OSG Campus Services

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What We Do

We help

campuses share compute and storage capacity with researchers and

researchers access and benefit from that capacity

to reduce barriers to discovery for all of Open Science







Services for Contributors



Summary of Services (also, Tuesday talk)

Planning

- Prepare you to describe sharing plan in proposal; provide letter of collaboration
- Discuss your process, technical details, and responsibilities (you and us)
- Offer suggestions on hardware and software configurations

Integration

- Plan and carry out the integration itself
- Host and operate certain services on your behalf e.g., HTCondor-CE, OSDF Origin
- Support you throughout process; email, meetings, documentation whatever works

Operations

- Monitoring: We proactively watch for issues and repair or contact you as needed
- Accounting: Show you what you're contributing and who that helps (CE dashboard!)
- Support: Respond to requests, update software, host Campus Meet-Ups, etc.



Why Contribute?

- Join a national-scale Cl ecosystem, contribute to great research
- Learn about HTC, advise your researchers on getting access
- Connect with the community, share ideas to hone local systems
- Maximize usage of purchased capacity
- Fulfill a promise made in a grant proposal (e.g., CC*)...



NSF CC* 2024 — 15 Oct 2024 Deadline

Area 2: Computing & the Computing Continuum (Campus or Region)

- For "a shared, high-performance network-connected compute resource"
- Campus ≤ \$700,000, Region ≤ \$1,400,000; ≤ 2 years; ≥ 50% for HW

Area 4: Data Storage and Digital Archives (Campus or Region)

- "a shared, high-performance network-connected data storage resource"
- Campus ≤ \$700,000, Region ≤ \$1,400,000; ≤ 2 years; ≥ 50% for HW

Area 5: Strategy (Campus or Region)

 "support PIs and teams requiring resources and time to coordinate and develop an approach to CC*-related activities"; ≤ \$100K for 1 year



Services for Researchers

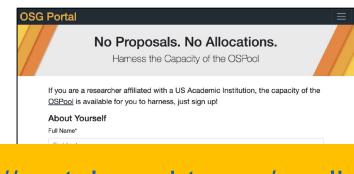


Researchers can use the OSPool today

If researchers on your campus would benefit from what we provide, they can start **right away**.

- 1. Fill out an account request form
- 2. Meet with us
- 3. Start running work

Researchers can use a test environment to prototype workloads at any time before or after creating an account.



https://portal.osg-htc.org/application

username@domain.ext

Briefly describe your research or research-related role*

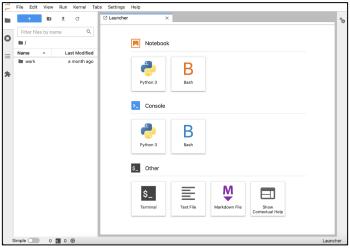




Quick Start with Notebooks

OSPool Notebooks: Jupyter-based interface to an HTCondor Access Point

https://notebook.ospool.osg-htc.org





Join Our Community

Don't do everything on your own!

- One-on-one Help: consultations and office hours
- Asychronous Help: email and documentation
- Training: monthly training, annual OSG School
- Community Events: HTC24, Campus Meet-Up





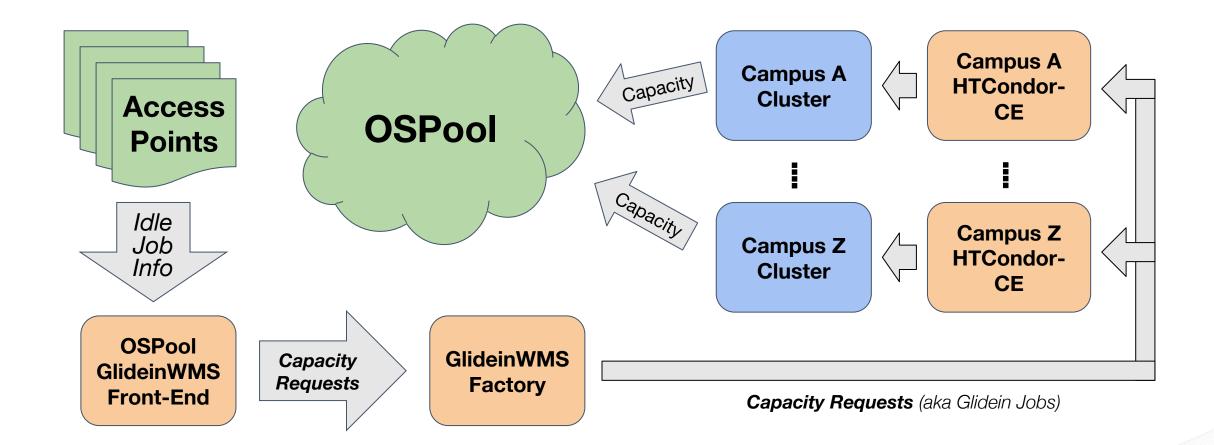




Technical Overview



OSPool Provisioning





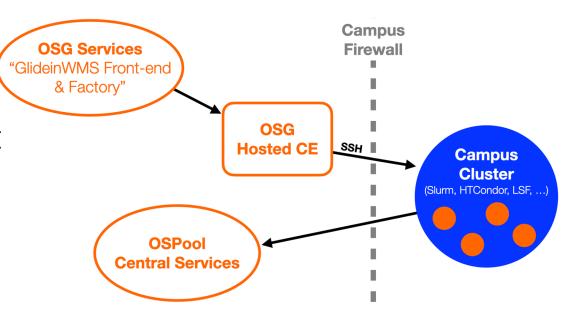
OSPool Provisioning Details

For a batch scheduler:

