

Program Priorities

Outreach

- Seminars provide hands-on lessons on how computation can make a difference
- One-on-one meetings allow experts to propose appropriate solutions
- Companies share best practices and success stories

Training/Internships

- Short courses show how to use advanced computation
- Certificate programs accredit trained individuals
- Internships train next-generation workforce

Partnerships

- Consulting engineering companies
- State organizations such as Edison Welding Institute
- Industry groups such as Polymer Ohio
- Large manufacturers such as Procter & Gamble

Software Development

- Using computation from browser and desktop
- Transition research code to practice
- Better interfaces for multiple commercial codes

Research

- Making advanced computation easier to use and program through portals
- Finding better solutions to engineering problems

Contact Information

Main Phone: (614) 292-9248
Fax: (614) 292-7168
E-mail: oschelp@osc.edu
Internet: www.osc.edu

Stan Ahalt, Ph.D.

Executive Director
 (614) 292-9524 • ahalt@osc.edu

Ashok Krishnamurthy, Ph.D.

Director, Research & Scientific Development
 (614) 688-4803 • ashok@osc.edu

David E. Hudak, Ph.D.

Program Director, Cyberinfrastructure & Software Development
 (614) 247-8670 • dhudak@osc.edu

Kathryn Kelley

Director of Outreach
 (614) 292-6067 • kkelley@osc.edu



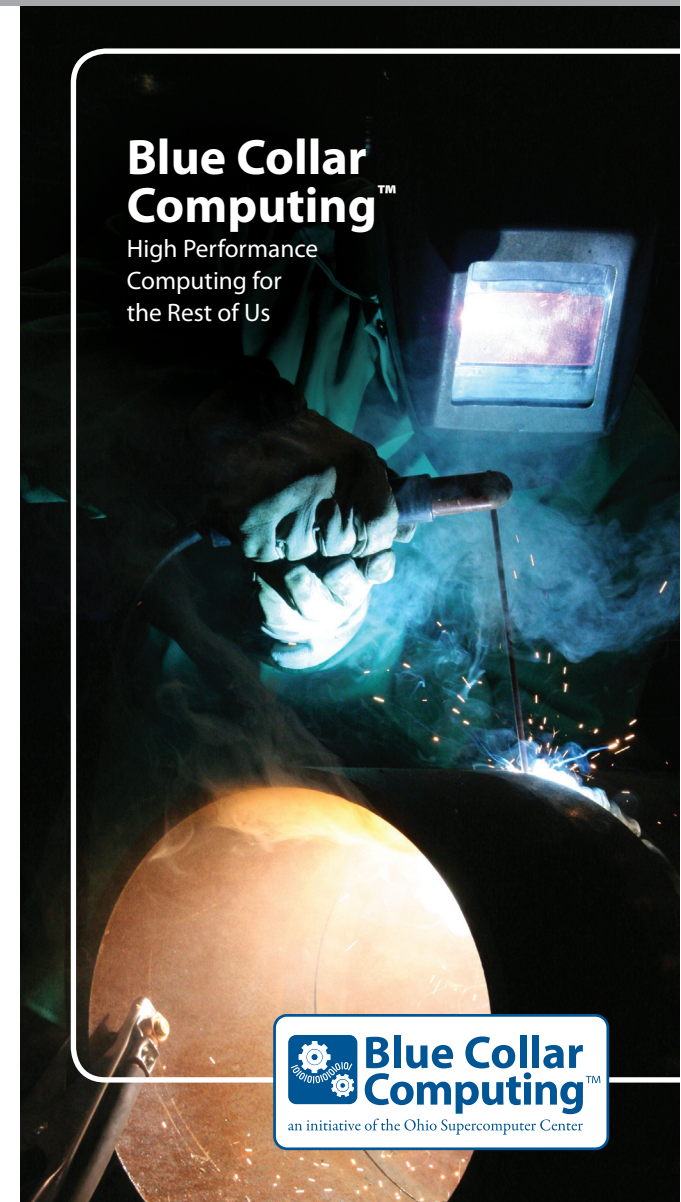
For more information about Blue Collar Computing™, please visit our website
www.bluecollarcomputing.org



Ohio Supercomputer Center

Blue Collar Computing™

High Performance
 Computing for
 the Rest of Us



A national program initiated by the Ohio Supercomputer Center to make advanced computation easily accessible to industry and research.

