UChicago and the next phase of OSG

Initial thoughts on the torch

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High level Chicago objectives

- Continue providing core OSG services in user support and Campus Grids while …
- … evolving campus ACI patterns with innovations in automation and emerging concepts and abstractions while…
- … remaining true to core HTC principles and science impact

Connecting campuses to national ACI

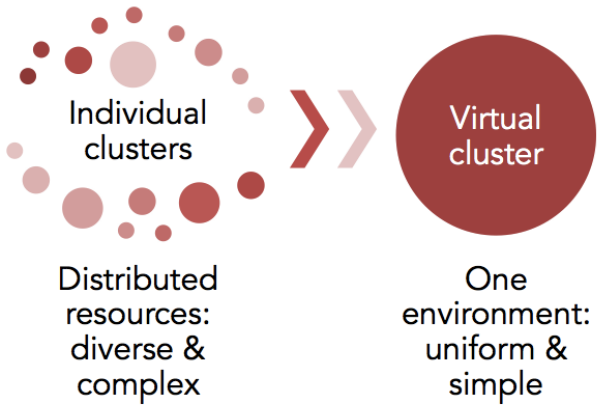
Campus to ACI principles

- Reduce IT footprint on premise
- Reduce needed expertise for service internals and operation on campus
- Promote the sharing economny that enhances multi-campus collaboration
- Reducing obstacles to usability
- Present users and resource providers with useful abstractions

Examples

Virtual clusters

```
$ submit myjob.sub
```



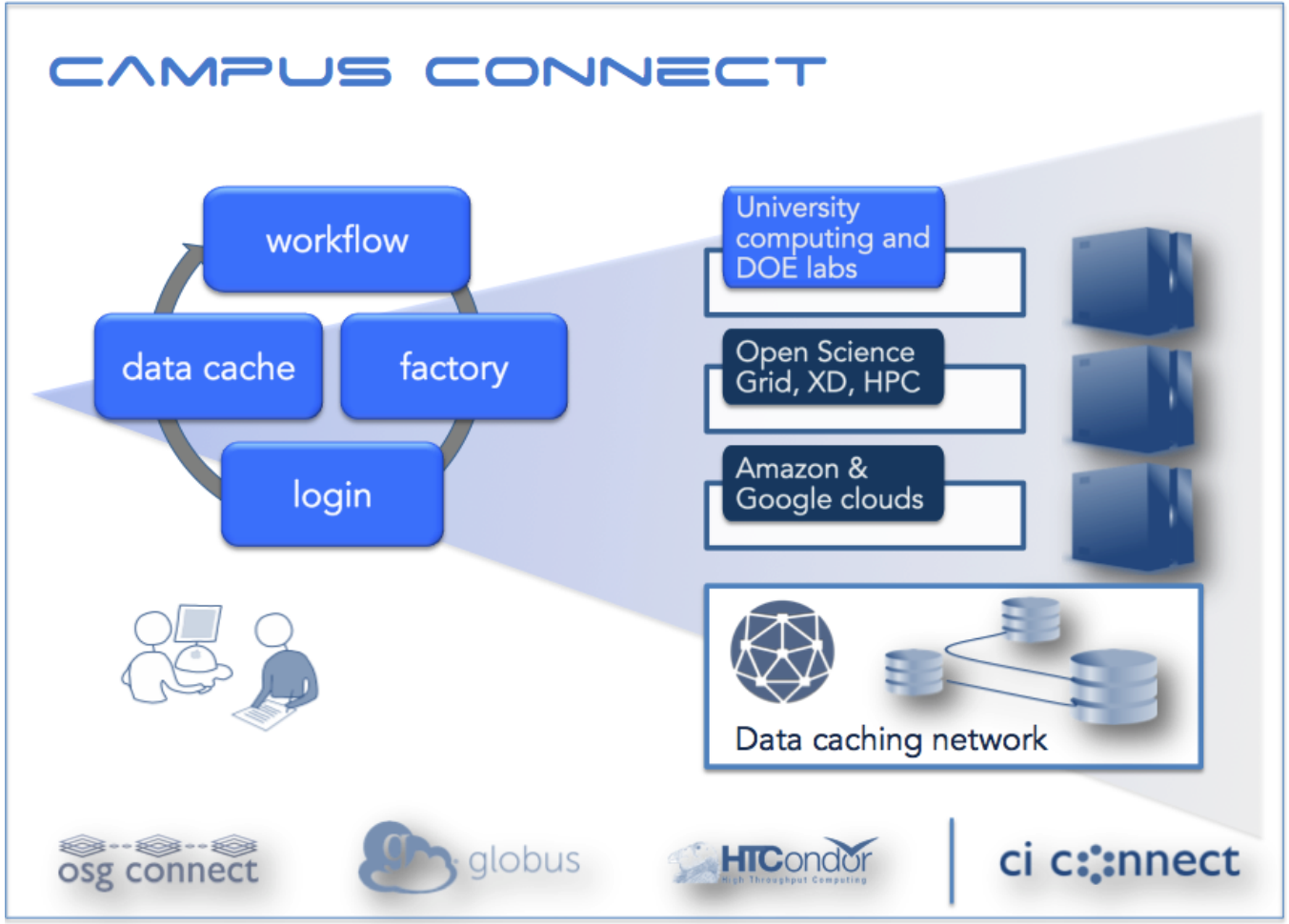
Global namespaces

```
Access my data:

Open(protocol://origin.org/user/file)
```

