

Community Cyberinfrastructure

On-Ramp to National CI

The logo for SURAgrid, featuring the word "SURA" in a bold, blue, sans-serif font, followed by "grid" in a teal, lowercase, sans-serif font. A large, light blue swoosh arches over the text from the right side.

SURAgrid™

Accessible Grid Computing

CI-Enabled Transformative Research

CI-Enabled Transformative Research

Applications Deployed on SURAGrid

		Current Status	Date Deployed
1	GSU Multiple Genome Alignment on the Grid	Hiatus	Dec-03
2	UABgrid Dynamic BLAST	Hiatus	May-05
3	UNC Storm Surge Modeling with ADCIRC	Hiatus	Jun-05
4	NCSU Simulation-Optimization for Threat Management in Urban Water Systems	Hiatus	Mar-06
5	LSU Wave Watch 3 for SCOOP	Hiatus	Mar-06
6	SURA SURAGrid Teaching Environment	Active	Aug-06
7	ODU Bio-Sim: Bio-electric Simulator for Whole Body Tissue	Hiatus	Aug-06
8	UFL CH3D Storm Surge Monitoring System with Grid Appliance	Hiatus	Sep-06
9	University of Delaware Climate Modeling with CAM3	Active	Jun-07
10	GSU Virtual Screening for Computational Chemistry	Active	Jun-07
11	VCU Virtual Parasite	Active	Sep-07

Applications Being Ported

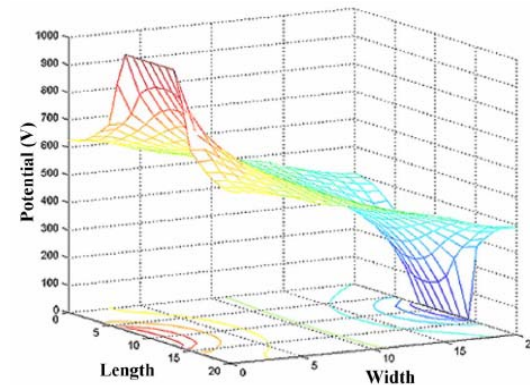
- ❑ Hampton University: Tokamak Divertor Maps (physics)
- ❑ NCAT: Protein Loop Structure Prediction (bioinformatics)
- ❑ ODU: Options Pricing (financial)
- ❑ SURAGrid Teaching Environment

Application Leads

- HU Atmospheric and Planetary Sciences
Department A-Train Project
- HU COSM/ATLAS
- LSU Task Farming within UCoMs (petroleum simulation)
- NCAT Mining Spatio-temporal Patterns
Characterizing Climate Change Events from
Multivariate Sensor Stream on a Sensor Grid
- NSU Molecular Dynamics Simulation
- NSU Silicon Computational Modeling
- TTU Endyne
- Grid-enabled Gromacs (multiple institutions)

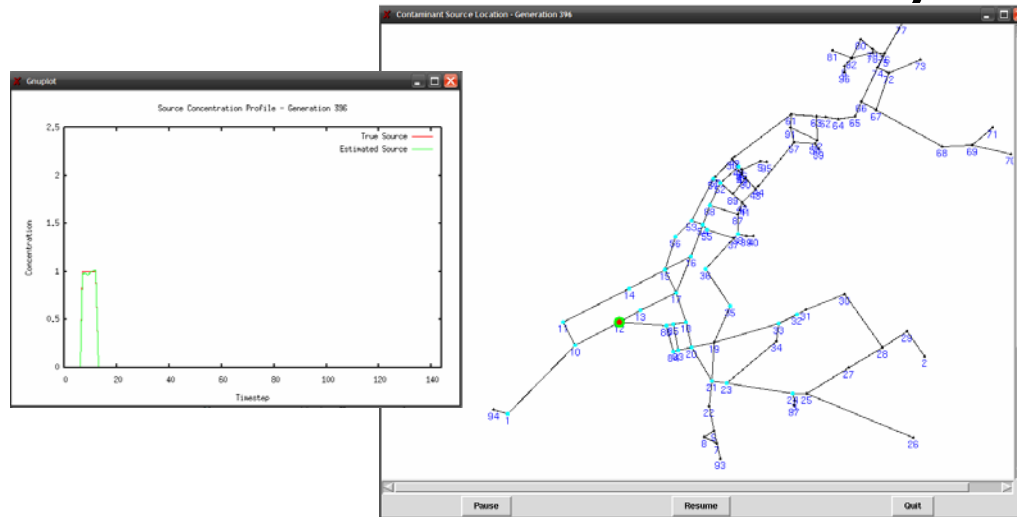
CI-Enabled Bioinformatics & Biomedical Research

- ❑ GSU Multiple Genome Alignment on the Grid
- ❑ GSU Virtual Screening for Computational Chemistry
- ❑ ODU Biosim: Bio-electric Simulator for Whole Body Tissue
- ❑ UAB Dynamic Blast
- ❑ VCU Virtual Parasite



On-Ramp to National CI

NCSU Simulation-Optimization for Threat Management in Urban Water Systems



- SURAGRID provides compute resource heterogeneity, low overhead to participate
- Staging on SURAGRID, uncovers programming and workflow problems prior to porting to TeraGRID

SURAGrid Teaching Environment

- ❑ University of Arkansas/Amy Apon exploring use of University of Florida's Virtual Grid Appliance to support student class assignments
- ❑ Renato provided tutorial material
- ❑ Grad Students implementing Virtual Grid Appliance
- ❑ Project to be completed and evaluated at the end of this Spring Semester

Application Documentation

- Application Deployment Tracking and Categorization
- Application Template
 - Updated, new applications submitted using the new template
 - Evaluate and update as needed
- Application Glossies (case studies)
- Resource Setup Instructions
- SCOOP Deployment Document (Mary)

Outreach to Researchers

- Ocean Sciences Meeting - Dali
- HealthGrid08 - Mary Fran/Gary
- American Geophysical Union Fall Meeting - Under Consideration
- National CI-Days
- Campus Visits
- Other targets resulting from strategic planning efforts