Release Manager Wish List

Citrix

Release Mgr (Linux) → **LSF**
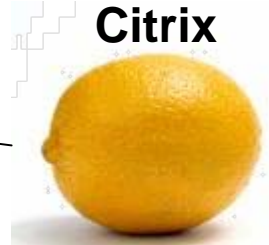
glast 06, 09-11 (soon 05, glastwin-03)?
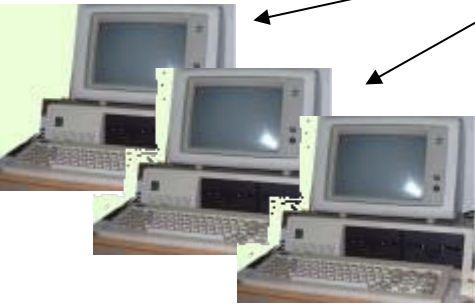
Linux farm

MAC farm
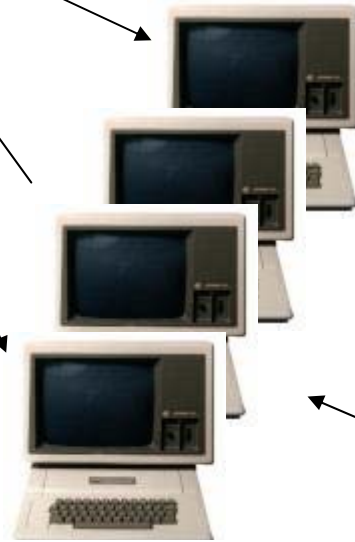
Windows garden

V:\Glast_Software_Scratch 2 TB

Glast Software Installer

Welcome to the Glast installer

Welcome to the Glast software installer. Click Next to continue.

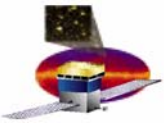Glast installer version 1.7   Cancel   < Back   Next >
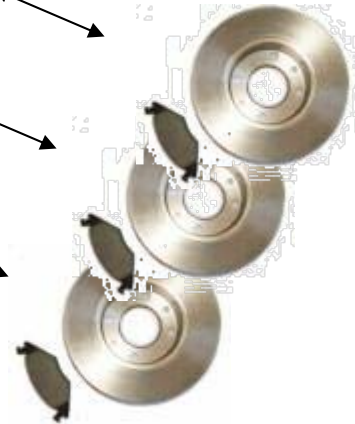
/nfs/farm/g/glast/u09/ For Installer distribution

