

# XSEDE Resource Description Repository

## User Manual

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## Finding Resource Data

### Logging In

Resources can be found on the front page of the RDR Application at <https://rdr.xsede.org>. You will be required to login using your XSEDE portal credentials. By default users have access to view resource information. If you do need access add or edit resources in RDR, request it by sending an email to [help@xsede.org](mailto:help@xsede.org) with the organization name that you need permissions to manage resources for.

### Listing Active or All Resources

At <https://rdr.xsede.org> the default view is a listing of all active resources. A resource will not be shown in this view if its status is inactive because the end dates for the resource have passed or current dates have not been entered in the RDR. If you'd like to view all resources, including inactive resources, click the "View All Resources" link near the top of the page.



### Active Resources ([View all resources](#))

[Add a Resource](#)

### Filtering and Toggling Resource Data

You may use the Search box to filter the list. Multiple terms can be separated by spaces. You can also view or remove from view columns by clicking the column toggles

Toggle column: [Resource ID](#) - [Organizations](#) - [Project Affiliation](#) - [Service Provider Level](#) - [Types](#) - [Status](#)

Show  entries

Search:

When you have found the resource you wish to view click the resource name to view the data or if you want to edit the resource and have sufficient privileges click Edit.

[SDSC Dell Cluster with Intel Haswell Processors  
\(Comet\)](#)

[Edit](#)

[comet.sdsc.xsede.org](#)

[SDSC](#)

# Adding a Resource

## Base Resource

RDR uses a concept of Base Resources and Specific Resources to define a resource. The Base Resource is general resource information that applies to almost all resources. Specific Resources define more detailed information depending on the resource type.

Add a Base Resource by clicking Add a Resource from the main page of RDR <https://rdr.xsede.org>



Clicking the Add a Resource button brings up a form in which you should input basic resource data. Most fields provide tooltip help when hovering over the field name. Fields with a \* are required.

Add a Resource

Descriptive Name

Resource Description

Organizations

Is only for XSEDE Services (KRAS,Accounting,etc)

Resource Project Affiliations

Affiliation*	Info Resource ID*	Provider Level
<input type="text"/>	<input type="text"/>	<input type="text"/>

Resource Status

Status	Begin Date	End Date
Friendly	<input type="text"/>	<input type="text"/>
Coming Soon	<input type="text"/>	<input type="text"/>
Pre-Production	<input type="text"/>	<input type="text"/>
Production	<input type="text"/>	<input type="text"/>
Post-Production	<input type="text"/>	<input type="text"/>
Decommissioned	<input type="text"/>	<input type="text"/>
Retired	<input type="text"/>	<input type="text"/>

Some notes on the Base Resource form

- Descriptive Name is required. For an XSEDE resource the entered name should be consistent with other XSEDE resources "SP Abbreviation Short hardware description"

(Short name)” for example for Comet at SDSC the descriptive name is SDSC Dell Cluster with Intel Haswell Processors (Comet)

- Multiple Organizations may be entered by selecting each individually from the drop down.
- The “Is only for XSEDE Services (XRAS,Accounting,etc)” checkbox is used to denote a resource that is only to help XSEDE services and that the resource shouldn’t be reported as a resource for users.
- Resource Project Affiliations should be used to denote which systems the resource should appear in. Multiple affiliations can be added. For example Blue Waters is an XSEDE level 2 resource and also using the Blue Waters XRAS allocations system for handling some allocations. Blue Waters needs to rows here. One with Project Affiliation XSEDE and Provider Level XSEDE Level 2 and one row with Project Affiliation BW and an empty Provider Level
  - Info Resource ID is a unique key for a resource for a Project Affiliation
    - For XSEDE Resources this ID should be of the form name.site.xsede.org where name should not contain any “.”. For example comet.sdsc.xsede.org
- Resource Status Dates should be entered as appropriate. An end date is not required if a start date is entered, but the specified period can not overlap except for the friendly period.

After Submitting the Base Resource Form successfully you’ll be taken to the Edit Resource page for that resource. The Edit Resource Page is the starting point for adding additional data or editing what has already been entered.

Most XSEDE services including the User Portal and SP Resource Dashboard and SP Resource Operational Status Console require that at least one specific resource be defined for the base resource before they will be displayed so please continue the Edit Resource section below.

## Editing Resource Data

**Specific Resources**

- Compute
- Add New Compute Resource
- PSC Regular Memory (Bridges)
- Storage
- Add New Storage Resource
- Grid
- Add New Grid
- Other
- Add New Other Resource
- Cache
- Clear cache for resource

**Edit PSC Regular Memory (Bridges) General Info**

**\* Descriptive Name:** PSC Regular Memory (Bridges)

**Resource Description:** Regular Shared Memory nodes each consist of two Intel Xeon E5-2680 v4 CPUs and 128GB of 2133 MHz DDR4 RAM configured as 8 DIMMs with 16GB per DIMM. A subset of FSM nodes contain NVIDIA Tesla GPUs. 18 nodes will contain two H80 GPUs each. We anticipate adding 32 FSM nodes with two Pascal GPUs each in late 2016. Bridges contains many hundreds of FSM nodes for capacity and flexibility.

