

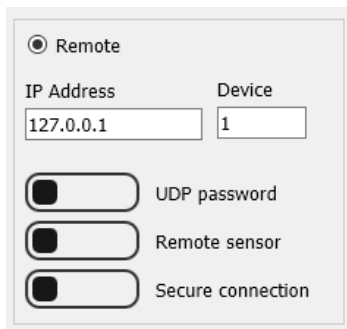
POWERSHIELD TROUBLESHOOTING GUIDE

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1. When should I enable the secure connection?

The secure connection field is available on Powershield from version 7.x :



Remote

IP Address: 127.0.0.1 Device: 1

☐ UDP password

☐ Remote sensor

☐ Secure connection

The secure connection field is **disabled by default**.

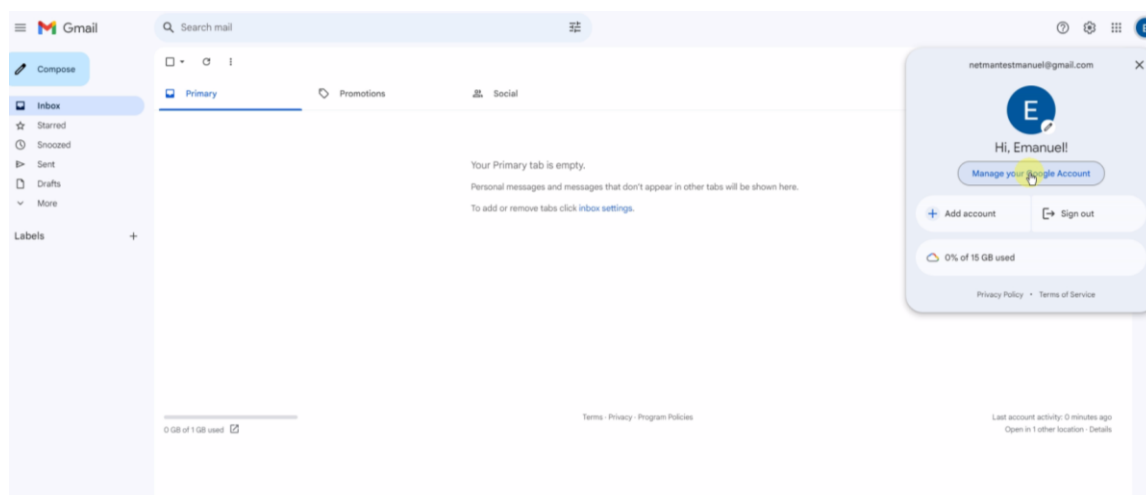
This function should only be used when using a **NetMan 208C**, certified for cybersecurity.

It must not be used in any other cases.

NOTE: The factory configuration in the NetMan 208C provides the UDP **disabled by default**. It must be enabled in order to work with the secure connection option.

2. What are the SMTP settings with gmail?

To configure Gmail as the mail provider it is essential to follow specific steps
Firstly, ensure that two-factor authentication (2FA) is enabled on the Gmail account:



POWERSHIELD_TROUBLESHOOT_rev02

Google Account Search Google Account

Home Personal info Data & privacy **Security** People & sharing Payments & subscriptions About

Welcome, Emanuel Guarise

Manage your info, privacy, and security to make Google work better for you. [Learn more](#)

Don't get locked out of your Google Account
Add a second recovery option to ensure you always have access to all your Google services, even if you forget your password.
[Add recovery phone](#)

Set a home address for your Google Account
Get more relevant search, weather, and map results.
[Set home address](#)

Privacy & personalization
See the data in your Google Account and choose what activity is saved to personalize your Google experience.
[Manage your data & privacy](#)

You have security tips
Security tips found in the Security Checkup.
[Review security tips](#)

Privacy suggestions available

Recovery email added 11:35 AM - Italy
New sign-in on Windows 11:35 AM - Province of Verona, Italy
[Review security activity](#)

How you sign in to Google
Make sure you can always access your Google Account by keeping this information up to date

2-Step Verification	2-Step verification is off	>
Password	Last changed 11:35 AM	>
Skip password when possible	On	>
Recovery phone	Add a mobile phone number	>
Recovery email	Verify e.guarise151@gmail.com	>

You can add more sign-in options

[Passkeys and security keys](#) [Authenticator](#) [Google prompt](#) [2-Step Verification phone](#)

Your devices
Where you're signed in
1 session on Windows computer

Your connections to third-party apps & services
Keep track of your connections to third-party apps and

Privacy Terms Help About

← Verifica in due passaggi

Aggiungi un secondo passaggio al tuo account
Per attivare la verifica in due passaggi devi prima aggiungere un secondo passaggio al tuo Account Google, ad esempio un numero di telefono.
[Aggiungi numero di telefono](#)

