

DATA CENTER

Reducing Hazards Increases Profits



- **Decrease risk** with less hazardous chemical handling
- **Boost efficiencies** with higher performing water quality that eliminates downtime
- **Grow profits** by evaluating CapEx that saves on OpEx
- **Protect your investment** with real-time monitoring and remote system adjustment
- **Upgrade performance** with the continuous improvement model of the Earthwise Standard of Care



PROJECT CONSULTING

Our Certified Water Technologists survey and identify water opportunities throughout the facility, with the goal of reducing the water footprint, minimizing risk and cutting operating expense.

Earthwise considers ways to improve efficiency, extend equipment life, reduce chemical consumption and provide remote system performance monitoring.

Earthwise Proven Process

The process starts with a complete mechanical and system survey of the facility.

Our partners in industrial hygiene, safety and environmental services offer an additional dimension of expertise.

Initial Plant Survey

- Define piping networks.
- Consult OEM guidelines

Standard of Care

- Over 100-point service inspection.
- Managed by a VP of Compliance & Waterborne Pathogen Control.

Independent Lab Work

- Obtain and analyze data.
- Generate a plant formulary and determine what type of system to implement.

Sampling and Testing

- Conducting biological and deposit analysis.
- Photo Documentation.

Customized Solutions

- Follow ISO manufacturing and services guidelines.
- Full technical services with 24/7 remote monitoring and emergency response.

CASE STUDY

DATA CENTER

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PROJECT BACKGROUND

- Mid-sized data center with aging infrastructure
- Previous treatment used hazardous chemistry (acid)
- Reduced efficiency due to low cycles of concentration (COC)
- Scale deposits due to poor heat transfer rate

EARTHWISE APPLIED SOLUTIONS

Ion- Exchange System

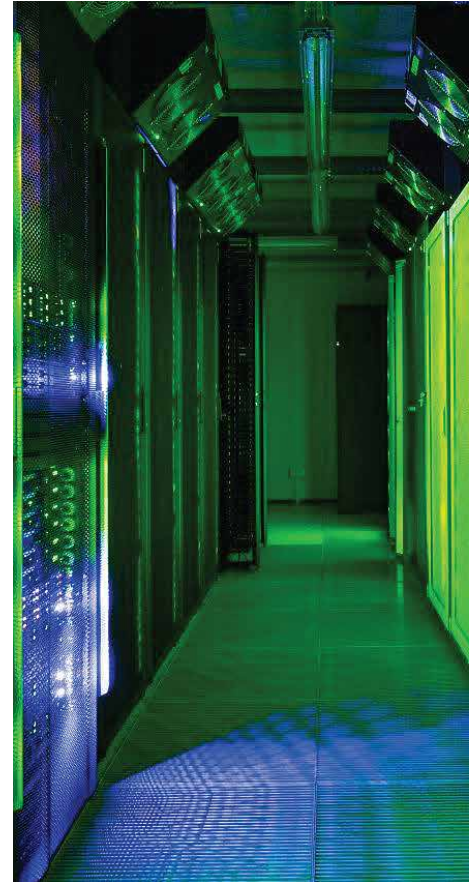
Pretreatment of water allowed the cycles of concentration to be increased to 10. This reduced the need to replenish makeup water and the amount of chemistry needed to treat the system.

Solid Chemical System

Utilized a solid chemical delivery system instead of liquids optimized floor space, reduced shipping costs and improved safety.

Results

- Eliminated hazardous sulfuric acid feed, improved safety
- No risk of acid over/under feed which can lead to equipment failure and downtime
- Eliminated the need for drum disposal. Solid containers are recycled
- No secondary containment required
- Reduced carbon footprint, since no truck delivery required



	Realized OpEx Savings
Reduction in Water Usage	445,000 Gallons
Reduction in Treatment Chemicals	\$ 8,750.00
Annual Water Savings	\$ 4,000.00
Capital Expense Payback	1.5 Years

CASE STUDY

