Open Science Grid

# OSG Software Status & Plans

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# OSG Software recap

**Open Science Grid**

## December 2011

OSG 3.0 Released!
- RPM-based
- RHEL 5, CentOS 5, and SL5
- Almost everything included
  - Missing GUMS & Gratia

## January – March 2012

Steady stream of improvements
- Software upgrades (Globus, Condor, Bestman…)
- Streamlining/Bug fixes (osg-configure, RSV, Gratia…)
- SL6 support (worker node)

# Differences from OSG Software 1.2

- No more Pacman: just RPM

- Install software into standard locations
  - /usr/bin/grid-proxy-init
  - /usr/sbin/globus-gridftp-server
  - /etc/osg/config.d/*.ini
  - /var/log/globus-gatekeeper.log

- Worker node client is best installed on each computer

- RSV can easily be standalone now

- If you use GUMS, *must* use 1.3 or later

- The single config.ini file has been replaced by /etc/osg/*.ini

# Requirements for using
# OSG Software 3.0

- RHEL 5, CentOS 5, or Scientific Linux 5
  - The entire OSG Software 3.0 stack
- RHEL 6, CentOS 6, or Scientific Linux 6
  - Just the worker node for now, but more soon
- We rely on software from three sources:
  - OSG
  - OS
  - EPEL
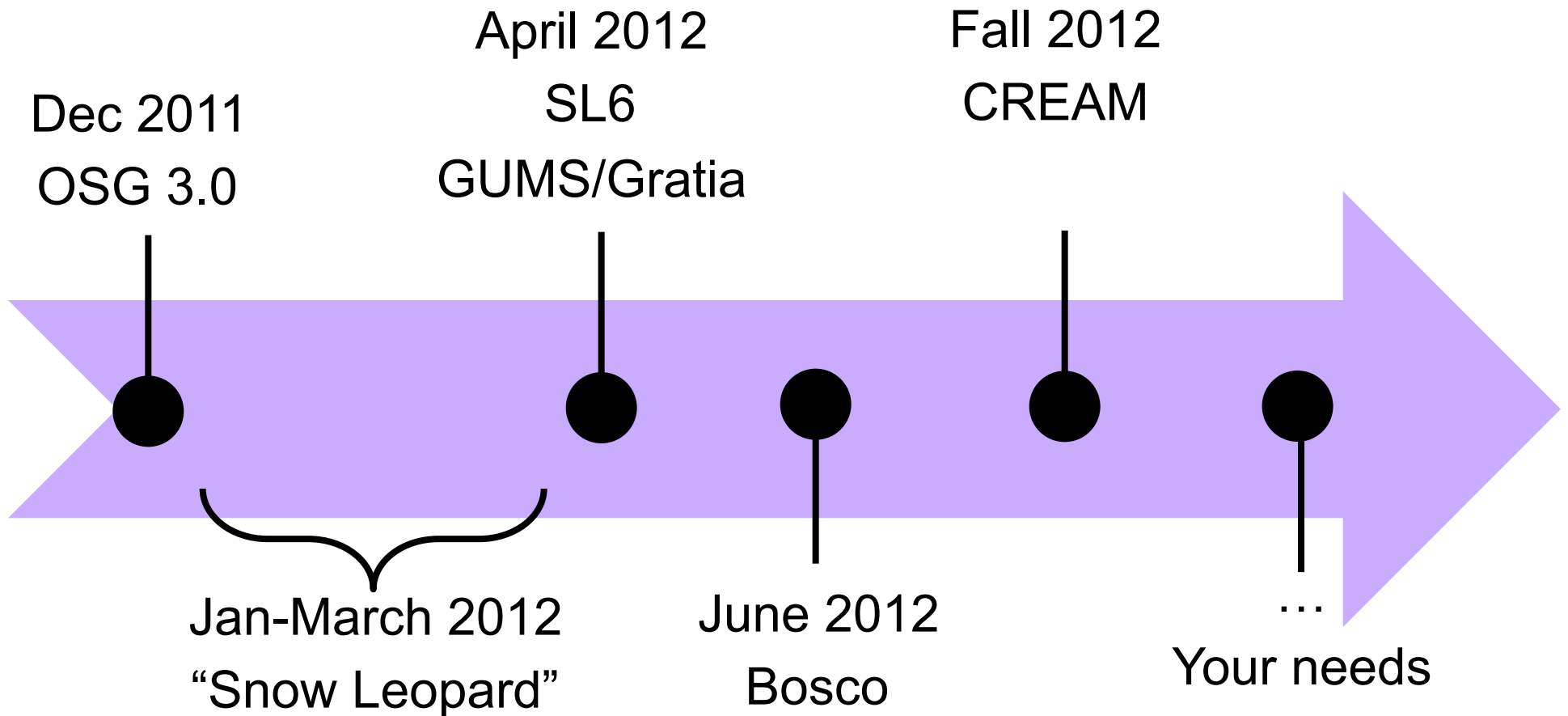- You install software with:
  - Yum
  - RPM

# Software changes

**Open Science Grid**

## Upgrades:

| Software | New Version | Old Version |
|----------|-------------|-------------|
| Globus | 5.2 | 4.0 |
| Bestman | 2.2 | 2.0 |
| VOMS | 2.0 | 1.8 |
| Condor | 7.6 | 7.2 |
| glexec | 0.8 | 0.6 |
| hdfs | 0.2 | --- |

## Changes:

| New | Old |
|-----|-----|
| lcmaps | PRIMA |
| osg-configure | configure-osg |
| --- | vdt-control |

# Some 2012 Highlights

Dec 2011
OSG 3.0

April 2012
SL6
GUMS/Gratia

Fall 2012
CREAM

Jan-March 2012
"Snow Leopard"

June 2012
Bosco

…
Your needs

# Some short-term improvements

**Goals:**

We want OSG Software 3.0 to be perfect for you.

We want you to have a smooth, easy transition.

We're not quite there yet, but your feedback will help us get there.

# Improvement #1: Bug fixes

- Bugs in
  - Globus,
  - Gratia integration
  - osg-configure
  - RSV
  - …
- Expect bug release *soon*, within 1-2 weeks
  - Many bug fixes are in testing already
  - Working through a few remaining bugs

# Improvement #2:
# Add back missing functionality

- ## GUMS
  - In testing/evaluation right now
  - Release end of March, if it goes well

- ## Gratia Service
  - In development right now
  - Release in April?

- ## Equivalent to " vdt-control --off "

# Improvement #3:
# Scientific Linux 6 support

- Today: Fully supported on worker nodes
- Client & CE are in testing
    - Tomcat issues to explore
- Goal: Early April for CE + SE
    - Unless bug fixes/missing functionality go slowly

# Medium-term improvement:
# Testing

- We have daily automated testing
  - Install software on VM
  - Run suite of functionality tests
  - Extremely useful! But it is rather light
- Expand functionality coverage
- Expand platform coverage
  - Especially pre-release versions: the canary in the mine
- This is (hopefully) invisible, but essential to your happiness.

# Ideas under consideration

- Tested EPEL mirror/snapshot
- Non-root installations
  - Install as non-root
  - In other locations
  - Especially for worker node client
- Expanded platform coverage
  - Debian? Ubuntu?
- Comments?

# Questions for me?
# Feedback?