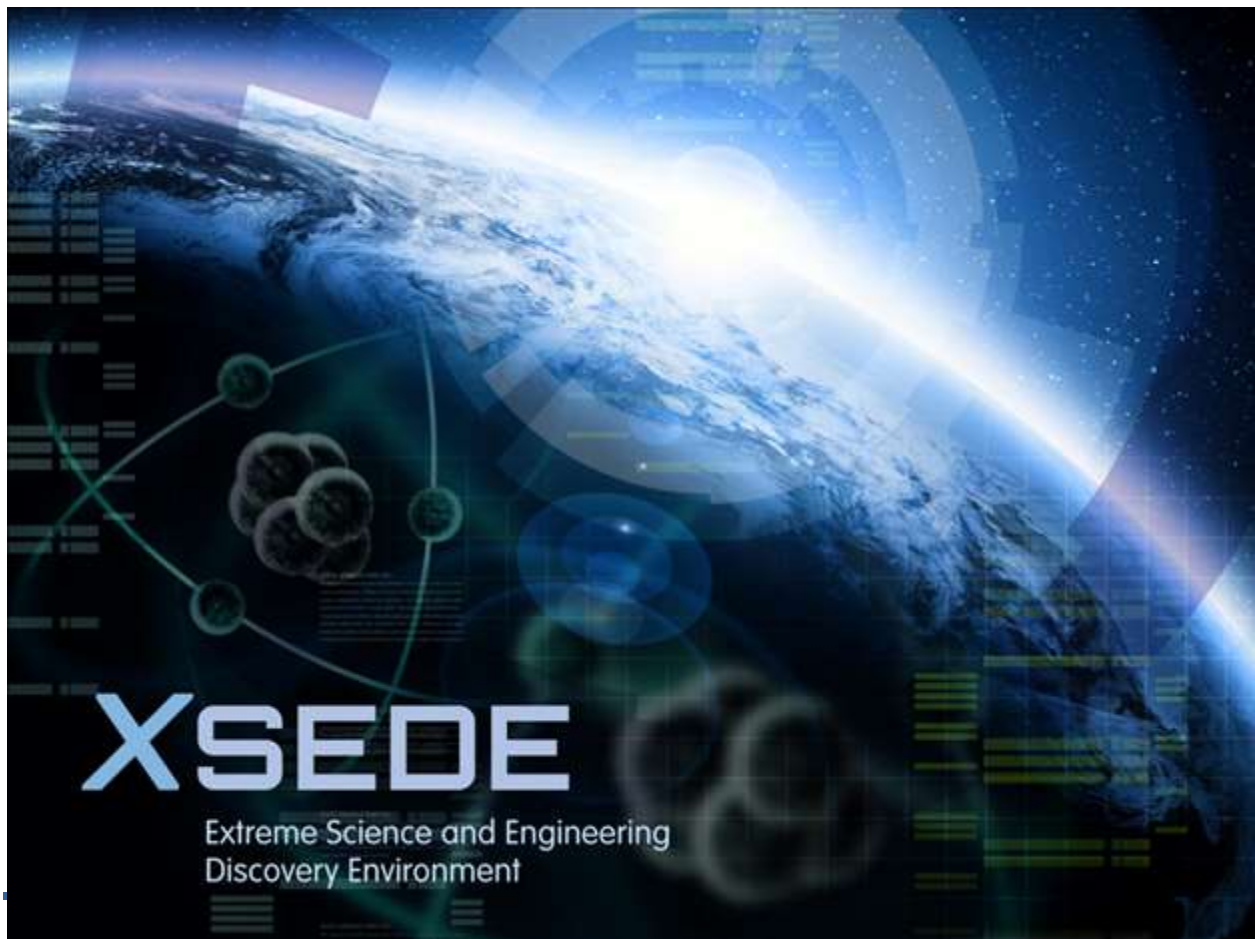


XSEDE Operations Deployment Plan: Fix and enhance Information Publishing Framework for software publishing (XCI-021)

2017-07-25

Version 1.3



List of Figures

N/A

A. Document History

Relevant Sections	Version	Date	Changes	Author
Entire Document	1.0	2016-10-27	Initial draft	JP Navarro
Various	1.1	2016-11-15	TRR review feedback	JP Navarro
F.2	1.2	2017-07-25	Added survey link	Shava Smallen
All sections	1.3	07-25-2017	Final version	V. Hazlewood

B. Document Scope

This document is the XSEDE Cyberinfrastructure Integration (XCI) deployment plan for an incremental fix/enhancement of Information Publishing Framework (IPF) software to version 1.3-4 to be deployed on XSEDE Service Provider (SP) resources.

