



Forward *

Tim Cartwright

University of Wisconsin–Madison

OSG School Director

OSG Campus Coordinator

** Among other things, this is the State Motto of Wisconsin*



Ideas for Going Forward from Here

- Accessing capacity
- Staying in touch
- Final logistics
- Tim's random ideas



Accessing Capacity



Open Capacity – In Your Lab

Server or cluster in your lab

- 👍 Not your laptop, control everything
- 👎 Buy and maintain it, not a lot of capacity



https://images.abmx.com/30/3004/abmx_3004_1_1200.jpg



Open Capacity – Local Cluster

Department or campus cluster

- 👍 No/low direct costs, local help
- 👎 Shared; maybe Slurm, PBS/Torque, LSF...

No campus cluster? Talk to CIO!

Note! NSF CC* Compute awards

<https://new.nsf.gov/funding/opportunities/campus-cyberinfrastructure-cc/nsf24-530/solicitation>



<https://www.pngall.com/wp-content/uploads/5/Server-Rack-PNG-Free-Image.png>



Open Capacity – Collaborators

Collaborators

- 👍 No/low direct costs, may be tailored to project
- 👎 Shared, project-specific, hard to come by



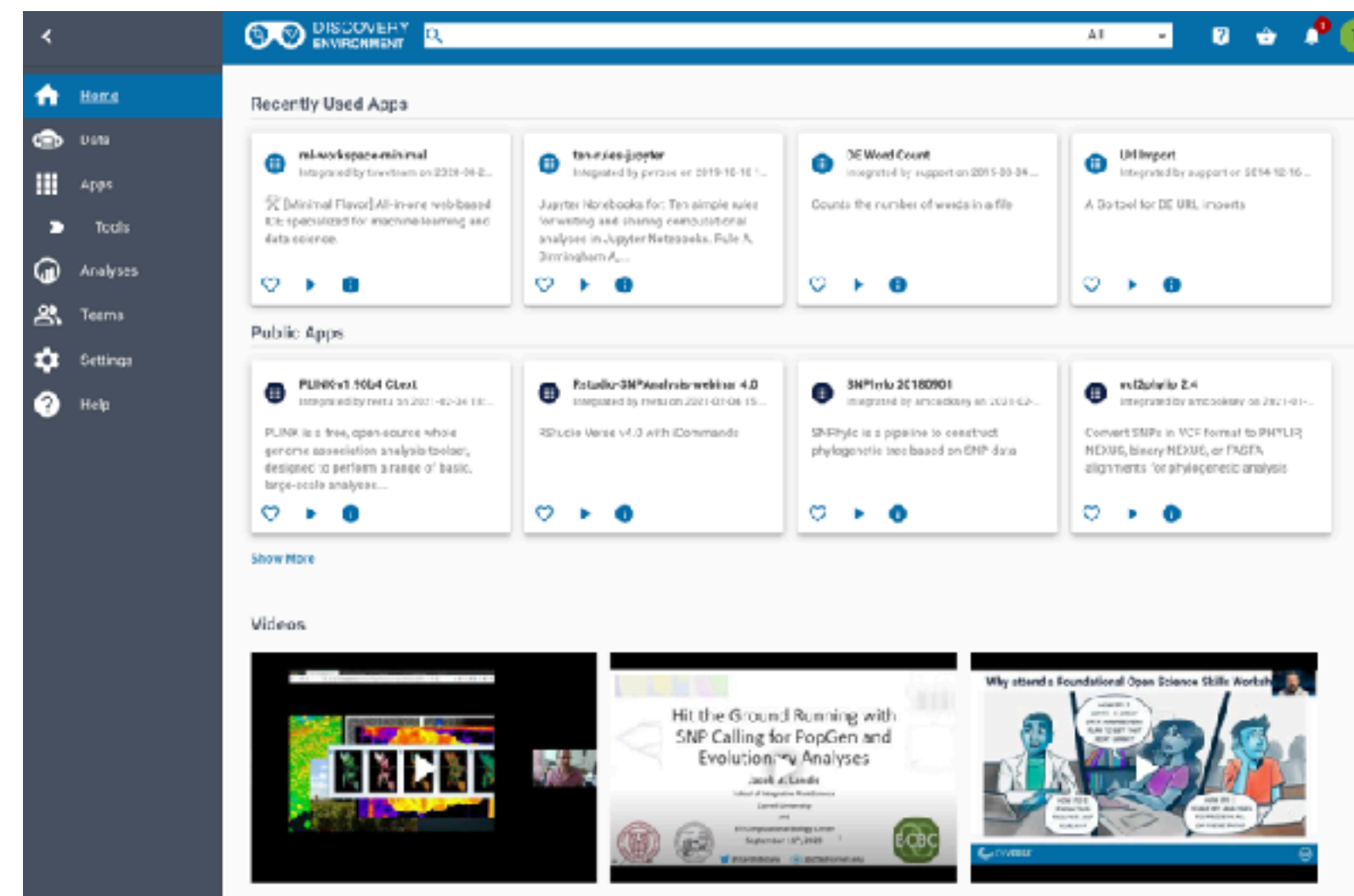
<https://www.dunescience.org/about-the-collaboration/>



