

UPTIME STORIES

The background of the slide is a dark, high-contrast photograph of several server racks in a data center. The racks are filled with server units, and many of the units have small green indicator lights that are illuminated. The lighting is dramatic, with strong highlights and deep shadows, creating a sense of depth and scale. The racks are arranged in a row, and the perspective is slightly angled, making them appear to recede into the distance.

ABM **Mission Critical Solutions**

How ABM achieves mission critical success for clients.



TAKING CARE OF THE FACILITIES THAT AREN'T ALLOWED TO FAIL



When mission critical systems go down, news stories go out. That's because unplanned downtime can cause work disruption and loss of productivity. In business-critical scenarios, it can cost a company millions of dollars a day in lost revenue.

Whether you're a global data center, government site, industrial facility, or communications center, you need a trusted, proactive partner that can help ensure your business equipment and systems are always up and running, all while controlling costs and resources.

ABM is the most reliable provider of mission critical facility solutions and management in the industry. With **30+ years in specialized mission critical services across diverse industries**, ABM delivers unmatched depth for non-stop, mission critical infrastructure. Our team of certified, highly trained technicians keep operations running securely, efficiently, and reliably every hour of every day to protect mission critical environments, drive savings, and increase uptime.

Our collection of Uptime Stories shows how ABM has kept our clients up, running, and out of the headlines.

U.S. GOVERNMENT DATA CENTER IN SPRINGFIELD, VIRGINIA

Creating true power redundancy for a high-impact, national data center with high visibility

After this mission critical facility experienced an outage that shut down border crossing both for people and commerce and cost “a billion dollars an hour,” the U.S. Government decided it was time to call in some technical reinforcements.

The ABM Mission Critical Solutions team completely designed and installed full power redundancy for this existing high-density data center. This included installing new uninterruptible power supply (UPS) and generator power from the legacy side of the facility to the high-density area that supports the mission critical infrastructure.

This facility was using existing Tier II and Tier III equipment but was operating as a Tier IV data center, so ABM developed an innovative and less-invasive solution to upgrade the facility to have true Tier IV capabilities and capacities.

The upgrade project included installation of new 300 KVA PDUs, new distribution boards, new 1600 amp feeders, and distribution power to fulfill the true “A/B power” redundancy with dual-corded racks that were required by the client. In addition, we integrated all this into a building automation system (BAS) that included a fire-suppression system.

All of the team’s planning and onsite collaboration paid off, and we were able to complete the project with minimal downtime (only one weekend of partial offline time while rotating PDUs), the **critical load was not impacted, and we got it done months ahead of schedule.**



INDUSTRY

U.S. Government,
Dept. of Homeland Security

FACILITY PURPOSE

National data center

FACILITY SIZE

7.6MW power consumption

ABM’S SERVICES

Technical project management and
specialized technical services

TIMELINE

Initial projection of 18 months was
completed well ahead of estimate

RESULT

True power redundancy for the
facility

BENEFITS

Never lost service to the mission
critical equipment, and work will help
prevent any future outages

**TO LEARN MORE ABOUT THIS CASE STORY, CONTACT
YOUR ABM MISSION CRITICAL SOLUTIONS TEAM**

COMMERCIAL DATA CENTER WITH A GOVERNMENT TENANT IN SOUTH TEXAS

Providing modular data center solutions at the leading edge of the industry

In need of a fast fix that few other companies could provide, this large commercial client came in hot pursuit of ABM's Mission Critical Solutions team to get their facility up to leading-edge processing power.

Our scope included installing and setting the eight new modular design data centers, cooling blocks, power blocks, and generators for this project. The client had already independently purchased the modular components from the manufacturer, however, they weren't perfectly sized. The ABM team needed to conduct a fair amount of modifications and shimming to make everything fit together perfectly. We completed this while ensuring that everything we installed didn't interfere with the standard building codes for power, mechanical, plumbing, and other new construction requirements.

Due to the sensitive nature of the client and their information, this was a very atypical construction site. Everything surrounding it had to be immensely pre-planned, coordinated, and detailed, with a manifest for every item and vetting every person in advance to get onto the site.

The ABM team worked efficiently for twelve hours a day, seven days a week to get the job done in just six weeks, even though it was initially scoped upwards of 14 weeks. **The project was also completed 15% under budget – even after making unexpected modifications.** As a result, the client was able to go live eight weeks sooner than anticipated while meeting all the computing power their facility required to keep up with demand.