- CE requests capacity (as jobs) based on demand
- Scheduler may run req.s
- Our SW creates Execution Point & adds to OSPool

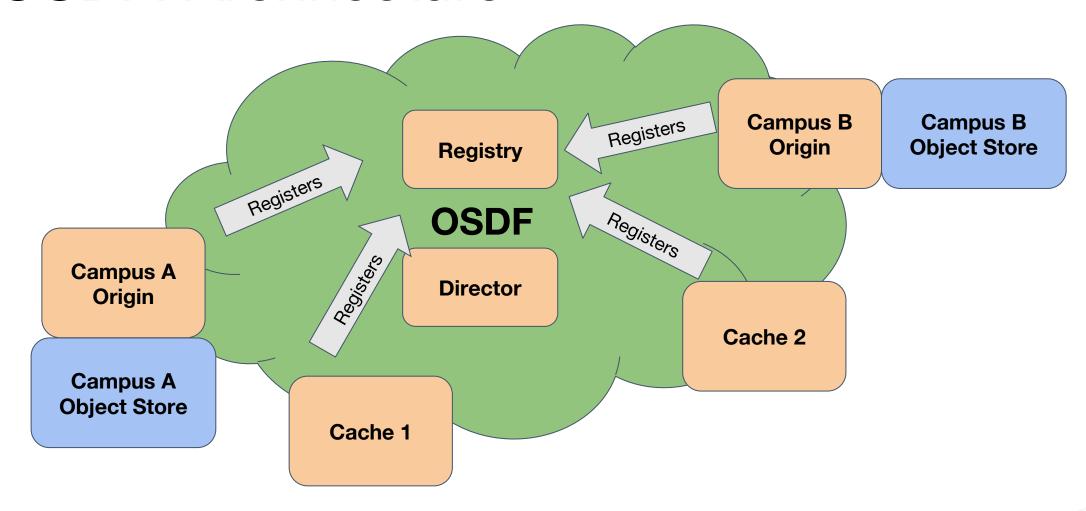
Using containers:

- You start containers to share
- Rest is the same





OSDF: Architecture





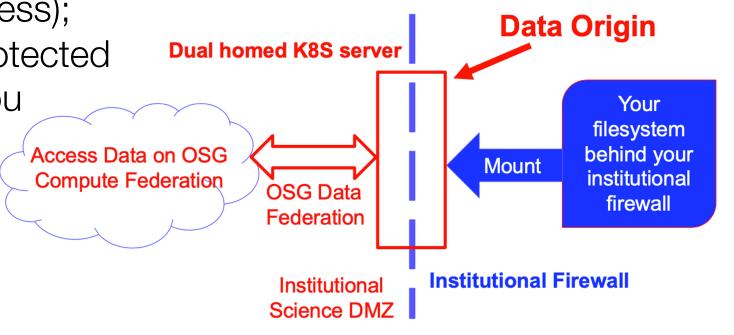
OSDF Origin Details

 Underlying FS can be whatever (more or less); access is public/protected

Mount only what you

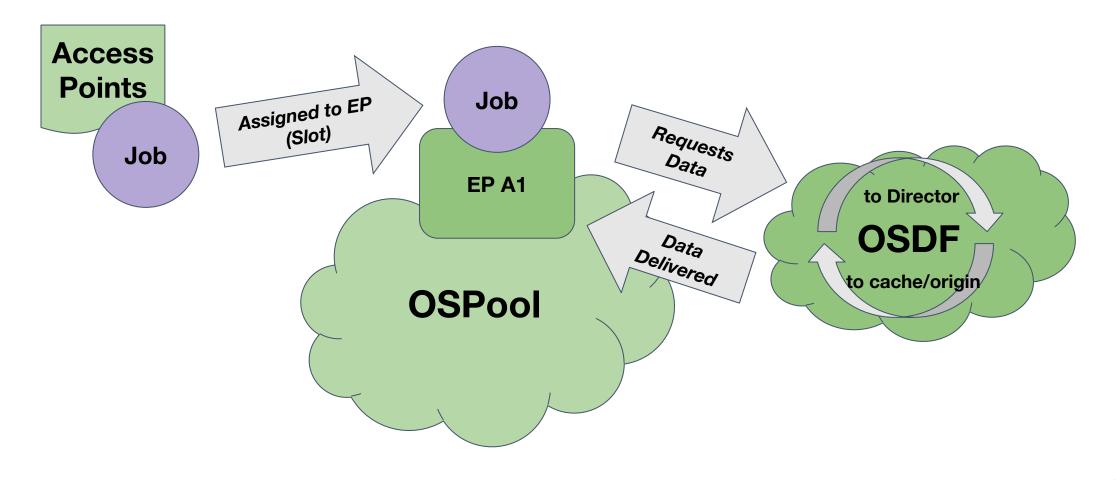
want to expose

 Origin node just needs Kubernetes, we do the rest





OSPool and OSDF: Usage





Questions?

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