

Non-stop Business

ExpressCluster® X LAN Edition



At a Glance

- High availability solution ensures uptime in physical and virtualized environments within same location
- Fast, automated whole application system recovery minimizes business impact
- Support for standard applications and common hardware lowers TCO
- Integrated application and data web console for simple setup and management

Overview

ExpressCluster® X LAN is an easy-to-use and low-cost high availability software solution for standalone systems in on-premise or cloud environments running critical applications and data.

Virtualization has helped organizations achieve new highs in resource optimization, even for business critical applications. However, virtualized on-premise or cloud systems often provide limited control of performance and availability due to extensive sharing of compute, storage, and network resources. As a result, avoiding downtime or data loss is an even greater priority.

Standalone departmental and branch office systems running critical transactional applications and data benefit from the simplicity and continuity of the ExpressCluster X LAN solution. High performance synchronous data mirroring over LAN ensures data is protected, while efficient FastSync® data synchronization updates changed data.

Granular application failure detection and synchronous data mirroring deliver fast system recovery in LAN environments. ExpressCluster X LAN offers easy on-demand application and data workload failover/failback that preserves continuity even in public cloud environments. Data mirroring support for standard internal disks, as well as support for lower-cost standard applications and operating systems, reduces the total cost of ownership (TCO).

Solution

Simplified High Availability

High availability is essential for IT systems and cloud environments running critical applications and data to sustain the productivity and continuity of vital business operations and services.

NEC ExpressCluster X LAN provides fast application recovery and synchronous data mirroring to protect critical standalone physical and virtualized application systems against unexpected hardware and

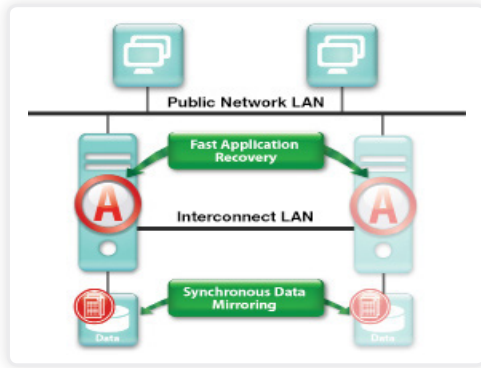
software failures. Trouble-free one-click migration across servers offers a practical approach for planned downtime mitigation. It also simplifies high availability by requiring minimal server, storage, and network resources.

Virtual and cloud environments are often based on infrastructure that is more restrictive than traditional on-premise physical environments. The simplicity and flexibility of ExpressCluster make it well-suited for virtual and cloud environments.

Fast Application Recovery

Continuous monitoring of applications and system resources, such as software processes, disk and network I/O for failure on the primary and standby servers, enable ExpressCluster X LAN to provide comprehensive visibility of the whole application system health. When a failure is detected, the target applications and dependent resources are automatically recovered on the standby server within minutes.

Once a failed server is repaired or replaced, the system can be quickly restored to the normal operating condition in physical or virtualized environments. Flexible configuration options allow administrators to easily configure resource monitoring and recovery policies for their specific needs.



Synchronous Data Mirroring

Especially important in virtualized database systems, ExpressCluster X LAN's proven synchronous data mirroring technology provides continuous and thorough protection of critical data against system

failures. All data changes stored to the primary server disk storage are also stored to the standby server disk storage simultaneously. There is no gap during which data could be lost due to a delay in copying data from the primary server to the standby server.

Support for multiple network links with automated link level management for data mirroring further reduces the risk of data loss due to individual network link congestion and failure. By using standard internal and external storage hardware, there is no need for expensive proprietary SAN storage hardware traditionally required for synchronous data mirroring.

Simple Management

The built-in support for virtual server identity enables each group of applications and related resources to maintain its own server identity independent of the static server identity assigned to each server. By using the virtual server identity feature, client systems do not need to be reconfigured to reconnect to target applications and data after failover since the virtual server identity is automatically assigned to the active server.

Integrated application and data protection and recovery eliminates the need to integrate multiple products. A unified web management console offers a single intuitive management interface for users to monitor and assess the availability of applications and data resources, even in virtual and cloud environments.

Download a free 30-day trial of ExpressCluster X LAN Edition by visiting www.ExpressCluster.com/Eval

System Requirements	Network Requirements	Available Options
At least two servers are required. Both servers must meet the following requirements:	The network infrastructure connecting all cluster servers must meet the following requirements:	The following add-on product options are available:
CPU & Memory <ul style="list-style-type: none"> 32-bit system: Intel® x86 compatible 32-bit 1GHz or faster CPU 64-bit system: Intel EM64T compatible 64-bit 1GHz or faster CPU Minimum 128 MB available Disk & Network Interface <ul style="list-style-type: none"> At least 80 MB available OS boot disk, and 1 or more additional data disks Two or more 100Mbps or faster network interface adaptors Operating System* <ul style="list-style-type: none"> Microsoft® Windows Server® Red Hat® Enterprise Linux® Server Novell® SUSE Linux Enterprise Server VMware® vSphere® Microsoft Hyper-V® 	Cluster Interconnect Network <ul style="list-style-type: none"> One IP network to connect servers at the same location Maximum network roundtrip latency between servers of 10ms or less Minimum available bandwidth of 100Mbps or more Cluster Public Network <ul style="list-style-type: none"> One IP network connecting the servers 	Database Server Agent Proactively monitors proper functional state of database servers and initiates recovery in case of malfunction. Internet Server Agent Proactively monitors proper functional state of web and email servers and initiates recovery in case of malfunction. Alert Service Option Enables SMTP email alert notification for specific events, (e.g., failover and resource failure) selected by user configuration.

*Some features may not be available on all operating environments.

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