

Case Study

MTU Maintenance – Modular Data Center

»The professionalism shown by Fujitsu during the implementation of the project completely fulfilled our high demands«

Michael Czernik, Lead Buyer, Central Purchasing, MTU Aero Engines AG



The customer

MTU Maintenance is part of one of the world's largest independent providers of maintenance services for civil aircraft engines. As a subsidiary of MTU Aero Engines, the company benefits from almost 100 years of experience in developing and manufacturing aircraft engines. MTU Maintenance's portfolio includes service packages and complete solutions for a wide range of modern engines. It covers everything from small business jet engines to large ones for the Airbus A380. Its range also includes maintenance and repair services for industrial gas turbines and auxiliary equipment. The MTU Maintenance Hannover GmbH site is the largest in the MTU Maintenance Group and is responsible for maintaining and repairing medium to large sized civil aircraft engines.

A second server room was to be installed in a container on the MTU Maintenance site in Hanover in order to combat the growing data volumes. The aim of the project was to combine the two server rooms in such a way as to increase the total availability of the IT infrastructure substantially, while maintaining the highest possible security standards.

The individual specifications for the server room:

- Width approx. 3 meters, space for 10x19" racks (42U) with room to expand
- Hot and cold air containment system
- Fire resistance class F90 in accordance with DIN 4102
- Redundancy in the cooling and refrigeration system by using efficient Direct Free Cooling
- Total IT power approx. 30 kW, can be expanded to 45 kW including redundancy
- Uninterruptible power supply (UPS) with 90 minutes autonomy
- Fire extinguishing system including early detection system
- Lighting
- Provision of error alerts and transfer of these to the building management system at the site
- Remote monitoring interface
- Maintenance contract for the air conditioning systems, UPS and fire extinguishing system.

The customer

Country: Germany
Sector: Aviation industry
Employees: 3,000
Website: www.mtu.de/maintenance



The challenge

Due to increased demand on the availability of its IT system and high growth in its database volumes, MTU Maintenance wanted to replace an existing server room at its site in Hanover.

The solution

Creating a Fujitsu Modular Data Center. The Fujitsu Modular Data Center turnkey security solution offers excellent flexibility whilst maintaining the highest possible security standards for the building services within the container at an attractive price.

The benefits

- The entire solution is extremely flexible
- High security standards
- Attractive price
- Project realized very quickly (in this case approx. 12 weeks from placing the order to completion)
- Everything from a single source (solution and services)
- Innovative, highly effective technology (UPS), efficient direct passive cooling and coolants that comply with the Kyoto Protocol

Products and services

- Fujitsu Modular Data Center
- Electrical systems / UPS
- Air conditioning
- Security and monitoring
- Racks and accessories
- Project and construction management
- Maintenance services

High quality demands

MTU Maintenance is one of the world's leading single source providers of maintenance services for civil aircraft engines. As is standard in the aviation industry, these services and high-tech repairs are subject to the highest quality demands in terms of both products and working processes. MTU Maintenance in Hanover is an active member of the Coordination Agency for Supplier Evaluation (C.A.S.E), and therefore sets the standards for quality worldwide. The IT system is an integral part of the working processes at the site and as such is subject to the same high quality standards, particularly in terms of data availability.

The solution

MTU Maintenance aimed to achieve the following objectives by installing a Fujitsu Modular Data Center in Hanover:

- Relocating an existing server room, creating more space within the site
- Combining the individual availabilities of the old and new server rooms to increase the availability of the IT systems in general across the site - particularly for building services.

The server rooms are still operated as standalone data centers. By mirroring the data between the two server rooms and duplicating the design of the network infrastructure, there is always a backup for the site's IT systems.

Conclusion

With the Fujitsu Modular Data Center solution, Fujitsu was able to provide MTU with a powerful infrastructure that met its demands not only quickly, but also with the highest possible levels of protection against disaster and maximum operational security.

Reasons why the company decided to work with Fujitsu on the project were:

- Quality of the solution (customer reference visit)
- Competent solution from a single source
- Competent solution design
- The flexibility of the solution
- Realization period
- Price of the solution.

The Fujitsu Modular Data Center also gives MTU Maintenance the flexibility it needs to adjust its IT infrastructure to suit the changing conditions of a growing market.

The Fujitsu Modular Data Center solution uses the latest technology to support the IT systems and provide the highest possible levels of security against external influences, whilst also conforming with climate protection guidelines.

Contact

FUJITSU
Phone: +44 (0) 870 242 7998
E-Mail: cic@ts.fujitsu.com
Website: www.fujitsu.com/de
2014-12-18

© 2014 Fujitsu and the Fujitsu logo are trademarks or registered trademarks of Fujitsu Limited in Japan and other countries. Other company, product and service names may be trademarks or registered trademarks of their respective owners. Technical data subject to modification and delivery subject to availability. Any liability that the data and illustrations are complete, actual or correct is excluded. Designations may be trademarks and/or copyrights of the respective manufacturer, the use of which by third parties for their own purposes may infringe the rights of such owner.