Reducing Server Energy Consumption

Written by Marco Attard 15 March 2013

Immersively cooled server rack maker Iceotope finds a first customer-- the University of Leeds, England, uses an Iceotope server to run computational fluid dynamics models while warming laboratory radiators.



"Wet" computing is a fairly simple concept. A single Iceotope Platform rack holds up to 48 hot-swappable server modules, each being a self-contained aluminium unit holding server components submerged in Novec, an inert liquid coolant from 3M.

A pump pushes a second coolant (water) from the bottom to the top of the rack, where it cascades down through all modules. Eventually it terminates at heat exchangers and transfers heat to a third and final coolant (water from "grey" sources such as rain or river water) on an external loop.