

CITY OF LEBANON

Tennessee community enhances public safety using **STRATUS® EVERRUN® ENTERPRISE** for always-on applications

The City of Lebanon is located in Wilson County, Tennessee, approximately 25 miles east of downtown Nashville. The county seat and a growing residential and business community, Lebanon has a population of more than 28,600 based on the 2013 census. The City of Lebanon sees a daily influx of over 100,000 people. The Lebanon Police Department's Communications Division is responsible for 24/7/365 dispatch of routine and emergency calls to police, fire, animal control, and public works. In addition to dispatching an average of 5,700 calls each month, the agency also enters and maintains National Crime Information Center (NCIC) records such as missing persons, wanted persons, stolen vehicles, weapons, license plates, and other items containing an identification number.

The Communication Division relies on critical applications—from various record management and reporting systems to Computer-Aided Dispatch (CAD) software that extends to field unit vehicles—to conduct daily business, track incidents, and respond quickly and effectively to emergency situations. Always-on availability of these applications is crucial for optimizing operational efficiency and ensuring community safety and security.



“Stratus everRun Enterprise makes it simple to achieve continuous application availability. The software is remarkably easy to install and manage—even with limited IT resources—and comprehensive monitoring and notification features let us know of any problem so we can take immediate action to head it off.”

Elvis Huff
MIS System Administrator/Police Officer
Lebanon Police Department

The Challenge

For years, the agency's aging physical server infrastructure lacked the redundancy needed to perform routine support and updates while maintaining operational continuity. Without regular maintenance, the servers would inevitably go down, forcing dispatchers to resort to a paper-based solution while the systems were restored. When dispatchers received a call, they would write down all the required information and dispatch responders without the help of automation. Once the servers were back online, the handwritten dispatch information would have to be entered into the system manually. While this outdated approach worked, it slowed down processes and response times—even in life-and-death emergency situations where every second counts.

In 2014, the Lebanon Police Department decided to change and implemented a change to the department's outdated servers and installed, in 2015, a continuous availability solution to keep critical applications up and running—all the time.

The Solution

Lebanon Police Department upgraded its computing infrastructure to run all applications, including its emergency CAD, traffic reporting, police use of force, and document and record management systems, on virtualized industry-standard x86 servers in its on-site data center.

While server virtualization reduces costs, improves agility, and optimizes hardware utilization, it also provides a single point of failure for multiple applications, making continuous availability all the more important. After consulting with a nearby municipality that was successfully using a Stratus solution, the agency decided to run its virtualized applications on Stratus everRun Enterprise, a fault-tolerant downtime prevention software that ensures business continuity and data integrity by keeping Windows applications up and running with mainframe-like availability—without requiring application modifications.

With everRun, the agency's applications live on two physical machines. If one machine fails, the application continues to run on the other machine with no interruptions or data loss. If a component fails, it's simply replaced with the healthy component from the second system. The I/O is automatically mirrored to the redundant server and memory check-pointing ensures all in-flight transactions, as well as data in memory and cache, are preserved.

Built-in application monitoring provides complete performance visibility, letting the agency know when an application or device is down and restarts it instantly to minimize impact. For added peace of mind, Stratus' support center constantly monitors the virtualized environment and automatically sends system-level notifications should a fault occur.

The Results

Stratus everRun Enterprise has helped the Lebanon Police Department improve efficiency by operating a stable, reliable, and always-on virtualized application environment. Thanks to everRun, the agency has experienced no unplanned downtime since implementing server virtualization. In addition, the solution's built-in redundancy enables IT personnel to take down a server for routine maintenance and keep all of the other virtual machines running—without interrupting agency operations.

By keeping systems up and running all the time, everRun Enterprise allows agency personnel to optimize response times in emergency situations and to better protect and serve the Lebanon community day in and day out.

About Stratus Technologies

Stratus Technologies' solutions enable rapid deployment of always-on infrastructures, from enterprise servers to clouds, without any changes to your applications. Stratus products (software and servers) combined with Stratus people, enable customers to prevent downtime before it occurs, ensuring uninterrupted 24/7/365 performance of essential business operations.

To learn more, visit www.stratus.com.

“When lives are on the line, you need the ability to detect issues and prevent system failures before they occur. With Stratus everRun Enterprise, we're able to do just that. As a result, our systems are continuously available, helping our agency deliver the best possible service to the community.”

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