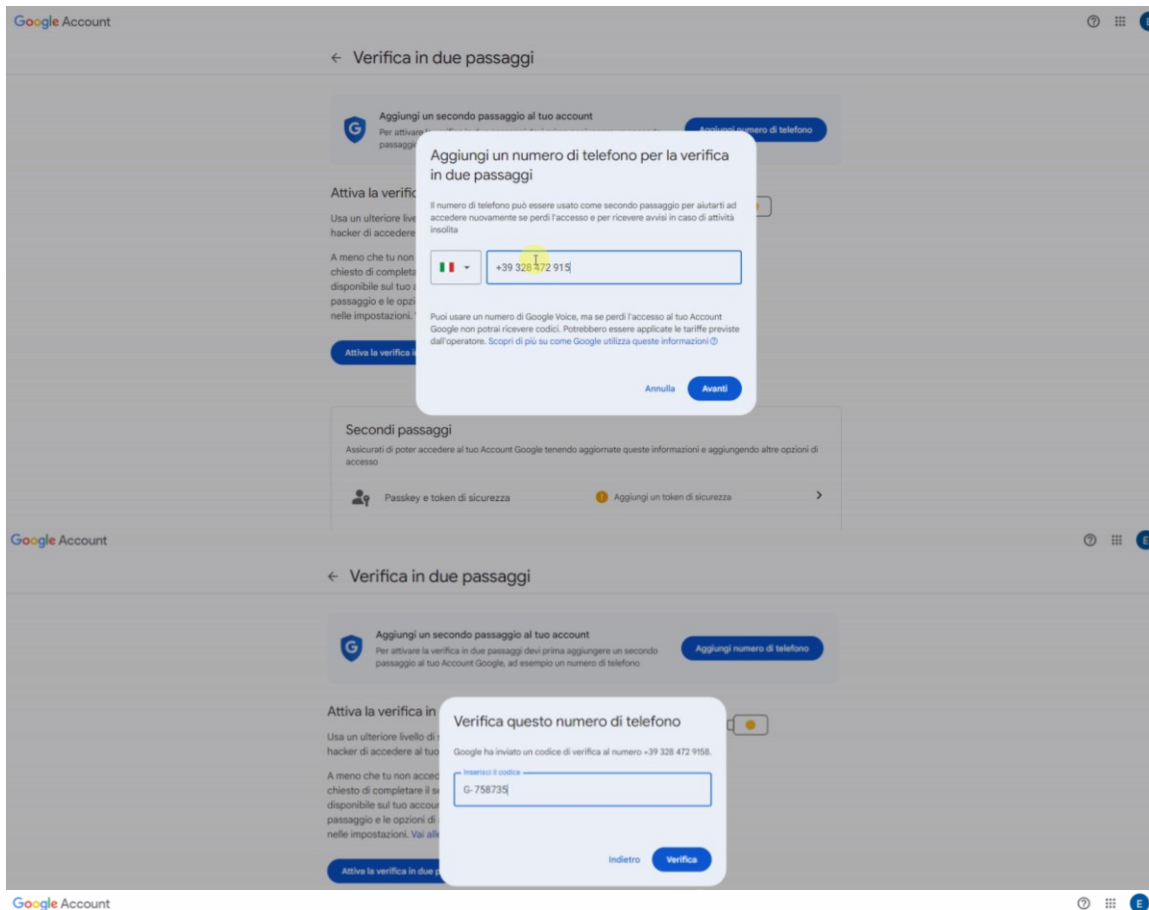
Attiva la verifica in due passaggi
Usa un ulteriore livello di sicurezza per impedire agli hacker di accedere al tuo account.
A meno che tu non acceda con una passkey, ti verrà chiesto di completare il secondo passaggio più sicuro disponibile sul tuo account. Puoi aggiornare il secondo passaggio e le opzioni di accesso in qualsiasi momento nelle impostazioni. Vai alle impostazioni Sicurezza.

[Attiva la verifica in due passaggi](#)

Secondi passaggi
Assicurati di poter accedere al tuo Account Google tenendo aggiornate queste informazioni e aggiungendo altre opzioni di accesso.

[Passkey e token di sicurezza](#) [Aggiungi un token di sicurezza](#) >

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← Password per le app

Le password per l'app ti consentono di accedere al tuo Account Google su app e servizi meno recenti che non supportano i moderni standard di sicurezza.

