User Support of WLCG Storage Issues

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WLCG Collaboration Meeting

Imperial College, London July 7, 2010
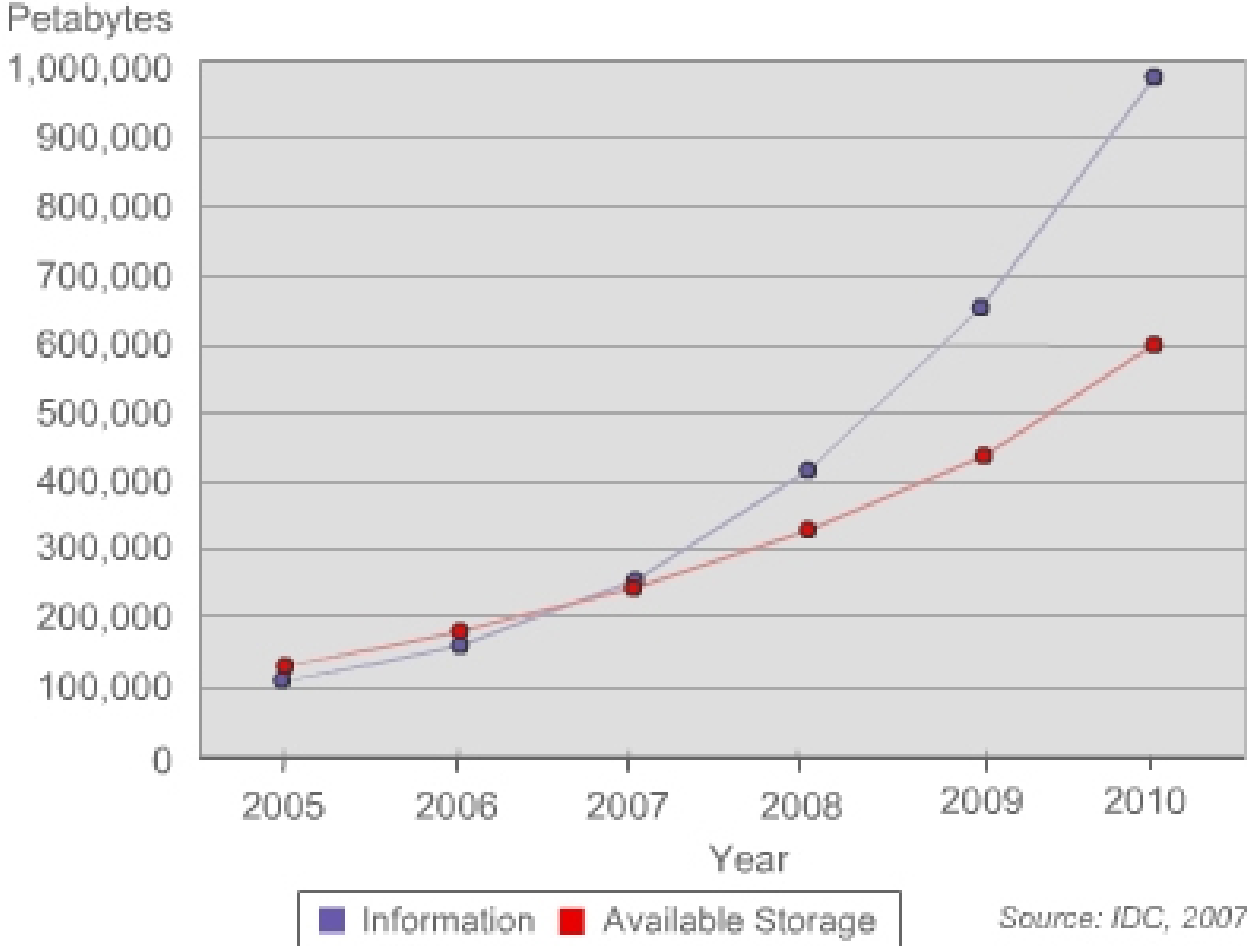
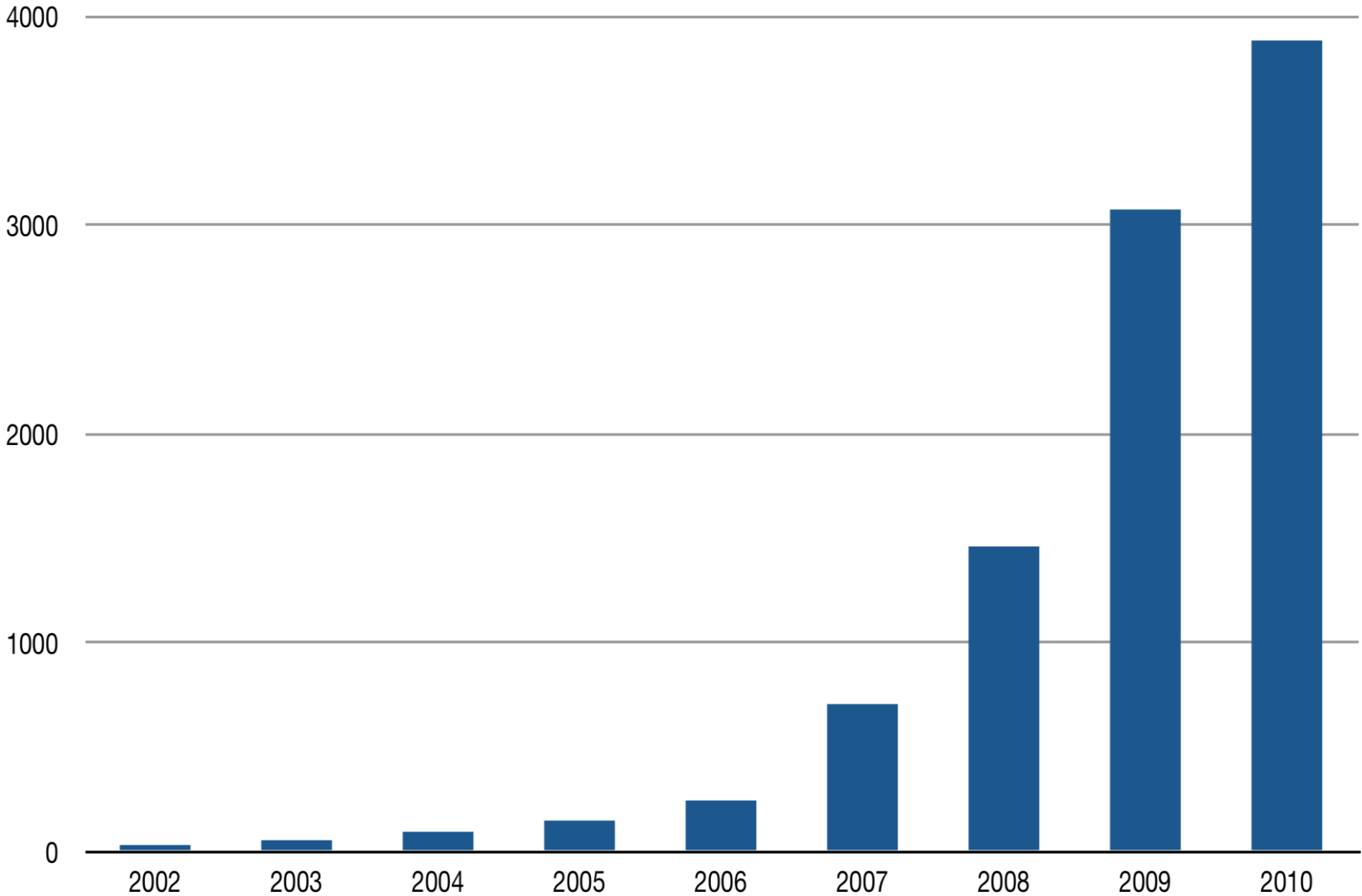# Storage

