

# News from RAC

Verena, Mayuko + JAA

The right stuff  
to get you there.



[usatlas-rac-l@lists.bnl.gov](mailto:usatlas-rac-l@lists.bnl.gov)

## Mandate/Mission

"The RAC committee decides priorities on the usage of computing resources (CPU and storage) funded by the U.S. Research Program. Most of these resources are pledged to the WLCG through a U.S. MoU. Overall ATLAS priorities for these pledged resources are set by the ATLAS CREM committee. The RAC will set resource allocations of pledged resources based on CREM guidelines. There are additional resources funded by the U.S. Research Program which are not pledged to the WLCG. The RAC will allocate these resources based on needs of U.S. funded physicists, in consultation with the U.S. physics community (via the U.S. physics forums and other channels), U.S. Operations Team and the U.S. Facilities Manager. Examples of the use of U.S. resources are 'regional production', 'group analysis', large scale MC production (1 billion SM sample in 2009 used for UAT09). We expect the RAC to play a central role in managing efficient usage of U.S. Research Program funded resources."

The RAC also coordinates LOCALGROUPDISK and other computing resource-related activities within US ATLAS

**Summary** of lots of text: - coordinate as needed  
US ATLAS computing resources to most  
efficiently serve the US ATLAS research program

- Held a recent “re-kickoff” meeting to discuss several questions from your new Physics Support managers and RAC
- It had **been awhile since the RAC met**, for sure not since JAA started in Physics Support

- Who serves on the RAC, and what is the process by which members are nominated and/or rotate?
- **Answer:** Up to Physics Support Managers. Based on precedent, added Analysis Support Panel members and Speakers Committee Chair and Deputy

## Members

Jahred Adelman, Doug Benjamin, Chunhui Chen, Kaushik De, Rob Gardner, Mayuko Kataoka, Eric Lancon, Verena Martinez, Armin Vartapetian

Advisory members: Tim Andeen, Wade Fisher, Joe Haley, Tae Min Hong, Sabine Lammers, Andy White

- Do we need semi-regular meetings, or only as needed? If as needed, can we reserve a regular spot?
- **Conclusion post meeting:** We will meet once as needed the first Thursday of every month @3 pm CST / 4 pm EST (this month's meeting already canceled)

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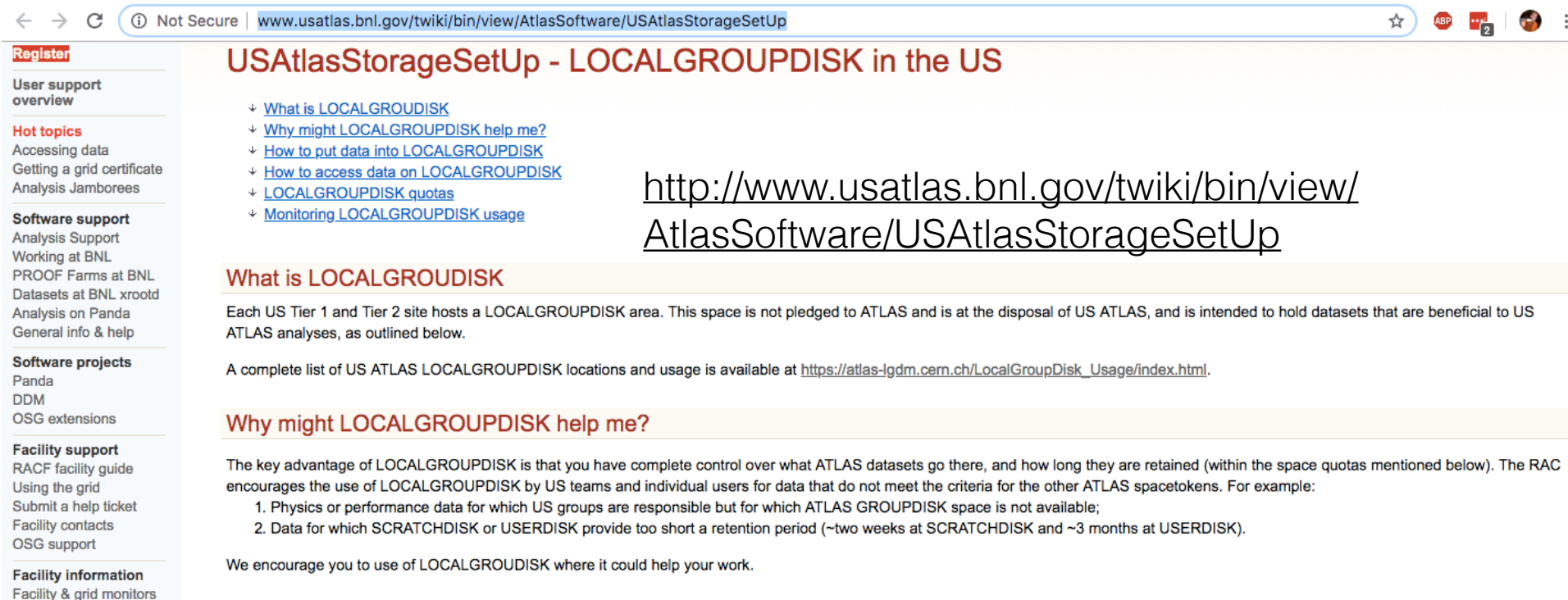
- Does our documentation need updating?
  - **Conclusion post meeting:** It's actually in reasonable shape (new small revisions), but perhaps just needs better advertising.
  - **Mayuko** to continue to update it as needed



