What is OSG?
(What does it have to do with you?)

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Some Hypothetical Problems

- Lot's of hype in software marketing…
  - The Devil is in the details

- Setting up a grid is non-trivial
  - no matter what you read
  - Lots of trial and error ☹

- Difficult to know what "works"
  - "I'm a scientist" "I don't want to spend all my time w/CS"

- Which components do I need?
  - If I pick package X, will it work with Y? Which Versions?

- Which components are production ready?

- Where do I get each one?

  The problems are not all technical…

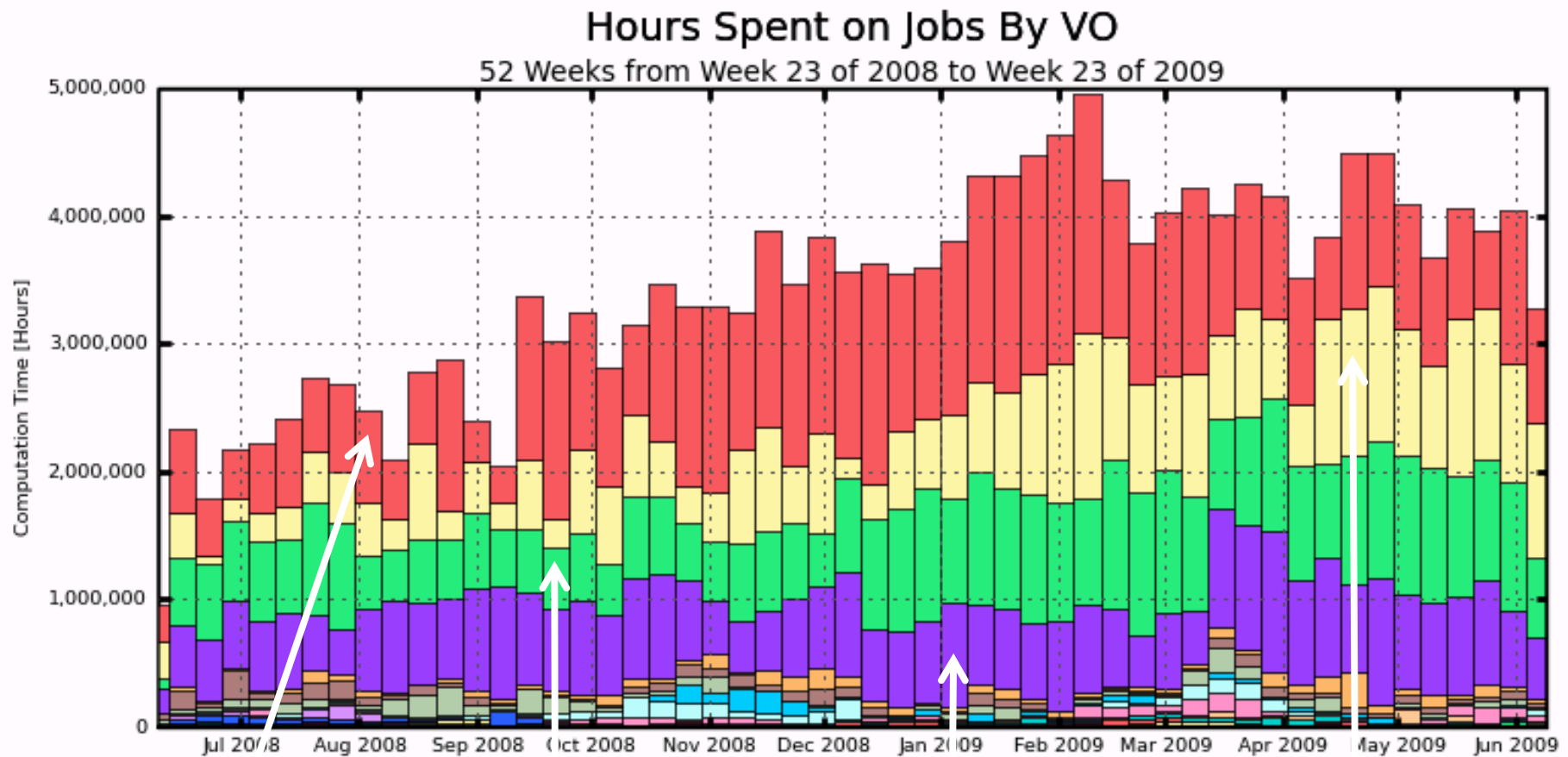# Problems are not just "technical"

- Can we work together?
- Can we be compatible?

