How to connect and configure UPS to NR9581/NR9681?

This document guides you how to connect NR9581 with CyberPower CP1500PFCLCD.

Test environment

NVR Model: NR9581 Firmware: 1.13.1.10

UPS model: CyberPower CP1500PFCLCD Firmware: CRCA102_261 Software: PowerPanel Business Edition for Windows

1. BIOS

Follow the steps to configure "Restore on AC Power Loss" option in BIOS.

(a) Restart NR, press "Delete" key to enter BIOS after this is displayed during NR is booting.



(b) Use "Arrow" key to move to <u>Advanced</u> category, and <u>Boot Feature</u> is also selected because it is the first option. Press "Enter key" to enter <u>Boot Feature</u> options.

Aptio Setup Utility – C Main Advanced Event Logs Boot Se	Copyright (C) 2012 American Meg ecurity Save & Exit	atrends, Inc.
System Date System Time Supermicro X10SAE	[Wed 01/24/2018] [16:11:33]	Set the Date. Use Tab to switch between Date elements.
Version	3.0	
Main Advanced Event Logs Boot Se	curity Save & Exit	
Aptio Setup Utility - C Main Advanced Event Logs Boot Se > Boot Feature > CPU Configuration > Chipset Configuration > SATA Configuration > PCIe/PCI/PNP Configuration > ACPI Settings	opyright (C) 2012 American Mega curity Save & Exit	System Boot Feature Setting.
 PCH-FW Configuration AMT Configuration Super IO Configuration H/W Monitor Serial Port Console Redirection 		

(c) In Boot Feature options, go to Restore on AC Power Loss.



(d) Press "Enter" key to list its options, select <u>Power On</u> option and press "Enter" key



(e) Press F4 to Save & Exit.

2. Windows OS

After NR is booted, double click File Manager. After it is displayed, type "cmd" in the address bar and press "Enter" key to bring out command line window. In the command line window, type this command "fbwfmgr /disable". You must reboot NR after this command is typed.

If Windows responses that "'fbwfmgr' is not recognized as an internal command, operable program or batch file.", just ignore it. That only means you are using older firmware and 'fbwfmgr' command doesn't exist.

- 🔶 Search Computer 🔾 🔾 🔽 🛄 cmd Q cmd drive Organize 🔻 >> Search for "cmd" ☆ Favorites · Hard Disk Drives (1) E Desktop New Volume (D:) 📕 Downloads 2.72 TB free of 2.72 TB 🖳 Recent Places Devices with Removable Storage (1) 🔚 Libraries ADATA UFD (E:) Documents 3.46 GB free of 14.4 GB J Music Pictures Videos 🖳 Computer Rew Volume (D:) ADATA UFD (E:)

Above step prevents UPS software from being removed after reboot.



3. Cable connections

(a) The power cable of NR must connect to sockets which are protected by battery.

Note that not all sockets of an UPS are protected by the battery.

(b) The UPS must be connected to NR via USB cable.

(c) This picture shows the rear panel of CyberPower CP1500PFCLCD.



4. Install UPS software

The UPS should have a management tool in its CD. Or it is available on its support web site. Install the management software. Generally, you should configure these.

- (1) The amount of seconds to shut down NR after utility power is failure.
- (2) The amount of seconds to shut down UPS after NR is down.

4-A. CyberPower CP1500PFCLCD

(1) Download "PowerPanel Business Editions for Windows" from CyberPower supporting site.

(2) During the installation, select "Agent" type. Accept all default to complete installation.

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ts you do not want to install.
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(3) When you first run the application, just click "Next" to accept all default configurations.



(4) Go to "Event Action/Settings". Configure these four items like the picture.

UPS Shutdown Status Necessary shutdown time Information Shutdown type Configuration Biso turn off UPS Diagnostics Save opened file & log off Load Save opened file & log off Energy Yes Consumption Activate Reporting Service Provider Settings Service Provider Settings Service Provider Status Records Service port Status Records Service port Settings Service port Secssary shutdown time 2 minutes utdown type Hibernate So turn off UPS Yes	System	Settings					
Status Necessary shutdown time 2 • minutes Information Shutdown type Hibernate • Diagnostics Also turn off UPS • Yes • No Load Save opened file & log off • res • No Energy Consumption Apply Consumption Reporting • Yes • No Event Action E-mail • Yes • No Events Activate • Yes • No Settings Service Provider Other Status Records Service port • TLS • SSL • None Status Records Service port • TLS • SSL • None Settings Sender name • TLS • SSL • None ent Action > Settings Sender name • TLS • SSL • None ent Action > Settings Sender name • TLS • Settings ecessary shutdown time 2 minutes • Mibernate utdown type Hibernate • Yes	UPS	Shutdown					
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Hibernate: It will save your open documents and running applications straight to your hard drive so that there's no chance of losing anything if power is abruptly cut.

(5). Go to "Event Action/Events". Configure this item like the picture.

No	No. Event		Notify		Command			Shutdown	40
n	Event	Initiated	Repeat	Initiated	Duration	File	Initiated	AS	
on 1	+	Local communication lost in a power event	Inactive	Inactive	Inactive	<u>< 1 sec.</u>		Inactive	
s 2	+	Remaining runtime will be exhausted	Instant	Inactive	Inactive	<u>< 1 sec.</u>		Instant	
3		Utility power failure	Instant 👻	Inactive 👻	Inactive 🔻	< 1 sec. 💌	•	1 min. 🚬 💌	
ion 4	1	Local communication lost	Instant	Inactive	Inactive	<u>< 1 sec.</u>		Inactive Lot	
5	1	Battery test incomplete	Inactive	Inactive	Inactive	< 1 sec.		Inactive	
6	1	Available runtime is insufficient	Instant	Inactive	Inactive	< 1 sec.		Inactive	
on 7	1	UPS fatal internal abnormality	Instant	Inactive	Inactive	< 1 sec.		Inactive	
8	i	Battery replacement recommended	Instant		Inactive	<u>< 1 sec.</u>			
9	i	Shutdown initiated	Instant		Inactive	< 1 sec.			
10	i	Battery is fully charged	Instant		Inactive	< 1 sec.			
cords				Click Apply to s	ave changes				
				Ann	lv .				
				The					

Utility power failure Shutdown set to 1min

5. Test before you deploy

The above steps are tested OK in VIVOTEK's lab environment.

Since your environment could be different from our lab, we suggest you test your UPS connection and configuration before you deploy.