

# OSG Production Support

Bo Jayatilaka  
*Fermilab*

OSG Area Coordinators Call  
March 18, 2015



# Introduction

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- Chander is stepping down as User Support lead this month
  - Will continue to be project manager
- The OSG ET has revised the organizational plan such that User Support is split into other functional areas
  - Personnel will either be part of the existing Campus Grids team or the new Production Support team
- Work involving **campus researchers** will fall under **Campus Grids** lead by Rob Gardner
  - OSG as an XSEDE service provider, ACI-REFs interface to OSG, direct support for campus researchers
- Working involving **VO access to opportunistic resources** will fall under **Production Support** lead by BAJ

# Mission of Production Support

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1. Growing the opportunistic pool of the OSG
  - Add sites to opportunistic sphere
  - Improve on methods and technology to access opportunistic resources more efficiently
2. Help experiments (and VOs) access the opportunistic sphere
  - *e.g.* find the right VO for experiments (OSG for PHENIX, Fermilab for the FNAL IF experiments)
3. Be a catalyst for projects and technologies that help VOs run opportunistically
  - *e.g.* XRootD based StashCache system for distributed storage



# Personnel

## User Support

Name	Institution
Alex Zaytsev	BNL
Marko Slyz	FNAL
Tanya Levshina	FNAL
Bo Jayatilaka	FNAL
Chander Sehgal	FNAL
Mats Rynge	ISI
Emelie Harstad	Nebraska



## Production Support

Name	Institution	FTE
Alex Zaytsev	BNL	0.10
Marko Slyz	FNAL	0.60
Tanya Levshina	FNAL	0.25
Bo Jayatilaka	FNAL	0.75
Chander Sehgal	FNAL	<i>ex officio</i>
Robert Illingworth	FNAL	0.50

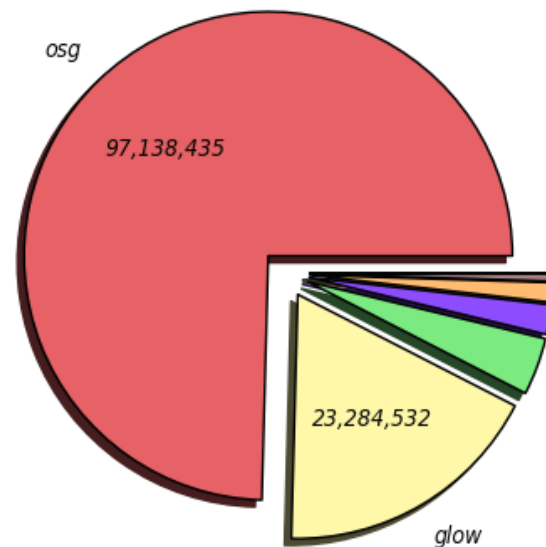
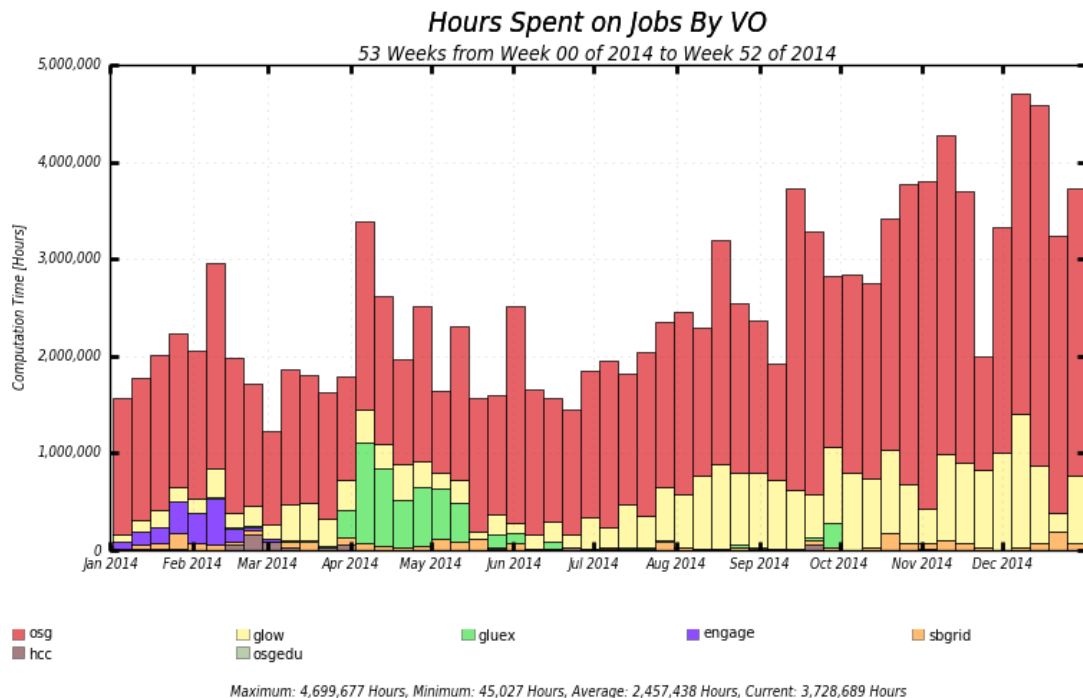
2.2



