

Geneva, June 28, 2011

Safety and security for priceless data

In the business world of today, data centers play a vital role, storing the data of their customers and ensuring that they are available continuously. For this reason, data centers are particularly vulnerable to service interruptions—their infrastructure needs to be protected not only against hardware failures and data line and power supply interruptions, but also against physical hazards such as sabotage and fire. Geneva-based provider Safe Host uses solutions from Siemens to protect the data of its customers.

Very few companies today are willing—and financially able—to operate and maintain their own data centers. This void is filled by service providers such as Safe Host whose data centers ensure that their customers can focus on their core business.

Geneva-based data center operator Safe Host was founded in 2000, began operations in September 2002 and today is one of the leading provider of data center and workplace recovery services in Switzerland. Its portfolio includes comprehensive IT services ranging from simple dedicated servers to business continuity and managed IT services. Safe Host's 5000 square meter Tier III data center in a Geneva suburb now houses approximately 12,000 servers and storage devices (Network Attached Storage) containing the data of more than 140 customers, including international aid organizations such as UNICEF and the International Committee of the Red Cross, Swiss luxury goods manufacturer Chopard and French car maker PSA Peugeot Citroën. In total, Safe Host currently stores a data volume exceeding 1 Petabyte¹. Safe Host has been ISO 9001:2008 certified since 2003 and fulfills the guidelines of the independent Swiss Financial Market Supervisory Authority FINMA.

“Our customers include many international organizations, global companies and financial institutions for which a loss of data would be an absolute disaster,” explains Gérard Sikias, CEO of Safe Host. “As a service provider we guarantee the safety of our customers' valuable data by protecting them as best and comprehensively as possible. In addition to a site with low external

¹ 1 Petabyte = 1000 Terabyte = 1,000,000 Gigabyte

risks, as is the case here outside the city center, our security concept also includes the use of best-of-breed safety and security technology from Siemens. In addition, our entire data center is designed for high redundancy according to the N+1 principle: This extends not only to IT, but also to essential systems such as uninterruptible power supply (UPS), emergency generators and the automatic extinguishing system.”

State-of-the-art extinguishing solutions for data centers

Safe Host owns a six-story building, five of which are occupied almost entirely by IT equipment. The top floor is used by company management and administration. The expansion of the five-story data center was driven by demand: Step by step, one floor after the other, from the top of the building towards the bottom, was equipped with the necessary technology. For this reason, Safe Host’s building now contains different generations of fire detectors, fire control panels and extinguishing control panels from Siemens—some floors still use fire detectors and control panels from the older AlgoRex line, while most are equipped with devices from the current Sinteso family.

All fire safety and security devices are managed using a Siemens LMS 6 central management station. The LMS 6 collects information from more than 2,800 data points and visualizes them on 60 graphical displays of all the floors, offering varying levels of detail.

Today, Safe Host’s building is divided into 350 fire detection zones. No fewer than 830 highly sensitive fire detectors from the Sinteso and AlgoRex families are in use. To ensure reliable fire detection, they are supported by approximately 30 aspirating smoke detectors which continuously analyze the room air for smoke particles. In addition, some 50 manual call points are installed at strategic locations throughout the building. All detectors are connected to a total of four AlgoRex CC11 fire control panels, supplemented by four AlgoRex floor repeater displays. In an emergency, 65 alarm sounders make sure that the building is evacuated quickly.

The automatic extinguishing system meets all the requirements specific to data centers. Water or water mist cannot be used to extinguish a fire in a data center: The moisture would potentially cause more damage to the sensitive electronics of the servers and storage devices than the fire itself. For this reason, Safe Host uses a Sinorix N₂ gas extinguishing system. If the fire detectors detect and confirm a fire, the system automatically triggers the extinguishing process. Valves on the gas tanks in the basement of the building are opened and nitrogen, an inert natural gas, flows through a complex piping network into the room where it is needed. There nitrogen displaces oxygen, robbing the fire of one of its essential components. All of this happens in a matter of minutes and it is an effective way to extinguish both open fires and smoldering fires. Safe Host’s

building is divided into 21 extinguishing sectors; each sector is equipped with its own extinguishing system comprising gas tanks, piping network and extinguishing control panel.

Highest level of security in and around the building

For building security, Safe Host also chose a solution from Siemens. At the heart of the solution is a CC440 intrusion detection system to which 20 infrared motion detectors are connected. In addition to 50 automatic door interlocks, 180 magnetic contacts on doors and windows protect the building against intruders. In addition, surveillance cameras are installed at all major entrances to document attempted break-ins, acts of sabotage and other unusual incidents. In case of a direct attack, two panic buttons are available to manually trigger an alarm.

“Our highly secure building and our protected IT infrastructure allow us to offer our customers business continuity services on-site,” says Gérard Sikias. “If a customer’s IT or building is no longer usable after an extraordinary incident, their employees can temporarily move into our building. Since we have the necessary infrastructure and the customer’s data are already here in the form of backups, the customer can resume their business activities within a very short period of time. In some industries, this service can ensure a company’s economic survival².”

Siemens AG (Berlin and Munich) is a global powerhouse in electronics and electrical engineering, operating in the industry, energy and healthcare sectors. For over 160 years, Siemens has stood for technological excellence, innovation, quality, reliability and internationality. The company is the world’s largest provider of environmental technologies. More than one-third of its total revenue stems from green products and solutions. In fiscal 2010, which ended on September 30, 2010, revenue from continuing operations (excluding Osram and Siemens IT Solutions and Services) totaled €69 billion and net income from continuing operations €4.3 billion. At the end of September 2010, Siemens had around 336,000 employees worldwide on the basis of continuing operations. Further information is available on the Internet at: www.siemens.com.

The **Siemens Industry Sector** (Erlangen, Germany) is the worldwide leading supplier of environmentally friendly production, transportation and building technologies. With integrated automation technologies and comprehensive industry-specific solutions, Siemens increases the productivity, efficiency and flexibility of its customers in the fields of industry and infrastructure. In fiscal 2010, which ended on September 30, 2010, revenue from continuing operations of the Industry Sector (excluding Osram) totaled around €30.2 billion. At the end of September 2010, Siemens Industry Sector had around 164,000 employees worldwide without consideration of Osram. Further information is available on the Internet at: www.siemens.com/industry.

The **Siemens Building Technologies Division** (Zug, Switzerland) is the world’s leading provider of safe, secure and energy efficient solutions for buildings („Green Buildings“) and building infrastructure. As a service provider, system

² According to HDI-Gerling, one of Germany’s leading industrial insurance and security consulting companies, manufacturers using Just-in-Time production often experience a complete standstill of operations within 24 hours after IT goes down. At banks and similar commercial institutions it takes just one and a half days longer, statistically speaking, until operations come to a halt.

integrator and product supplier Building Technologies offers building automation, HVAC, fire safety, security, low voltage power distribution and electrical installation technology. With around 42,000 employees worldwide (September 30), Building Technologies achieved a turnover of €6.9 billion in fiscal year 2010. www.siemens.com/buildingtechnologies

Safe Host (Geneva, Switzerland) operates a state-of-the-art data center and offers a comprehensive range of infrastructure services. With its service lines Colocation, Connectivity & Security, Business Continuity and Managed IT Services, Safe Host helps its customers to safely, reliably and cost-effectively ensure the uninterrupted availability of their business systems and applications. Safe Host's management systems were ISO 9001 certified in 2003. www.safehost.ch