021	14:58:55	UPS critical event: Low Battery .
02/04/2021	14:58:55	Low-battery condition has occurred.
02/04/2021	14:58:55	UPS has switched to battery power.
02/04/2021	14:18:27	Available runtime has been exceeded.
02/04/2021	14:18:27	Battery is discharged.

SNAPPY UPS

View Power pro

https://www.power-software-download.com/viewpower.html

- User-friendly power analysis graph, event statistics, history data chart export
- Real-time dynamic graphs of UPS data (voltage, frequency, load level, battery level)
- Safely OS shutdown and protection from data loss during power failure
- Warning notifications via audible alarm, broadcast, mobile messenger, and e-mail
- Scheduled UPS on/off, battery test, programmable outlet control, and audible alarm control
- Password security protection and remote access management
- Supports multiple languages: English, Chinese, French, German, Spanish, Russian, Portuguese, Ukrainian, Italian, Polish, Czech, Turkish

Download the software according to your requested operation system in your computer system. Supported browser versions include IE browser (not support the version older than IE10), Google, Chrome, Firefox. All browsers should support html5.

Software Version	Type	Download Link	Supported OS
		Download	Windows® 7 / 8 / 10 (32-bit & x64-bit) Windows® Server 2012 / 2016 / 2019 (32-bit & x64-bit) Windows SBS 2011
	Software for Windows® (V.HTML1.04-21012)	Download	Windows XP 2003 /2008

ViewPower

UPS MENU

Configuration | UPS info | Diagram

UPS settings | Local shutdown | Remote shutdown | Parameters setting | Purchase information

Control | View | Date format | Temperature unit | Help

Monitored UPS: USB (id=3A83DBF7_P01) English

Input information
Input voltage: 226 V
Input frequency: 50 Hz

UPS information
UPS mode: Line mode
UPS temp: 25.1 °C

Output information
Output voltage: 219.7 V
Output frequency: 50 Hz
Load level: 14 %
Current: 0.7 A

Battery information
Battery voltage: 25.9 V
Battery capacity: 50 %
Remaining backup time: 114 Min

UPS settings >> Local shutdown

Time to wait before shutting down the local system

1 Min

File to execute when shutting down

C:\3.exe

Maximum file execution time 1 Min

Cancel shutdown execute file

For example: C:\WINDOWS\notepad.exe

Warning dialog settings

Pop-up dialog before shutdown 60 Sec.

Warn me again every 30 Sec.

UPS settings >> Local shutdown

When the UPS is running from the battery

Shut down the local system after 0 Min 0 Sec.
 The local system is still on but execute file after 0 Min 0 Sec.
 Local shutdown when the capacity of battery down to %
 Also shut down the UPS after shutting down the local system

UPS battery is running low

Shut down the local system immediately
 UPS shut down depend on UPS model UPS will shutdown immediately UPS is still on

When a scheduled shutdown is triggered

Trigger the local system to shut down or go to sleep

The local system should

EATON UPS

Eaton IPP

The screenshot shows the Eaton Intelligent Power Protector web interface. The main content area displays system information and settings:

- System**
 - About Eaton Intelligent Power Protector...
 - Product version: 1.67 release 162
 - Server system name: Windows NT/6.02.00
 - Contact:
 - Location:
 - Website link: <http://pgsoftware.eaton.com/explore/eng/ipp/default.htm>
- Language Settings**
 - Language: [en-us] English (USA)
 - Date Format: dd/mm/yyyy
 - Time Format: h:MM:ss tt
 - Temperature Unit: [F] Fahrenheit
- Scan settings**
 - Automatic scan: Disabled
 - XML Enabled
 - Username / Password: admin / ****
 - SNMPv1 Enabled
 - SNMP community name: public
 - SNMPv3 Disabled
 - NUT Enabled
 - MQTT Enabled
 - Username / Password: /
- Automatic Update Settings**
 - Interval: Every week
 - Last Update: 10/02/2021-8:12:28 pm
 - Next Check Update: 17/02/2021-8:12:55 pm
- Modules Settings**
 - Redundancy: Disabled
 - Shutdown controller: Disabled
- Security settings**
 - Force HTTPS mode to access to the interface: Enabled
 - Force session logout after inactivity period: None

The right sidebar contains navigation links: Edit system information, Edit language, Edit scan settings, Edit update settings, Check for updates, Edit modules settings, and Edit security settings.

The 'Edit shutdown configuration' dialog box shows the following settings:

- Shutdown timer (second(s)): None
- Shutdown duration (second(s)): 120
- Shutdown type: Script
- Shutdown script: C:\UPS.exe

Buttons: Save, Cancel

- Maintenance
- Storage
- SAN Management
- Hybrid SAN
- Cluster
- System
- Log System
 - Maintenance Log
 - Operation Log
 - Performance Log
 - Upgrade Log
- Use Help
- Logout

[Clear Operation Log](#)

Operation Log Information (Total: 776)

Search: Complete Log Search

Date	Log Co
April 07 2021 08:06:34	(web_admin) IP:(192.168.101.80)Login successful
April 07 2021 08:06:12	The resource NIC IP is configured. 10.254.254.2.
April 07 2021 08:06:12	Hybrid SAN service is started. (10.254.254.2)
April 07 2021 08:06:12	Change protect area success
April 07 2021 08:06:12	Open raid monitor mode success
April 07 2021 08:06:09	Data NIC 4 disconnected when the system is starting up.
April 07 2021 08:06:09	Data NIC 2 disconnected when the system is starting up.
April 07 2021 08:06:09	Data NIC 1 disconnected when the system is starting up.
April 07 2021 08:05:59	Starting Hybrid SAN service(10.254.254.2)
April 07 2021 08:05:38	Set the local as the time host.
April 07 2021 08:05:10	System boot
April 07 2021 08:04:13	StorOS system start running
April 07 2021 07:59:37	System poweroff normally
April 07 2021 07:59:17	The resource NIC is closed. 10.254.254.2
April 07 2021 07:59:17	Turn off raid monitor mode success
April 07 2021 07:59:15	System starts shutdown.