



**The Coolcentric RDHx helps the George Washington University increase reliability while reducing the operational costs of the Colonial One HPC system and increasing its speed.**

The Legacy PSInet datacenter, now the George Washington University's Enterprise Hall on the Virginia Science and Technology Campus; was designed for 2kW per rack. The Colonial One HPC System runs at a sustained 25kW per rack and initially, rack "chimneys" were deployed on the HPC to shift exhaust air to above the ceiling. This has caused systems to be overheated during LINPACK benchmark testing & chimney fans were added but could not keep up with the airflow demands.

Coolcentric added their 30kW High Density Rear Door Heat Exchangers (RDHx) to five of the racks, Cooling Distribution Unit, and 8-port manifold in order to increase efficiency. After this was implemented the Colonial One HPC Cluster is cooler resulting in an increase in system speed. In addition to the increase in system speed overall cluster fails and hot spots were eliminated.

"Coolcentric is thrilled to be able to help GW increase their Colonial One HPC reliability; while also increasing the system efficiency. The Coolcentric Passive RDHx is a very energy efficient solution that can help existing data center owners increase the reliability and efficiency of their data center," Patrick Giangrosso, General Manager of Coolcentric.

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**About Coolcentric:**

Coolcentric® delivers the world's most energy and space efficient cooling solutions for reducing costs and data center sustainability. Coolcentric products for rack level cooling, combined with services for integration and deployment of Coolcentric data center thermal solutions, allow customers to optimize their data centers for maximum performance and return on investment.

**About the George Washington University:**

The George Washington University was created in 1821 and is the largest institution of higher education in the District of Columbia with more than 26,000 students – from all 50 states, the District and 130 countries – studying a rich range of disciplines. GW is comprised of three campuses – Foggy Bottom and Mount Vernon in Washington, D.C., and the GW Virginia Science and Technology Campus in Ashburn, Va., as well as several graduate education centers in the metropolitan area and Hampton Roads, Va. The GW Division of Information Technology (IT) is the chief provider of technology infrastructure, services and applications at GW. The division partners with stakeholders across GW to equip students, staff and faculty with the technology know-how and tools necessary to achieve academic excellence. Colonial One is managed by professional staff in the Division of IT, with university-sponsored computational staff housed in the Computational Biology Institute and the Columbian College of Arts and Sciences.

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