

High Availability Software

EXPRESSCLUSTER X for Windows for Linux for Solaris



Disaster Recovery and Business Continuity solution for mission-critical system protection, achieving No.1 market share for 4 straight years from 2009 in Asia Pacific region*.

*Sources : June 2013 "Japan System Software 2013-2017 Forecast and 2012 Analysis" (J13310103)
August 2013 "Asia/Pacific (Excluding Japan) Availability and Clustering Software Market Analysis and Forecast Update" (AP2670321U)

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.



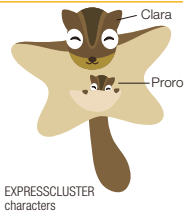
Benefits

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.

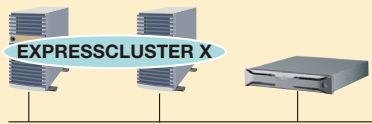


Product Overview

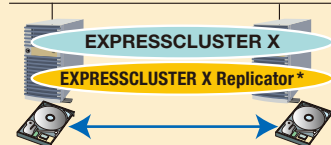
- **More selectable data sharing types** In addition to the typical shared storage methods used for HA clusters, NAS disks or data mirrors can be selected.



Shared storage suitable for large capacity, heavy access



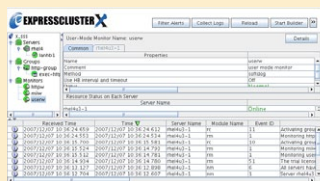
NAS disk that makes it possible to effectively use an existing infrastructure



Data mirroring type enables sharing data at a low cost

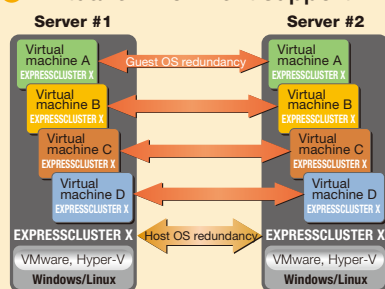
* EXPRESSCLUSTER X replicator is an optional product.

- **Web-Based Management GUI**

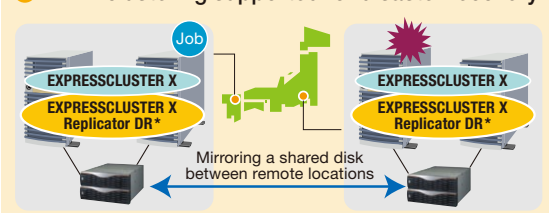


The operation status can be visually determined using a Web browser.

- **Virtual environment support**



- **WAN clustering supported for disaster recovery**

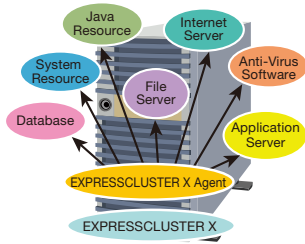


Naturally, one-on-one clustering is possible between remote locations, but it is now possible for cluster members to share data as well.

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

Add-On Options

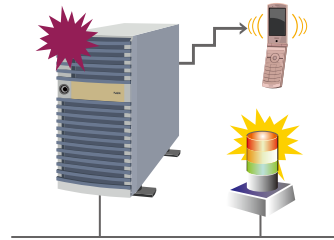
EXPRESSCLUSTER X Agent



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. Seven 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.
** Java Resource Agent and System Resource Agent are only available for Windows/Linux 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 2012 R2 Standard/Datacenter Microsoft Windows Server 2012 Standard/Datacenter Microsoft Windows Server 2012 Standard Microsoft Windows Server 2008 R2 Standard/Enterprise Microsoft Windows Server 2008 Standard/Enterprise Microsoft Windows Server 2003 Standard/Enterprise x64 R2 Microsoft Windows Server 2003 Standard/Enterprise x64	Red Hat Enterprise Linux Novell SUSE LINUX Enterprise Server Asianux Server MIRACLE LINUX Turbolinux Server Turbolinux Appliance Server CentOS Oracle Enterprise Linux	Solaris11 Solaris10
Virtual Environment		Windows Server 2012 Hyper-V, Hyper-V, VMware vSphere, XenServer, KVM, Solaris Container (non-global zone)		
Architecture		IA32, x86_64	IA32, x86_64, IBM POWER	x86, x86_64
Verified Applications with Agents	Database Agent	DB2, ODBC, Oracle, PostgreSQL, PowerGres, SQL Server,	DB2, Oracle, PostgreSQL, PowerGres, MySQL, Sybase, Sybase Adaptive Server Enterprise	Oracle, PostgreSQL, MySQL
	Internet Server Agent	FTP, HTTP, IMAP4, POP3, SMTP	FTP, HTTP, IMAP4, POP3, SMTP	N/A
	Application Server Agent	Tuxedo, WebLogic Server, WebSphere, WebOTX, Oracle Application Server	Tuxedo, WebLogic Server, WebSphere, WebOTX, Oracle Application Server	N/A
	File Server Agent	N/A	Samba, NFS	Samba, NFS
	Java Resource Agent	WebLogic Server, WebOTX, Apache Tomcat	WebLogic Server, WebOTX, Tomcat, Jboss Application Server, Oracle iPlanet Web Server	N/A

Case Studies

United Corporate Assurance Saudi Arabia, Insurance



United Cooperative Assurance Company (UCA) is a Saudi Arabia-based public shareholding company engaged in the provision of all classes of insurance and reinsurance business services within the Kingdom of Saudi Arabia. Successful implementation of EXPRESSCLUSTER led to business continuity by switching over to online mode within few minutes even on the Jeddah floods of 2011, achieving; Productivity of company staff increased by 15%, downtime of the main application reduced by 90%, and users satisfaction rate increased by 20%.

East River Electric Power Cooperative USA, Electric Power Supply



East River Electric Power Cooperative is a wholesale electric power supplier distributing power to 24 member electric systems throughout eastern South Dakota and western Minnesota. Since the deployment of EXPRESSCLUSTER, East River has not experienced any overall system downtime.

AV Global Corporation Pvt. Ltd. India, Logistics



AV Global is a leading total logistics solution provider, well known in the industry for its dynamic and result oriented approach. The Logistics system of AV Global equipped with EXPRESSCLUSTER is geared up to take peak workloads without experiencing downtime.

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

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