- Can we share our efforts?
  - Software design and reuse
    - OSG does not develop software
  - Stack design & integration
  - Operation best practices

- What about monitoring/accounting?

- Must we always reinvent the wheel?

OSG Focused on these problems

- Create a common grid infrastructure
  - Based on working with the community (not independent)
  - Improve compatibility
  - Sites still autonomous, can experiment with different options
  - Successful combos often make it back into the VDT
- Test software combinations (so you don't need to)
- Integrate commonly used components
- Recommend & Propagate best practices
- Package results for centralized download
- Offer a centralized support structure
- Build a "community" for those who manage and operate grid infrastructures
  - Includes large sites + those who are just startin

OSG used by many VOs (old)

Hours Spent on Jobs By VO
52 Weeks from Week 23 of 2008 to Week 23 of 2009

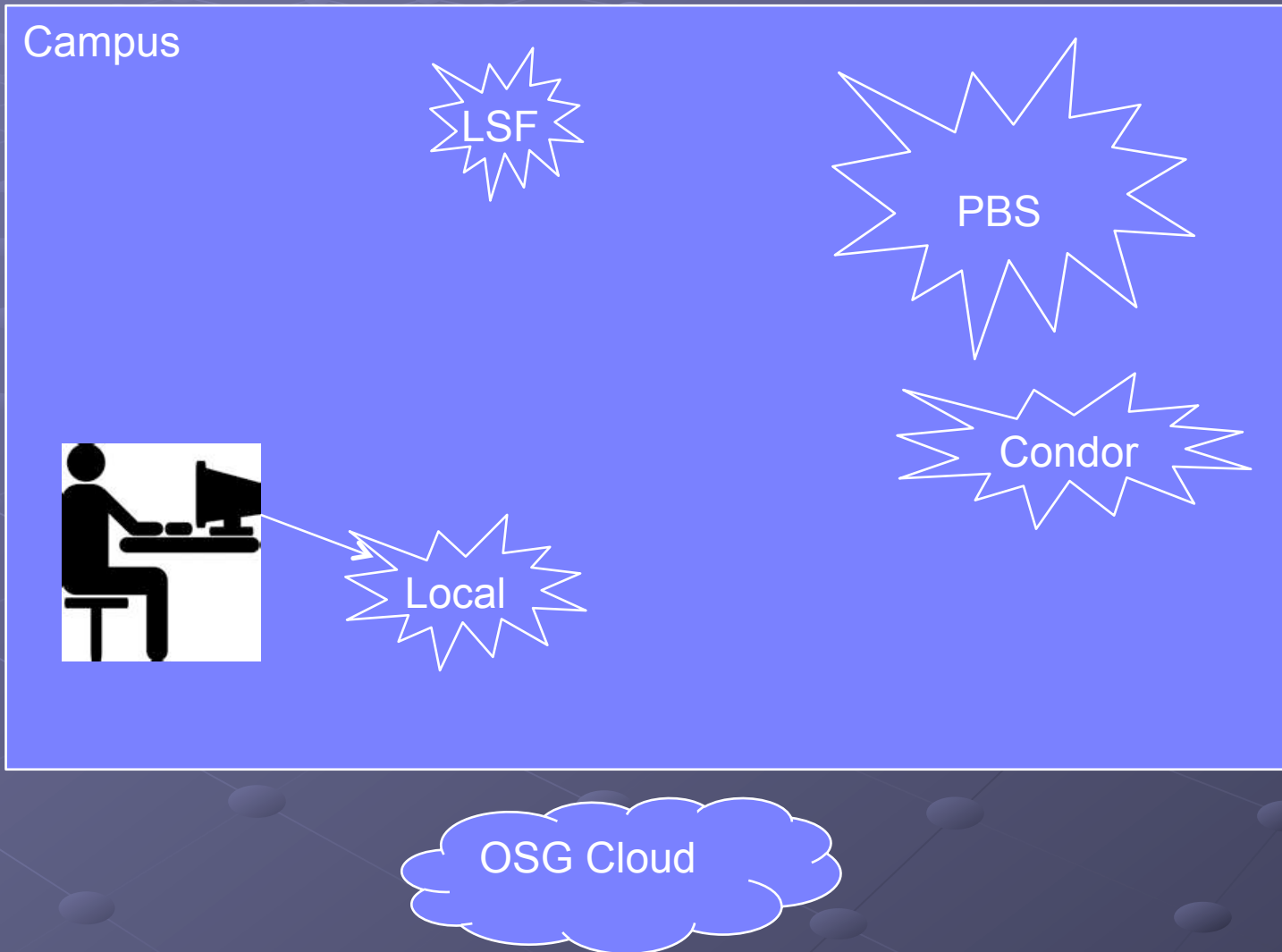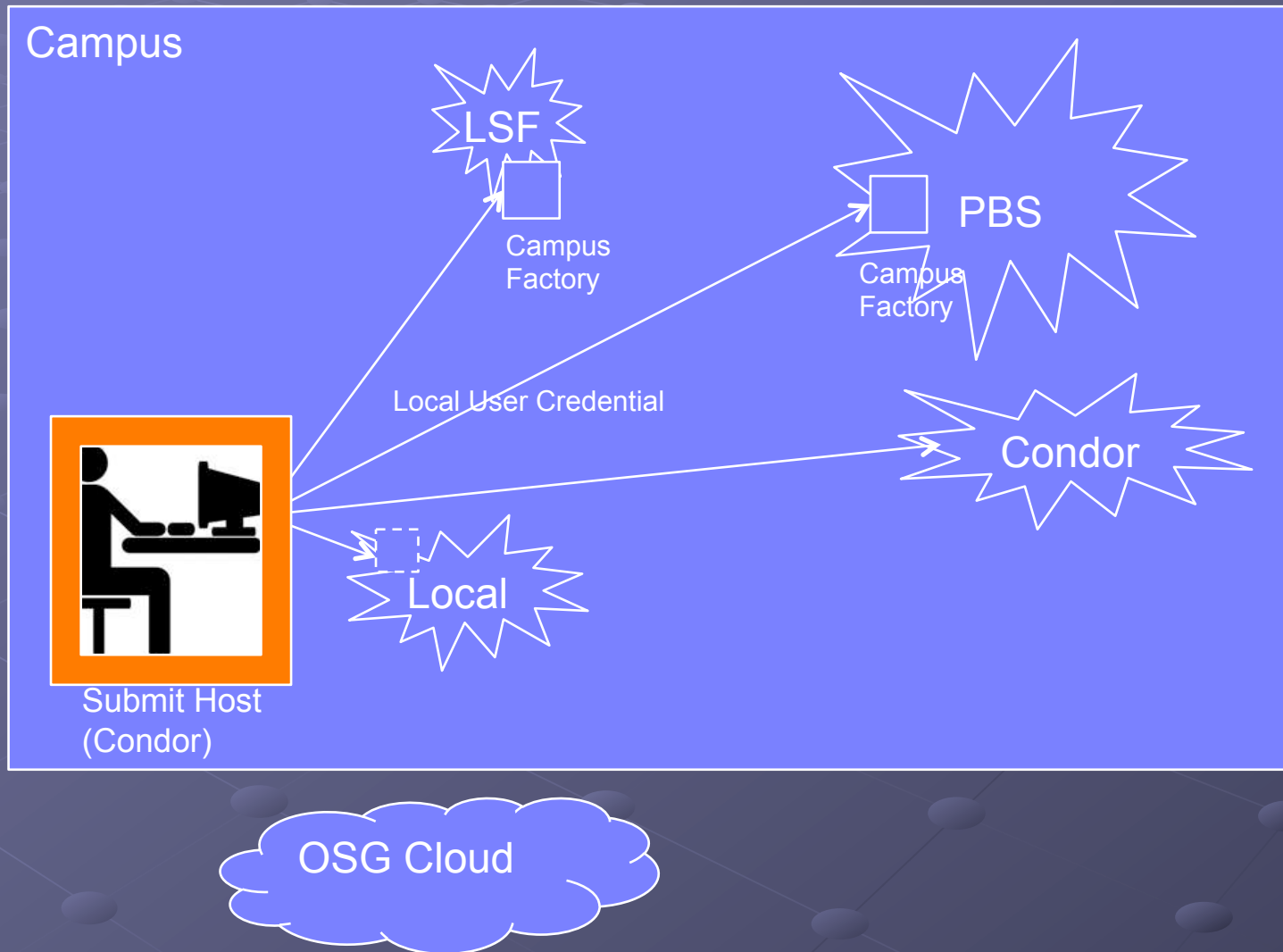CMS   CDF   DZero   ATLAS