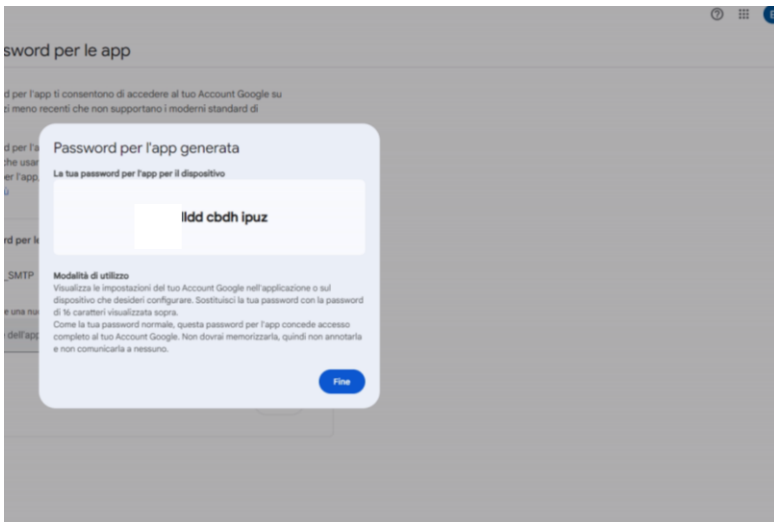
Le password per l'app sono meno sicure dell'utilizzo di app e servizi aggiornati che usano standard di sicurezza moderni. Prima di creare una password per l'app, verifica se l'app ne ha bisogno [per effettuare l'accesso](#). [Scopri di più](#)

Nessuna password per l'app disponibile.

Per creare una nuova password specifica per l'app, digita un nome di seguito.

Nome dell'app

Crea



Please note that the app password generated by Gmail may include spaces. When entering this password into the Powershield, make sure to remove all spaces for proper functionality.

Next, use the app password generated in the Gmail account to enable the Powershield to send emails successfully

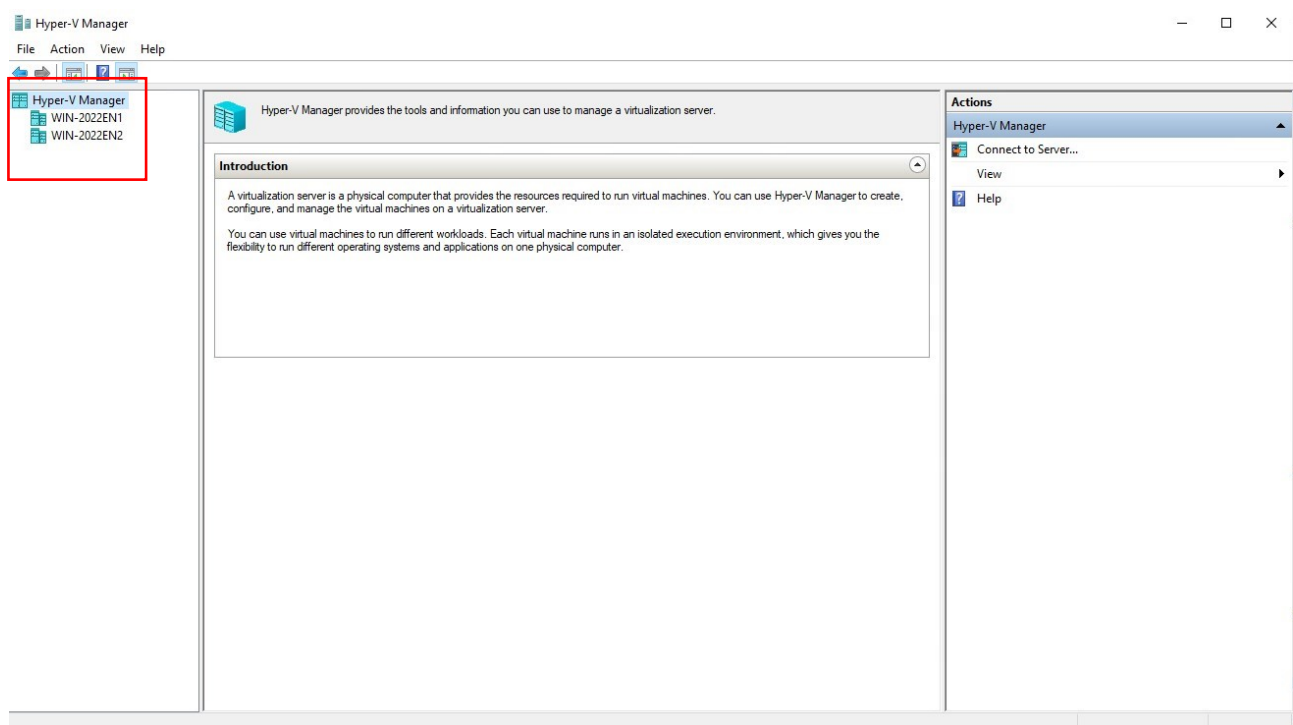
3. Is Poweshield compatible with Hyper-V management?