Storage

Source: IDC, 2007

Aggregate Storage in IU HPSS

User Issues

- **Install VDT client tools**
- **Use Information Systems for available space**
- **Ask for space if the need is large**
- **Find endpoints**
- **Test availability**
- **Maintain acceptable site list**
- **Stage data**
- **Track which input files are where**
- **Direct jobs to sites**
- **Track where output data is**
- **Stage data out**
- **Remove files at completion of project**
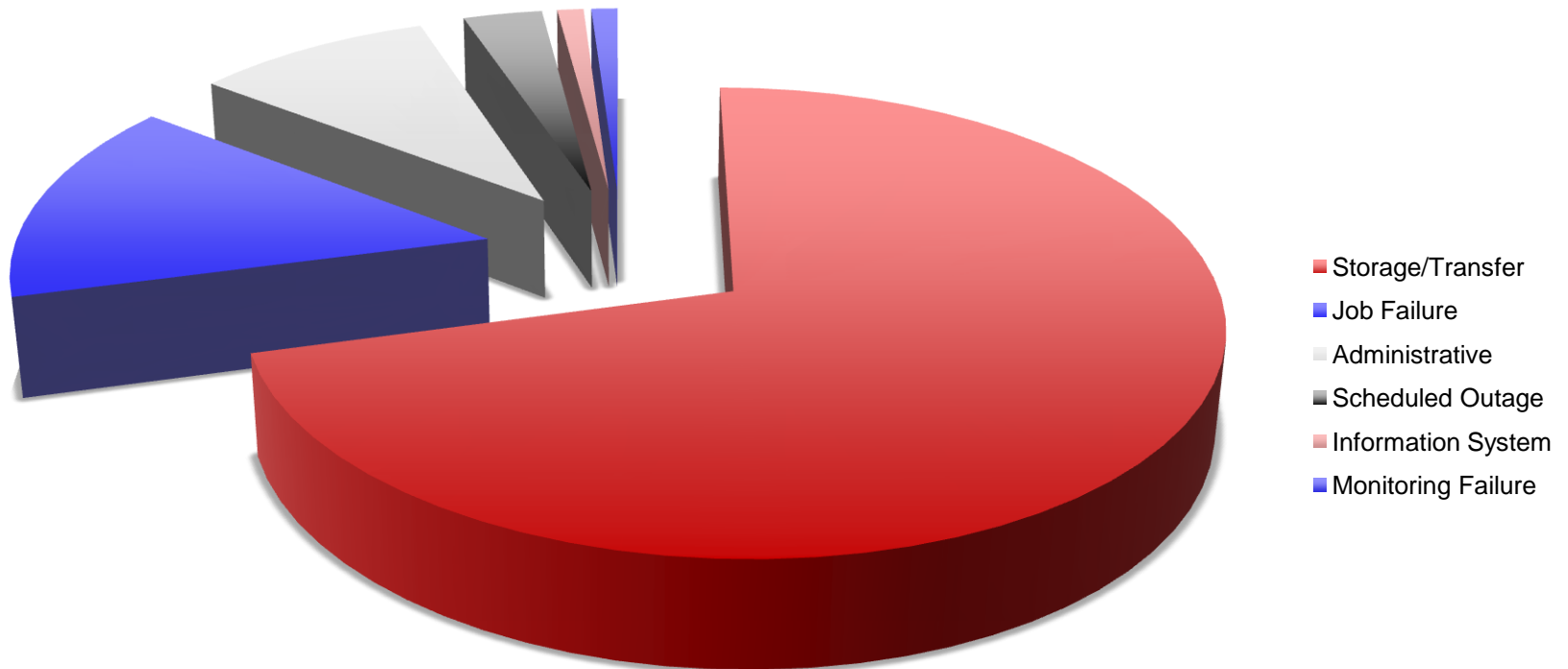
Source: Ted Hasselroth

Site Issues

- **Connection/bandwidth abuse**
- **Online data to be used for ongoing research, not archiving**
- **Space and computing fair access to all VOs**
- **Jobs and data transfer design make efficient use of resources**
- **Data is being cleaned up after being used**

Source: Ted Hasselroth

WLCG to OSG Tickets
Last Quarter

- 96 GGUS Tickets

Legend:
- Storage/Transfer
- Job Failure
- Administrative
- Scheduled Outage
- Information System
- Monitoring Failure

Support

- Adding Effort for WLCG Tickets
  - Earlier Hours in the US (06:00 EST)
  - Friday Meetings to Review WLCG Tickets
  - Alarm Procedures to be sure Tier1s are alerted

- Web Services Based Ticket Exchange
  - Removes Email Dependencies
  - Improved Alerts on Failure
  - This is in Place Between GGUS and OSG Footprints

- More Communication
  - Daily Attendance at the WLCG Ops Meetings
  - Discussion of WLCG Items at the OSG Operations and Production Meetings
  - Heavy Interactions with EGI SAM and GGUS Groups

Infrastructure

- The real story is not what we are doing, but what we are not doing

- Continue Service SLA (This is now completed)
  - https://twiki.grid.iu.edu/bin/view/Operations/ServiceLevelAgreements

- Effort to Bring OSG Services Not Hosted by the GOC Into the Same Forums as the Indiana University Hosted Services
  - Gratia, ReSS, Engage MM, Others
  - Operations and Production Meetings
  - GOC Notifications

- Change Management
  - Scheduled Release Periods
  - Change Management Review
  - Community Notification Revisited
  - Determining What Needs to Be Done and What Needs to Not Be Done

Storage Support

- ## Issues
  - FTS is a black box to us
  - OSG Ops has at various times set up a test SE but without lifelike scenarios this is not very helpful
  - OSG Storage Group does not see most WLCG tickets

- ## Questions
  - Are reported storage issues getting resolved in a timely manner?
  - Are all storage issues being made into tickets?

- QUESTIONS?