

XSEDE Operations Deployment Plan: XSEDE User Two Factor Authentication

Phase I deployment of user two factor authentication
SDIACT-180

10/10/2015

Version 1.1

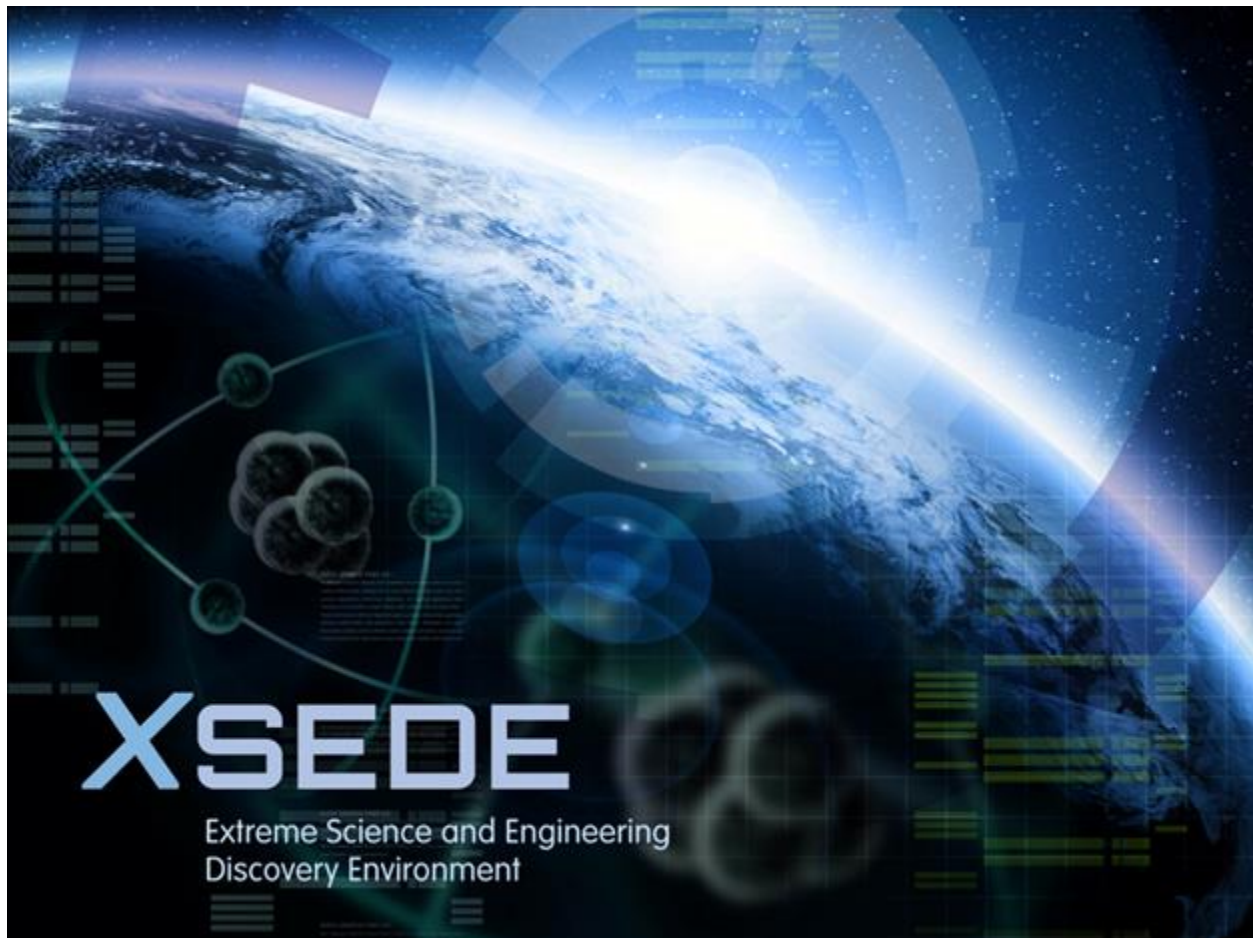


Table of Contents

A. Document History	4
B. Document Scope	5
C. Overview	6
D. Resources	6
D.1. Human Resources.....	6
D.2. Budget	6
E. Coordination and Communication	6
F. Deployment.....	7
F.1. XSEDE Enterprise Services.....	7
F.1.1 Duo Authentication service	7
F.1.2 XUP	7
F.1.3 SSO Hub	7
F.1.4 Nagios.....	7
F.1.5 Inca	7
F.2. XSEDE Service Providers	7
F.3. XSEDE User Services	8
F.4. XSEDE Training.....	8
G. Schedule	8

List of Figures

N/A

A. Document History

Document History					
Entire Document	1.0	2015-04-28	Initial draft		Shava Smallen
F.1.2, F.1.4	1.1	2015-05-18	Incorporated feedback.	Venkat's	Shava Smallen

B. Document Scope

This document outlines the XSEDE Operations deployment plan for XSEDE User Two Factor Authentication on the SSO Hub and optionally SP login nodes.

