

High Availability Software

ExpressCluster X for Windows for Linux for Solaris

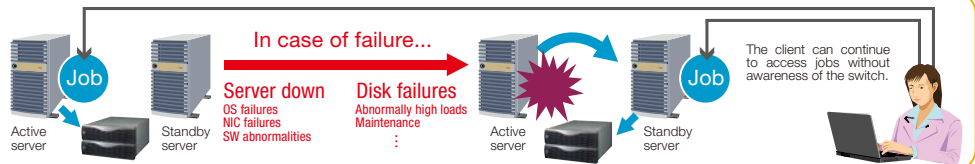


ExpressCluster X
Top market share* high availability (HA) clustering software with over 10 years of proven innovation in mission-critical system protection and recovery.

*Sources : Asia/Pacific (Excluding Japan) Availability and Clustering Software 2010-2014 Forecast (AP2670310S)
 Japan System Software 2010-2014 Forecast and 2009 Analysis (J10450103)

HA Clustering System

This system uses multiple servers: active servers and standby servers. When any failure occurs on an active server, the jobs on that server are quickly inherited to a standby server to ensure that jobs continue running with minimum downtime.



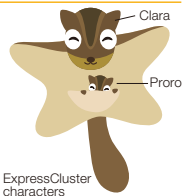
Benefits

Superior Business Continuity

Business continuity is crucial in today's increasingly computerized business world. ExpressCluster X minimizes the loss of business opportunities during maintenance or disasters.

Real-Time Health Monitoring

The Operational status of even large-scale systems made up of multiple clusters can be checked at a glance. Jobs can also be moved to any server by performing simple operations.

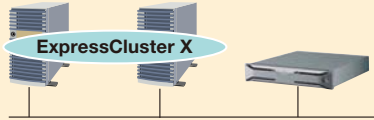


Product Overview

- **More selectable data sharing types** In addition to the typical shared storage methods used for HA clusters, NAS disks or data mirrors can be selected.



Shared storage suitable for large capacity, heavy access



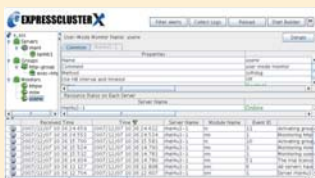
NAS disk that makes it possible to effectively use an existing infrastructure



Data mirroring type enables sharing data at a low cost

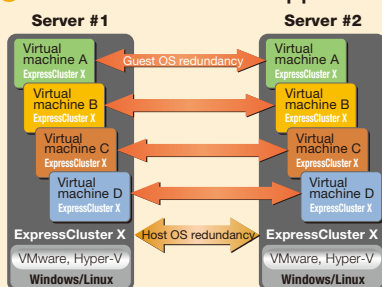
* ExpressCluster X replicator is an optional product.

- **Web-Based Management GUI**

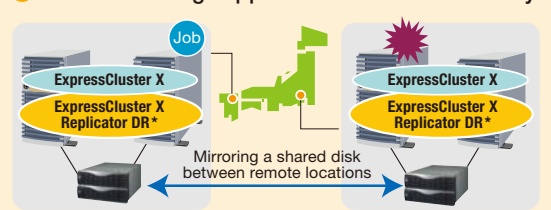


The operation status can be visually determined using a Web browser.

- **Virtual environment support**



- **WAN clustering supported for disaster recovery**

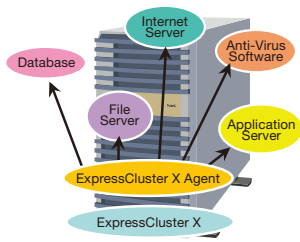


Naturally, one-on-one clustering is possible between remote locations, but it is now possible for cluster members to share data as well.

* ExpressCluster X Replicator DR is an optional product. ExpressCluster X Replicator DR includes the features of ExpressCluster X Replicator.

Add-On Options

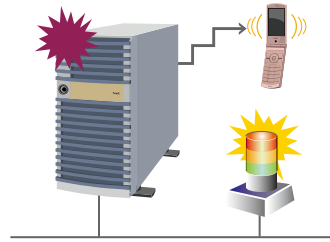
ExpressCluster X Agent



In addition to monitoring to determine whether the various applications in a cluster are alive or dead, the status of the applications including hang-up and abnormal response can be monitored. Five types of agents are available for each supported application.

* File Server Agent is only available for the Linux version, and Anti-Virus Agent is only available for the Windows version.

ExpressCluster X Alert Service



Alert email can be sent to the administrator when a failure or failover occurs. In addition, the status of servers can be visually checked anytime through network warning lights.

Support Matrix

	Windows	Linux	Solaris
OS	Microsoft Windows Server 2008 Microsoft Windows Server 2008 R2 Microsoft Windows Server 2003 R2 SP2 Microsoft Windows Server 2003 SP2	Red Hat Enterprise Linux 5.5, 5.4 Novell SUSE LINUX Enterprise Server 10, 11 Asianux Server 3 Turbolinux 11 Server Turbolinux Appliance Server 3.0 Oracle Enterprise Linux 5 Cent OS 5.5, 5.4	Solaris10 10/08, 10/09
Virtual Environment	VMware (vShpere 4, VI3), Hyper-V 1.0, 2.0, Citrix XenServer 5.5, Xen, KVM, PowerVM, Solaris Container (non-global zone)		
Architecture	IA32, x86_64	IA32, x86_64, IA64, ppc64	x86, x86_64
Verified Applications with Agents	Database Agent	DB2, Oracle, PostgreSQL, PowerGres, SQL Server	Oracle, PostgreSQL, MySQL
	Internet Server Agent	FTP, HTTP, IMAP4, POP3, SMTP	N/A
	Application Server Agent	Tuxedo, WebLogic Server, WebSphere, WebOTX, Oracle Application Server	N/A
	File Server Agent	N/A	Samba, NFS

Case Studies

Dream Island Department Store Co., Ltd.

Retail, China



Dream Island Department Store Co., Ltd. is a leading large scale retail store in Nanning city in Guangxi Province in China. Through the deployment of ExpressCluster, they successfully achieved high availability of critical database systems, ensured the stability of their key application systems and reduced Total Cost of Ownership (TCO) at once.

Sumitomo Electric Semiconductor Materials, Inc.

Manufacturing, United States



Sumitomo Electric Semiconductor Materials, Inc. (SESMI) is a leading Gallium Arsenide (GaAs) semiconductor product manufacturer located in Oregon. Since deploying ExpressCluster, there have been no production process interruptions due to system failures.

ROUX ET CIE

Manufacturing, France



ROUX, specialized in the installation of electric, electronic and optical materials, has chosen ExpressCluster as the solution to protect and secure its SQL databases. This solution guarantees the performance of their production chain, allowing ROUX to offer an excellence in quality of service to its customers.

For more information, visit "<http://www.nec.com/expresscluster>"

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For more information, visit Website: www.nec.com/expresscluster

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