norics

In Words

- **Release Manager**
  - **Triggered by cvs tags**
  - **3 tiers of builds: release, candidate release, "latest tags"**
  - **Cron job on linux**
  - **Builds are done in batch as serial checkout, compile, unit tests (each a separate job)**
- **Builds**
  - **Keep as many as we can afford**
  - **For use by local users**
  - **Used by Installer for code/binaries distribution**
    - **Perl, java versions of installer talking to mySql db**
    - **Installer files kept on nfs farm disks**
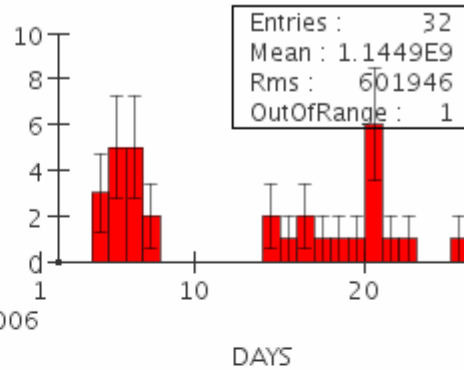- **Provide standard shared environment on linux (norics) and windows (Citrix)**
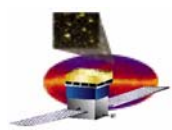
Supporting Data
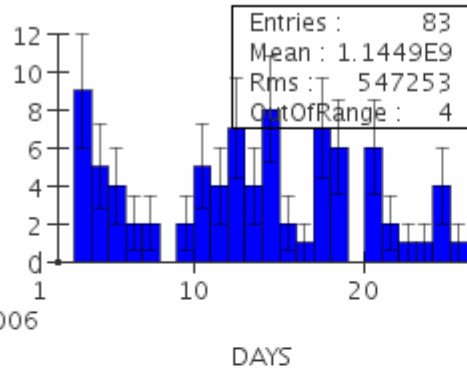
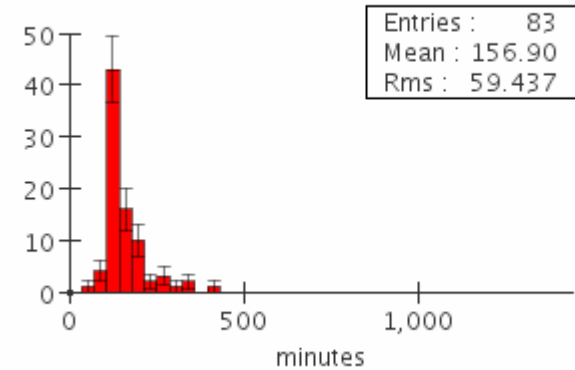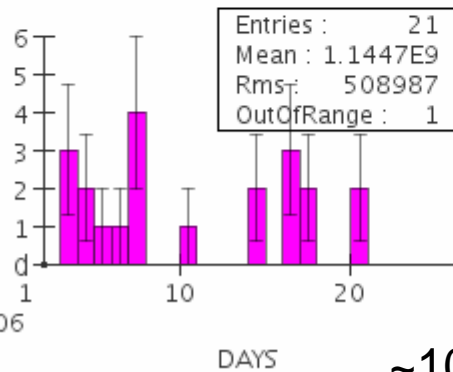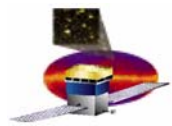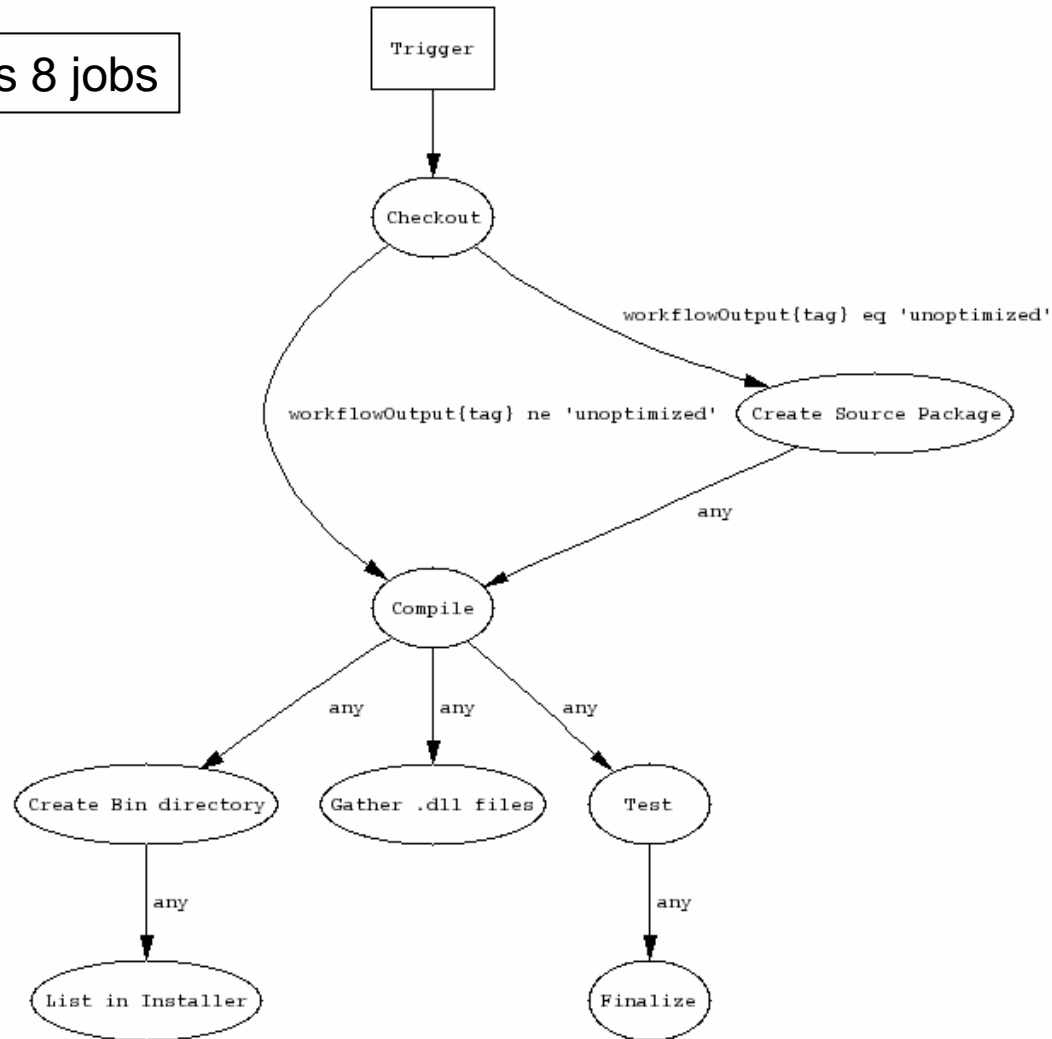~10 builds/day @ 2.5 hrs each (linux),
but episodic