Powershield³ can manage **Hyper-V**. It's possible to shutdown the virtual machine and one or more host.

An example of the configuration of **UpsConfigHyper-V** is described as following.

3.1 How to configure Powershield to manage Hyper-V?

This is an example of the structure of a Hyper-V, where two or more hosts are available. This structure has been taken from the Hyper-V Manager that is running on the host Windows Server 2022 EN1:



Powershield3 has been installed in Windows Server 2022 EN1 (**WIN-2022EN1**) and UpsConfigHyper-V is present in this host. We can say that, for Powershield3, this is the **local host**. This is referred to as the local host because Powershield3 is running on it.

The first goal of this installation is to shutdown the virtual machines present in the host **WIN-2022EN2** and then to shutdown the host itself.

The second goal of this installation is to shutdown the virtual machines present in the host **WIN-2022EN1** and then to shutdown the host itself.

3.2 UpsConfigHyper-V configuration

First, set the **Hyper-V host information**.

The first host that should be added is the host where Powershield³ is running (**local host**) and the **slider Local host** has to be **enabled**:

Config Hyper-V VM management Version 1.6.0

Shutdown script parameters

Loop counter: 3 ☐ Test Hyper-V shutdown

Sleep delay (sec): 15 ☐ Maintenance hosts

Hyper-V host information

Host name/IP: WIN-2022EN1 Host domain name: lab.test

Username: Administrator Password: *****

Local host: ☒

Host

Virtual Machine

Dependent Virtual Machine

NOTE: The **username** (user) must be a **local administrator account** or in case it's not a local administrator account it must be added to the **Hyper-V Administrator** group

Press the “+” button to add it in the Host list:

Config Hyper-V VM management Version 1.6.0

Shutdown script parameters

Loop counter: ☐ Test Hyper-V shutdown

Sleep delay (sec): ☐ Maintenance hosts

Hyper-V host information

Host name/IP: Host domain name: **+**

Username: Password:

Local host: ☐

Host

Host	Host name/IP	Host domain name	Administrator
	WIN-2022EN1	lab.test	Administrator

Virtual Machine

Dependent Virtual Machine

Then add all the other hosts. In this example, there is only one host left to be added. It's the **WIN-2022EN2** host. As it's not a local host, the slider is not to be enabled:

Config Hyper-V VM management Version 1.6.0

Shutdown script parameters

Loop counter: ☐ Test Hyper-V shutdown

Sleep delay (sec): ☐ Maintenance hosts

Hyper-V host information

Host name/IP: Host domain name: **+**

Username: Password:

Local host: ☐

Host

Host	Host name/IP	Host domain name	Administrator
	WIN-2022EN1	lab.test	Administrator
	WIN-2022EN2	lab.test	Administrator

Virtual Machine

Dependent Virtual Machine

NOTE: The **username** (user) must be a **local administrator account** or in case it's not a local administrator account it must be added to the **Hyper-V Administrator** group

Press the “+” button to add it in the Host list:

Config Hyper-V VM management Version 1.6.0

Shutdown script parameters

Loop counter: ☐ Test Hyper-V shutdown

Sleep delay (sec): ☐ Maintenance hosts

Hyper-V host information

Host name/IP: Host domain name: +

Username: Password:

Local host: ☒

Host

	WIN-2022EN1	lab.test	Administrator	
	WIN-2022EN2	lab.test	Administrator	

Virtual Machine **Dependent Virtual Machine**

Repeat the action to add the hosts for all the hosts you want to manage / shutdown

3.3 Retireving the virutal machines inside each host

Select the host and press the button “**Retrieve VM from host**” to get the virtual machine(s) running on that host.

Below **WIN-2022EN1** is selected and VMs are retrieved from it. You can see that three virtual machines are present in that host:

Config Hyper-V VM management Version 1.6.0

Shutdown script parameters

Loop counter: ☐ Test Hyper-V shutdown

Sleep delay (sec): ☐ Maintenance hosts

Hyper-V host information

Host name/IP: Host domain name:

Username: Password: ☒

Local host: ☒

Host

Host	Host name/IP	Host domain name	Username	Local host
WIN-2022EN1	lab.test	Administrator	☒	
WIN-2022EN2	lab.test	Administrator	☐	

Virtual Machine

Virtual Machine	Host	state	Delay (sec)
Windows10	WIN-2022EN1	Running	10
Debian10	WIN-2022EN1	Running	10
Windows10-2	WIN-2022EN1	Off	10

