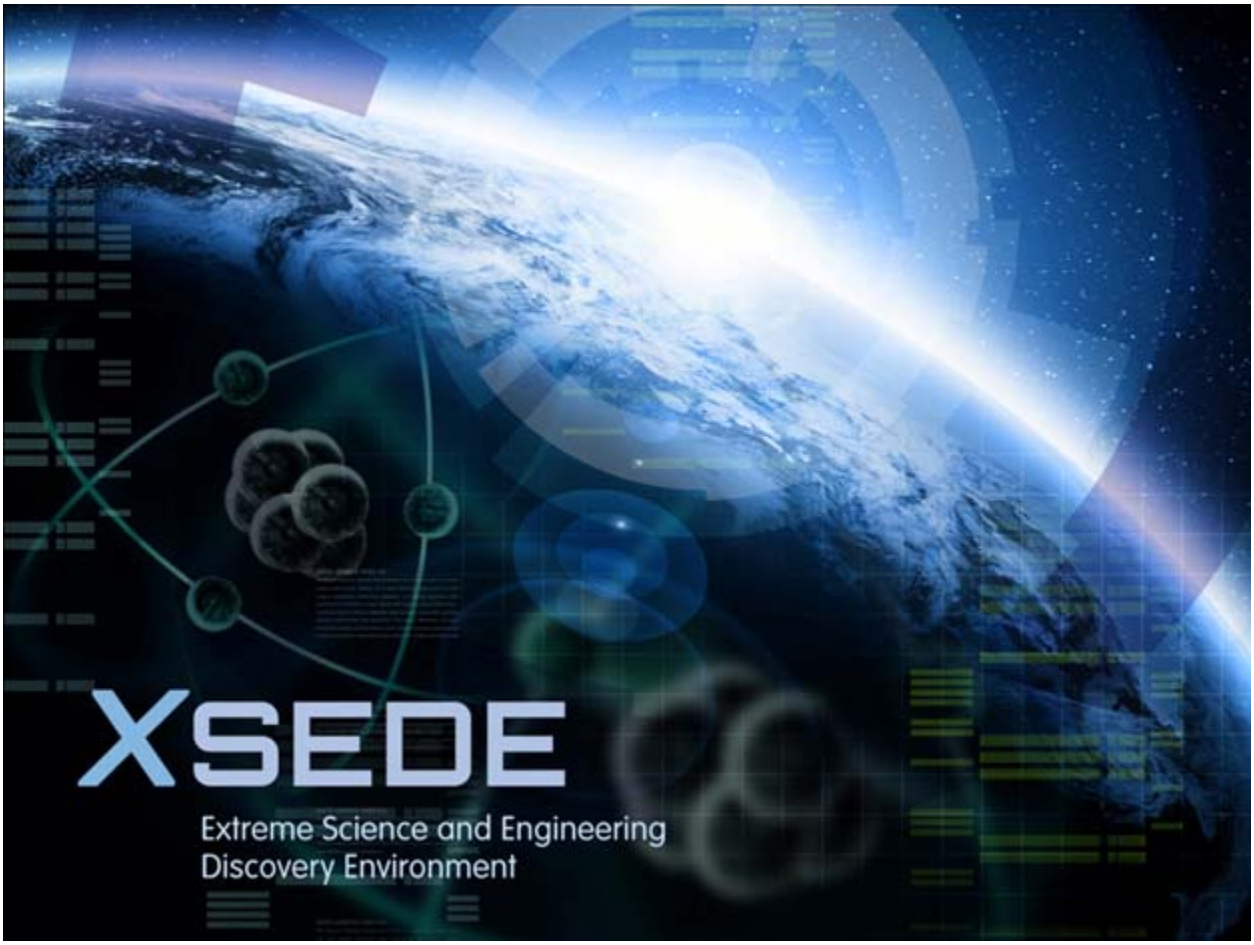
XSEDE Software and Services Table
For
Service Providers and Campus Bridging

19 February 2013

Version 1.1



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none

A. Document History

Relevant Sections	Version	Date	Changes	Author
Entire Document	1.00	5/11/2012	Baseline	VGH,TB,JPN
Updated table on page 2	1.1	2/19/2013	Changed some items to Globus Toolkit (instead of command), removed tgproxy and set Glue2 as optional	

B. Document Scope

The following describes the software and services for XSEDE Service Providers (SPs) and those interested in being a Campus Bridging provider by bridging into the XSEDE cyberinfrastructure.

C. Software and Services Summary Table

The following describes the software and services for XSEDE Service Providers (SPs) and those interested in being a Campus Bridging provider by bridging into the XSEDE cyberinfrastructure. The XSEDE Software and Services Baseline document [1] provides more detail, however, Table 1 below provides a concise high-level overview with links to further descriptions and links to the software and installation instructions.

