

XSEDE Operations Deployment Plan: XCI-139 GSI-OpenSSH 7.5p1b-1 Update

19 September 2017

Version 1.2



Table of Contents

[Document History](#)

[Document Scope](#)

[Overview](#)

[Resources](#)

[Human Resources](#)

[Budget](#)

[Coordination and Communication](#)

[Deployment](#)

[XSEDE Service Providers](#)

[Inca](#)

[XSEDE User Services](#)

[Schedule](#)

List of Figures

N/A

A. Document History

Entire Document	1.0	2017-06-27	Initial draft	Venkat Yekkirala Shava Smallen
E.2, F.1	1.1	2017-08-31	Updated package versions and added news announcement	Shava Smallen
Review entire document	1.2	19 Sept 2017	Update document	V.Hazlewood

B. Document Scope

This document outlines the XSEDE Operations deployment plan for an upgrade to the GSI-OpenSSH 7.5p1b-1 servers and clients at XSEDE Service Providers (SPs).

C. Overview

GSI-OpenSSH (<http://grid.ncsa.illinois.edu/ssh/>) is a modified version of OpenSSH that adds support for GSI authentication and credential forwarding (delegation), providing a single sign-on remote login and file transfer service. GSI-OpenSSH also includes High Performance Networking (HPN -<https://www.psc.edu/hpn-ssh>) updates for OpenSSH from the Pittsburgh Supercomputing Center, iSSHD/NERSCmod (run-time disabled by default), username mapping using the gridmap file, and TCP wrapper support. XCI-139 delivers and update to version 7.5p1b-1 of GSI-OpenSSH server and client at SPs.

The XCI-139 overview documentation is available at <https://software.xsede.org/display/xci-139>. The test plan and test report are linked off this document. Do not use the deployment plan as that is the draft deployment plan. The deployment plan is available at

http://software.xsede.org/production/deployment_plans/XSEDE-Deployment-XCI-139-GSISSH.pdf

IMPORTANT NOTE: Per <https://www.openssh.com/security.html> many older versions are vulnerable to multiple security issues. Also older GSI-OpenSSH releases don't support peers using newer OpenSSL 1.1. Hence, it's imperative and strongly encouraged that all XSEDE GSI-OpenSSH SPs upgrade to this new GSI-OpenSSH release 7.5p1b.

D. Resources

D.1. Human Resources

The deployment of this component requires installation at each of the SPs. The following human resources have been identified:

Resource	SP Site/XSEDE Group/Other Resource
Staff	XSEDE UI (documentation) See section F.3
Staff	OSG
Staff	PSC (Bridges, Bridges GPU)
Staff	TACC (Stampede2, Maverick, Jetstream*, Wrangler*)
Staff	SDSC (Comet)
Staff	Indiana (Jetstream*)
Staff	LSU (SuperMIC)

Staff	Stanford (Xstream)
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* - review if applicable

D.2. Budget

No additional resources are required to deploy this update to GSI-OpenSSH.

E. Coordination and Communication

E.1. Deployment coordination

XSEDE users make frequent use of the GSI-OpenSSH servers at the SP sites (e.g., via login.xsede.org, SP login nodes, and/or Science Gateway portals). Please update this service accordingly to minimize interruption to users.

F. Deployment

F.1. Software repo

The gsi-openssh-server-xsede RPMs below that has been tested as part of this activity have been copied to the Production repository and the tar files and tar file installation instructions were copied to <https://software.xsede.org/production/gsi-openssh-server/7.5p1b-1/>. Since this update requires newer versions of Globus packages, additional Globus metapackages were copied over to the Production repository as well:

- gsi-openssh-server-xsede-7.5p1b-1
- globus-gram5-xsede-5.7-13
- globus-client-xsede-6.0-7
- globus-gridftp-xsede-6.0-6

F.2. XSEDE Service Providers

SPs will need to update both their GSI-OpenSSH clients and servers using the installation instructions at

<https://software.xsede.org/production/gsi-openssh-server/7.5p1b-1/XSEDE-GSI-OpenSSH-install.html>

or

<http://software.xsede.org/production/gsi-openssh-server/latest/XSEDE-GSI-OpenSSH-install.html>

and update their version information in the information services using the instructions under “XSEDE GSI OpenSSH Service Availability Publishing”. Note that if they have the globus-client-

xsede, globus-gram5-xsede, or globus-gridftp-xsede metapackages installed on the node they are updating, those packages will get updated as well due to updates to dependent Globus packages.

Inca

No monitoring changes required for Inca tests.

F.3.XSEDE Portal Documentation

Documentation changes for the XSEDE User Portal are noted in:

<https://software.xsede.org/svn/xci/activities/xci-139/trunk/Deliverables/userdoc-changes.txt>

G. Schedule

The schedule for deployment involves installation and configuration of the {title} software and testing by the SPs.

Task #	Task	Start Date	End Date	Resource
1.	Update Portal documentation	9/19/2017	10/1/2017	XSEDE documentation
2.	Upgrade GSI-OpenSSH server and client.	9/19/2017	10/31/2017	SPs
3.	Deployment complete		11/1/2017	