POWERSHIELD TROUBLESHOOTING GUIDE

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1. When should I enable the secure connection?

The secure connection field is disabled by default. This function should only be used when using a NetMan certified for cybersecurity. It must not be used in any other cases.

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:



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Google Account Q Search Google Account				0 111 🗉
Home	Recovery email added	11:35 AM - Italy	>	
E Personal info	New sign-in on Windows	11:35 AM - Province of Verona, Italy	>	
Security	Review security activity			
2. People & sharing				
Payments & subscriptions	How you sign in to Google	hu basalaa this information oo ta data		
() About	 2-Step Verification 	2-Stop 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.guarise1518@gmail.com	>	
	You can add more sign-in options			
	Passkeys and security keys	tor Google prompt 💷 2-Step Verification p	hone	
Phany Terms Hulp About	Your devices Where you're signed in1 session on Windows computer	Your connections to third-part apps & services Keep track of your connections to third-party a	y aps and	
Google Account				0 III 🚺
	 Verifica în due passaggi 			
	<section-header><section-header><section-header><section-header><section-header><text><text><text><text></text></text></text></text></section-header></section-header></section-header></section-header></section-header>	e un numero di telefono pi ria ondo ento ento aggiornate queste informazioni e aggiungendo altre o Qujungi un token di sicurezza	patori di	
Google Account	← Verifica in due passaggi			0 =
	Agiung un secondo passagoi a tra tra trater Surver Atrica ta vertica Anero de turdina deponibile aul turà deponibile aul turà	e account tro di telefono per la verifica re usta come secondo passaggio per alutarti ad l'accesso e per ricevere avitá in caso di attivita 2915 le Voice, ma se perdi l'accesso al tuo Account So. Potebbero essere apicale te tariffo previste come Google utiliza queste informazioni e aggiungendo altre	eption d	
	Reg Passkey e token di sicurezza	Aggiungi un token di sicurezza	>	

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Google Account		0
	← Verifica in due passaggi	
	Aggiungi un secondo passaggio al tuo account Per attivare la verifica in due passaggi devi prima aggiungere un secondo Aggiungi numero di telefono	
	passaggio al tuo Account Google, ad esempio un numero di telefono	
	Attiva la verifica in	
	Usa un ulteriore livello di :	
	hacker di accedere al tuo Google ha inviato un codice di verifica al numero +39 328 472 9158.	
	A meno che tu non accec chiesto di completare il si discoltare di si G-758735	
	passaggio e le opzioni di	
	nete impostazioni. Vai alle	
	Attiva la verifica in due p	
Google Account		0 🏼 💽
	 Password per le app 	
	Le password per rapp ti consentiono di accedere al tuo account usogle 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 bisonno per effettuare l'accesso.	
	Scopri di più	
	Neurona and an few dataship	
	Nessuna passivoru per rapp unponicine. Per creare una nuova passivord specifica per l'app, digita un nome di seguito	
	Nome dell'app	
	Crea	
	0 🖩 🚺	
sword per le app		
d per l'app ti consentono di accedere al tuo Account Google su zi meno recenti che non supportano i moderni standard di		
Compared and from another		
the usar		
u series and s		
lldd cbdh ipuz		
rd per k		
SMTP Modalità di utilizzo Visualizza le impostazioni dei tuo Account Google nell'applic	ations a sul	
dispositivo che desideri configurare. Sostituisci la tua passw e una nur di 16 caratteri visualizzata sopra.	ord con la password	
Come la tua password normale, questa password per l'app o dell'app completo al tuo Account Google. Non dovrai memorizzaria, q	oncede accesso juindi non annotarla	
e non comunicaria a nessuno.		

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:

File Action View Heip Image: Ima	Hyper-V Manager		– 🗆 X
A log in the second	File Action View Help		
Image: VMarager WIN-3022EN1 Image: provides the tools and information you can use to manage a vitualization server. Introduction Antualization server is a physical computer that provides the tools and information you can use to manage a vitualization server. You can use vitual machines to nu different voides			
Introduction Introduction A valuation server is a physical computer that provides the resources required to run vitual machines. You can use Hyper-V Manager to create. View You can use vitual machines to run different workbade. Each vitual machine runs in an isolated execution environment, which gives you the field by to run different operating systems and applications on one physical computer.	Hyper-V Manager WIN-2022EN1	Hyper-V Manager provides the tools and information you can use to manage a virtualization server.	Actions Hyper-V Manager
A vitualization server in a physical computer that provides the resources mequined to run vitual machines. You can use Hyper-V Managerto create. View > You can use vitual machines to run different workloads. Each vitual machine runs in an isolated execution environment, which gives you the flexibility to run different operating systems and applications on one physical computer. If Help	WIN-2022EN2	Introduction	Connect to Server
		Introduction	View >