C. Overview

XCI-021 is described at <https://software.xsede.org/display/xci-21> and delivers an updated IPF component used by SPs to publish software information in GLUE 2.0 format (originally delivered as SDIACT-107 and then enhanced with SDIACT-178).

D. Resources

D.1. Human Resources

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

Resource	SP Site/XSEDE Group/Other Resource
Staff	OSG
Staff	PSC (Bridges)
Staff	TACC (Stampede1/2, Wrangler)
Staff	SDSC (Comet, Comet GPU)
Staff	Indiana (Jetstream)
Staff	LSU (SuperMIC)
Staff	Stanford (Xstream)

D.2. Budget

XCI will continue to operate the messaging service on XSEDE's Information Server machines, the new GLUE 2.0 information services warehouse, the components that store published information in the warehouse, and the new RESTful interfaces to the information services warehouse. Service Providers already provide service nodes on their systems for the IPF software to interface with the site compute resources. No additional resources are required.

E. Coordination and Communication

No coordination with other XSEDE components required.

F. Deployment

F.1. XSEDE Enterprise Services

F.1.1. XSEDE Messaging Service

This is a [RabbitMQ](#) XSEDE Enterprise service deployed and operated by XCI. This deliverable will alter the information SPs publish to this service.

F.1.2. Information Services Warehouse

This is an XSEDE Enterprise service composed of:

1. A local PostgreSQL database (which is only available to local running services),
2. Collector/router processes that subscribe to messaging service queues and store published information in the PostgreSQL database,
3. An Apache managed RESTful API that providing public access to warehouse information written in Django.

F.1.3. Nagios

A HTTP get on <https://info1.dyn.xsede.org:443/wh1/glue2-views-api/v1/services/> should run every 5 minutes. Failures should be sent to info-serv-admin@xsede.org.

F.1.4. Inca

Inca will access information about which software/service elements are required at each type of SP from:

- <https://info1.dyn.xsede.org:443/wh1/xcsr-db/v1/componentsprequirement/>

ComponentNames should match the *InterfaceName* from

<https://info1.dyn.xsede.org:443/wh1/glue2-views-api/v1/services/>

and the *AppName* from

<https://info1.dyn.xsede.org:443/wh1/glue2-views-api/v1/software/>

Three Inca tests will continue to monitor IPF published information:

1. Certificate expiration test against <https://info1.dyn.xsede.org/> and <https://info2.dyn.xsede.org/> will be run once a day.
2. A “current data” check will be added for each Level 1, 2, and 3 SP to verify GLUE2 software and services data is being collected at expected intervals.
<https://info1.dyn.xsede.org:443/wh1/glue2-views-api/v1/software/ResourceID/{ResourceID}/>
<https://info1.dyn.xsede.org:443/wh1/glue2-views-api/v1/services/ResourceID/{ResourceID}/>

Errors on all tests will be sent to info-serv-admin@xsede.org and XCI will contact SPs as needed to start.

F.2.XSEDE Service Providers

Service providers will need to install RPM packages via the XSEDE Production Yum repository.

Please see instructions at <http://software.xsede.org/production/ipf/1.3-4/INSTALL>. Any issues during deployment should be reported to help@xsede.org.

After completing installation, please go to the below survey link to rate the quality of the IPF software and your experience installing it.

<https://software.xsede.org/node/1665/vote>

F.3.XSEDE User Services

This component does not deliver new or changed user documentation.

F.4.XSEDE Training

This component is not user facing and therefore doesn't need special training.

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.	SPs install/upgrade/test ipf-xsede-1.3-4	7/25/2017	8/31/2017	SP admins
2.	SPs make ipf-xsede production by	9/1/2017	9/1/2017	SP admins
3.	deployment complete		9/1/2017	