High Availability Software
ExpressCluster X SingleServerSafe for Windows for Linux

Low Cost and Easy to Use Enhanced Availability Solution for Single Servers

Benefits

Extremely cost-effective

The autonomic recovery of IT systems is possible in environments where there is no permanent SE and for internet data centers that have multiple servers.

Real-Time Health Monitoring

The operating conditions of each server can be visually checked through web browser, and ExpressCluster X integrated manager can be used to collectively monitor the operating conditions of multiple servers.

Flexible Deployment

Flexible solution to enhance availability even in environments where traditional HA clustering is inherently more difficult to deploy such as servers in network load-balancing cluster.

Product Overview

ExpressCluster product technology can also be effectively used for a single-server configuration.

● Stop

SingleServerSafe detects when applications or services stop abnormally. When an application is detected to unexpectedly stop, it is automatically restarted to perform recovery. Custom applications can also be monitored.
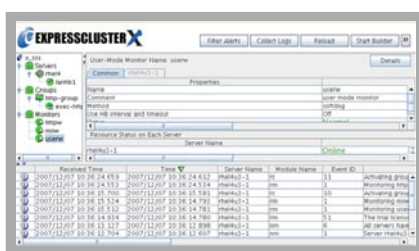
● Stall

SingleServerSafe detects when software, operating systems, or hardware access hang-up. In case of hang-up, which does not leave any evidence in the syslog or failure logs, is detected, restarting is automatically performed for recovery.
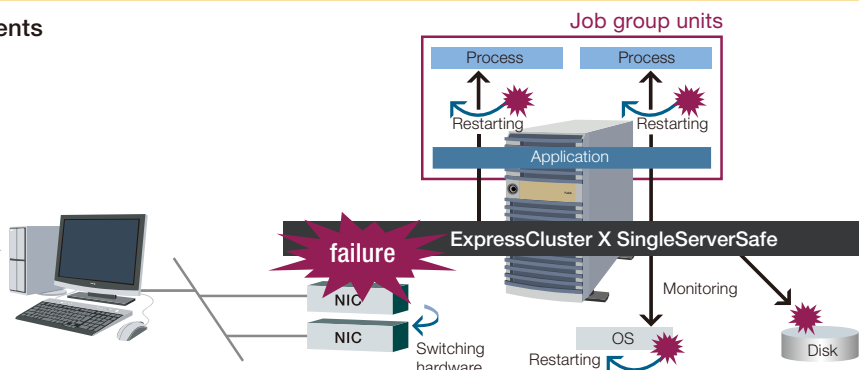
● Setup

Deployment is easy because setup information is saved in a file. Because settings are created offline, switching from test to production environment is easy, as is deploying a configuration you are already using for another system.

Operation Overview

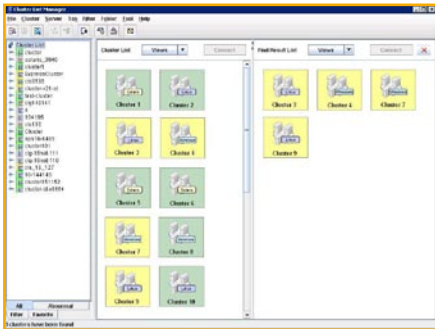**High reliability in single-server environments**

Web-Based Management GUI
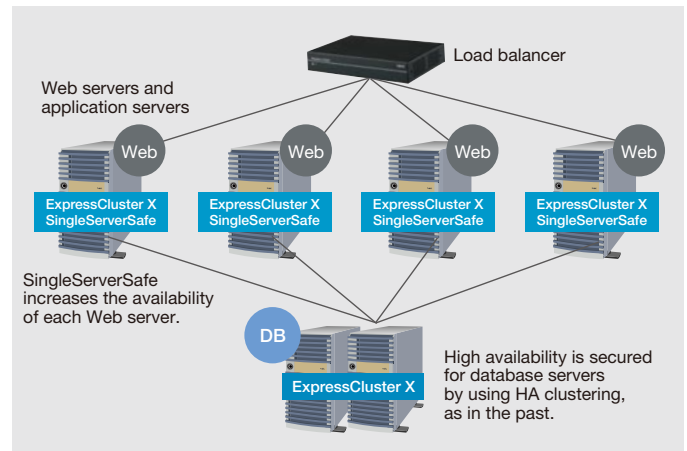
ExpressCluster X

http://www.nec.com/expresscluster

Integrated Management

If ExpressCluster X SingleServerSafe is installed on a single server or on a server controlled by a load balancer, integrated management and increased availability of the entire system, from its front end to its back end, are possible.
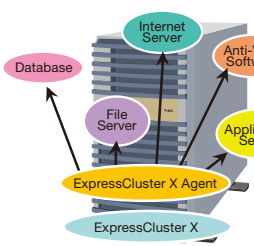
Integrated manager

A Web browser can be used to perform operations and view statuses in an integrated way.

Web servers and application servers

Load balancer

ExpressCluster X SingleServerSafe

SingleServerSafe increases the availability of each Web server.

High availability is secured for database servers by using HA clustering, as in the past.

Add-On Options

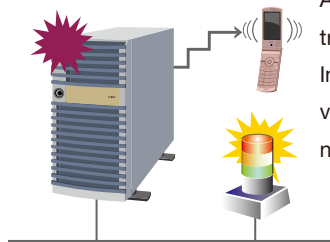The optional products for ExpressCluster X can also be used for ExpressCluster X SingleServerSafe.

● 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
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 4, 5 Novell SUSE LINUX Enterprise Server 10,11 Asianux Server 3 MIRACLE LINUX V4.0 SP2 Oracle Enterprise Linux 5 Turbolinux 11 Server
Virtual Environment		VMware vSphere 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 (including Microsoft Exchange)	FTP, HTTP, IMAP4, POP3, 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