

Integrated data center solutions for maximum business continuity

Siemens Beijing Data Center, China



In September 2008, Siemens China opened its new Siemens' Center Beijing (SCB), the company's largest real-estate project worldwide. Siemens, the leading provider for energy-efficient, safe, and secure buildings and building infrastructure, provided the technology to maximize the energy efficiency of its new HQ, optimize the management of its technical infrastructure, ensure maximum business continuity, and enhance the comfort and safety of its occupants themselves.

■ The project

The Siemens' Center Beijing, the cutting-edge, environmentally friendly headquarters, is the company's largest, real-estate project worldwide. It houses the headquarters of Siemens China and partly consolidates the offices of local Siemens companies, subsidiaries, and operating companies under one roof. It also includes the Beijing Data Center, the company's largest and most advanced data center in Asia, comprising 630 servers, 100 racks, and covering 490 m² of floor space. The new building is strategically important for Siemens, as it functions as the regional headquarters covering the infrastructures for the IT and voice services of more than 70 locations in China and Mongolia. The data center also provides computing and storage space for all of Siemens' Asian subsidiaries, along with a reliable infrastructure and a secure environment.

■ The challenges

The new data center was built to provide capacity, performance, and assured business continuity for both Siemens itself and external customers in China and throughout Asia. No commercial organization today can afford breaches of its data security, disruption of its computer network or the loss of irreplaceable data. For some, even one or two hours of downtime can be not only financially crippling, but also very damaging for their reputation. Housing as they do such sensitive, vital information and systems essential to the survival of their clients, data centers therefore present a greater need for absolute protection whilst demonstrating a greater level of risk – especially when it comes to fire and security. It is therefore essential that preventive and active fire protection and security are employed in such mission critical locations.



■ The solution

The data center was equipped with a tailored fire safety and security solution, amongst others integrating fire detection and extinguishing, evacuation, access control, video surveillance, and building automation systems from Siemens:

- The integral fire safety concept ensures the perfect interaction between very early and reliable detection, alarming, control, and extinguishing. In the event of a confirmed fire, the fire control panel, converts the alarm into adequate actions and helps trigger the right response.
- For optimal security of the data center the SiPass® access control system integrates with the video surveillance and intrusion detection system. The digital recording system provides live and recorded images from 25 day/night cameras.
- Central management and control of the fire safety and security systems is ensured by the danger management station from Siemens, also supporting an efficient incident response at all times.

- The building's energy consumption is about 28 percent less than that of comparable buildings. The concept behind the Siemens Center Beijing does not only feature individual "green" IT strategies, but incorporates all of its infrastructures: design, fire safety, security, energy, water management, building engineering, communication, and traffic. The building utilizes open-air cooling and low-energy lighting along with servers needing 35% less energy.
- A building automation management station from Siemens is integrating all data from the building control, fire safety, security, lighting, and power systems.

■ The benefits

The data center demonstrates the obvious advantages of energy efficiency and the many benefits of integrated solutions from Siemens in providing a pleasant, safe, secure and – above all – controlled working environment.

For many Asian companies, critical business functions are now assured due to

the services provided in the Beijing Data Center. In April 2010, the Siemens Beijing Data Center was given the "New Generation Data Center Award 2009", based on the criteria: "Green Energy", "Security, Stability, and Availability".

Highlights

- Integral fire safety and security concept ensuring business continuity
- Extremely fast and reliable fire detection and extinguishing
- Optimal security thanks to SiPass access control, video surveillance, and intrusion detection systems
- Danger management system for central management and supervision ensuring efficient incident response
- Intelligent building management system ensuring ongoing energy savings
- "New Generation Data Center Award 2009" for "Green Energy", "Security, Stability, and Availability"

The information in this document contains general descriptions of technical options available, which do not always have to be present in individual cases. The required features should therefore be specified in each individual case at the time of closing the contract.

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