

Dell Multi-UPS Management Console and  
UPS Local Node Manager Software  
Version 01.06

User Guide Update



## Operating Systems supported by MUMC and ULNM

MUMC and ULNM v01.06 support the following systems:

Operating system		MUMC					ULNM				
		Service Pack	Platform		Software version		Service Pack	Platform		Software version	
			x86	x64	V1.04	V1.06		x86	x64	V1.04	V1.06
Windows Server 2012	Windows Small Business Server 2012 Standard	Latest		√		√	Latest		√		√
Windows Server 2011	Windows Small Business Server 2011 Standard	Latest		√	√	√	Latest		√	√	√
Windows Server 2008	Windows Server 2008 R2 Standard, Enterprise, Datacenter	SP1		√	√	√	SP1		√	√	√
	Windows Server 2008 R1 Standard, Enterprise, Datacenter	SP2	√	√	√	√	SP2	√	√	√	√
	Windows Server 2008 Small Business Server R2	Latest	√	√	√	√	Latest	√	√	√	√
	Windows Server 2008 Small Business Server	Latest	√	√	√	√	Latest	√	√	√	√
Windows Server 2003	Windows Server 2003 Standard, Enterprise, Datacenter R2	SP2	√	√	√	√	SP2	√	√	√	√
	Windows Server 2003 Standard, Enterprise, Datacenter R1	SP1	√	√	√	√	SP1	√	√	√	√
	Windows Small Business Server 2003 Standard, Enterprise, Premium R2	Latest	√		√	√	Latest	√		√	√
Windows 8	Windows 8 (Enterprise, Premium, Professional, Ultimate, Basic)	Latest		√		√	Latest		√		√
Windows 7	Windows 7 (Enterprise, Premium, Professional, Ultimate, Basic)	SP1	√	√	√	√	SP1	√	√	√	√
Windows Vista	Windows Vista (Enterprise, Ultimate, Business)	SP2	√	√	√	√	SP2	√	√	√	√
Windows XP	Windows XP Professional	SP3	√		√	√	SP3	√		√	√
RedHat Enterprise Linux	Red Hat Enterprise Linux 6.3							√	√		√
	Red Hat Enterprise Linux 6.2							√	√	√	√
	Red Hat Enterprise Linux 5.9							√	√	√	√
	Red Hat Enterprise Linux 5.8							√	√	√	√
	Red Hat Enterprise Linux 5.7							√	√	√	√
	Red Hat Enterprise Linux Advanced Platform 5.4 (Latest)						U7	√	√	√	√

	Update)									
	Red Hat Enterprise Linux Base Server 5.4 (Latest Update)						<b>U7</b>	√	√	√
	Red Hat Enterprise Linux Version 5						<b>U6</b>	√	√	√
	Fedora core 15							√	√	√
	Fedora core 14							√	√	√
<b>SUSE/Novel</b>	SuSE Linux Enterprise Server 11						<b>SP2</b>	√	√	√
	SuSE Linux Enterprise Server 11						<b>SP1</b>	√	√	√
	SuSE Linux Enterprise Server 10						<b>SP4</b>	√	√	√
	OpenSuse 11.4							√	√	√
	OpenSuse 11.2							√	√	√
<b>Debian GNU Linux</b>	Debian 6 (Squeeze)							√	√	√
	Debian 5 (Lenny)							√	√	√
<b>Ubuntu</b>	12.10							√	√	√
	12.04 LTS							√	√	√
	11.04 LTS							√	√	√
	10.04 LTS							√	√	√

## Virtualization environments supported by MUMC and ULNM

MUMC and ULNM v01.06 support the following environments:

Virtualization Environment		MUMC					ULNM				
		Service Pack	Platform		Software version		Service Pack	Platform		Software version	
			x86	x64	V1.04	V1.06		x86	x64	V1.04	V1.06
<b>VMware</b>	ESXi 5.1 (pay version only)			√		√			√		√
	ESXi 5.0 (pay version only)	<b>U1</b>		√	√	√	<b>U1</b>		√	√	√
	ESX 4.0 (pay version only)	<b>U4</b>		√	√	√	<b>U4</b>		√	√	√
	ESXi 4.1 (pay version only)	<b>U4</b>		√	√	√	<b>U4</b>		√	√	√
	ESX 4.0 (pay version only)			√	√	√			√	√	√
	ESXi 4.1 (pay version only)			√	√	√			√	√	√
<b>Microsoft HyperV</b>	Windows Hyper-V Server 2012			√		√			√		√
	Windows Hyper-V Server 2008 R2			√	√	√			√	√	√
	Windows Hyper-V Server 2008			√	√	√			√	√	√
<b>Citrix</b>	XenServer 6.0		√	√	√	√		√	√	√	√
	XenServer 5.6		√	√	√	√		√	√	√	√
	OpenSource Xen 2.6 on RHEL 5			√	√	√			√	√	√
	OpenSource Xen 3.2 on Debian 5			√	√	√			√	√	√
<b>KVM</b>	KVM 0.12.1.2 on RHEL 6 and Debian 5			√	√	√			√	√	√

