

Enterprise High Availability & Disaster Recovery Solution

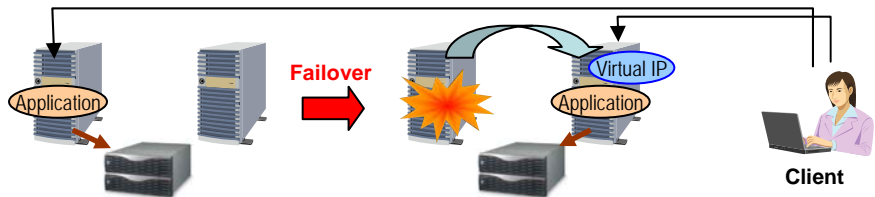
ExpressCluster X 2.0 for Windows for Linux

High Availability on Your Mission-Critical System

In today's business, mission-critical (MC) system downtime causes huge loss of revenue, business opportunity & business reputation. ExpressCluster X, a High Availability (HA) clustering software can protect your MC systems.

HA Clustering System

In case some failure occurs on active server, standby servers can immediately take up the responsibility of running mission critical applications



Key Benefits

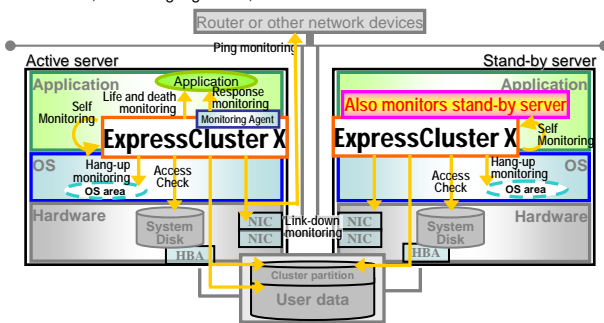
- **Business Continuity (HA + DR in one solution)**
Offers synchronous data replication, hardware/software/network failure detection, clustering in both LAN & WAN environments and automatic failover.
- **Low Total Cost of Ownership (TCO)**
Using ExpressCluster X, one standby server can be configured for multiple active server (N to 1 configuration), decreasing the overall usage of servers resulting in better IT infrastructure utilization. ExpressCluster X also supports all leading virtualization environments, which further helps in reduced IT infrastructure cost.
- **User-friendly Management GUI**
Administrators can control not only one cluster but also a large-scale system consisting of several clusters (both Windows & Linux), via a single Java-based management web GUI.

Features

Failure Detection and Automatic Failover

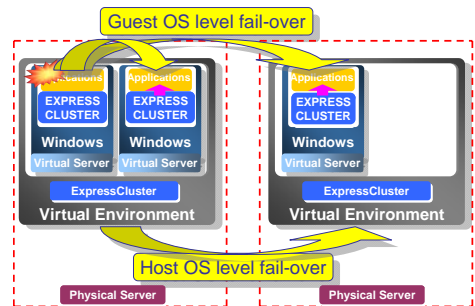
ExpressCluster X offers automatic failover capability by monitoring various targets*.

* server shutdown, OS hang up, application failures, NIC failure, disk error, exceeding high load, etc



Supports Virtual Environments

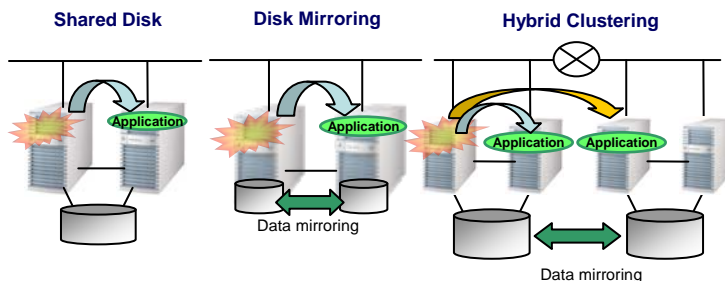
ExpressCluster X offers high availability also for virtual environments, supporting major hypervisors including VMware, Hyper-V, Xen.



Flexible Configurations

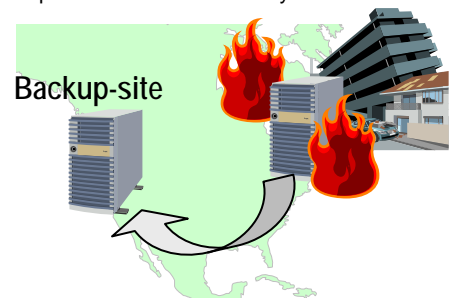
ExpressCluster X supports up to 32 nodes shared disk clustering, and also data mirroring clustering and Hybrid* (mirroring of shared disk data).

* ExpressCluster X is the only clustering software to support hybrid clustering



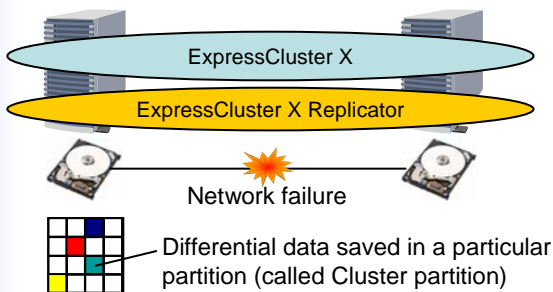
Disaster Recovery Solution

ExpressCluster X enables geographically dispersed servers to be clustered in order to provide Disaster Recovery Solution.



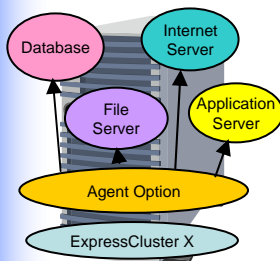
» Optional Add-on Products

➤ ExpressCluster X Replicator



- ExpressCluster X Replicator is an optional add-on product for local/remote disk mirroring cluster.
- Replicator has partial re-sync function to reduce re-synchronization time.
- Replicator has both synchronous and asynchronous mirroring mode. Asynchronous mirroring mode is a powerful function for a cluster across WAN using low bandwidth network. Perfect for implementing Disaster Recovery Solution.

➤ ExpressCluster X Agent



There are 4 types of Agents available to monitor existence and status (stall, abnormal termination) of applications and services.

➤ ExpressCluster X Alert Service



When some failures are detected and failover happens, Alert Service can send E-mail and SMS to administrators. Also, it can flash warning light to quickly identify the failed server.

» Support Matrix

		Windows	Linux
OS		Microsoft Windows Server 2003 R2 SP2 or later Microsoft Windows Server 2003 SP2 or later Microsoft Windows Server 2008	Turbolinux 11 Server Red Hat Enterprise Linux AS/ES 4 Red Hat Enterprise Linux 5 MIRACLE LINUX V4.0 SP2 Asianux Server 3 Novell SUSE LINUX Enterprise Server 10 Oracle Enterprise Linux 5
Virtual Environment		VMware ESX Server Microsoft Hyper-V Xen	
Architecture		IA32, x86_64	IA32, x86_64, IA64, ppc64
Verified Applications with Agents	Database Agent	DB2, ODBC, Oracle, PostgreSQL, PowerGres, SQL Server	DB2, Oracle, PostgreSQL, PowerGres, MySQL, Sybase Adapted Server Enterprise
	Internet Server Agent	FTP, HTTP, IMAP4, POP3, SMTP	HTTP, SMTP
	Application Server Agent	Tuxedo, WebLogic Server, WebSphere Application Server, WebOTX	Tuxedo, WebLogic Server, WebSphere Application Server, WebOTX
	File Server Agent	N/A	Samba, NFS

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