Hartsfield-Jackson International Airport

Assured uptime for CAD enables police, fire, and emergency response at the world's busiest airport

Business situation

More passengers travel through Atlanta's Hartsfield-Jackson International Airport than any other on the planet. Not only has Hartsfield-Jackson been number one in passengers for the past 13 years, but also for five years straight the airport has been the busiest in landings and takeoffs.

With that much activity, Hartsfield-Jackson stays ready to handle emergencies of all types. In 2010, the airport added a new Centralized Command and Control Center (C4) to expand its preparedness. The C4 provides a single point for managing incidents on its 4,700 acre campus, and one central place that people can call.

The C4 uses a computer aided dispatch (CAD) system to help speed police and fire department responses. Both the Atlanta Police

QUICK FACTS

SOLUTION PROFILE
- Enables computer aided dispatch of police and fire units stationed at airport
- Serves the busiest airport in the world
- Provides centralized point of contact for 4,700 acre airport campus
- Integrates with the city's CAD system
- Assures mission-critical uptime with Stratus® ftServer® system

PRODUCTS
- Stratus ftServer system
- PSSI RESPONSE™ Computer Aided Dispatch (RESPONSE CAD) software
- Microsoft® Windows Server®
- SQL Server® database software

SERVICES
- Stratus Assured Availability Support

" We have not experienced any unplanned downtime in five years."

Dan Negris
CAD Administrator, Department of Information Technology
Hartsfield-Jackson International Airport

Uptime. **All the time.**

Stratus®
Technologies

Department and the Atlanta Fire Department keep units stationed at the airport.

And for the past five years, Hartsfield-Jackson has depended on Public Safety Systems Incorporated (PSSI) and Stratus Technologies to keep its CAD system running smoothly – with maximum uptime.

Business objectives

Before 2006, the airport was served by CAD from a different software provider. When the system was due for replacement, it offered the chance to adopt the same PSSI software used by the City of Atlanta. Then the two CAD systems could work together effortlessly. For example, the airport CAD system could archive police and fire calls directly to the city's records management (RMS) database.

The change also called for a new server. The systems integration firm that did the initial installation recommended a fault-tolerant Stratus ftServer system for uptime assurance. The airport's CAD administrator, Dan Negris, was familiar with the built-in resiliency provided by the ftServer design. He recalled, "Having researched Stratus before this for a different application, I was excited about the possibilities Stratus had over a cluster in terms of manageability."

Uptime is crucial for the CAD system. Negris explained, "CAD recommends the best response using the nearest police and fire units that are available. So for example, it sends a different recommendation for a passenger having a heart attack than it would for an unattended bag."

Dispatch would also be less efficient if the CAD system were down. "Our dispatchers would have to rely a lot more on communication by phone and radio. They would also have to keep track of calls manually to be reentered for archiving later," he said.

The PSSI and Stratus solution

Mission-critical CAD applications need a resilient platform. "Stratus' 24/7 uptime assurance and proactive monitoring, paired with the proven reliability and efficiency of our RESPONSE CAD software, gives distpatchers the stability they need for continuous real-time access to vital information and communications," said Linda Kossa, director of marketing at PSSI.

Dispatchers at 14 workstations access RESPONSE CAD, which runs on the ftServer system. They track incidents, and send police, fire, and emergency medical services help to calls on airport property.

Dynamic mapping capability lets the dispatchers view the area of an incident and see where there are units available to respond. The system also provides access to Georgia Crime Information Center/National Crime Information Center (GCIC/NCIC) records.

" Stratus' 24/7 uptime assurance and proactive monitoring, paired with the proven reliability and efficiency of our RESPONSE CAD software, gives dispatchers the stability they need for continuous real-time access to vital information and communications."

Linda Kossa
Director of Marketing
PSSI

Uptime. **All the time.**

In addition, the system interacts with PSSI's RESPONSE In-Field software on mobile computer terminals that deliver information to police and fire personnel in their vehicles. PSSI's ICIS™ In-Form lets these responders file incident reports using mobile computers.