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 Sleep delay (sec) 15	Test Hyper-V shutdown Maintenance hosts
Hyper-V host information Host name/IP WIN-2022EN1 Username Administrator Local host Image: Contemportant contempor	Host domain name lab.test
Host	_
Virtual Machine	Dependent Virtual Machine

NOTE: <u>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</u>

Press the "+" button to add it in the Host list:

Config Hyper-V VM management		7 Versi	on 1.6.0
Shutdown script parameters Loop counter Sleep delay (sec) 15	0	Test Hyper-V shutdown Maintenance hosts	
Hyper-V host information Host name/IP Username Local host	Host domain nam	e	O
WIN-2022EN1	lab.test	Administrator	
Virtual Machine	Depende	nt 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 3 Sleep delay (sec) 15	Test Hyper-V shutdown Maintenance hosts
Hyper-V host information Host name/IP WIN-2022EN2 Username Administrator Local host	Host domain name lab.test
Host WIN-2022EN1	lab.test Administrator
Virtual Machine	Dependent Virtual Machine

NOTE: <u>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</u>

Press the "+" button to add it in the Host list:

Config Hyper-V VM managemen	ť	7 Versi	on 1.6.0
Shutdown script parameters Loop counter Sleep delay (sec) 15		Test Hyper-V shutdown Maintenance hosts	
Hyper-V host information Host name/IP Username Local host	Host domain na Password	ame	•
WIN-2022EN1	lab.test	Administrator	
WIN-2022EN2	lab.test	Administrator	
rirtual Machine	Depen	dent 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 manage	ment	7 Versi	on 1.6.0
Shutdown script parameters Loop counter 3 Sleep delay (sec) 15		Test Hyper-V shutdown Maintenance hosts	
Hyper-V host information Host name/IP WIN-2022EN1 Username Administrator Local host	Host domain na Password	me lab.test	0
WIN-2022EN1 WIN-2022EN2	lab.test	Administrator Administrator	9 8 9 9 9 9
Virtual Machine Windows10 WIN-2 state: Running Delay (sec) Debian 10 WIN-2 state: Running Delay (sec) Windows10-2 WIN-2 state: Off Delay (sec)	Depend 022EN1 Image: Comparison of the second	dent 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 manageme	ent	Z Vers	ion 1.6.0
Shutdown script parameters Loop counter 3 Sleep delay (sec) 15		Test Hyper-V shutdown Maintenance hosts	
Hyper-V host information Host name/IP WIN-2022EN2 Username Administrator Local host	Host domain Password	name lab.test	0
Host		A.J.,	
WIN-2022EN2	lab.test	Administrator	
Virtual Machine	Дере	endent Virtual Machine	
Windows10 WIN-2022 state: Running Delay (sec) 10	EN1		
Debian10 WIN-2022 state: Running Delay (sec) 10	EN1		
Windows10-2 WIN-2022 state: Off Delay (sec) 10	EN1		
Debian10-2 WIN-2022 state: Off Delay (sec) 10	EN2		
Windows10-3 WIN-2022 state: Running Delay (sec) 10	EN2		

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":

Config Hyper-	V VM management		7 Vers	ion 1.6.0
Shutdown script pa Loop counter Sleep delay (sec) Hyper-V host inforr Host name/IP Username	ameters 3 15 15 14 14 14 14 14 14 14 14 14 14 14 14 14	Host domain m Password	Test Hyper-V shutdown Maimtenance hosts ame [ab.test	
Local host Host	N-2022EN1	lab.test lab.test	Administrator	Retrieve VM from host
Virtual Machine		Deper	ident Virtual Machine	

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.