TO LEARN MORE ABOUT THIS CASE STORY, CONTACT YOUR ABM MISSION CRITICAL SOLUTIONS TEAM

INDUSTRY

Large cloud computing provider

FACILITY PURPOSE

Data center

FACILITY SIZE

8MW power consumption

ABM'S SERVICES

Technical project management and specialized technical services

TIMELINE

Completed in just 6 weeks, though initially scoped for 12-14 weeks

RESULT

Project completed 15% under budget and 8 weeks ahead of schedule

BENEFITS

The client was able to go live 8 weeks sooner than anticipated

COMMERCIAL DATA CENTER IN ANNAPOLIS JUNCTION, MARYLAND, WHICH SERVICES THE U.S. GOVERNMENT

Rapid emergency response prevents fuel leak from becoming major disaster

ABM currently provides maintenance and operations support for a complex of technical space in leased facilities occupied by a U.S. Dept. of Defense agency. One of these facilities had experienced a failure with the fuel polishing system controller serving a generator farm that supports highly sensitive mission critical equipment. As a result of this failure, approximately 3,000 gallons of diesel fuel had leaked into the parking lot of the facility, and the fuel was beginning to seep into the surrounding land.

To rapidly resolve this issue, the client called in our Mission Critical Solutions team to provide Emergency Response services. We responded to the situation in under two hours to troubleshoot, contain, and repair the problem in their infrastructure.

Following the escalation procedures that ABM had created in tandem with the client, our team immediately worked to stop the flow of wasted fuel, contain the leak, and protect the natural exposures around the facility. We then assessed what systems under the parking lot had been impacted by the fuel, discovering that it had made its way into the building’s sewer system. To remedy this issue, we bypassed the affected section of the sewer system by digging a pit and installing a temporary septic tank and above-ground pump until we could get the sewer system back in service.

We completed all this while also working concurrently to get EPA-approved vendors onsite to remediate the contaminated soil and asphalt, as well as to install test wells to monitor the soil conditions. Additionally, we coordinated with the local Dept. of the Environment, the EPA, and local authorities to ensure the remediation procedures abided by their standards. We then followed that with a 14-month monitoring process to ensure that none of the leaked diesel made its way into the local water system.

This event occurred on a Saturday afternoon, and the building was fully functional by Monday morning, **all without any downtime to the critical infrastructure or loss of the critical IT load.** With an immensely fast response from ABM – and with all the work above being completed in just a handful of hours – the client was able to avoid a much bigger disaster and becoming headline news.

TO LEARN MORE ABOUT THIS CASE STORY, CONTACT YOUR ABM MISSION CRITICAL SOLUTIONS TEAM

INDUSTRY

U.S. Government, Dept. of Defense

FACILITY PURPOSE

Data center, technical office space

FACILITY SIZE

10MW power consumption

ABM’S SERVICES

Emergency response, as part of operations and maintenance program

TIMELINE

Typically 2-4 hours of guaranteed response time, usually onsite in less

RESULT

Contained, removed, and remediated 3,000 gallons of leaked diesel fuel

BENEFITS

Mission critical infrastructure stayed operational the entire time, problem handled in hours, and client avoided becoming headline news

ENTERPRISE DATA CENTER FOR COMMERCIAL IT PROVIDER IN NORTHERN VIRGINIA

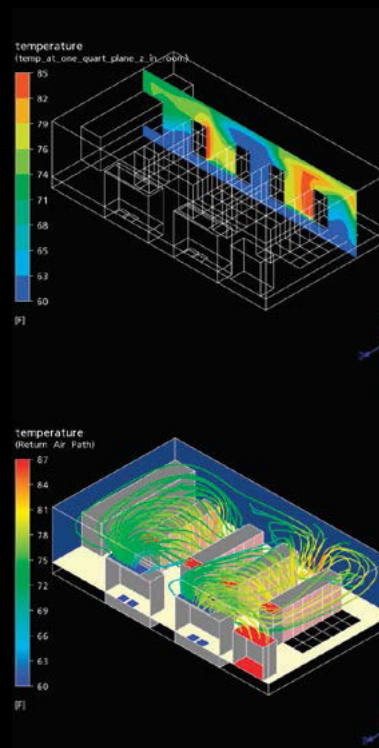
Changing out end-of-life critical infrastructure with zero impact on data load

A large enterprise data center for an Internet Service Provider (ISP) needed to upgrade some of its critical infrastructure, specifically its system chillers, as the equipment neared its prescribed end-of-life date.