Campus ACI as hybrids of:

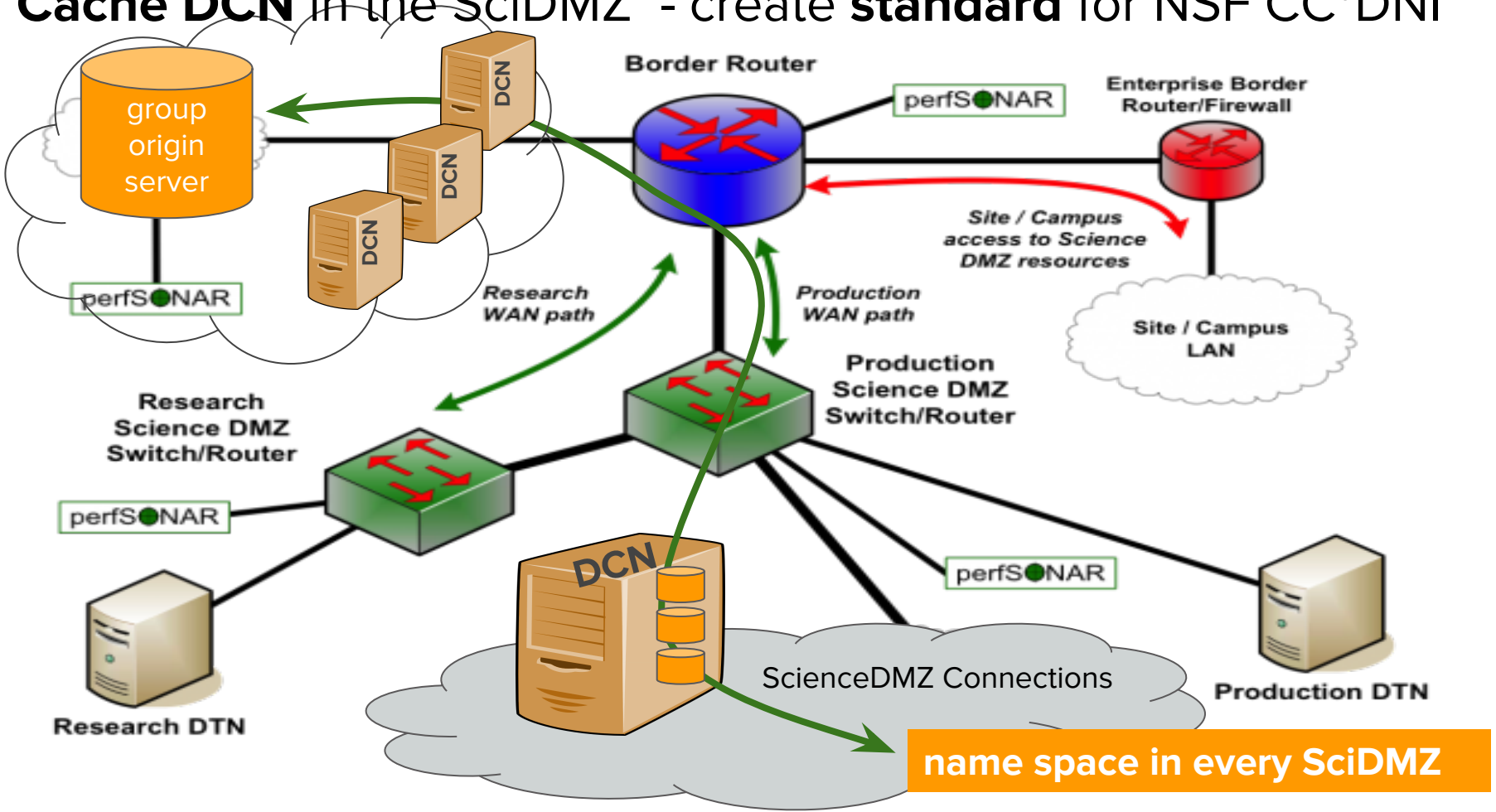
"on premise", national ACI, national HPC, and cloud



Areas of focus

- Easy to use automated service provisioning tools (“build your own CI Connect service”)
  - For the campus ACI engineers
- New ScienceDMZ services for data intensive
  - DCN (data caching nodes for StashCache)
  - Xrootd, http, NDN, caching in the network
- Usability
  - User-facing services to control resource utilization

Cache DCN in the SciDMZ - create **standard** for NSF CC*DNI



Practicals

- Develop approach from exemplar science
- Provide advanced turn-key services for campus IT
- Submit multi-campus proposal to appropriate solicitation (e.g. DNI/DIBBS) for innovative components
- We have not (yet) discussed redefining the OSG satellite relationship but this