Dependent Virtual Machine

Dependent Virtual Machine

Below **WIN-2022EN2** is selected and VMs are retrieved from it. You can see that two virtual machines are present in that host:

Config Hyper-V VM management Version 1.6.0

Shutdown script parameters

Loop counter: ☐ Test Hyper-V shutdown

Sleep delay (sec): ☐ Maintenance hosts

Hyper-V host information

Host name/IP: Host domain name:

Username: Password: ☒

Local host: ☐

Host

Host	Host name/IP	Host domain name	Username	Local host
WIN-2022EN1	lab.test	Administrator	☐	
WIN-2022EN2	lab.test	Administrator	☒	

Virtual Machine

Virtual Machine	Host	State	Delay (sec)
Windows10	WIN-2022EN1	Running	10
Debian10	WIN-2022EN1	Running	10
Windows10-2	WIN-2022EN1	Off	10
Debian10-2	WIN-2022EN2	Off	10
Windows10-3	WIN-2022EN2	Running	10

Dependent Virtual Machine

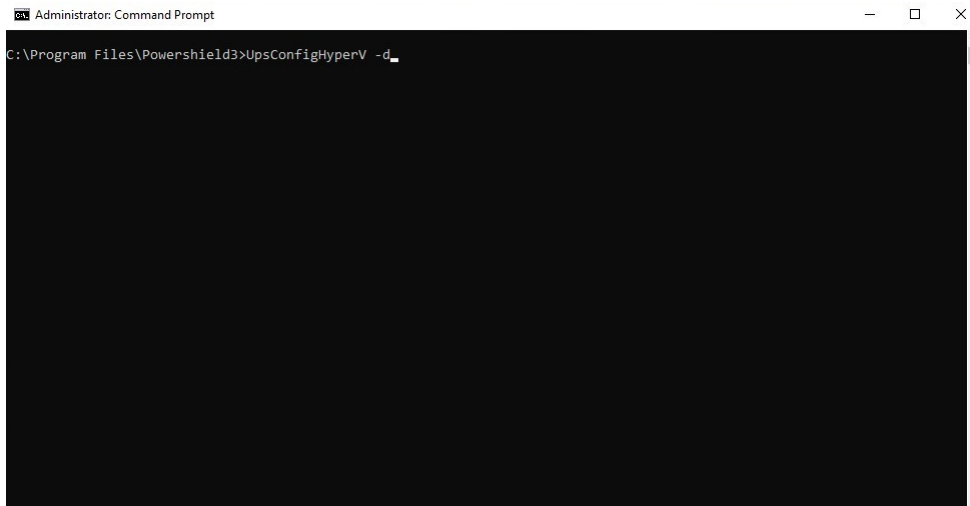
Note: not all the virtual machines are running. Some of the virtual machines are off.

3.4 Retireving the virutal machines inside each host

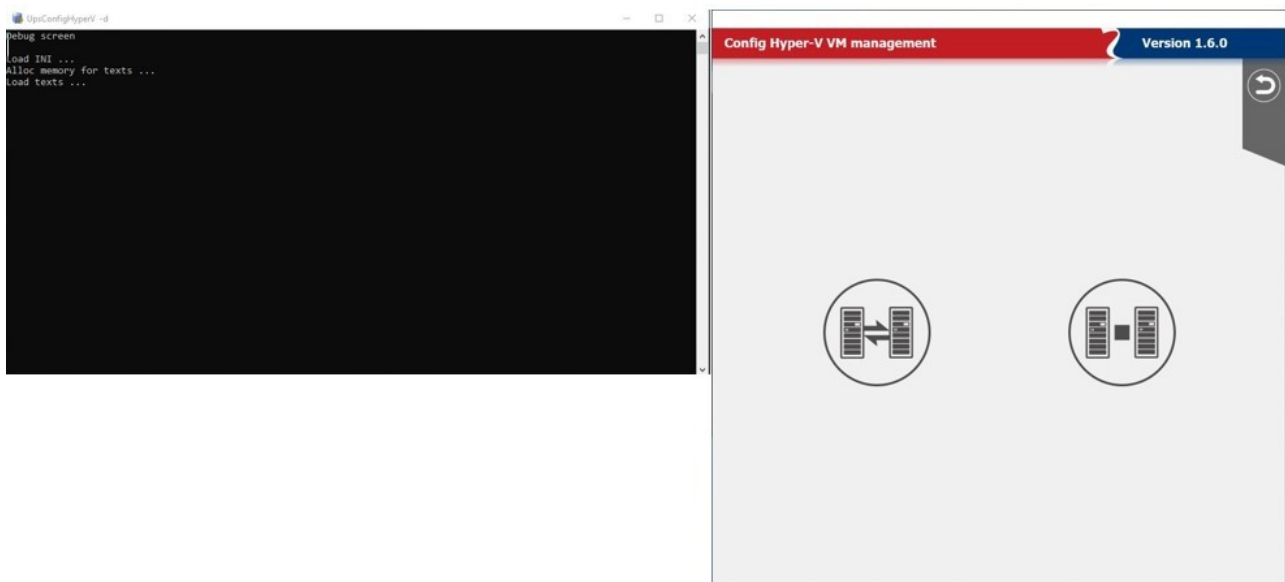
If it's not possible to retrieve the virtual machines from a host, it may be necessary to run the **UpsConfigHyperV** in **debug mode** to determine the cause.

