

TWiki and Condor: Two Underused Astro. Dept. Computer Resources

Hydro Group Lunch

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07/11/2007

Topics

- ▶ TWIKI
- ▶ Condor

TWIKI

- ▶ Web pages with user modifiable content
- ▶ Like Wikipedia
- ▶ Twiki is a fairly common version

Secure?

- ▶ Only registered users can edit
- ▶ Anyone can register, not tied to astro account
- ▶ restrict addresses
 - ▶ *.astro.umd.edu
 - ▶ *.umd.edu
 - ▶ gsfc.nasa.gov ?
 - ▶ more?

- ▶ Consolidate computer (and other) knowledge and info
- ▶ Does not depend on initial author to update it
- ▶ Info on Athena?
- ▶ Info on deepthought?

Editing

- ▶ Version controlled, so don't worry about editing things
- ▶ WikiWords

ADDRESS

[http://www.astro.umd.edu/cgi-bin/twiki/
view/AstroUMD/](http://www.astro.umd.edu/cgi-bin/twiki/view/AstroUMD/)

Condor

- ▶ Batch processing system
- ▶ Used on borg
- ▶ But not just for clusters
- ▶ Use spare cycles from astronomy dept. desktops

Who?

- ▶ First set up by Kayhan, Kevin, and Zoë
- ▶ Then some work by Graeme
- ▶ A little more by Kevin and I
- ▶ Will need new maintainer soon.
- ▶ Maybe someone here?

Your Machine too?

- ▶ If you haven't already, please let us add your machine to the pool.
- ▶ Should be no impact at all on your work.

Current Pool

- ▶ 51 CPUs
- ▶ Mostly x86 Linux
- ▶ A few x64 Linux
- ▶ But things work fine on both
- ▶ ~ 34 GFlops
- ▶ Borg is 60 GFlops
- ▶ Deepthought is a whole lot more

What is it good for?

- ▶ Serial jobs only
- ▶ **NO MPI**
- ▶ Fairly short things
- ▶ Although at night it may get several uninterrupted hours
- ▶ Analysis
- ▶ Nothing with crazy disk usage (runs on other machines, but writes to your directories)

How to do it

- ▶ astroload condor
- ▶ condor_status
- ▶ condor_q
- ▶ condor_submit
- ▶ condor_rm

Twiki page

[http://www.astro.umd.edu/cgi-bin/twiki/
view/AstroUMD/UsingCondor](http://www.astro.umd.edu/cgi-bin/twiki/view/AstroUMD/UsingCondor)

simple submit script

Executable = wrap_zeus

Arguments =

Universe = vanilla

Log = condor.log

Output = zeus3d.out

Notification = Complete

notify_user = vernaleo@astro.umd.edu

Requirements = ((Arch == "INTEL") || (Arch ==
"x86_64"))

Queue

- ▶ Can do much more complicated things
- ▶ See TWiki or man pages
- ▶ Checkpointing
- ▶ wrapper scripts
- ▶ condor_compile
- ▶ multiple submissions

Please try both if you can.