Grids in Use

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10/18/2004

Genre O

- Seti@home : search for extra terrestrial intelligence: <u>http://planetary.org/html/UPDATES/seti/index.html</u>
 - The Wow signal http://planetary.org/html/UPDATES/seti/SETI@home/ wowsignal.html
- Protein Folding : <u>Proteins</u> are biology's workhorses -- its "<u>nanomachines</u>." Before proteins can carry out their biochemical function, they remarkably assemble themselves, or "<u>fold</u>."
 - <u>http://folding.stanford.edu/</u>
- Climate prediction: <u>http://climateprediction.net/index.php</u>



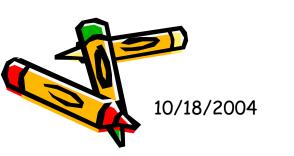
 Condor Grid in operation was last week's demo (10/11)



- Globus grid: CSELinux grid
- Linux Operating system
- Limitation: Not connected external grids
- We will look at a demo of this next Monday (10/25)



- Tera grid: <u>www.teragrid.org</u>
- <u>http://www.teragrid.org/about/TeraGrid-Primer-Sept-02.pdf</u>
- For solving large scale problems
- Making use of extensive "collections" of information and expertise generated by the Internet.
 - Example: National Science Digital Library (NSDL); <u>http://www.nsdl.org</u>
- State of the art microscope "resource": http://bugscope.beckman.uiuc.edu/
- Mega data bases with huge "data sets": National Center for Biotechnology Information (NCBI): <u>http://www.ncbi.nlm.nih.gov/</u>
 - Look at the top line menu of databases, esp. Entrez and Blast



- Service-Oriented Grids (SOG)
- View all the resources and functions as services.
- Build application models around services.
- Anatomy of the grid
- Physiology of the grid
 - A good <u>presentation/interpretation</u> of the physiology paper
- We will study the SOG in the next lectures.

