XSEDE
eXtreme Science and Engineering Discovery Environment

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Advanced Research Computing Center
University of Central Florida

Contents

What is XSEDE?

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from `www.XSEDE.org`

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- It is a single virtual computing system that scientists can use to interactively share resources, data and expertise.

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In nutshell, XSEDE is portal or gateway to **16** Supercomputer/HPC/HTC resources for Scientific Computing and Scientific Visualization, funded by US Agencies such as NSF, and available to US Researchers and Faculty.

What Resources are these ?

from www.xsede.org/web/guest/resources/overview

- Compute Resources
  - TACC: Stampede (XeonPhi)[102400 cores], Wrangler, Jetstream
  - PSC: Greenfield, Bridges Larg mem and Regular mem
  - SDSC: Gordon, Gordon ION. Comet [47616 cores]
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- Write a startup, education or research allocation request - more on next slide
- Apply for an allocation: `portal.xsede.org/submit-request/`

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  - Report results from previous research (XSEDE/non-XSEDE) - papers, benchmarks, code etc.

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Checkout `www.xsede.org` for current policies and rules

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  - Any number of educational requests can be made.

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- Additional resources for an allocation may be requested through a Supplement Request

Can I transfer SUs from one cluster to another ?

- SUs can be transferred from one facility to another
- However transferred SUs are based on a formula derived from HPL benchmark performances
- Use SU Conversion Calculator : `www.xsede.org/web/guest/su-converter`

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  - Stokes at ARCC UCF has GridFTP Capability, you can move large data to/from XSEDE clusters over High Speed Research Network - To Be Announced Soon

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  - `www.nersc.gov/users/computational-systems/`

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  - Writing XSEDE Research Requests
  - SLURM on XSEDE (and Stokes) :-)
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