Name Our Computer – A Supercomputer!!

[Dublin, Ireland] September 2, 2013 - Today, the Irish Centre for High-End Computing (ICHEC, http://www.ichec.ie) launched a competition to find a name for the country's latest supercomputer. The competition is aimed at primary and secondary students of Irish schools. A new website, http://nameourcomputer.ichec.ie/, was created to introduce the world of supercomputing to the general public with a short video, http://youtu.be/35p5wGevzVY, commissioned for its launch. Previously, names of Ireland's supercomputers were named after famous scientists that were either born or worked in Ireland. It is time to open the naming process to the public as the utility of supercomputing can be widely seen. Weather forecasting, F1 racing, car/airplane design, and social media to name just a few all rely on supercomputers.

This new machine will more than quadruple computing resources previously available to scientists in Ireland, besides providing access to the latest technology from Intel, Ivy Bridge processors along with Xeon Phi coprocessors, coupled to high performance storage from DataDirect Networks (DDN), to researchers across Ireland. Overall, the new supercomputer will enable scientists and companies to solve their scientific and industry-related problems quicker.

A wide range of new research and development will be enabled on the new machine. These will include an increased resolution in weather and climate forecasting, larger and longer simulations for research in areas such as medical device development, nanotechnology, genomics, drug design, etc. The machine will also be capable of running heterogeneous workflows that require large compute power and large amounts of memory either during the pre- or post-processing phases of researchers work. In other words this machine will be able to solve the Big Data problems of today.

The machine is an investment of over €4M euro and was funded by primarily Science Foundation Ireland (http://www.sfi.ie). The supercomputer is a hybrid machine capable of running many different applications and workflows. The machine is made up of four components: Thin, Hybrid, Fat and Service nodes with over 8,400 compute cores and 24TBs of RAM. The new machine will run non-stop for the next four years. It will provide an estimated 295,000,000 hours of computation not counting the power of the accelerators!!

The supercomputer was purchased from SGI (http://www.sgi.com; CA, USA) with the storage provided by DDN (http://www.ddn.com; CA, USA. EMEA headquarters in Dublin, Ireland). The supercomputer is currently being installed at the TSSG (http://www.tssg.org/) data centre in Waterford Institute of Technology (http://www.wit.ie/).

About ICHEC

The Irish Centre for High-End Computing (ICHEC) is the national High-Performance Computing Centre in Ireland with offices located both in Dublin and Galway. Established in 2005, ICHEC operates the national HPC service providing compute resources and software expertise for the research communities across all the main science disciplines through collaborative partnerships and programmes of education. ICHEC has grown to an organization recognised internationally as a partner of choice for HPC services and R&D enablement. Since 2010, ICHEC has developed an active industry engagement programme working on a consultancy basis in areas as varied as financial services, oil & gas, data analytics and renewable energy. ICHEC is funded by Department of Jobs, Enterprise & Innovation, Department of Education and Skills, Science Foundation Ireland (SFI) and the Higher Education Authority (HEA), and hosted by NUI Galway. For additional information, visit http://www.ichec.ie and http://gpgpu.ichec.ie.

Supplementary Material

http://www.ichec.ie
http://nameourcomputer.ichec.ie/
http://youtu.be/35p5wGevzVY

For more information contact:

Martin Peters
ICHEC
martin.peters@ichec.ie
+353-1-524-1608 ext. 39