The screenshot shows a web browser displaying the Twiki page for the U.S. ATLAS Resource Allocation Committee. The browser address bar shows the URL: <https://www.usatlas.bnl.gov/twiki/bin/view/AtlasSoftware/ResourceAllocationCommittee>. The page features a navigation menu on the left with categories like 'AtlasSoftware', 'Software Home', 'User support overview', 'Hot topics', 'Software support', 'Software projects', 'Facility support', 'Facility information', and 'Other Links'. The main content area has a breadcrumb trail: 'You are here: TWiki > AtlasSoftware Web > ResourceAllocationCommittee'. Below this is the title 'U.S. ATLAS Resource Allocation Committee' and a list of links: 'Mandate/Mission', 'Members', 'Meetings', 'Mailing List', 'Disk Space for US Analysis Activities', 'US Regional Production', 'Dataset replication', 'Contact Us', and 'U.S. ATLAS Available Resources'. The 'Mandate/Mission' section contains text about the RAC committee's role in resource allocation. The 'Members' section lists the committee members and advisory members.

<http://www.usatlas.bnl.gov/twiki/bin/view/AtlasSoftware/ResourceAllocationCommittee>

- Does our documentation need updating?
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← → ↻ ⓘ Not Secure | www.usatlas.bnl.gov/twiki/bin/view/AtlasSoftware/USAtlasStorageSetUp ☆ ABP 2

## Register

- User support overview
- Hot topics
  - Accessing data
  - Getting a grid certificate
  - Analysis Jamborees
- Software support
  - Analysis Support
  - Working at BNL
  - PROOF Farms at BNL
  - Datasets at BNL xrootd
  - Analysis on Panda
  - General info & help
- Software projects
  - Panda
  - DDM
  - OSG extensions
- Facility support
  - RACF facility guide
  - Using the grid
  - Submit a help ticket
  - Facility contacts
  - OSG support
- Facility information
  - Facility & grid monitors

## USAtlasStorageSetUp - LOCALGROUPDISK in the US

- ↓ [What is LOCALGROUPDISK](#)
- ↓ [Why might LOCALGROUPDISK help me?](#)
- ↓ [How to put data into LOCALGROUPDISK](#)
- ↓ [How to access data on LOCALGROUPDISK](#)
- ↓ [LOCALGROUPDISK quotas](#)
- ↓ [Monitoring LOCALGROUPDISK usage](#)

<http://www.usatlas.bnl.gov/twiki/bin/view/AtlasSoftware/USAtlasStorageSetUp>

### What is LOCALGROUPDISK

Each US Tier 1 and Tier 2 site hosts a LOCALGROUPDISK area. This space is not pledged to ATLAS and is at the disposal of US ATLAS, and is intended to hold datasets that are beneficial to US ATLAS analyses, as outlined below.

A complete list of US ATLAS LOCALGROUPDISK locations and usage is available at [https://atlas-lgdm.cern.ch/LocalGroupDisk\\_Usage/index.html](https://atlas-lgdm.cern.ch/LocalGroupDisk_Usage/index.html).

### Why might LOCALGROUPDISK help me?

The key advantage of LOCALGROUPDISK is that you have complete control over what ATLAS datasets go there, and how long they are retained (within the space quotas mentioned below). The RAC encourages the use of LOCALGROUPDISK by US teams and individual users for data that do not meet the criteria for the other ATLAS spacetokens. For example:

1. Physics or performance data for which US groups are responsible but for which ATLAS GROUPDISK space is not available;
2. Data for which SCRATCHDISK or USERDISK provide too short a retention period (~two weeks at SCRATCHDISK and ~3 months at USERDISK).