To do so, you need to **open command prompt** and to set the proper directory where UpsConfigHyper-V is running.

Then run the command "**UpsConfigHyperV -d**":



You will get:



Select “Configuring Hyper-V VM Shutdown”, select the host, and select “Retrieve VM from host”:

In the prompt window a log will be written, and the same log will be written in the file **“debugs.log”**. In this file you will be able to determine the reason why the VMs cannot be retrieved. In case of further information, please send the file debugs.log to the service dept.

This procedure can be repeated for all the hosts.

3.5 Test Hyper-V shutdown

It's suggested to perform a test when the configuration have been completed.

Enable the “Test Hyper-V shutdown” with the slide and save:

From the directory “**C:\ProgramData\Upsmon**” run the file “**ups_shut.bat**”

The test can be performed ONLY running the file “ups_shut.bat”

The test cannot be performed removing the mains from the UPS.

Once the file has been executed, you will find in the same directory a log file called “**ups.log**” where you can see the result of the test.

Taking as reference the above configuration, here the content of the file ups.log:

```
07.02.2023 12:08:55 Start           : HVshutdownRPS.ps1 [TEST MODE]
07.02.2023 12:08:56 Hostname       : WIN-2022EN1
07.02.2023 12:08:56 Major          : 10
07.02.2023 12:08:56 Minor          : 0
07.02.2023 12:08:56 Build          : 20348
07.02.2023 12:08:56 OS Version     : Microsoft Windows Server 2022 Standard
07.02.2023 12:08:56 OS Language   : en-US
07.02.2023 12:08:56 >>> Shutdown all independent VM(s)..
07.02.2023 12:08:56 Simulate shutdown : Windows10
07.02.2023 12:08:56 Simulate shutdown : Debian10
07.02.2023 12:08:56 Simulate wait/loop: 3 times / 15 seconds
07.02.2023 12:08:56 Hostname       : WIN-2022EN2
07.02.2023 12:08:56 Major          : 10
07.02.2023 12:08:56 Minor          : 0
07.02.2023 12:08:56 Build          : 20348
07.02.2023 12:08:56 OS Version     : Microsoft Windows Server 2022 Standard
07.02.2023 12:08:56 OS Language   : en-US
07.02.2023 12:08:56 >>> Shutdown all independent VM(s)..
07.02.2023 12:08:56 Simulate shutdown : Windows10-3
07.02.2023 12:08:56 Simulate wait/loop: 3 times / 15 seconds
07.02.2023 12:08:56 >>> Shutdown all Hosts without UPS-Host => WIN-2022EN1 ...
07.02.2023 12:08:56 Simulate shutdown : WIN-2022EN2
07.02.2023 12:08:56 Total elapsed time: 0.5819859 seconds
07.02.2023 12:08:56 End           : HVshutdownRPS.ps1 [TEST MODE]
```

Note: In the log there will be present only the virtual machines that, in the moment of the shutdown, were running.

3.6 Hyper-V shutdown

To perform a real shutdown, the “Test Hyper-V shutdown” must be disabled:

Remove the mains on the UPS. The shutdown will be executed for all the virtual machines and for all the hosts.

NOTE: The host where Powershield3 is running (local host) will be shutdown last. To shutdown the host (local host), enable the shutdown in Upssetup:

In the file ups.log you will find the log of the real shutdown:

