Winpower for VMware ESXi via USB/RS232 (paid version)

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1 Over viewer

1.1 Topological structure

- **Case 1:**
  Winpower can be installed on any of the Guest OS, just as windows, Linux, Mac OSX, Solaris.
  Please make sure the “**VMware tools**” are installed for all the Guest OS.
  The guest OS that is installed Winpower is the Critical VM.

- **Case 2:**
  Winpower can be installed on the other physical Computer at the same network with VMware ESXi, just like Windows, Linux, Mac OSX, Solaris.
  Please make sure the “**VMware tools**” are installed for the all the Guest OS.
1.2 Shutdown Sequence

Case 1 (Case 1 has two instances):
- Winpower shut down the VMs and Hosts (Host disable Autostart)
  - UPS Power Fail
  - Shutdown condition is met
  - No-critical VMs shutdown
  - Critical VM shutdown
  - ESXi Hosts shutdown

- Winpower only shut down the Hosts (Host enable Autostart)
  - UPS Power Fail
  - Shutdown condition is met
  - All the VMs shutdown
  - ESXi hosts shutdown

Case 2:
- UPS Power Fail
  - Shutdown condition is met
  - All the VMs shutdown
  - ESXi hosts shutdown
  - Local Winpower physical PC shutdown
2 Configuring for critical guest OS (only need to be done for case1)

2.1 USB Communication

2.1.1 Earlier than ESXi 6.5:

- Choose the critical guest OS that Winpower is installed, Add the USB controller by the “Summary” -> “Edit setting” -> “add” -> “USB Controller”

- Choose the critical guest OS that Winpower is installed, Add the USB device by the “Summary” -> “Edit setting” -> “add” -> “USB device”, make sure the UPS is connected.
The UPS USB can be added successfully as below image

- Restart the guest OS after adding the USB controller and USB device

2.1.2 Later than ESXi 6.5:

- Choose the critical guest OS that Winpower is installed, Add the USB device by the “Edit settings”->“add other device”->“USB device”
The UPS USB can be added successfully as below image
2.2 RS232 Communication

2.2.1 Earlier than ESXi 6.5:

- Power off the critical guest OS that Winpower is installed, right click it. Add the serial port by the "Summary"->"Edit setting"->"add"->"Serial Port"->"Use physical serial port", the serial port name is "/dev/char/serial/uart0" as default.

- Restart the guest OS after adding the serial port

2.2.2 Later than ESXi 6.5:

- Power off the critical guest OS that Winpower is installed, right click it. Add the serial port by the "Edit settings"->"add other device"->"Serial Port"->
- Choose “Use physical serial port”

- Restart the guest OS after adding the serial port
2.3 USB TO RS232 Communication

2.3.1 Earlier than ESXi 6.5:

- Choose the critical guest OS that Winpower is installed. Add the USB controller by the “Summary”->“Edit setting”->“add”->“USB Controller”.

- Choose the critical guest OS that Winpower is installed. Add the USB device by the “Summary”->“Edit setting”->“add”->“USB device”. Choose “prolific USB-Serial Controller”, make sure the UPS is connected.
2.3.2 Later than ESXi 6.5:

- Choose the critical guest OS that Winpower is installed, Add the USB device by the "Summary"->"Edit settings"->"add other device"->"USB device"
The UPS USB-RS232 can be added successfully as below image.
3 Configuring for Winpower

3.1 Winpower installation

Winpower can be installed on any of the OS, just like Windows, Linux, MACOSX, Solaris. For more simply, just give the windows and Linux samples. Please check the Winpower user manual for more information.

3.1.1 Winpower installation on Windows OS

- Right click the “setup.exe”, choose “Run as administrator” to complete the installation.
- The Winpower agent will be running automatically when the Windows boots

3.1.2 Winpower installation on Linux OS

- Download the software (Winpower_setup_LinuxAMD64.tar.gz) from the Website or from the CD attached. Upload the software from Windows to the Linux using WinSCP tools.
- Extract the software, there are two files including LinuxAMD64 and InstallerData.
- Enter the LinuxAMD64 and then enter the following command to install the software:
  
  cd LinuxAMD64
  ./setup.bin (if the Linux is GUI Mode)
  ./setup_console.bin (if the Linux is CUI mode)

- Go to the installation path and enter the following command to start the Winpower agent manually:
  
  cd /opt/MonitorSoftware
  ./agent start

  Note: The Winpower agent will be running automatically when the Linux boots, you don’t need to enter the command for every time.

3.2 Winpower start

3.2.1 Winpower start on windows OS

- Winpower agent will be started automatically, you can right click the green icon choose “start monitor” to start the Winpower manager.

3.2.2 Winpower start on Linux OS

- Winpower agent will be start automatically, you can input the command “./monitor” under
the “/opt/MonitorSoftware” to start the Winpower manager

3.3 Winpower communication

3.3.1 RS232 or USB

- If the Winpower communication with UPS via USB or RS232, just auto search it by “System” -> “Auto search device”

Windows OS:

Linux OS:
3.3.2 USB TO RS232

- If the Winpower communication with UPS via USB-RS232:
  
  On the Windows OS, you should install the USB-RS232 driver, then restart the system and auto search the device.
  
  On the Linux OS, you don’t need to install the USB-RS232 driver, you should add the serial port name by “System” ->“Com port Setting”, add the serial port name “/dev/ttyUSB0”, then auto search the device.

3.4 Set the shutdown condition

- Open Winpower manager, Click “Device” -> “Shutdown Parameter”, Set the shutdown
3.5 Add the ESXi hosts

- Open Winpower manager, Click “Device” -> ”Shutdown Parameter”, choose the “Shutdown ESXi hosts and VMs before Shutdown”

- Click “ESXi Configure”->“Add”, Enter the ESXi hosts IP, user name, password
  You can input multi-ESXi hosts.

- If you have disabled the “Autostart” as below image:
Please check the Winpower box “Shutdown all the VMs before host shutdown”, Winpower will shut down all the no-critical VMs firstly, then shutdown the critical VMs and hosts.

- If you have enable the “Autostart” as below image:

Please don’t check the box “Shutdown all the VMs before host shutdown”, so Winpower only shut down the hosts. The VMs will be shut down before host shutdown by the “Autostart” function.