Relatively New Things

- Best Practice to use Pilot job submission:
  - Glide-inWMS (CMS, most other VOs)
  - PANDA (Atlas)
- HTPC (High Throughput Parallel Computing)
  - Submit whole node/machine jobs
- Campus Grid Infrastructures
- New relationship with XSEDE (TeraGrid)

Easy way to utilize additional campus resources
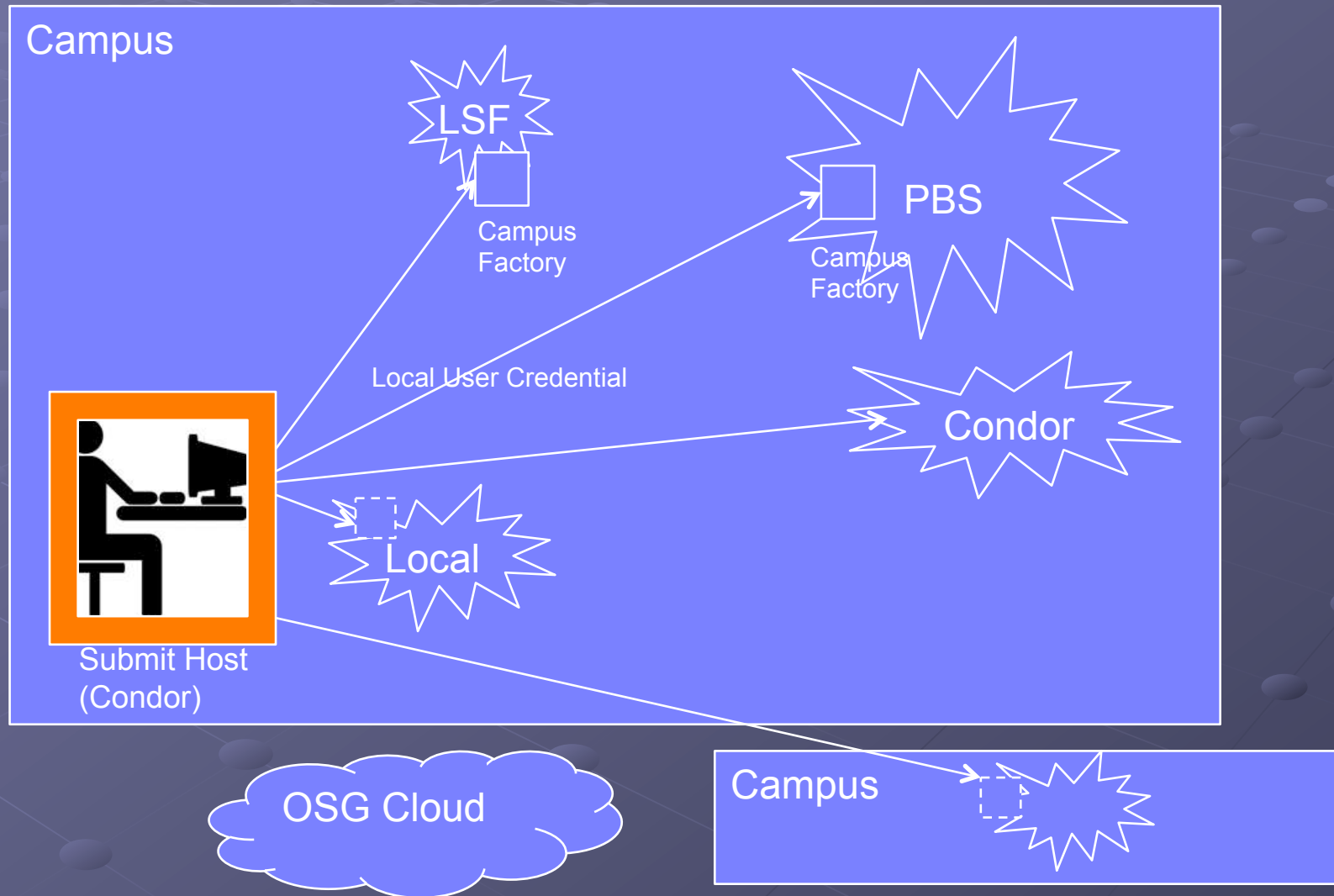
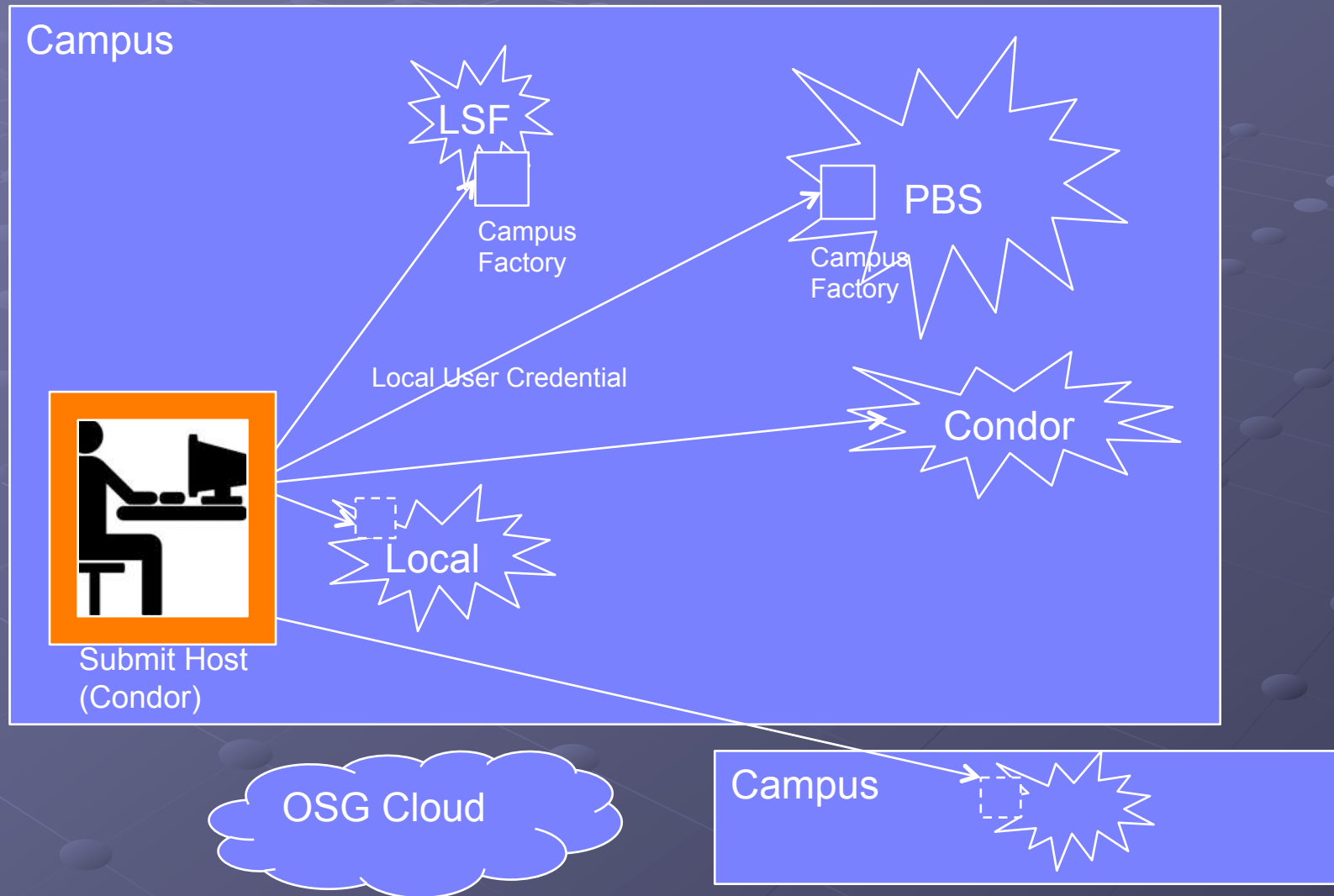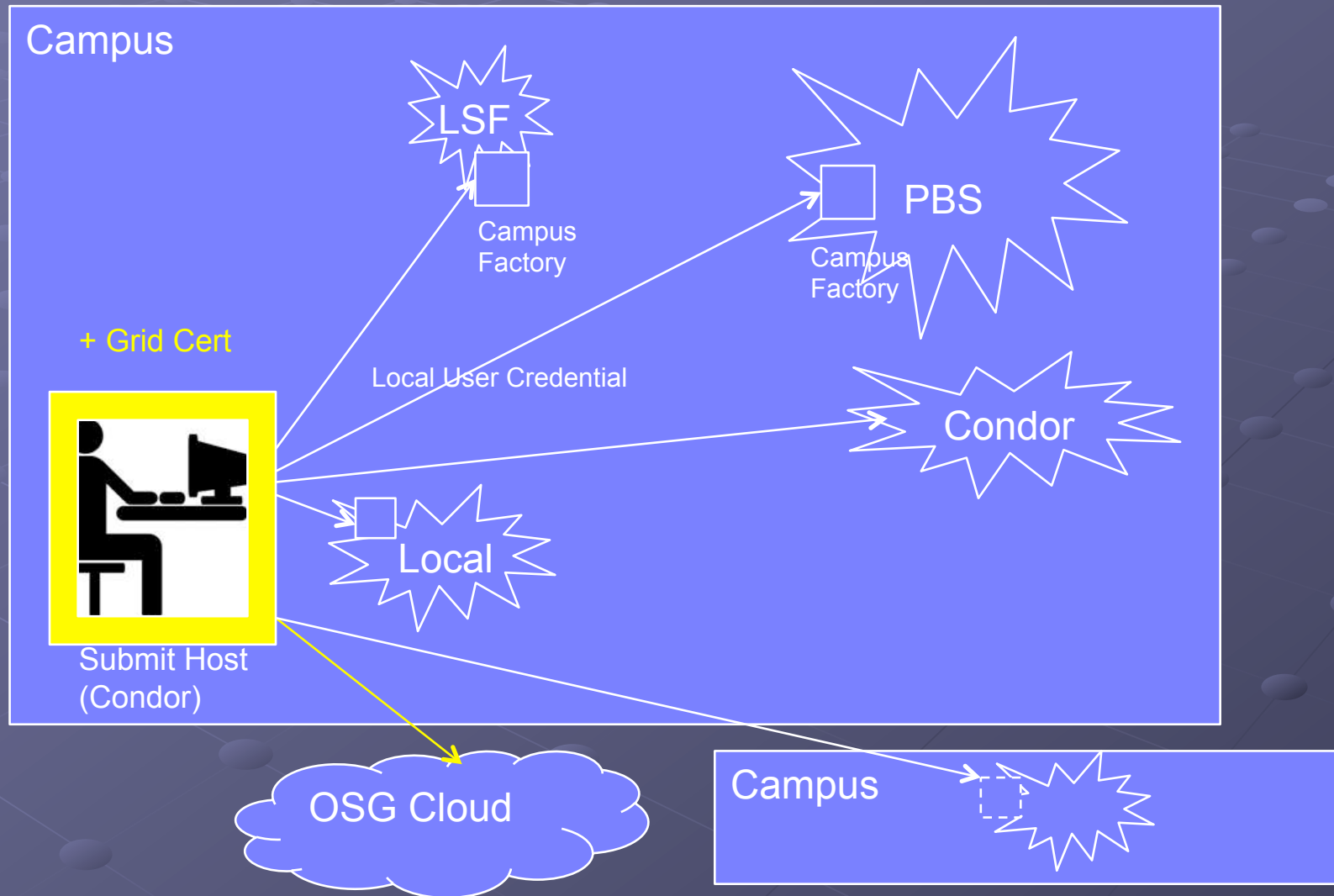Campus

LSF

PBS

Condor

Local

OSG Cloud

Easy way to utilize additional campus resources

Easy way to utilize additional campus resources

Easy way to utilize additional campus resources

Campus

LSF

Campus Factory

PBS

Campus Factory

Local User Credential

Condor

Local

Submit Host (Condor)

OSG Cloud

Campus

Easy way to utilize additional campus resources

Enjoy the Workshop

- Choose your topics
- Move freely between User and Admin tracks
- Ask questions, try things out
- Have fun!