POWERSHIELD_TROUBLESHOOT_rev02

```
08.02.2023 15:52:21 Start           : HVshutdownRPS.ps1 [REAL MODE]

08.02.2023 15:52:21 Hostname        : WIN-2022EN1

08.02.2023 15:52:21 Major           : 10
08.02.2023 15:52:21 Minor           : 0
08.02.2023 15:52:21 Build            : 20348
08.02.2023 15:52:21 OS Version       : Microsoft Windows Server 2022 Standard
08.02.2023 15:52:21 OS Language     : en-US

08.02.2023 15:52:21 no independent VM(s) found for Shutdown!

08.02.2023 15:52:21 Hostname        : WIN-2022EN2

08.02.2023 15:52:21 Major           : 10
08.02.2023 15:52:21 Minor           : 0
08.02.2023 15:52:21 Build            : 20348
08.02.2023 15:52:21 OS Version       : Microsoft Windows Server 2022 Standard
08.02.2023 15:52:21 OS Language     : en-US

08.02.2023 15:52:21 >>> Shutdown all independent VM(s)..
08.02.2023 15:52:21 Execute shutdown : Windows10
08.02.2023 15:52:21 Execute shutdown : Debian10

08.02.2023 15:52:21 Wait 15 seconds, to give VM(s) time for shutdown.
08.02.2023 15:52:36 Wait for shutdown : Windows10
08.02.2023 15:52:36 Wait 15 seconds more..

08.02.2023 15:52:51 >>> Shutdown all Hosts without UPS-Host => WIN-2022EN1 ...
08.02.2023 15:52:51 Execute shutdown : WIN-2022EN2
08.02.2023 15:52:52 Total elapsed time: 31.1434459 seconds

08.02.2023 15:52:52 End           : HVshutdownRPS.ps1 [REAL MODE]
```

4. How to setup a USB connection over MAC?

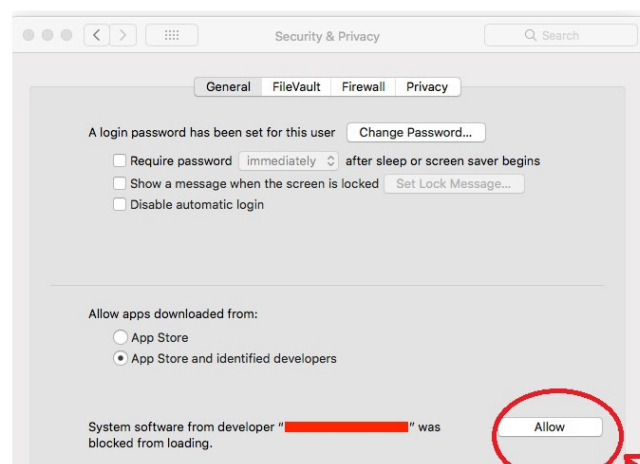
4.1 Prior to version HIGH SIERRA 10.13

1. Stop Powershield/Upsmon service from command line by typing:
sudo launchctl stop com.rps.upsmon

and pressing enter key

NOTE - It is recommended to use a user with root permissions

2. Verify if our application is allowed to load by following the steps shown in the screenshots below, it must be allowed:



3. Type **cd /Library/Extensions** and press enter
4. Type **ls** and press enter, for checking that in list appear **USBUPSDriver** items, and if so, do for each **USBUPSDriver** item command **sudo kextload** as below:
 - If USBUPSDriver is present, type **sudo kextload USBUPSDriver.kext** and press enter
 - If USBUPSDriver2 is also present, type **sudo kextload USBUPSDriver2.kext** and press enter
 - If USBUPSDriver3 is also present, type **sudo kextload USBUPSDriver3.kext** and press enter

...

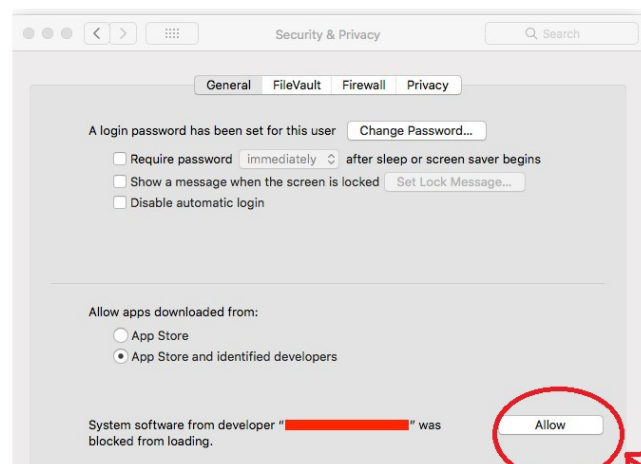
NOTE – If kextload command not allowed, type **sudo kextutil** for each USBUPSDriver

5. Repeat step 2
6. If the USB cable is connected, disconnect and reconnect it
7. Restart the Powershield/Upsmon service from the command line by typing:
sudo launchctl start com.rps.upsmon
and pressing enter

4.2 From version HIGH SIERRA 10.13 included

In macOS 10.13 High Sierra, Apple introduced Secure Kernel Extension Loading (SKEL), which builds upon the protections established by System Integrity Protection (SIP). While SIP requires all kernel extensions (KEXTs) to be signed, SKEL adds an additional layer of security by requiring explicit user approval before loading third-party KEXTs.