C. Overview

XSEDE Two Factor Authentication (XSEDE TFA) will protect SSH login attempts to enabled user accounts at certain XSEDE Service Providers using their XSEDE portal account username/password as the primary authentication factor and Duo Security Authentication as the secondary authentication factor. XSEDE TFA Phase I has completed the XSEDE engineering process as “SDIACT-180 Phase I deployment of user two factor authentication”. It passed the SD&I and Operations testing and has been approved for deployment onto the SSO Hub and is optional for XSEDE SPs. There is also a web-based user enrollment process and unenrollment process that will be deployed in the XUP. The Help Desk will need to be trained on support for users using XSEDE TFA.

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	NICS (Darter)
Staff	PSC (Greenfield, Bridges)
Staff	TACC (Stampede, Wrangler, Jetstream)
Staff	NCAR
Staff	SDSC (Gordon, Comet)
Staff	Indiana (Mason, Jetstream)
Staff	LSU (SuperMIC)
Staff	SSO Hub
Staff	XUP
User Services staff	XSEDE User Services

D.2. Budget

An initial set of 200 licenses has been purchased from DUO for XSEDE program year 5. Additional licenses if needed will have to come from XSEDE2. No additional expenditures are needed for SPs to enable XSEDE TFA on their login nodes nor on the XSEDE single sign on hub.

E. Coordination and Communication

Operations shall announce to users when this is available on the SSO Hub service and when implemented on any SP Login Node.

This upgrade should be transparent to users that have NOT chosen to enroll in XSEDE TFA (Two Factor Authentication) via their XSEDE User Portal profile page.

Users that have chosen to enroll in XSEDE TFA will be subject to XSEDE Duo authentication as well in addition to XSEDE username/password.

F. Deployment

F.1. XSEDE Enterprise Services

F.1.1 Duo Authentication service

Duo services are hosted at <https://www.duosecurity.com>. The XSEDE DUO admin will need to familiar with the admin procedures documented at https://software.xsede.org/production/two-factor/DUO_ADMIN.txt

F.1.2 XUP

DUO enrollment/un-enrollment procedures deployed to test portal at xup5.xsede.org will need to be deployed to the production portal.

F.1.3 SSO Hub

Follow instructions to enable XSEDE TFA at https://software.xsede.org/production/two-factor/SETUP_SSOHUB_DUO.txt and some background info at https://software.xsede.org/production/two-factor/DUO_ADMIN.txt

F.1.4 Nagios

Add a host check for specific hosts Duo assigns when integration is established. SPs to coordinate with SP Coordinator or ST&D manager.

F.1.5 Inca

No monitoring changes required for Inca.

F.2. XSEDE Service Providers

Follow instructions at https://software.xsede.org/production/two-factor/SETUP_SP_SSH_DUO.txt to enable XSEDE TFA authentication on SP login nodes. In case there are issues, restore the PAM modules and SSHD configuration files modified to their former states and restart sshd/gsisshd as applicable.

F.3. XSEDE User Services

XSEDE Help Desk personnel will need to familiarize themselves with support procedures documented at HELP_DESK.txt at https://software.xsede.org/production/two-factor/HELP_DESK.txt

F.4. XSEDE Training

Discussions with User Training lead indicated TFA would be too advanced of a topic for new users and that good documentation should be sufficient for advanced users of XSEDE, who are the most likely to use TFA. XSEDE Operations will have NICS go over the SP installation at the next monthly XSEDE Operation SP Software meeting.

G. Schedule

The schedule for deployment involves installation and configuration of the two factor software and testing on the SPs login nodes and single sign on hub.

Task #	Task	Start Date	End Date	Resource
1.	Run DUO_admin.txt	10/1/15	10/16/15	T.Samuel G. Rogers
2.	Setup Nagios monitoring for Duo	10/10/15	10/30/15	G. Rogers J. Rinkovsky
3.	Deploy XSEDE TFA to SSO Hub	10/16/15	12/30/15	D. Carver
4.	Deploy XUP changes	10/10/15	12/30/15	M. Dahan
5.	Work with Help Desk to train staff on new procedures	10/10/15	12/30/15	M. Pingleton
6.	Deploy at optional SPs	10/16/15	12/31/15	SPs staff
7.	deployment complete		12/31/15	