

Business Continuity Solution for Manufacturer's ERP

Nipman Fastener Industries



NEC provides a leading auto parts manufacturer with a state-of-the-art integrated solution for business continuity and disaster recovery

Introduction

Downtime due to system failure results in missed business opportunities and damages a company's brand. Measures need to be taken to ensure business continuity at all times. The most critical applications of a business are the enterprise resource planning (ERP) system and the corresponding database. Nipman needed a solution that would protect the ERP system and its database against system, application or OS failure. The EXPRESSCLUSTER X family of integrated business continuity (BC) and disaster recovery (DR) software enables fast recovery and continuous protection of critical applications and data. EXPRESSCLUSTER X not only monitors system operations, but accurately detects failures and automatically fail overs operations to a standby server that continues to shoulder application workloads. NEC EXPRESSCLUSTER X was chosen to achieve fast, automatic failover to ensure not only business continuity but also provide a disaster recovery site.

Challenges

Nipman required a solution that would prevent the occurrence of downtime due to system, OS or application failure. The challenge was to ensure availability of the ERP system and database within minutes of the detection of a failure. The ERP system is directly accessed by manufacturing plants located in Bawal, Haridwar, Manesar and Ghaziabad to upload orders and dispatch information on order statuses to customers. Any downtime of the ERP system or its database will lead to a cascading effect, resulting in delays in delivering important information such as order statuses and dispatch notices to the customer. Downtime of mission-critical applications and databases has a serious financial impact and extended downtime can be fatal, resulting in huge loss of revenue and customer goodwill. Top-class manufacturers must be able to provide quality services to customers efficiently and cost effectively. To ensure this, it is essential to have an IT solution that can meet current as well as future IT requirements.

Customer

- Nipman Fasteners Industries Pvt. Ltd.

Industry

- Automotive Fastener

Challenges

- Downtime of mission-critical applications and databases has serious financial impact and extended downtime can be fatal, resulting in huge loss of revenue and customer goodwill.
- 1 Mbps narrow network bandwidth and a DR site 25 kilometers away connected by a WAN link.

Solution

- Implemented EXPRESSCLUSTER as business continuity and disaster recovery solution.
- Achieved continuity of operations during planned maintenance and protection against unplanned failures in critical applications.
- Implemented constant server monitoring to detect problems and provide automatic recovery.

Results

- MS NAV and MS SQL Server can now shoulder peak workloads without experiencing downtime.
- Nipman has dramatically reduced downtime due to server, application, network or database failure.
- Nipman's IT team met the challenge of ensuring 99.99% uptime in its business-critical systems (ERP software and database) at a very low cost of ownership.

Solution

Nipman chose NEC's EXPRESSCLUSTER X as it provides the business continuity for critical applications demanded by Nipman's IT team. EXPRESSCLUSTER X offers a robust solution with a user friendly interface for easy operation and management and can achieve fast, automatic failover and recovery of databases containing vital data including products for sale, customer information, orders, and shopping schemes in the event of OS, hardware or application software failure. EXPRESSCLUSTER X provides protection against system failure and minimizes downtime during planned maintenance of Nipman's IT infrastructure. It monitors various resources on the servers, detects failures and provides automatic recovery to minimize server downtime. The users at manufacturing sites 1 and 2 access the ERP application (Microsoft Dynamics NAV) and its related database (Microsoft SQL Server) from the primary site. In this solution, high availability for critical applications (Microsoft Dynamics NAV (MS NAV) and Microsoft SQL Server (MS SQL Server) is ensured by EXPRESSCLUSTER X. Data related to ordering and dispatch from manufacturing plants generated at the primary site is protected by EXPRESSCLUSTER X by replicating it in a data partition of the standby server at the DR site. EXPRESSCLUSTER X fails over MS NAV and MS SQL Server to the DR site automatically if a failure is detected at the primary site.

NEC's EXPRESSCLUSTER X software provides:

- WAN clustering for both MS NAV and MS SQL Server
- Data replication across the WAN
- Ultimate business continuity 24/7
- Continuity of operations during planned maintenance and protection against unplanned failures in Nipman's critical applications
- Constant server monitoring that detects problems and provides automatic recovery to minimize server downtime to about 5 minutes

Results

EXPRESSCLUSTER has been deployed at the customer's site and Nipman is enjoying the benefits of this product.

- MS NAV and MS SQL Server can now shoulder peak workloads without experiencing downtime.
- Nipman has dramatically reduced downtime due to server, application, network or database failure.
- Nipman's IT team met the challenge of ensuring 99.99% uptime in its business-critical systems (ERP software and database) at a very low cost of ownership.

About

Nipman Fastener Industries Pvt. Ltd. was established in 1997 with the philosophy of "Achieve best to give the best." Nipman manufactures standard and special fasteners for the automotive and auto component industries. The company believes in following best practices and deploying best technologies to achieve the highest level of customer satisfaction.

Nipman had the following to say about their experience working with NEC:

"In the past, we have experienced huge loss of data due to network outages and application server failure, which have resulted in bad business losses. Being in the automobile industry, on-time delivery is a necessity, so frequent failure of the network link has a serious impact on our dispatch schedule. After implementing EXPRESSCLUSTER X, we now have active and standby servers that contain live data, which has helped in ensuring minimal impact on business in the case of downtime or data loss. For example, when our primary server recently failed due to a power outage, within two minutes of failure detection—even before the failure was reported by our staff—EXPRESSCLUSTER X had performed failover to the DR site located 25 kilometers away. Thanks to EXPRESSCLUSTER X, we were able to avoid serious business losses.

We would like to express our gratitude to the entire NEC team for being committed to solving our problems and delivering us this solution. We strongly recommend EXPRESSCLUSTER X for business continuity and disaster recovery and are looking forward to adopting other NEC products that can add value to our business."