Campus  
Grids



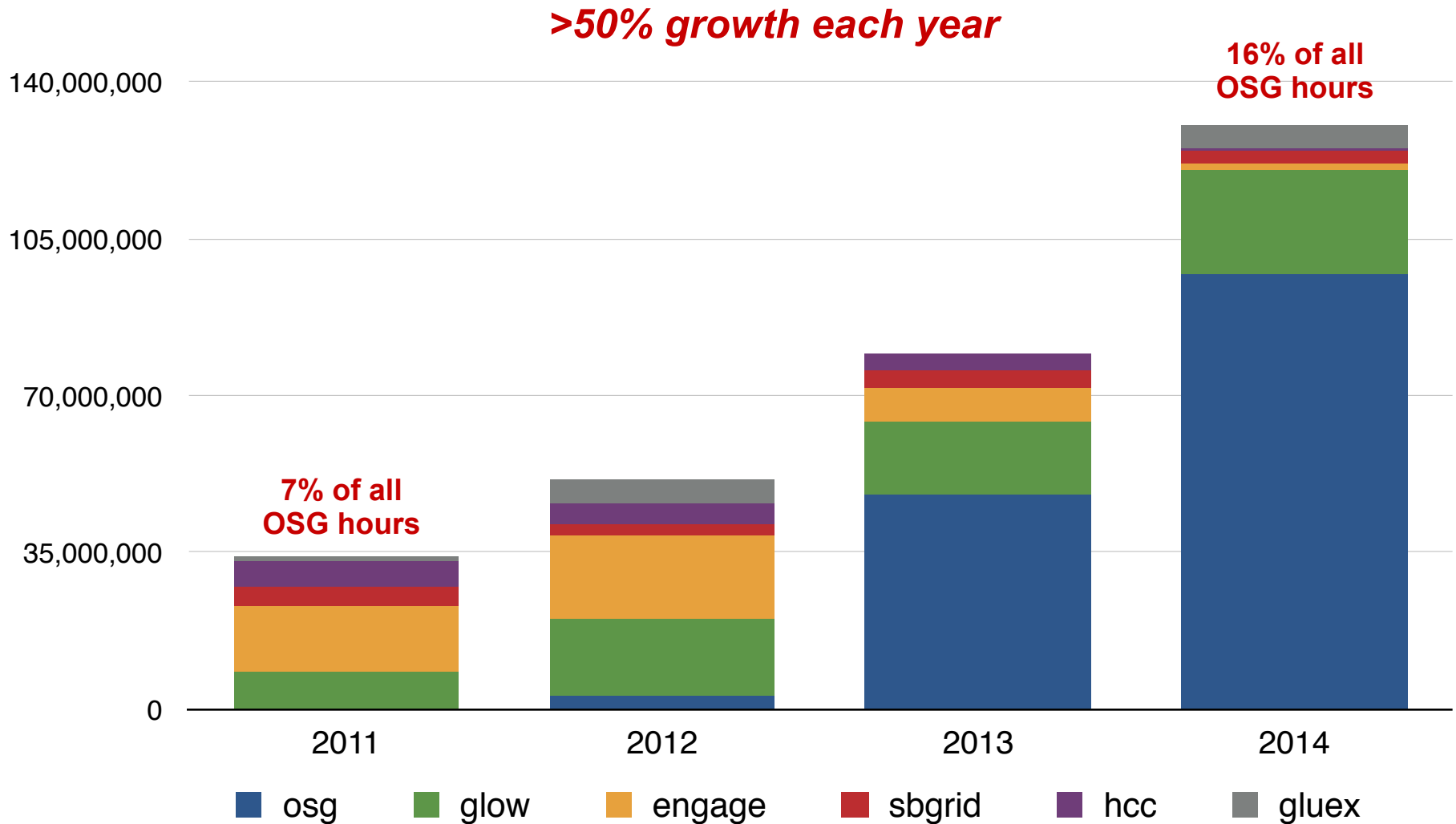
# Opportunistic Computing in 2014



- Primarily opportunistic VOs (osg, glow, gluex, engage, sbgrid, hcc) received **130M wall hours** in 2014
  - 16% of all OSG hours

