

World's most powerful DC data center online

ABB and Green launch state-of-the-art data center employing HP servers for new levels of efficiency and reliability

Zurich, Switzerland, May 30, 2012 – ABB, the leading power and automation technology group, and Green, one of the top information and communications technology (ITC) service providers in Switzerland, today announced the official opening of Green's new Zurich-West data center expansion based on direct current (DC) technology.

Green's facility, which employs HVDC-capable HP servers, is the most powerful application of DC in a data center to date. Performance tests showed that Green's new power distribution system is 10 percent more efficient than for comparable alternating current (AC) technology. In addition, investment costs for the system were 15 percent lower than for an AC system.

With the addition of almost six million new servers every year, data center energy demand is increasing at a rate of more than 10 percent annually, requiring more efficient and reliable solutions. DC systems are less complex than AC systems, making fewer power conversions. This requires as much as 25 percent less space, and reduces equipment, installation, and real estate and maintenance costs.

"Across all our business areas, customers are asking for improved reliability and energy efficiency, and DC power is an effective solution," said Tarak Mehta, head of ABB's Low Voltage Products division. "Zurich West will serve as a global showcase to demonstrate that DC is a complementary technology in data centers as it enhances reliability while minimizing footprint, installation and maintenance costs."

"The implementation of 380 volt DC technology in our data center is part of our long-term energy optimization strategy, a big step that has set a new standard in the industry," said Franz Grueter, CEO of Green. "When fully loaded, the system will result in energy savings of up to 20 percent in power consumption from grid to chip and in cooling."

ABB installed the one megawatt DC power distribution solution for the 1,100 m² expansion of the 3,300 m² Zurich-West data center. It was engineered to Green's strict ecological standards by ABB with support from Validus DC Systems, an ABB company, and includes a service level agreement.

The project underlines ABB's goal to create new power options through expanded DC applications. The company pioneered technologies that made conversion between AC and DC systems possible and was the first to commercialize long distance high-voltage DC power transmission. ABB is now applying DC to medium- and low-voltage applications in electric vehicle charging, power distribution systems on ships, in building and in data centers.

HP provided the HVDC-enabled IT for this technology showcase, including servers and storage, such as the HP X1800 G2 Network Storage System, HP DL385 servers, and the HP BladeSystem c3000. These systems represent the beginning of HP's strategy to enable the enterprise IT portfolio with support for high-voltage DC.

"Green was looking for an IT partner that could provide HVDC-enabled IT solutions to meet its specific data-center needs," said Ron Noblett, vice president, Infrastructure and Storage, HP. "At the heart of HP's Converged Infrastructure strategy is our commitment to develop new energy-saving technologies that can lower data-center capital costs, as well as ongoing operations costs and complexity."

Press Release



ABB (www.abb.com) is a leader in power and automation technologies that enable utility and industry customers to improve performance while lowering environmental impact. The ABB Group of companies operates in around 100 countries and employs about 145,000 people.

Green Datacenter AG (www.greendatacenter.ch) provides data center services for mid-size and large companies in Switzerland, Europe and worldwide. The recently opened greenDatacenter Zurich-West is Switzerland's first Tier III certified data center. A greenfield approach enabled Green Datacenter to build a state-of-the-art, highly secure and energy efficient data center for the most demanding needs.

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