XSEDE SPs that are part of the XSEDE Federation are required to install the software and services as described in Table 1 below based on the SP Level and SP Type. The SP Levels are Level 1, Level 2 and Level 3 and the levels are described in the Service Provider Definition document [2]. The SP Types are HPC for High Performance Computing resource, HTC for High Throughput Computing resource and Viz for Visualization resource. Where "Yes" is indicated in a cell in the table below, it indicates that the SP at the indicated Level and Type column is required to install and maintain the software and/or service indicated in the corresponding row. Where "No" is indicated the software or service is not required, but it should be considered optional based on the needs of the SP or campus bridging provider.

The current documentation for XSEDE software and services is being converted to the XSEDE website and is currently located at *http://www.teragridforum.org/mediawiki/index.php?title=CTSS_Version_4* which is the TeraGrid CTSS version 4 page. The table below has links from the capability item to the teragridform.org website for more information and links to the software.

Note: XSEDE SP Data Storage resource requirements are not currently described in this document. For more information for SPs providing Data Storage resources submit a ticket with the details of the question or contact the Operations Software Testing and Deployment Manager or Operations Deputy Director for more information on Data Storage resource requirements.

[1] -https://www.xsede.org/documents/10157/281380/XSEDE_SP_Software_and_Services_Baseline_v1.0.pdf

[2] - https://www.xsede.org/documents/10157/281380/SPF_Definition_v10.1_120228.pdf

Capability	SP Level 1			SP Level 2			SP Level 3/ Campus Bridging		
	SP Type			SP Type			SP Type		
	HPC	HTC	Viz	HPC	HTC	Viz	HPC	HTC	Viz
Registration									
pacman	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Globus-mds-info	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ctss-core-registration	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Verification and Validation									
INCA	Yes	Yes[1]	Yes[1]	Yes[1]	Yes[1]	Yes[1]	No[3]	No[3]	No[3]
Accounting and Account Mgmt									
AMIE – Account Mgmt Info Exchange	Yes	Yes	Yes	Yes[2]	Yes[2]	Yes[2]	No[3]	No[3]	No[3]
Data Movement Servers									
ctss-data-movement-servers-registration	Yes	Yes	Yes	Yes	Yes	Yes	No[3]	No[3]	No[3]
GridFTP	Yes	Yes	Yes	Yes	Yes	Yes	No[3]	No[3]	No[3]
GSI OpenSSH with HPN (for SCP)	Yes	Yes	Yes	Yes	Yes	Yes	No[3]	No[3]	No[3]
Data Movement Clients									
ctss-data-movement-clients-registration	Yes	Yes	Yes	Yes	Yes	Yes	No[3]	No[3]	No[3]
Globus Toolkit (globus-url-copy/UberFTP)	Yes	Yes	Yes	Yes	Yes	Yes	No[3]	No[3]	No[3]
GSI OpenSSH with HPN (for SCP)	Yes	Yes	Yes	Yes	Yes	Yes	No[3]	No[3]	No[3]
Local Compute									
ctss-local-compute-registration	Yes	No[3]	No[3]	Yes	No[3]	No[3]	No[3]	No[3]	No[3]
globus-wsrf (for Job/Load info)	Yes	No[3]	No[3]	Yes	No[3]	No[3]	No[3]	No[3]	No[3]
XSEDE GLUE2 publishing	No[3]	No[3]	No[3]	Yes	No[3]	No[3]	No[3]	No[3]	No[3]
Local resource management system (Load Leveler, PBS, Torque, SGE, etc)	Yes	No[3]	No[3]	Yes	No[3]	No[3]	No[3]	No[3]	No[3]
Single Sign-On / Remote Login									
ctss-login-registration	Yes	Yes	Yes	Yes[2]	Yes[2]	Yes[2]	No[3]	No[3]	No[3]
GSI OpenSSH with HPN	Yes	Yes	Yes	Yes[2]	Yes[2]	Yes[2]	No[3]	No[3]	No[3]
gx-map	Yes	Yes	Yes	Yes[2]	Yes[2]	Yes[2]	No[3]	No[3]	No[3]
Globus Toolkit (myproxy client)	Yes	Yes	Yes	Yes[2]	Yes[2]	Yes[2]	No[3]	No[3]	No[3]
tgusage/xdusage	Yes	Yes	Yes	Yes[2]	Yes[2]	Yes[2]	No[3]	No[3]	No[3]
modules	Yes	Yes	Yes	Yes[2]	Yes[2]	Yes[2]	No[3]	No[3]	No[3]
Common User Environment "CUE"	Yes	Yes	Yes	Yes[2]	Yes[2]	Yes[2]	No[3]	No[3]	No[3]
Visualization Software Support									
vtss-registration	No[3]	No[3]	Yes	No[3]	No[3]	Yes	No[3]	No[3]	No[3]

Footnotes

[1] – Yes, but only the INCA testing appropriate for the resource type

[2] – Yes, if the SP is providing allocable resources

[3] – No, but it is optional