RESPONSE CAD also links to the city's ICIS Records Management System (ICIS RMS), which PSSI also provides. That gives authorized public safety personnel outside the airport access to incident information when they need it.

The CAD application uses the Microsoft Windows operating system and SQL Server database, which makes it a good fit for the fault-tolerant Stratus ftServer system.

The ftServer system builds in duplicate components. This design lets the system automatically ride through issues that would cause a conventional server to crash. And unlike using a server cluster for redundancy, the ftServer system doesn't require IT administrators to use special software scripts and systems management procedures to ensure uptime.

Customized CAD

The ftServer system uses standard technologies, and applications don't have to be modified to benefit from the server's uptime features. As a result, the airport gained more flexibility to tailor the CAD application.

PSSI customized the airport's fire district alerting. Before when dispatchers needed to call fire or EMS personnel, they sent a tone that alerted an entire fire station. Now the dispatchers alert zones in any of the five stations. "If we need a particular type of equipment, or to alert a certain group of people, we can do that discretely," explained Negris. That gets the right help, to the right place, at the right time.

The industry-standard environment also accommodates small changes to the application that the airport operations team sometimes needs. Negris observed, "Making routine changes in the SQL GUI [graphical user interface] is a whole lot easier than our previous system. "With our previous system, we had to notify the vendor every time we wanted to make a change. Now the supervisors can make a large percentage of the changes, and I can take care of anything they can't do."

Call-home monitoring is always on the job

As an IT professional, Negris appreciates that the ftServer design makes managing uptime much easier. "I've dealt with clusters, but it's nothing like the availability of a Stratus server. Maintaining the cluster so it will fail over correctly can be tricky," he noted. "I like the redundancy that the Stratus hardware has. It keeps us running and we don't miss a beat," he said.

The ftServer system's self-diagnostics and predictive monitoring contribute to keeping uptime high without extra effort. Negris said,

> " Having researched Stratus before this for a different application, I was excited about the possibilities Stratus had over a cluster in terms of manageability."

Dan Negris
CAD Administrator

Uptime. **All the time.**

"And what I really, really love is the phone home–to get a call from a Stratus technician telling me that, say, one of our power supplies is down. They're on top of things even after hours," he said.

On one occasion, the airport had to move the Stratus ftServer from one building to another. The server had to be offline briefly during the move, which interrupted the connection with the Stratus Customer Assistance Center (CAC). Negris quickly got a call from the Stratus CAC to check on what seemed to be abnormal monitoring events. While there was no problem, he was reassured to know that the server's call-home reporting and Stratus' 24-hour monitoring are always there.

This support is more extensive than with the previous solution, and Negris' department also saves money on system support costs by working with Stratus and PSSI.

Business impact

Managing Hartsfield-Jackson's CAD system over the past five years has made an impression on Negris. He has heard positive comments from the dispatchers as well.

"I've been very pleased with the performance of the Stratus hardware and the support I've gotten from them. And running the PSSI CAD has taken a lot of stress out of the picture," Negris stated. With daily responsibility for administering the CAD system, he observed, "Having that instant access to Stratus support is really useful."

The real test is how successfully the ftServer supports uptime. "We have not experienced any unplanned downtime in five years," said Negris. In addition, the CAD administrator notes that planned downtime has been quite limited. Scheduled downtime has been mostly for occasional application maintenance.

At Hartsfield-Jackson, impeccable CAD uptime has become part of the plan that keeps emergency response ready to go on any moment's notice.

About Stratus

Stratus delivers uptime assurance for the applications its customers depend on most for their success. With its resilient software and hardware, backed by proactive availability management services, Stratus products help to save lives and to protect the business and reputations of companies, institutions, and governments the world over.

To learn more about worry-free computing, visit www.stratus.com

> " I like the redundancy that the Stratus hardware has. It keeps us running and we don't miss a beat. And what I really, really love is the phone home – to get a call from a technician telling me that, say, one of our power supplies is down. They're on top of things even after hours."

Dan Negris
CAD Administrator

Stratus®
Technologies

www.stratus.com