Open Capacity – Science Gateways

Science Gateways (e.g., web front-end to a cluster)

- 👍 Easy to use, no/low cost
- 👎 Only for pre-defined use cases





Commercial Capacity

- **Commercial clouds** (*Amazon, Google, Microsoft, ...*)
 - 👍 Don't own, high availability, many options (e.g., GPUs), ...
 - 👎 Pay/hour, data out may be costly; challenging to manage
- **Managed clouds** (*Azure CycleCloud, Globus Genomics, ...*)
 - 👍 As above, but *less* to manage
 - 👎 Costs more (paying someone to manage), fewer options?
- But keep commercial options in mind:
 - Credits may be available
 - May be able to write into grants
 - May be helpful for burst of activity (e.g., for a deadline)



PATH Facility

The **PATH Facility** is a purpose-built, national-scale dHTC resource meant to deliver computational capacity to **NSF** researchers



- Began in 2022
- Can apply for credits – existing or new NSF award
- Credits go toward **dedicated** dHTC capacity
- See [PATH website](https://www.nsf.gov/pubs/2022/nsf22051/nsf22051.jsp) and NSF DCL 22-051 for more:
<https://www.nsf.gov/pubs/2022/nsf22051/nsf22051.jsp>



Your School Accounts

- **ap1.facility.path-cc.io** – goes away after Aug. 23
 - This is your last warning!
 - Or, see previous comments about getting credits
- **ap40.uw.osg-htc.org** account
 - If just created for School, temporary (~1 month)
 - But, just take easy steps to convert to full account
 - See School website (Logistics > Access OSPool):
<https://osg-htc.org/school-2024/logistics/projects/>
- Remember that Access Points are not backed up!



Staying in Touch



How to Reach Us

- **For OSPool and other OSG topics**
 - support@osg-htc.org
 - Reaches the OSG Research Computing Facilitators
- **For School-specific things**
 - Always use school@osg-htc.org
 - Reaches Tim, Christina, Janet... and indirectly, many others
- **Any time, for any reason, email us directly:**
 - Tim Cartwright <cat@cs.wisc.edu>
 - Christina Koch <ckoch5@wisc.edu>



