

# Leading by example

DELIVERING OPERATIONAL EXCELLENCE IN DATA CENTRES

## Results driven business

WHAT TO CONSIDER WHEN SELECTING TEST EQUIPMENT

## The rebirth of cool

AVOIDING MISTAKES WHEN IMPLEMENTING CLIMATE MANAGEMENT SYSTEMS



## IAN CATHCART

CHANNEL MANAGER EUROPE AT CHATSWORTH PRODUCTS

When designing and constructing data centres there is a tendency to focus on major, long-term expense costs or capital expenditure (CapEx) rather than the accumulating day to day operating expenses (OpEx).

The heating, ventilation and air conditioning (HVAC) of a data centre can use up to 30 per cent of an entire data centre facility budget. But assessing the most energy efficient cooling system to reduce operating costs, no matter the size of the initial investment into the cooling and climate management systems, is not always considered.

Planning and implementing effective airflow management with a containment system offers two overall benefits:

- It lowers OpEx, but only if there is complete isolation between hot and cold air, and the necessary power, cooling and airflow. It is possible to run high density server loads at higher temperatures by reducing the power consumption necessary to provide cooling to the data centre environment.
- It allows data centre operators to monitor results and increase server capacity where needed. As long as there is complete isolation between hot and cold air, and the necessary power, cooling and airflow, it is possible to run high density server loads at higher temperatures, while providing servers with adequate cooling to prevent overheating and shutdowns.

It is also important to know that exact results of containment will vary for each site. Overall performance, the initial cost of the system (CapEx), the estimated operating cost (OpEx), resulting savings and return on investment will all also vary. But by selecting a single supplier for complete



data centre infrastructure needs, including cooling and climate management systems, simplifies infrastructure plans that also reduce overall CapEx and OpEx.

**'THE HEATING, VENTILATION AND AIR CONDITIONING (HVAC) OF A DATA CENTRE CAN USE UP TO 30 PER CENT OF THE ENTIRE DATA CENTRE FACILITY BUDGET. BUT ASSESSING THE MOST ENERGY EFFICIENT COOLING SYSTEM TO REDUCE OPERATING COSTS, NO MATTER THE SIZE OF THE INITIAL INVESTMENT INTO THE COOLING AND CLIMATE MANAGEMENT SYSTEMS, IS NOT ALWAYS CONSIDERED.'**