Builds eat up about 600 MB on linux
2.75 GB on windows!

WorkFlow on Windows

Each build spawns 8 jobs

```
                              ┌─────────┐
                              │ Trigger │
                              └─────────┘
                                   │
                                   ▼
                              ( Checkout )
                                 /      \
   workflowOutput{tag} ne 'unoptimized'   workflowOutput{tag} eq 'unoptimized'
                              /            \
                             /      ( Create Source Package )
                             │              │
                             │             any
                             ▼              ▼
                            ( Compile )
                           /    │    \
                        any    any    any
                        /       │       \
          ( Create Bin directory ) ( Gather .dll files ) ( Test )
                      │                                      │
                     any                                    any
                      ▼                                      ▼
            ( List in Installer )                      ( Finalize )
```
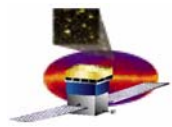
Monitoring

- **We use ganglia on the linux side to monitor servers and disk**
    - **Would like the same tools for windows servers and disk too to minimize things to learn and remember!**

What is wrong with this picture?

- **Windows builds are dead slow!**
    - **<5 hr> with tail to 8 hrs!**
    - **Just defragged disk, some improvement in I/O**
        - **Suspect that is not the (whole) problem**

GlastRelease: VC8debug

Entries : 67
Mean : 301.90
Rms : 100.22

minutes
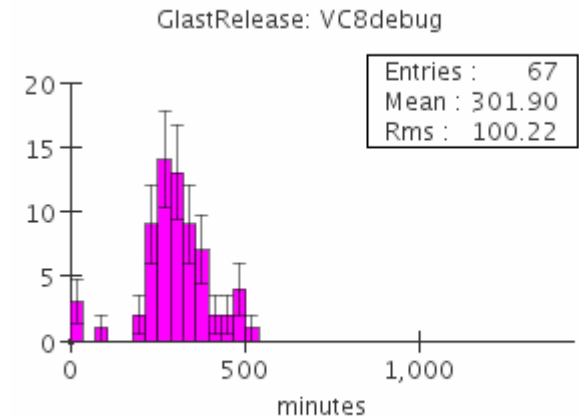
- **Citrix box is Windows Server 2000**
    - **Does not support long path variable**
    - **We can't run our code!**
    - **Request for upgrade to 2003 is longstanding**
    - **Access from linux impossibly inconvenient; no support to fix it**

- **Several month lag already getting glast-win03 into the fray**
    - **(and glast05, 06 – but different hold-up)**
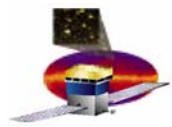
Priorities

1. **RM does windows builds at same rate as linux**

    1. Needs good I/O; enough CPUs; enough disk to keep up

2. **Users can use Citrix to access RM builds**

    1. Good connectivity to V:\; maintenance of supporting code on Citrix (cvs, ssh, MrVcmt etc)
    2. Accessible from windows, linux, mac
    3. Supports long paths

3. **Users can submit windows batch jobs to LSF from Citrix**

    1. Enough CPUs; enough disk space
    2. Small number of users expected