## Virtualization consoles and features supported by MUMC and ULNM

MUMC and ULNM v01.06 support the following virtual environment consoles and features:

Virtualization consoles and features		MUMC					ULNM				
		Service Pack	Platform		Software version		Service Pack	Platform		Software version	
			x86	x64	V1.04	V1.06		x86	x64	V1.04	V1.06
VMware console	vCenter			√		√			√		√
VMware feature	vMotion			√		√			√		√
	vSphere					√					
Microsoft HyperV console	SCVMM 2012			√		√			√		√
Microsoft HyperV feature	LiveMigration			√		√			√		√
Citrix console	XenCenter			√		√			√		√
Citrix feature	XenMotion Live Migration			√		√			√		√

## Release notes

### MUMC and ULNM version 01.06

#### Operating systems updates compatibility:

- Windows 8
- Add new etoast notification tool for operating system providing Metro interface.
- SCVMM 2012
- ESXi 5.1
- RedHat 6.3

#### Bug fixes:

- Remove vCenter plugin does not remove MUMC tab in vCenter
- Fix issue with IE10 (Windows 8) compatibility
- Fix bad icon in Windows 8 task bar when notification popup is displayed
- Fix a crash when special network interfaces are set. This crash has been reported in Red Hat 5.6 using a tuned interface created via openvpn.

## **MUMC and ULNM version 01.04**

### **Usability enhancements to the graphical user interface**

- System tray menu added (Windows) including ability to stop/start service from the tray icon contextual menu
- Improved alarm acknowledgement options, and audible alarm added to notification events
- Improved event sorting options
- Display of active power in watts, not Volt-Amps
- UPS shutdown settings menu now available in shutdown menu location

### **New functionality in the graphical user interface**

- Improved mass configuration of multiple Dell UPS Network Cards and ULNM agents
- XML v4 implementation for improved security
- Improved reverse name resolution capabilities for ULNM agents and hardware nodes
- Enhanced detection of communication loss, which is now available as a shutdown criteria
- Added ability to force UDP or TCP subscription for NMC
- MUMC now can be registered as “powered application” in NMC Web interface.
- Database logs optimized to handle larger installations

### **Expanded virtualization platform support and integration**

- XenCenter plugin
- Force VM shutdown in HA clusters using Remote Virtual Machine Shutdown (RVMS)
- Smoother operation of host management shutdown
- Improved documentation for VMware setup

### **Support for two or more UPSs powering redundant power supply unit (PSU) devices**

- UPS software considers multiple UPS battery status before reaching “low battery” status and shutting down servers.
- Ability to create virtual composite groups of UPSs to manage redundant installations as one device

### **Support of Dell's unique power metrics**

- Peak headroom, peak consumption, all metrics now in Watts (W) and not Volt-Amps (VA).

### **Virtualization**

- Subscribe MUMC is shown as a “notified application” in the UPS NMC card when a VM host node has a UPS configured in MUMC.

### **Microsoft Integration**

- Trigger vCenter vMotion™ and SCVMM Live Migration™ applications
- Transparently move virtual machines from a server affected by a power interruption to a non-affected server

## Citrix integration

- **XenServer:** Remote shutdown from MUMC, remote maintenance from MUMC, can Add/Protect a XenServer in MUMC
- **XenCenter:** Create an MUMC XenCenter plug-in, agent-less host management from MUMC, agent-less XenMotion

## VMware integration

- Removed the prerequisite of Pearl SDK installation for MUMC to communicate with VMware vCenter
- New power events and alarms logs created in VMware vCenter console
- Added ability to force VM shutdown for HA clusters
- Can now Add/Protect a standalone ESX/ESXi in MUMC without vCenter

## Linux Support

- Added support for latest Linux distributions (see User Guide for full list)

## Bug fixes:

- Crash when emc2 runs out of resources (memory)
- ULNM does not detect UPS connected with USB connectivity
- Transfer to high efficiency mode not visible in the events list
- MUMC may lose nodes, and generates alarms on non-UPS SNMP devices
- When a proxy client reaches shutdown time, all other proxy clients along with server get shut down
- No communication lost after network cable is removed
- Make sure Scan and communication behaves correctly when USB module is not present
- Proxy: when changing power source, previous endpoint is not removed
- MUMC upgrade will disable the "Set as Power Source"
- ULNM in connected mode in Notified Applications of NMC
- Event Pane in Power Source View is Off by One
- Detect Lansafe, Netwatch, Lansafe Web View in the installer
- Silent uninstall does not remove the install folder

## Other bug fixes and improvements:

- Outlet management improvements
- Scan sometime never stops
- Removing devices hangs the server