

US ATLAS Facilities Overview

- ◆ Tier 1 Center at Brookhaven Natl. Lab
 - Currently Tier 0 for RHIC (4 experiments)
 - ◆ 1,600 CPUs
 - ◆ 80 TB Central Disk
 - ◆ 1.2 PB HPSS Mass Storage
 - ◆ 25 Staff
 - Much Smaller ATLAS Facility Operating
- ◆ Plan to Deploy 5 ATLAS Tier 2 by 2006
 - Prototype Centers at Boston, Indiana
 - Eight Sites Participating in Grid Test Bed



Hardware Deployment Plans

- ◆ Tier 1 (planning numbers)
 - 500 kSI95 CPU
 - 1 PB Disk (Full year ESD \sim 750 TB)
 - 1 PB/yr Tape
 - 25 Staff
- ◆ Five Tier 2, Each \sim 1/5 of Tier 1
 - 2 Staff per Tier 2 Site
- ◆ Network – Estimate 10 to 40 GB/s Needed
 - Far from Certain What Will Exist in 2007



Authentication & Authorization

- ◆ New PPDG Effort Expected to Focus on Site Authentication, Authorization & Audit
- ◆ US DOE SG Certificate Authority Established
- ◆ European CA Must Also be Included

- ◆ Intention is to Reserve Some Resources for US Users but Share Resources with ATLAS



Grid Deployments

- ◆ All US Sites Involved with PPDG/iVDGL
- ◆ Will Deploy “Virtual Data Toolkits”
 - Hopefully These Interoperate with EDG!!!
- ◆ Tier 1 Will Participate in ATLAS DC1-2
 - This will FORCE Integration with EDG
- ◆ Tier 2 Involvement in ATLAS DC2

