DELL Technologies

## Dell Sustainable Infrastructure

### Key areas of innovation in Dell's infrastructure products

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**Energy Efficiency** We are making our technology more efficient and less intensive to reduce energy waste.

Thermals & Cooling We are engineering new solutions for addressing the heat generated from these powerful machines. By reducing the heat, we can avoid energy wasted cooling the data center.

**Infrastructure Consolidation** We are making our products denser while simplifying storage data reduction to reduce our physical and carbon footprint in the data center.

## Highlighting sustainability in our infrastructure products



## **Dell PowerEdge**

#### **Energy Efficiency**

Engineering advancements have helped us reduce our energy intensity in HCl products by up to 83% since 2013 and we increased our energy efficiency by 29% from the previous generation\*!

We also make it easier for you to manage your power budgets with data-driven insights with OME Power Manager.

#### **Thermals & Cooling**

Reducing the energy and cooling needs of datacenters plays a huge role in facilitating a company's carbon footprint.

Our multi-vector cooling, liquid cooling, and thermal design capabilities are cutting-edge solutions to one of the biggest challenges in IT today.

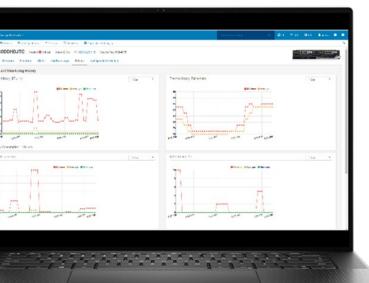
#### Infrastructure Consolidation

In 2013, it took six servers to do what is possible in just one server today. Reducing the amount of hardware required to meet business needs saves money and energy, while reducing e-waste.

### **Engineered for efficiency**

#### Power and cooling

Making our technology more efficient and keeping them cool reduces energy waste helping your organization reduce their datacenter's carbon footprint, as well as our own.



## OME Power Manager gives you the insight you need to reduce your carbon footprint and cut operational costs

With OpenManage Enterprise with Power Manager you can manage your energy resources while maximizing uptime.

- Reduce power consumption during off-peak hours with policy automation to place power caps
- Identify issues on individual servers or racks and address it before it creates an SLA impact
- Gain ultimate control with automated power & thermal management that lets you know who consumes power with detailed historical reports

#### How do we keep our servers cool in any environment?

**Multi-Vector Cooling (MVC) 2.0** Intelligent thermal algorithms minimize fan and system power consumption while maintaining component reliability

 Enables custom cooling options that can be managed via iDRAC GUI **Dell Liquid Cooling (DLC)** We cool the CPU with warm liquid that has 4x the heat capacity of air

- Reduces burden on server system fans
- Increased System Cooling Capacity
- Improved Energy Efficiency (PUE)
- Higher Compute Density
- 3x ROI Within 4 Years

#### Thoughtful thermal design

Our world class engineers designed PowerEdge servers for ultimate thermal performance. With a new layout and high-performance fans, hot air exits the system quickly and efficiently.

Room to breathe Relocated drive bays free up the back of the chassis with additional perforation for maximum air flow



Relocated PSUs New layout places the PSU on the outside edges of the 1U and 2U server chassis

14th Generation PowerEdge



15th Generation PowerEdge



Balanced airflow designCreates exhaust lanes for hot airflow from the CPUs to prevent overheating of downstream hardware components

## A P E X

Dell APEX Want to know more? Speak to us today. Harpreet.grewal@exertis.co.uk

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a **DCC** business

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