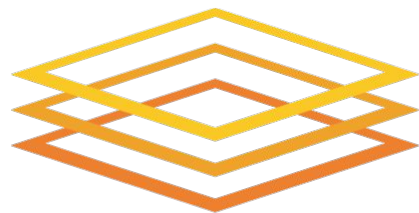


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# OSG Transition from GOC

Jeff Dost (OSG Operations)  
HOW2019





# The Big Scramble of 2018

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- It was first announced to operators that GOC was pulling out of OSG mid April 2018
- We had until May 30th (hard cutoff) to make sure all services were either migrated out of IU or decommissioned
- Tim C held special weekly Operations transition meetings where we used a big document outlining the plans to handle each IU hosted service
- We would report the progress made each week, and mark off items on the lists as they were completed



# Big Scramble Completed Tasks

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- Services migrated to UNL:
  - Topology REST interface (WLCG parses for APEL, downtimes)
  - Usage display and site map web pages
  - CE Collector
  - Software repos
  - OASIS / CVMFS Stratum hosts
  - StashCache Redirector
- Services migrated to U Michigan
  - Network pipeline - perfSONAR management / dashboard / monitoring hosts
- Services migrated to U Chicago
  - XD-Login (Suchandra physically drove box from IU to UC!)



# Big Scramble Completed Tasks, Ctd

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- Services moved to commercial clouds:
  - OIM -> Topology backend - database of site resources (CEs, Storage) moved to GitHub, contact info to private Bitbucket
  - Ticketing system - migrated to Freshdesk (and GGUS for WLCG related issues)
  - Homepage [www.opensciencegrid.org](http://www.opensciencegrid.org) moved to GitHub Pages
  - Jira - moved to Atlassian cloud
  - DNS for opensciencegrid.org domain - moved to Cloudflare / GoDaddy
- Services that were retired:
  - OSG CA (host certs should be requested through InCommon or Let's Encrypt)
  - OSG VOMS Admin
  - GOC Production + ITB glidein factories (UCSD and CERN factories remain)
  - Network pipeline ESMOND datastore -> replaced by UC and UNL ElasticSearch (GRACC)
  - RSV



# Big Scramble Outcome [success!]

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- ALL services requiring action before hard 5/30 deadline were completed in time
- Care was taken to notify anyone affected by transition from \*grid.iu.edu to \*opensciencegrid.org domains
- No major fires or unexpectedly long downtimes
- Major kudos to Software team for getting OIM transitioned to completely different backend format in topology, AND ensuring REST interface was not broken for end consumers (including WLCG) before deadline
- <https://opensciencegrid.org/technology/policy/service-migrations-spring-2018/>



# Post Transition Challenges

- InCommon IGTF certificates do not support service certs [in progress]
  - CNs are not allowed to be formatted with service/hostname, e.g. CN=[glideinwms/osg-flock.grid.iu.edu](#)
  - HTCondor-CE have always required service certificates for pilots
  - First OSG CILogon pilot cert expires in **April 2019**, this sets the deadline to get this resolved
  - Actions taken:
    - Software team updated HTCondor-CE to allow hostcerts for pilot proxies [done]
    - Contacted all OSG Sites and ensure all HTCondor-CEs are updated [in progress]
- Voms OSG CILogon certificates will start expiring in **May 2019** [in progress]
  - Joint effort with Software and Ops to contact each affected VO and ensure they can generate InCommon certs and send the new DNs to Software team to get into updated vo-client package
  - 9 Freshdesk tickets created to contact VO admins to get updated certs [in progress]
    - 3 tickets **resolved**, 6 **in progress**



# Post Transition Activities

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- Significant events:
  - Jeff Dost accepted position as OSG Operations Coordinator, announced to OSG AC team and WLCG Ops - June 2018
  - Resumed Weekly Operations meetings - Aug 2018
    - <https://opensciencegrid.org/operations/#meeting-minutes>
  - Operations Face 2 Face meeting held at UCSD - Jan 2019
  - Released OSG Service Catalog - Mar 2019
- Ongoing work:
  - Updating OSG Service SLAs



# OSG Service Catalog [released]

- IRIS-HEP 1YQ4 deliverable
- The operations team created the Service Catalog, a spreadsheet which inventories all of the services in OSG
- This includes centrally run services such as resource DBs (topology, ce collector), accounting (GRACC), user submit infrastructure, glidein factory, StashCache, etc; basically everything previously discussed in IU transition
- This also includes externally owned services that touch all of the above (VO owned GlideinWMS frontends, VO owned Stash data origins, etc)
  - This is important, as it gives OSG Security a complete picture of collections of distributed services that make up a whole logical service (GlideinWMS, StashCache)
- Service catalog officially released March 2019. For now release is limited to OSG AC team, OSG Executive team, and Operations team
- This is a living document, service owners agreed to periodically update and validate that information is correct, we have agreed on a 2 month cycle
- We will continue to add service attributes / adjust the formatting as needed over time as we see fit





# Updating OSG Service SLAs [in progress]

Open Science Grid

- IRIS-HEP 1YQ4 deliverable
- Working on consolidating existing SLAs into a small set of generic SLAs that cover all possible variations, rather than one per service
- Parallel work being done to set up service availability monitoring infrastructure using Check\_MK
  - “Availability” will be defined individually for each service and clearly documented, along with acceptable percentages as defined in SLAs
  - Check\_MK reports will show percentages that services were available over a 30 day period
- Once SLAs are updated and availability monitoring is in place, we can begin reporting the IRIS-HEP metric:
  - “Percentage of time that OSG-LHC central services meet agreed-upon Service Level Agreements (SLAs) per quarter”



# Summary

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- The transition required a lot of hard work under a stringent deadline, but due to the amazing staff of OSG, we made it a success!
- Out of necessity we were forced to streamline services such as topology, and also begin offloading service hosting into commercial cloud services where possible
  - These actions should significantly help reduce operational overhead moving forward
  - We should continue to streamline wherever possible to ease the burden of operations
- We still may encounter new bumps in the road moving forward but I am confident the difficult part is over, and we will be able to tackle any new challenge we may face with the talent in OSG



# Acknowledgements

Lots of hard work went into the transition. Thank you all\* who made it happen!!

- Fermilab:
  - Jeny Teheran
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- UW-Madison:
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And thank you and apologies to anyone else I forgot!

\* staff listed by affiliated institutions during the time of transition