

publiccloud – DELL Fresh Air Cooling

Fresh Air. Ecologic. Inexpensive. DELL Fresh Air Cooling utilizes fresh air from outside to cool the data center. The use of fresh air for the cooling of data centers means a drastic reduction in the energy costs and CO2 emissions.



No, it's cool for your servers to run hot.

Driving efficiency to bring a breath of fresh air to the datacenter.

With DELL Fresh Air Cooling, the cooling systems feeds the fresh air from outside to cool the system. The industry norm for normal air-conditioned data centers lies at about 35°C. To not exceed this value the outside temperature has usually to be relatively cool. Due to special DELL hardware, that allows higher operating temperatures and close coordinating work, it is possible to use this fresh outside air even in hot summer months.

DELL has tested and validated this solution and allows the operating temperatures to increase by 10 degrees Celsius. The DELL Fresh Air Solution offers the following benefits:

- Enables operating temperatures of up to 45°C
- Allows the operation of the facility in up to 90% humidity
- Makes the use of compressor cooling redundant or at the very least limits its use

DELL has developed and validated this solution for server, storage, network and power components. This allows the year round operation of the facility at temperatures between -5°C and 45°C and humidity between 5% and 90%. The newest tests have shown that the components that use fresh air cooling can run error free up to 900 hours in a 40°C environment. At temperatures of 45°C they still run error free for up to 90 hours per year.

With these temperature tolerant solutions, modern data centers can drastically reduce the energy costs. In addition, the risk of failure of your system is lower in the case of a cooling issue.

