

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
<b>Windows Server 2012</b>	Windows Small Business Server 2012 Standard	<b>Latest</b>		√		√	<b>Latest</b>		√		√
<b>Windows Server 2011</b>	Windows Small Business Server 2011 Standard	<b>Latest</b>		√	√	√	<b>Latest</b>		√	√	√
<b>Windows Server 2008</b>	Windows Server 2008 R2 Standard, Enterprise, Datacenter	<b>SP1</b>		√	√	√	<b>SP1</b>		√	√	√
	Windows Server 2008 R1 Standard, Enterprise, Datacenter	<b>SP2</b>	√	√	√	√	<b>SP2</b>	√	√	√	√
	Windows Server 2008 Small Business Server R2	<b>Latest</b>	√	√	√	√	<b>Latest</b>	√	√	√	√
	Windows Server 2008 Small Business Server	<b>Latest</b>	√	√	√	√	<b>Latest</b>	√	√	√	√
<b>Windows Server 2003</b>	Windows Server 2003 Standard, Enterprise, Datacenter R2	<b>SP2</b>	√	√	√	√	<b>SP2</b>	√	√	√	√
	Windows Server 2003 Standard, Enterprise, Datacenter R1	<b>SP1</b>	√	√	√	√	<b>SP1</b>	√	√	√	√
	Windows Small Business Server 2003 Standard, Enterprise, Premium R2	<b>Latest</b>	√		√	√	<b>Latest</b>	√		√	√
<b>Windows 8</b>	Windows 8 (Enterprise, Premium, Professional, Ultimate, Basic)	<b>Latest</b>		√		√	<b>Latest</b>		√		√
<b>Windows 7</b>	Windows 7 (Enterprise, Premium, Professional, Ultimate, Basic)	<b>SP1</b>	√	√	√	√	<b>SP1</b>	√	√	√	√
<b>Windows Vista</b>	Windows Vista (Enterprise, Ultimate, Business)	<b>SP2</b>	√	√	√	√	<b>SP2</b>	√	√	√	√
<b>Windows XP</b>	Windows XP Professional	<b>SP3</b>	√		√	√	<b>SP3</b>	√		√	√
<b>RedHat Enterprise Linux</b>	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)							<b>U7</b>	√	√	√

	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 openvprn.

## **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