

High Availability for Access Control



At a Glance

- Always-on security infrastructure
- 99.999% availability for physical security, access control & video surveillance
- Out-of-the-box continuous availability & easy operation
- Transparent failover & system integrity

Overview

Protection of people, property and information is a fundamental requirement for all businesses. Fulfilling this responsibility begins with controlling physical access. Knowing who is entering your facilities and when is the first step to safeguarding the heart of every organization – its personnel and critical data.

Effective security and access control systems require uninterrupted operation. When physical access control systems stop working, the entire operation is at risk. High availability of business critical technology resources ensures these essential systems remain operational and provide uninterrupted coverage.

NEC offers high availability solutions that maintain continuous availability of physical access control technologies in a simple, easy to use platform. NEC Express5800 fault tolerant (FT) servers, powered by the latest Intel® Xeon® processors, deliver the high availability and uptime demanded by critical security and physical access systems for 24/7 real-time monitoring – and the utmost protection.



San Jose Airport Locked Out

According to Mineta San Jose International Airport officials, a computer-server problem rendered access doors inoperable for about 45 minutes causing significant delays for travelers. The failure of the access control system meant that doors and alarms from the check-in to the jet-bridge entrances were inoperable. The situation caused a typically busy airport to come to a standstill. It took hours to recover delayed flights, and the snafu was responsible for missed connections and additional aggravation for both travelers and employees.

San Jose Mercury News, August 1, 2014

The Risk and Regret of Downtime

Controlling physical access effectively is mandatory to ensure the safety of the people, the protection of the facility, and the preservation of the work being done. The key to a successful access control system is uninterrupted operation. Maintaining high availability of the system ensures that the business is not vulnerable to infiltration by unauthorized people. Yet, according to the Standish Group research, 72% of mission critical applications experience 9 hours of downtime per year.¹

Faulty security and access control systems create a number of situations that are detrimental to business. To begin, all alarm and video monitoring stops leaving the facility vulnerable. Not only are employee credentials unable to be verified, but cardholder badging records cannot be updated. Real-time integration must be maintained between the access control system and authoritative sources of personnel status, so that changes in status are updated instantly. For sophisticated credentialing systems that span multiple locations, a disruption doesn't affect just one location – it exposes all locations to harmful intrusions.



First Line of Defense: High Availability

Clearly, no system can guarantee 100% availability, but ultimately the goal is to achieve the highest possible availability to ensure security systems remain operational. How much downtime can your business tolerate each year? To put it in perspective, a system that provides 90% availability experiences more than a month of downtime each year! Think of what your business can lose with that degree of vulnerability.

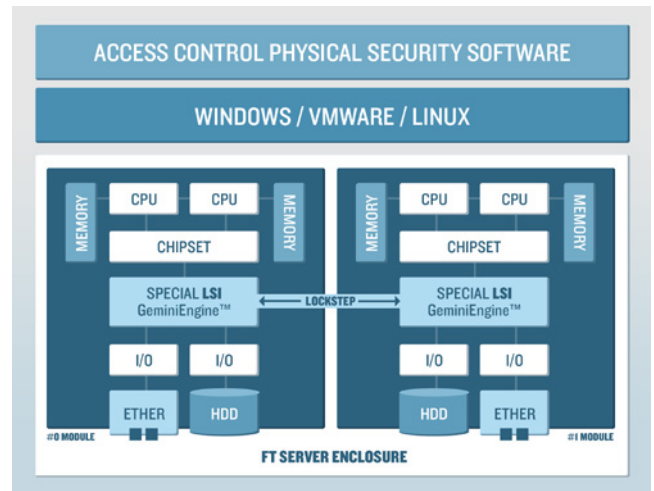
At the heart of uninterrupted operation of critical security systems is high availability server platforms. Fault tolerant servers offer a simple solution

¹ *Big Bang Boom*, The Standish Group International, Inc., 2014

that assures maximum uptime for physical access control systems. NEC offers one of the most innovative and reliable fault tolerant server solutions for preventing planned and unplanned system downtime.

NEC's Express5800 FT server series offers a fully redundant modular hardware design that ensures less than 5 minutes of downtime each year. Two duplicate server modules – each complete with CPU, memory, motherboard, I/O, hard disk drives and cooling fans – within the server run in lockstep as one logical server to ensure zero transaction or data loss, and no loss of TCP connection.

GeminiEngine™ is a chipset specially engineered for transparent failover and system integrity. Lockstep processing enables one module to continue processing without interruption or loss of data, while the fault in the other module is repaired. Display notices or alarms alert personnel to any failed component in order to identify and correct faults immediately. After replacement, the hot-swappable modules automatically synchronize and resume normal operations.



Affordable & Easy to Use

NEC Express5800 FT servers are an affordable high availability solution that lowers operational costs and does not require specially trained IT staff to maintain. By integrating two server modules into one logical server, only one operating system or software license is required. This highly efficient design, based on standard components, reduces power consumption and does not require specialized knowledge for customized configurations.

Find your new fault tolerant server at www.necam.com/ft.

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