🝓 UpsConfigHyperV -d — 🗆 🗙	
Debug screen	Config Hyper-V VM management Version 1.6.0
<pre>Land INI Alloc memory for texts Land textsPre connect: WIN-2022ENI SetLanguageEC sexeCurry [select * from Win32 OperatingSystem] Connect: retrieve languageID remote server: 1033 [OxVersion = 10.0.20348] EnumVitualMachines: execQuery [select * from Hsvs.ComputerSystem shere Caption-'Virtual Machine'] EnumVitualMachines: add WH: 170E1815-0F48-4664-A667-97280FF5DR83 EnumVitualMachines: add WH: 107E1815-0F48-4664-A667-97280FF5DR83 EnumVitualMachines: add WH: MS7535-5F1E-4458-0F1C-F107835E1816 EnumVitualMachines: add WH: MS7535-5F1E-4458-0F1C-F107835E1816</pre>	Shutdown script parameters Loop counter Sleep delay (sec) 15 Maintenance hosts
<pre>classifications control to a second second second a second a second a second seco</pre>	Hyper-V host information Host name/IP VUN-2022EN2 Host domain name [ab.test] Username Administrator Password Image: Comparison of the second sec
<pre>SetVirtualHachine: exeQuery [select * from Msvm_ComputerSystem where Caption='Virtual Machine' and Name='96FC5740-9822- 427A-9A0A-BOLOSE989FFF] 2. Debian10 State: Off</pre>	Local host
GetVirtualHachine: execQuery [select * from Msvm_ComputerSystem where Caption='Virtual Machine' and Name='AAS75355-5F1E- 4854-9-CIC-F107835E1BC'] 3. Windows10-2 State: Off	WIN-2022EN1 lab.test Administrator
pre connect: HII-0022HI2 GetLanguageTC: exeCutery [select * from Win32_OperatingSystem] Connect: estrives languageTD remote server: 1033 [OxVersion = 10.0.20346] EmuNitiuM Northons: exeCutery [select * from Novo Computarkevicta where Cantion='Virtual Machine']	
EnumVirtualMachines: add VM: 28656184-6960-4F00-810c-074FF640H616 EnumVirtualMachines: add VM: 8F8CC18A-8000-4659-810c4-8629C22FE995 EnumVirtualMachines: pEnumMeeClassOBject-XMext return None record	Virtual Machine Dependent Virtual Machine Windows10 WIN-2022EN1
GetVirtualMachine: exeCQuery [select * from Msvm_ComputerSystem where Caption='Virtual Machine' and Name='28E65184-6960- 4F80-8U6-074FF6064E40] 1. Debiani0-2 State: Off	state: Off Delay (see) [0]
GetVirtualMachine: execQuery [select * from Msvm_ComputerSystem where Caption-'Virtual Machine' and Name-'8F8CC18A-B9C8- 4659-81C4-BAE9C22FEPB5'] 2. Windows10-3 censers.off	Windows10-2 WIN-2022EN1
State. of	Debian10-2 WIN-2022EN2 state: Off Delay (sec) 10
	Windows10-3 WIN-2022EN2 C
	v

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:

Config Hyper-V VM	management		Z Vers	sion 1.6.0
Shutdown script parameters Loop counter 3 Sleep delay (sec) 15			Test Hyper-V shutdown Maintenance hosts	
Hyper-V host information Host name/IP Username Local host		Host domain Password	name	•
Host WIN-2022EN	1	lab.test	Administrator Administrator	
Virtual Machine		Depe	ndent Virtual Machine	
Windows10 state: Running	WIN-2022EN1 Delay (sec) 10			
Debian10 state: Running D	WIN-2022EN1 Delay (sec) 10			
Windows10-2 state: Off D	WIN-2022EN1 Delay (sec) 10			
Debian10-2 state: Off	WIN-2022EN2 Delay (sec) 10			
Windows10-3 state: Running D	WIN-2022EN2 Delay (sec) 10			

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 :	in	dependent 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 :	in	dependent 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 H	ю	sts without UPS-Host => WIN-2022EN1
07.02.2023	12:08:56	Simulate shutdown	:	WIN-2022EN2
07.02.2023	12:08:56	Total elapsed time	2:	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:

Config Hyper-V VM management		Z Version	1.6.0
Shutdown script parameters Loop counter 3 Sleep delay (sec) 15		Test Hyper-V shutdown Maintenance hosts	
Hyper-V host information Host name/IP Username Local host	Host domain na Password		Ð
Host WIN-2022EN1 WIN-2022EN2	lab.test	Administrator (7 7 7 7 7 7
Virtual Machine	Depen	dent Virtual Machine	
Windows10 WIN-2022EN1 state: Running Delay (sec) 10 Debian10 WIN-2022EN1 10 state: Running Delay (sec) 10 Windows10-2 WIN-2022EN1 10 Debian10 Delay (sec) 10 Debian10-2 WIN-2022EN1 10 Debian10-2 Delay (sec) 10 State: Off Delay (sec) 10 Windows10-3 WIN-2022EN2 10 Windows10-3 WIN-2022EN2 10 State: Running Delay (sec) 10			

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:

POWERSHI	ELD ³ Configuration	Version 6.5.0	
	Device identification Device Name PRTK code Device Serial Number	UPS 01 GPSER11201RU	
	Device Connection O Local Serial port V	Remote IP Address Device 10.1.30.19 UDP password Remote sensor	O SNMP IP Address Device Get community Set community
	Action on system shutdown Delay after A If autonomy t	C Fail (min)	Device shutdown Enable Delay (sec)

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

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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 i	ndependent 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	o 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 mo	re
08.02.2023	15:52:51	>>> Shutdown all He	osts 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?

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 **Is** 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

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



- 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 geenrate 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



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

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Changelog

DocRev	Data	Change
rev00	28/03/2025	First release