We encourage you to use of LOCALGROUPDISK where it could help your work.



- Discuss recent disk space requests: we receive several requests a month at the 20-50 TB level
  - Typically we **approve all such** requests, though at some point soon perhaps that becomes unsustainable. All now forwarded by Mayuko to RAC
  - **Rejected a recent 250 TB request** coming from a group of users looking to download the full SUSY multi-jet derivation to BNL
  - SUSY is largest user, but mostly due to having more requests, not larger requests (470 TB approved, 180 TB still to be discussed)



- What is the status of MC generation requests via unpledged or other US ATLAS resources?
  - **Answer:** Many fewer requests in recent history due to better throughput in ATLAS production system.
  - **Answer:** In the past requests were few enough that they were forwarded on to ATLAS production system
  - **Recent requests:** One canceled due to quick follow-up from ATLAS prodsys, one never followed up on questions from me, received request this AM for 60M full sim events and ~370M events at EVNT

- Dataset replication - is this still something we should think about?
  - **Answer:** Yes, but not directed right now by users. Maybe we should change this?

- Can groups request LOCALGROUPDISK space, instead of single users, even if assigned to specific users? This makes it easier for people to share in (for example) production output
  - **Answer:** Difficult to keep track of this, prefer not to, but it does make work more difficult for groups. Can we think about a good way to do this?
- LOCALGROUPDISK at SLAC. Wei wants to move several PB of old DATADISK to LOCALGROUPDISK
  - See Wei's talk for discussion

- Do we need to update policies on LOCALGROUPDISK we grant automatically and we approve?
  - **Answer:** Probably good to revisit this at our next meeting. If there are ideas or suggestions, please let us know (or come to our meeting!)

## Policy

- US ATLAS group member can use disk space at US ATLAS LOCALGROUPDISKs. To check if you have a US ATLAS membership or not, please go to the VOMS page [here](#) and check `"/atlas/usatlas"` is in **"Your groups and roles"**. [more info](#)

- **Management for "Disk usage of User"**

1. The default disk space is 10TB for a US ATLAS group member.
2. Usage will be updated every day (check timestamp in 'HOME').
3. A warning message will be sent every 2 weeks if user usage >10TB per site and >30TB for over all US-ATLAS.
4. If you need more space, please fill a [form](#)

- **Management for "popularity dataset"**

1. Send an automatic notification to owner of dataset if not accessed at least one year.
2. If the data is needed, owner is required to feed back to `atlas-adc-localdisk-management@cern.ch`.
3. In case of no feedback to 3 notifications, stop notification and start sending again in 60 days.
4. Notification is sent every 2 weeks.

- **Management for "Multiple dataset"** (currently for BNL-OSG2)

1. Send an automatic notification to owner of dataset if exists in another US T1T2 LOCALGROUPDISK.
2. Owner is required to delete dataset via link of Multiple dataset in notification.
3. Notification is sent every 2 weeks.

[https://atlas-lgdm.cern.ch/LocalDisk\\_Usage/HELP.html](https://atlas-lgdm.cern.ch/LocalDisk_Usage/HELP.html)

- Is there anything else that RAC can or should do?
  - **Answer:** Probably up to us, but if there are suggestions, let me know!
  - **For example**, with new accelerators and GPUs potentially coming online on the grid/ via panda, should we allow users to request special access via RAC?
  - **For example**, should we be more proactive about dataset replication?

[https://atlas-igdm.cern.ch/LocalDisk\\_Usage/index.html](https://atlas-igdm.cern.ch/LocalDisk_Usage/index.html)

## T1 T2 LOCALGROUPDISK Usage

Dec. 1, 2018, 12:09 p.m.UTC

LOCALGROUPDISK	Usage Size from RUCIO (TB)	Disk Usage Size (TB)	Disk Allocation Size (TB)
<a href="#">BNL-OSG2</a>	824.4	877.9	1125.9
<a href="#">MWT2_UC</a>	425.8	445.1	500.0
<a href="#">AGLT2</a>	368.1	378.3	445.0
<a href="#">NET2</a>	237.1	238.9	550.0
<a href="#">SLACXRD</a>	98.0	115.6	280.0
<a href="#">SWT2_CPB</a>	46.0	47.3	125.0
<a href="#">OU OSCER ATLAS</a>	18.5	20.4	50.0