

## State of the Coalition for Academic Scientific Computing (CASC) – 2008

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2008 marked the 19<sup>th</sup> year of the existence of CASC – the Coalition for Academic Scientific Computation ([www.casc.org](http://www.casc.org)). CASC now has 60 member institutions, including many of the leading supercomputing, grid, and visualization centers in the US. In this brief article, I will highlight some of CASC's recent accomplishments. I also hope to encourage academic organizations that are not yet members of CASC, and have a major commitment to scientific computing, to consider applying to become members.

Highlights of CASC activities in the past year include:

- CASC has become very active in expanding participation in advanced computing, particularly through support of the Broadening Engagement Program at SC08 and other earlier programs that help bring more students to the SC conference. CASC members collectively contribute a significant fraction of the sponsorships of the Grace Hopper Celebration of Women in Computing and the Richard Tapia Celebration of Diversity in Computing.

- CASC has continued to evolve as an important voice of the scientific computing community. One example of this is the CASC white paper submitted to the TeraGrid Futures project ([http://www.teragridfuture.org/system/files/CASC\\_TeraGrid\\_Futures\\_White\\_Paper\\_FINAL.pdf](http://www.teragridfuture.org/system/files/CASC_TeraGrid_Futures_White_Paper_FINAL.pdf)). Another example was CASC's representation at a hearing of the full House Committee on Science and Technology last summer as that committee began consideration of the recommendations in the 2007 report of the President's Council of Advisors on Science and Technology. The CASC testimony is available at <http://www.casc.org/federal.html> .
- Perhaps the most exciting thing CASC has done in 2008 was begin a very productive engagement with EDUCAUSE. EDUCAUSE represents a much larger constituency than CASC. If the scientific computing community is to have the greatest impact possible on the higher education community and the US 21<sup>st</sup> century workforce in general, we must work closely with EDUCAUSE. In so doing we can reach colleges and universities that can benefit from using the technology that CASC members, and the scientific computing community generally, are developing.

The CASC brochure (at [www.casc.org](http://www.casc.org)) describes the full extent and quality of the work being done by CASC members. CASC began in 1989 as the Coalition of Academic Supercomputer Centers. Since then CASC members have worked together and learned from each other as scientific computing evolved

from a few supercomputers to many supercomputers and then to grids and webs, changing its name and expanding its activities along the way. CASC members are already at work pursuing the best ways to derive scientific benefit from cloud computing. Any academic organization with a major commitment to scientific computing will benefit from becoming a CASC member and joining in CASC's activities as the field of scientific computing continues to evolve.

The architect David Burnham said: "Make no little plans. They have no magic to stir men's blood and probably themselves will not be realized. Make big plans; aim high in hope and work. " CASC and CASC members have been making – and implementing – big plans for years. As CASC comes to the end of its second decade of activities, I see before us a new decade in which the US and the world as a whole need, more desperately than ever, the insights CASC members and the scientific computing community generally can help bring about. The application of the technology CASC members are building, implementing, and using can help us find the right answers to important questions more quickly, and where there are no right answers at least better answers. Our education and training efforts can help accelerate the transformation of science and engineering while at the same time opening new and exciting career opportunities for the young people of the US and the world as a whole. The David Burnham quote goes on, "Remember that our children and grandchildren are going to do things that amaze us." Our children and grandchildren will indeed do things that amaze us, and the work that we are doing now will help provide better lives for them in the future.

Let me close by noting that the immediate future of CASC is in excellent hands. As announced at SC08, the CASC leadership team for 2009 will include Dick Pritchard as Secretary Treasurer, Amy Apon as Vice Chair, and Stan Ahalt as Chair. There is one thing that I had hoped CASC would get done in 2008 that we did not manage to get done – revising our bylaws. There is now so much to do in leading CASC that I feel very strongly that we should expand the leadership to include an executive board in addition to the current named officers, so we can have a larger group of people to serve as leaders and official spokespersons for CASC. I hope CASC will consider this matter in 2009.

It has been an honor, a privilege, and a tremendous learning experience to serve CASC as its chair for the past two years. I look forward to continuing to serve CASC and being a part of this community in the future.

Note: a slightly abridged version of this document was submitted as an article to HPCWire.