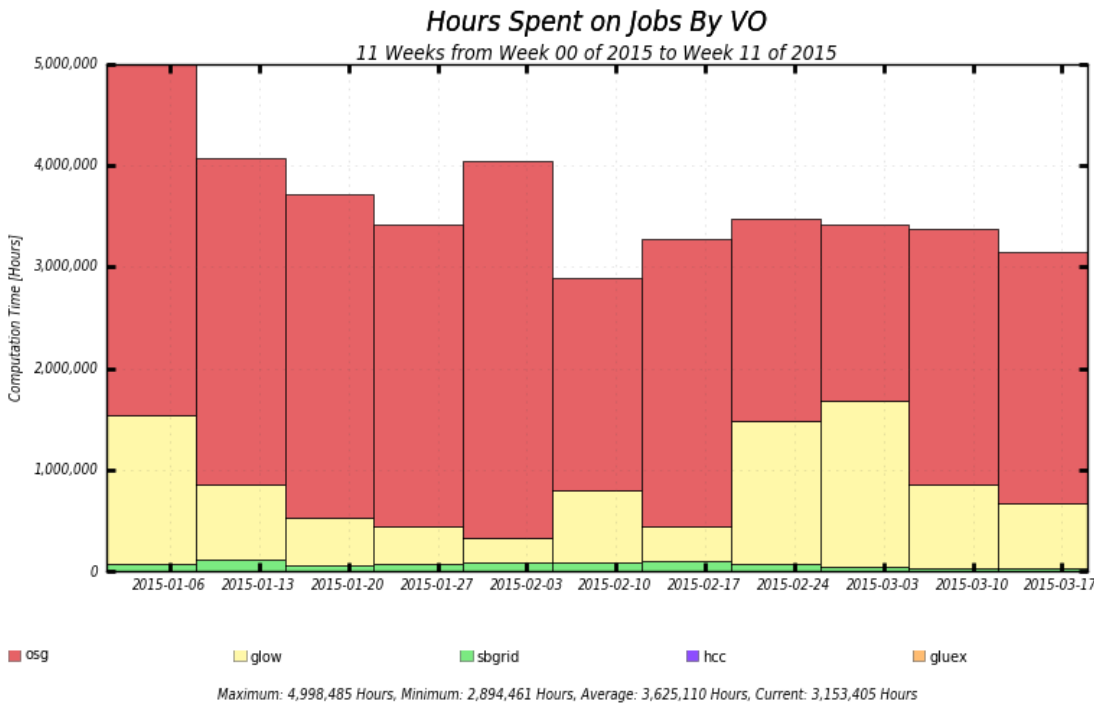


# Growth of Opportunistic VOs

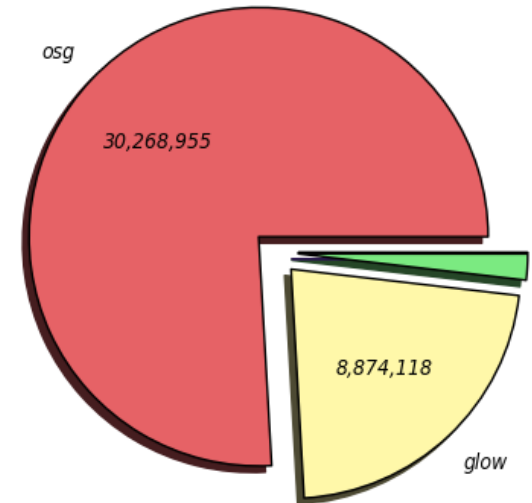




# Opportunistic in 2015 so far



*Wall Hours by VO (Sum: 39,876,209 Hours)*  
11 Weeks from Week 00 of 2015 to Week 11 of 2015



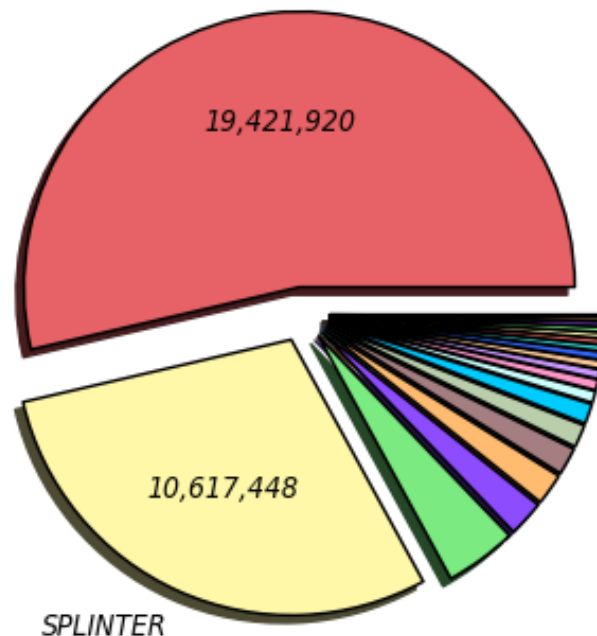
- Total of **39.9M** hours to-date in 2015 for primarily opportunistic VOs
  - ~24% of all OSG hours



# Open Facility for US Researchers

Wall Hours by VO (Sum: 36,210,244 Hours)

90 Days from Week 50 of 2014 to Week 11 of 2015  
TG-IBN130001



TG-IBN130001 (19,421,920)  
DUKE-QGP (671,108)  
UCHICAGO (247,998)  
Other (164,780)  
CONNECTTRAIN (111,108)

SPLINTER (10,617,449)  
TG-CHE140110 (584,142)  
UPRRP-MR (223,627)  
DUKE-4FERMION (131,857)  
CENTAURSIM (98,359)

ALGDOCK (1,525,831)  
ERRORSTUDY (483,413)  
DETECTORDESIGN (193,543)  
PROTEVOL (119,122)  
ATLAS-ORG-OKSTATE (84,660)

RIT (766,192)  
BNL-PHENIX (426,798)  
ICECUBE (173,940)  
PHENO (115,511)  
DEERDISEASE (48,887)





# Recent efforts

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- Continue to work with FIU and Washington to bring new sites there on board
- Continuing to enable access to opportunistic resources by Fermilab Intensity Frontier experiments
  - mu2e will have a large campaign in 2015 which hopes to use 1M+hr/month from opportunistic resources
- Continuing to work with GLOW to increase access to opportunistic resources
  - Now running on Fermigrid

# Open Issues and Concerns

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- Solution for data storage and access for Open Facility users (for beyond ~10 GB)
  - StashCache project will provide a solution using XRootD for up to ~1TB
  - Development of pilot in progress
  - R. Illingworth (FNAL) is member of development team
- Streamline process for new sites
  - In past year, Syracuse joined as new site, FIU and UW in progress, UVa considering
- Better utilization of available opportunistic cycles
  - Anticipate current level of availability through at least this year (until LHC Run2 computing ramps up)
  - Periodically demand-limited