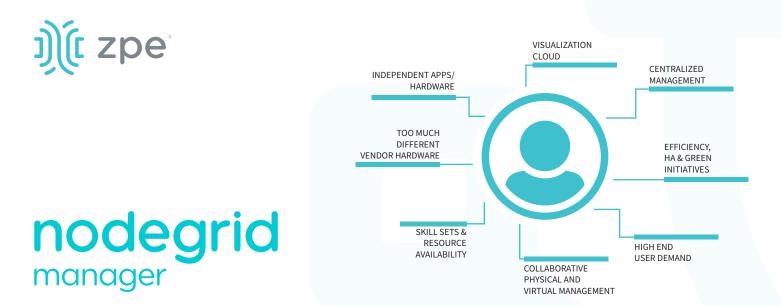
j)(r zpe

nodegrid manager

Software Defined Infrastructure for Access and Control

ZPE Systems, Inc.



Factors such as consolidation, cost savings, dynamic provisioning, and migration are driving most IT organizations to experiment with some form of virtual machine product today, and the advent of large- scale infrastructure systems has moved these back-room experiments and development environments into full, public-facing application infrastructure systems.

Virtualization technology is rapidly spreading across data centers around the world.

Organizations of all type of industries are focused on migrating to Virtualization platforms to harvest the benefits of reduced capital spending on server hardware as well as reduced demands for power and cooling capacity. Virtualization allows more flexibility in allocation of hardware resources resulting in maximum utilization of available capacity.

However, the introduction of Virtualization has led to a lot of unresolved IT management related questions for organizations. These challenges arise primarily because:

- Typically only a subset of every datacenter is virtualized. Even if several virtual machines run on a physical machine, there is a need to manage the physical machine itself.
- Physical machines by design allow various methods of management options whether through legacy console operations or advanced IPMI-based control.
- Virtual machines by their nature and design must be managed differently compared to the legacy methods for managing physical machines.
- Along with rack servers & blade servers, there is an increased need for managing network infrastructure like switches, routers, firewalls or even storage hardware. System admins are forced to use multiple methods of managing a growing proliferation of device types, protocols and brands.

This mix of virtual and physical servers adds a new level of complexity to management operations. As a result, IT organizations must re-think the way they manage their increasingly dynamic array of virtual and physical servers and other infrastructure

ZPE Systems, Inc.

Technical Note





- Centralized management of physical and virtual infrastructure including high availability solutions of network infrastructure.
- Managing heterogeneous hardware & operating systems.
- Each vendor has its own ways of managing its branded IPMI version: DRAC, ILO, UCS, RSA, LOM, etc.
- Bridging virtual management solutions into one unified solution.
- Lot of hardware vendors address point needs like consolidation of multi-vendor IPMI's, this results in dependency of hardware and increased capital and maintenance costs.
- Hardware vendors also help organizations in establishing serial connections over Ethernet but they work separately and cannot be easily integrated together.
- Power management solutions work independently. They need to connect together

Ê

Considering all these challenges, ZPE Systems' provides a software-based infrastructure management solution. Nodegrid Manager software provides a powerful, innovative and unified tool to control and access critical physical and virtual infrastructure through one simple interface. This doesn't require any additional hardware.

With Nodegrid, IT Managers can:

- Access virtual and physical servers from one single screen.
- Enjoy Mouse, Keyboard & Screen level control of remote virtual machines.
- Use virtual serial interfaces with specific virtual machines.
- Access multi-vendor IPMI like ILO, DRAC, UCS, RSA, LOM from the same interface.
- Consolidate leading multi-vendor serial console hardware.
- Manage power management hardware from the same interface.
- Employ granular access control across physical, virtual, IPMI & serial managed devices.
- · Receive data monitoring and event notifications.
- Discover new managed devices.

Technical Note

j)(t zpe

Ņţ

About ZPE Systems:

ZPE Systems is the industry's first provider of an "Open Infrastructure Management Solution"" for in-band and out-of-band access and control of Network, Compute, Storage and Power Devices in both physical and virtual IT Infrastructures. The company's NodeGrid® platform easily consolidates, organizes, and simplifies the need for a complete and highly secure remote access and control solution. ZPE's global headquarters is located in Fremont, California with offices throughout the US and globally in Ireland, India, Brazil and Japan.



Benefits of Nodegrid Manager

- Secure In-Band and Out-of-Band Network For dependable remote management of all Serial Consoles, Service Processors and VMs
- Easy Configuration and Installation Scalable configuration based on auto-discovery and Serial, SP and VM cloning
- Compliance with Data Center Access and Security Policies
 Customizable, multiple access levels and user group based roles
- Enhanced Security Framework
 Support custom security policies and service configurations
- Automatic Event Tracking
 Notification of fault conditions & Alerts
- Regulatory Compliance and Easy Troubleshooting Online and off-line data logging with time stamps, auditing, local/remote record archiving
- Multiple Vendor Support
 Service Processors: iLO, DRAC, CIMC/UCS, ALOM, IPMI Serial
 Appliances: Avocent/Cyclades, Digi, Raritan VMware VM: vSPC,
 MKS



Sales Inquiries: sales@zpesystems.com

Support Inquiries:

support@zpesystems.com

ZPE Systems, Inc.