Online Support

Websites

htcondor.org

HTCondor homepage

htcondor.org/manual

HTCondor manual

osg-htc.org

OSG homepage

portal.osg-htc.org/documentation

OSPool docs

chtc.cs.wisc.edu

CHTC Website

chtc.cs.wisc.edu/guides

CHTC How-To Guides

Mailing Lists

school@osg-htc.org

will remain

support@osg-htc.org

general OSG help



Meetings

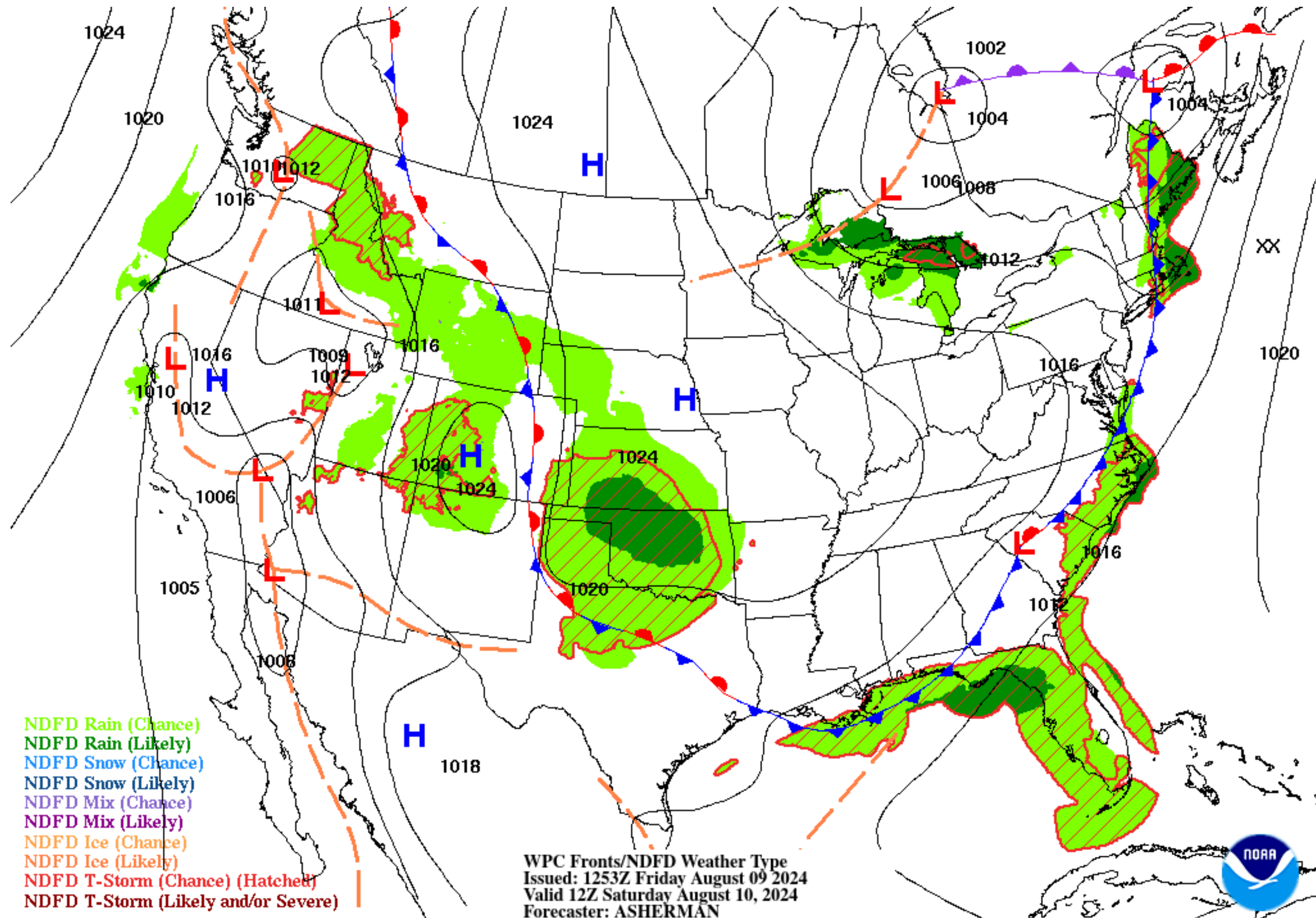
- **Throughput Computing Week 25 (and beyond)**
 - 2–6 June 2025
 - **David Swanson Award** – former School participants
<https://osg-htc.org/community/school/david-swanson>
- **European HTCondor Workshop**
 - 24–27 September 2024
 - <https://indico.cern.ch/event/1386170/>



Final Logistics



Saturday





Travel

- Transportation emails went out today
 - Most people will take shuttle or taxi/rideshare
 - If paid, payer should write down who shared the ride
- Remember the travel advice page:
<https://osg-htc.org/school-2024/logistics/travel-advice/>
- If you encounter issues:
 - Try the airline first
 - **Must** use FWT to pay for changes
 - Let us know (if you want to and have time)



Reimbursements

- What can be reimbursed?
 - Bus fare to/from Madison (if you paid)
 - Taxi or rideshare to/from Madison airport
 - Driving mileage, *if prearranged*
 - Meals, as noted on the meals page
 - Other *prearranged* things
 - It is best to have actual receipts
- How to get reimbursed?
<https://osg-htc.org/school-2024/logistics/reimbursements/>



Short Essay (If No Lightning Talk)

- Similar to the lightning talks, but written
 - Brief summary of current research work
 - One key computational challenge
 - How will you apply new knowledge & skills to that challenge
- Due by 20 September 2024 (same as reim.)
- Submit to School mailing list for review



Forward



How to Work With Us

- We are driven by user needs and expectations, plus our principles
- So push us to help make your research possible
- And we may push on you to take your work even further!





Be Part of the Community





**Don't let computing be
a barrier to research!**



**I, [YOUR NAME],
solemnly swear
to not let computing
be a barrier to research!**



THANK YOU!



Closing Dinner

Union South, Industry Room and outside
(1308 West Dayton Street, 3rd floor)

6:00 p.m.



Acknowledgements

This work was supported by NSF grants
OAC-1836650 and OAC-2030508