To proceed, ensure you are working with a clean installation of macOS (not an upgrade). Then, install the required KEXTs by following the steps outlined below:



4.3 Note

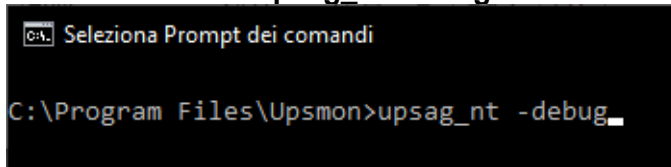
Currently, we do not have compatible kernel extensions (KEXTs) available for Apple ARM64-based systems (e.g., M1, M2 chips). This includes the following:

- MacBook Air (2020 and later, with M1, M2 and later chips)
 - MacBook Pro (2020 onward, with M1, M2, M3 chips and Pro/Max/Ultra variants)
 - Mac Mini (2020 onwards, with M1, M2 and later chips)
 - iMac 24" (2021 onward, with M1 chips and later)
 - Mac Studio (2022 onwards, with M1 Max, M1 Ultra, M2 Max, M2 Ultra chips)
 - Mac Pro (2023 onwards, with M2 Ultra chip)
-

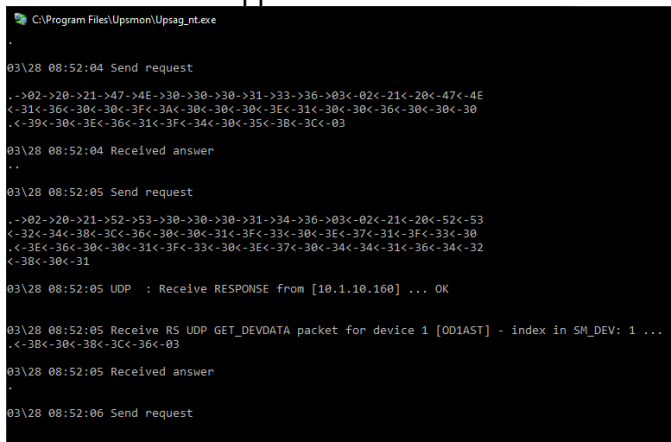
5. How to run upsagent in debug?

If a communication issue occurs, you can run UpsAgent in debug mode to generate a debug file, which should then be sent to the service department for analysis.

1. Open prompt
2. Open C:\Program Files\Upsmon directory or C:\Program Files\Powershield3
3. Run the command **upsag_nt -debug**



This window will appear:

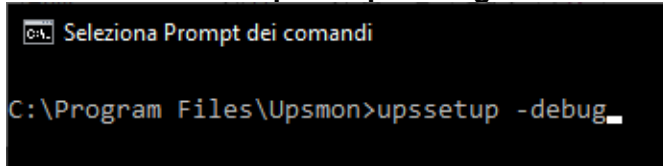


4. Stop the debug after 20 or 30 seconds pressing ctrl+c
 5. Open C:\ProgramData\Upsmon
 6. Locate the file **debug.log** and send it to your service contact
-

6. How to run upssetup in debug?

If a mail issue occurs, you can run UpsSetup in debug mode to generate a debug file, which should then be sent to the service department for analysis.

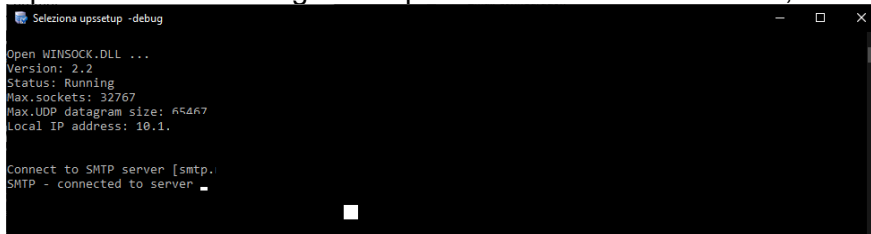
1. Open prompt
2. Open C:\Program Files\Upsmon directory or C:\Program Files\Powershield3
3. Run the command **upssetup -debug**



This window will appear:



4. Open Mail and messages and perform a test mail command, this window will appear:



5. Leave the above window running till the end
 7. Exit from the UpsSetup window
 8. Open C:\ProgramData\Upsmon
 9. Locate the file **debugmail.log** and send it to your service contact
-

Changelog

<i>DocRev</i>	<i>Data</i>	<i>Change</i>
Rev00	28/03/2025	First release
Rev01	22/05/2025	Added comments for MAC version SIERRA 10.31 Chapter 4.1 - Chapter 4.2 - Chapter 4.3
Rev02	27/08/2026	Chapter 1 - Added a description of the secure connection