Rush University Medical Center:
Worst-case data loss scenarios are things of the past

Building Technologies
Critical data and network system integrity and security are at the heart of Rush University Medical Center’s ability to operate its 600-bed hospital and educational/research facility in Chicago, Illinois.

The IT infrastructure that manages the patient records, diagnostic images, prescriptions, security and financial data generated by Rush’s 14,000 workstations is critical to day-to-day operations at every level.

To help protect the medical center’s myriad servers, data storage drives and backup tape systems, Siemens Building Technologies, Inc. applied its considerable systems and solutions expertise to replace the obsolete fire detection and suppression system used in Rush’s data center.

**Client Objectives**

After 20+ years of service, Rush’s fire suppression system was well past its technical prime and service contractors were having difficulty locating spare parts when needed. Rush required a solution that would protect data and drastically limit collateral damage to servers, network systems and other hardware in the event the system activated.

Through experience Rush learned that a 20 minute emergency power off condition could result in 48-72 hours of downtime to recover the facility’s operational status. The enormous costs associated with the loss of operations and suppressant made the elimination of false alarms paramount.

Additionally, Rush’s commitment to employ “green” standards where possible meant that the solution had to be environmentally friendly and without health risks if a discharge occurred.

**Siemens Solutions**

- Siemens Building Technologies’ Sinorex™ fire suppressant discharge system delivers a perfectly tailored solution that provides an exponentially faster response and superior protection over the previous system. The Sinorix system is so sensitive that it can detect and suppress a fire in one blade server before it affects other servers in the rack. It utilizes a tightly integrated array of Siemens Fireprint cross-zone smoke detection hardware and Sinorix discharge nozzles. Each Fireprint detector analyzes the particles in the air and measures them against stored algorithms, only operating when smoke particles are present. The discharge nozzles deliver a suppressant that chemically negates a fuel’s contribution to the fire triangle, leaves no residue and poses no threat to humans.

- Siemens also offered its Sinorix Limited Discharge Warranty that guarantees replacement of the agent should the equipment, installation or the technical support fail in its performance.

- Siemens began the installation by decommissioning the obsolete Halon system and arranging for its disposal through a local recycler.

- The Siemens solution included a key-actuated fail-safe switch that physically locks out the Sinorix system during detector network testing and maintenance routines mandated by regulatory code.

- There is also an additional stand-alone keyed switch that breaks the Emergency Power Off circuit, causing the main power distribution circuit breakers to shut the data center power off in the event of a major fire.

To learn more about Sinorix and the Sinorix Limited Discharge Warranty visit: www.usa.siemens.com/sinorix

For more information on Siemens Building Technologies, visit: www.usa.siemens.com/buildingtechnologies