Since this ISP supplies connectivity for a large portion of the U.S., they needed a reliable partner that could manage the replacement of these chillers with zero impact to the IT load for the data center. They called in ABM's Mission Critical Solutions team.

ABM came onsite and replaced the facility's chillers with upgraded ones that cooled the system on a chilled water loop for greater efficiency. In the process of installing the chillers, the ABM team noticed that there were design flaws with the manufacturer's equipment. In addition to repairing those flaws, the team also secured three extra years of warranties on the manufacturer's equipment on behalf of the client.

The team completed this on-site work both on time and on budget over a 16-week period that consisted of twelve weeks of lead time and four weeks of install (one week per chiller). **The data center continued operating throughout the entire project – all with a live load, and all with uninterrupted uptime** – resulting in no shutdown for the client during the end-of-life change out of this critical infrastructure.



INDUSTRY

Internet Service Provider (ISP)

FACILITY PURPOSE

Data center

FACILITY SIZE

3.6MW power consumption

ABM'S SERVICES

Technical project management and specialized technical services

TIMELINE

16 weeks from start to finish

RESULT

Upgraded facility's chiller system

BENEFITS

More efficient cooling for the facility and fewer client headaches from the manufacturer

TO LEARN MORE ABOUT THIS CASE STORY, CONTACT YOUR ABM MISSION CRITICAL SOLUTIONS TEAM

MISSION CRITICAL TIER IV U.S. GOVERNMENT FACILITY IN SOUTH TEXAS

Weathering an ice storm to ensure power and uptime when people needed it most

In February 2021, a severe and rare weather event in the form of an ice-and-snow storm struck South Texas, devastating both cities and outlying areas across the entire state. Businesses were shuttered, roads were closed, and millions lost power during this weather event lasting seven days. As a result, the state entities instructed the client site, a government data center, to utilize their emergency power generators to stay online.



ABM got the call to assist and, in under two hours, mobilized a team of seven expert Mission Critical Solutions staff members to support the facility's emergency power efforts. The team worked onsite at the data center, around the clock in shifts, for a full week straight. Their support involved monitoring and maintaining a 28-generator fleet for optimal performance, including fuel delivery and supply, as well as using asset runtime to log and evaluate the non-stop operation of these complex systems. Any issues encountered were noticed in advance and addressed immediately.

Due to ABM's proactive measures, including having fuel vendors on retainer and contracts with their fuel delivery trucks, the team was able to provide the client greater system reliability. The execution of the emergency operations plan (EOP), reporting, and post-event evaluation with the client were all favorable. As a result, **ABM's support mission was successful under a full emergency power load with no loss to critical systems**, ensuring 100% uptime for the facility throughout the entirety of the severe weather event.

TO LEARN MORE ABOUT THIS CASE STORY, CONTACT YOUR ABM MISSION CRITICAL SOLUTIONS TEAM

INDUSTRY

Government facility

FACILITY PURPOSE

Data center

FACILITY SIZE

65MW power consumption

ABM'S SERVICES

Emergency response, as part of operations and maintenance program

TIMELINE

Mobilized in under 2 hours, worked onsite 24/7

RESULT

Proactive measures to monitor and maintain a fleet of 28 emergency power generators

BENEFITS

100% uptime for the facility during a severe weather event

MISSION CRITICAL SOLUTIONS

ABM leads the industry in facility maintenance, managing more than 30 million square feet of mission critical facilities for hundreds of clients across North America, including:

COLOCATION DATA CENTERS	FINANCIAL & INSURANCE COMPANIES	GOVERNMENTS & UNIVERSITIES	HEALTHCARE COMPANIES
HIGH-TECH & CLOUD COMPUTING COMPANIES	LIFE SCIENCES/ PHARMACEUTICAL COMPANIES	MANUFACTURERS	TRANSPORTATION COMPANIES

We have the technology, team, and specialized expertise to deliver the right mission critical maintenance solutions, at the right price, for your facility's specific needs.

ABM works with you to reduce your operating expenses while keeping your facility safe, clean, comfortable, and energy efficient through integrated or standalone solutions.

Let ABM become your partner in uptime.

[ABM.COM/MISSION-CRITICAL](https://www.abm.com/mission-critical)

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