



Egenera PAN Manager Software

Solutions for Managed Services, Application Hosting, and SaaS Providers

PAN Manager Software

Egenera PAN Manager software creates a converged Infrastructure compute system – pooling and re-allocating servers, I/O and networking without the need for hypervisors. It also simplifies physical IT infrastructure and operation *across both physical and virtual servers...* all using industry-standard computing hardware and standard Ethernet and networking components.

The software reduces the overall I/O and networking component count, simplifies how servers are configured, all while delivering mission-critical high availability (HA) and disaster recovery (DR) with radically-reduced complexity.

Service providers benefit by avoiding having to buy expensive/complex clustering software and disaster recovery services. A single PAN Manager System can support 1,000's of VMs on a single floor tile, including running physical applications such as data bases.

Managed Services Business Benefits

- **Book-to-Bill acceleration** – provision new n-tier environments on-line faster
- **Differentiated services** – faster deployment of higher-margin non-standard offerings
- **SLA improvement** – at a better price-point than clustering
- **Scalability/elasticity** – of both physical and virtual applications
- **Disaster recovery** – recovery of nearly any physical or virtual environment in minutes
- **Lower overall TCO** – by reducing infrastructure-related efforts



PAN Manager provides integrated HA and DR, supports 1000's of VMs, and is available pre-configured for Dell m1000e enclosures for server scaling/failover pool sizes up to 48 blades per pod.

Features, benefits

- **Instant provisioning of servers and infrastructure:**
Complete with software workloads, networking, switching and storage configurations... at the press of a button.
- **High availability & failover:**
Provides n+1 hardware fail-over regardless of software workload, and without complex clustering products. Securely pool/share recovery servers, reducing capital investments.
- **Disaster recovery:**
Provides a shared recovery environment – regardless of physical/virtual software, I/O, or networking configuration of original production environment... reducing recovery capital outlays
- **Multi-tenancy + usage metering:**
Enables allocation of server, network and storage connections between designated users; also permits usage monitoring for billing and/or chargeback.
- **Reduced hardware I/O cost:**
HBAs are virtualized, reducing I/O cost when using shared storage; most NICs too, are eliminated and virtualized through I/O virtualization and network consolidation
- **Security:**
Fully supports role-based administration; network administration maintains point-to-point traffic control, and eliminates possibility of packet-sniffing between servers. Further, the software has successfully passed the U.S. DoD Information Technology Security Certification and Accreditation Process (DITSCAP).

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Ideal Managed Services Uses

- **Enterprise-critical application hosting:**
For SaaS Managed services of enterprise applications such as SAP & Oracle, which require inherent business-critical SLAs, including HA and DR. PAN Manager has a demonstrated >99.99% availability record for both physical and virtual servers
- **Cloud foundation:**
For creation of a highly-reliable, elastic, and self-healing cloud foundation - on which to run virtualization and/or infrastructure services
- **Compute PODs:**
For creation of modular, integrated compute blocks of up to 48 blades per block. Completely re-configurable, with inherent blade-level fail-over, capacity pooling, and disaster-recovery ready.
- **Infrastructure-as-a-Service:**
For design of either physical or virtual Infrastructure-as-a-Service systems. Self-provision physical or virtual servers on a modular, metered environment.
- **Disaster Recovery-as-a-Service:**
For providers wishing to provide complete Disaster Recovery (Data, application, server, network) for any number of production customers. N+1 DR means one physical system can be used to assume the configuration of any number of different production systems.

Supported Operating Environments

- Microsoft Windows
- Redhat RHEL
- Novell SLES
- VMware
- Citrix XenServer

Environment Prerequisites

- Windows or Linux on x86
- Shared /networked storage in-place or anticipated
- Willingness to share/pool server resources

Product Components

PAN Builder™ Enables IT staff to configure, control, provision and monitor data center physical resource pools. Includes chargeback and customizable administrator security management. Provides I/O virtualization, converged networking, virtual load balancing and secure virtual networking.

PAN Server Portability™ Helps maintain SLA commitments with N+1 High Availability (HA) that optimizes server utilization and repurposing for both scheduled and unscheduled events. Compatible with physical and virtual workloads

PAN Portability™ Provides protection from the uncertainty of data center outages with N+1 Disaster Recovery (DR) that quickly and reliably brings data center resources back online every time. Restores physical/virtual workloads, I/O configuration, network state and storage connectivity.

PAN Manager Compatible Storage Systems

iSCSI

- Dell EqualLogic PS6000 series (future)

FibreChannel

- Dell/EMC: CX4/CX arrays
- 3PAR: E200, S400, S800 and InServ T-Class
- EMC: Symmetrix, Clarrion CX3, CX4, AX4-5, Celerra
- Fujitsu: Eternus
- HP: EVA- 4X00, 6X00, 8X00, 4400, 6400, 8400
- HDS: AMS/WMS Series, USP V and USP VM
- IBM: DS4X00, DS8000 and XIV Nextra
- NetApp: FAS200, 900, 2000, 2020, 2050 3000, 6000

For More Information

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