Global Competitiveness

Blue Collar Computing™ is a collaborative program sponsored by the Ohio Supercomputer Center (OSC) to help industry gain easy and affordable access to advanced computing technologies. With support from the Ohio Board of Regents, OSC launched Blue Collar Computing™ (BCC) in 2004.

Under this program, advanced computational technologies provide companies with innovative tools that allow for the virtual development of new and improved products, such as cars, pharmaceuticals, and financial products. Virtual modeling and simulation provide companies with a competitive edge through improved manufacturing processes that can reduce the time, labor, and cost needed to bring products to market. Simulation makes choosing between alternative processing methods far easier, better analysis and documentation of capabilities help with efficiency, and improved factory and workflow layouts increase productivity.

BCC provides computational resources, hardware, training, software and expertise, to industrial clients to enhance their competitiveness.

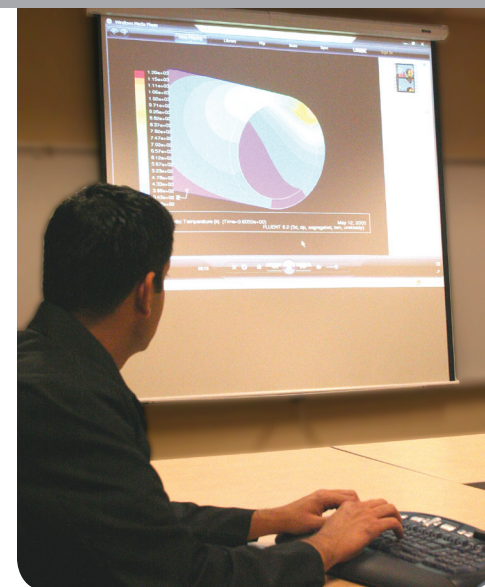


National Policy

The Ohio Supercomputer Center is taking an active role in national policy to advance Blue Collar Computing. OSC staff members serve as advisors to the Council on Competitiveness (CoC) on the use of high performance computing, to improve domestic manufacturers' efficiency. In conjunction with the CoC and University of Southern California's Information Sciences Institute, OSC is playing a critical role in the "National Innovation Collaboration Ecosystem" (NICE), which seeks to provide computational solutions and expertise on a national level. In addition, Senator George Voinovich (R-OH), Representative Tim Ryan (D-OH) and Senator Herb Kohl (D-WI) have introduced the "Blue Collar Computing and Business Assistance Act of 2007," an initiative championed by the Center to make computational resources available to manufacturing segments throughout the U.S.

Projected Outcomes

- Large jobs of today will become the small jobs of tomorrow
- Applications that will scale up AND scale down
- The bulk of everyday research, science, and engineering tasks will shift from single-processor desktops to everyday advanced computation platforms
- Parallel computing usage will be driven into the mainstream of computing
- A strong focus on industrial applications
- A pronounced emphasis on productivity



Our Partnerships

The Ohio Supercomputer Center has partnered with a number of industrial customers in polymers, pharmaceuticals, and metal forming to advance Blue Collar Computing. For example, the Center is working with Edison Welding Institute (EWI) to jointly develop the E-Weld Predictor, an application that models pipeline welds before the first welding prototype is produced. Engineers at industrial sites will use this application to determine the appropriate parameters for joining pipeline segments. The E-Weld Predictor uses OSCnet to seamlessly access OSC's computational resources via the BCC application portal. The Center has developed a similar portal program with PolymerOhio.