**Organizations:** Pittsburgh Supercomputing Center

is only for XSEDE Services (RMS,Accounting,etc)

**Resource Project Affiliations**

Affiliation*	Site Resource ID*	Provider Level
XSEDE 4	bridges.psc.xsede.org	XSEDE Level 1 4

**Resource Status**

Status	Begin Date	End Date
Friendly	03/11/2016	/mm/dd/yyyy
Coming Soon	/mm/dd/yyyy	/mm/dd/yyyy
Pre-Production	08/13/2015	12/31/2015
Production	01/01/2016	11/30/2016
Post-Production	/mm/dd/yyyy	/mm/dd/yyyy
Decommissioned	11/30/2015	/mm/dd/yyyy
Retired	/mm/dd/yyyy	/mm/dd/yyyy

\* Update Reason:  Data Correction  Change to Resource (preserve history)

**Update Resource**

## Base Resource

The Edit Resource Form allows editing of the same data as described in the Add a Resource section of the manual. For more information on the form view that section. The additional field on the form is Update Reason. This is a required field when updating resource data and allows us to know whether the update being made is a correction or entering of data but the resource hasn't really changed or whether the update is denoting an actual change to the resource showing a new distinct state of the resource.

## Adding and Editing Specific Resources

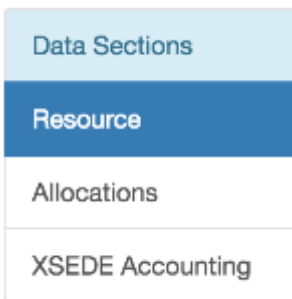
From the edit resource page you can add or edit specific resources for the Base Resource. For example in the screenshot above the Base Resource is PSC Regular Memory Bridges which has a specific Compute Resource. Specific resources can be added or edited by clicking in the menu on the left of the screen.

For XSEDE Resources there should always be a 1 to 1 relationship between Base Resource and a Specific resource. For example for PSC Bridges there are 4 Base Resources defined. One each for Regular Memory, Large Memory, GPU, Storage. Any resource that will be separately allocated in XSEDE must have its own Base Resource for various tools in XSEDE to function correctly.

The four specific resource types each have distinct fields. The fields all have tooltip text to help explain what they are. For complex resources with multiple node types do your best to enter data into fields such as cores per node. RDR does not support having more than one value for these fields for one resource. It is most important to explain the complexities of the resource in the appropriate description fields.

## Allocations

After a specific resource has been added you can go to the edit page for the Specific Resource to enter / edit Allocations info. The link can be found in the menu on the left of the screen



The allocations info that can be edited is show in the screenshot below

Data Sections

Resource

**Allocations**

XSEDE Accounting

**Edit PSC Regular Memory (Bridges) Allocations Info**

The XTRAS Allocation System is automatically updated with changes made here. If you are not sure what you need please contact the allocations manager for your project (XSEDE,NCAR, etc)

**XTRAS Name**

**Allocable Resource Type**

**Unit Type**

**Dollar Value**

**Allocations Description**

1 Service Unit = 1 Core Hour

[Update Allocations Info](#)

**Allowed Actions by Allocation Type**

Below are the actions that will currently be allowed on this resource by XTRAS for each allocation type. Clicking the Edit or Add link will also allow editing more detailed information.

Project Affiliation	Allocation Type	Modify	Allowed Actions
XSEDE	Campus Champions	<a href="#" style="color: #007bff;">Edit</a>	All Actions Allowed
XSEDE	Discretionary	<a href="#" style="color: #007bff;">Edit</a>	All Actions Allowed
XSEDE	Educational	<a href="#" style="color: #007bff;">Edit</a>	All Actions Allowed
XSEDE	Research	<a href="#" style="color: #007bff;">Edit</a>	All Actions Allowed
XSEDE	Staff	<a href="#" style="color: #007bff;">Add</a>	None Specified
XSEDE	Startup	<a href="#" style="color: #007bff;">Edit</a>	All Actions Allowed
XSEDE	XSEDE2 Staff Allocations	<a href="#" style="color: #007bff;">Edit</a>	All Actions Allowed
XSEDE	XSEDE Campus SSO Integration	<a href="#" style="color: #007bff;">Add</a>	None Specified

Some details from this form

- The XRAS Name is the resource name that will be displayed to users when requesting an allocation on the resource via the XSEDE User Portal or other XRAS Allocation Submission Client for non XSEDE allocations processes. It is best to keep this name consistent with other resources in the same allocations process
  - XSEDE Example: PSC Regular Memory (Bridges)
- For most XSEDE Resources the Unit Type is Service Units
- Dollar Value is the dollar value for one unit of the resource
- Allocations Description can give special notes about allocations on the resource

### Allowed Actions By Allocation Type

In the Allowed Actions By Allocation Type section you can view which Allocation Actions are allowed by the type of Allocation. The current actions for XSEDE are New, Renewal, Supplement, Transfer, Extension, and Appeal. By clicking add or edit you can change which actions are available for the resource for a type of Allocations.

**Edit Compute Sub-Resource: PSC Regular Memory (Bridges) - XSEDE Campus Champions Allocation Type Info**

Allowed Actions: All Actions Allowed

Default Allocation Amount:

Minimum Allocation Amount:

Maximum Allocation Amount:

Comments:

Relative Order:

Required Resource	Begin Date	End Date
PSC Storage (Bridges Pylon)	12/18/2015	mm/dd/yyyy
<input type="text"/>	mm/dd/yyyy	mm/dd/yyyy

[Update Allocation Type Info](#)

Form notes:

- The maximum, minimum, minimum, and default amounts are not currently enforced by the XRAS allocation system
- Relative Order should be used by resource administrators who control an entire allocations process such as the NCAR allocation process can set the order resources appear in the NCAR allocations submission client application. For XSEDE leave this blank
- Required Resources



- If Required Resources are defined for a resource at least one of the required resources currently between the Begin and End Date must also be requested when the current resource is requested.
- Take note of 2 way resource requirements
  - A compute resource might require a specific storage resource
    - Stampede Compute requires Ranch Storage
  - The storage resource might require one of many compute resources
    - Ranch Storage requires Stampede Compute or Maverick Compute
  - In this case Stampede should require Ranch, and Ranch should have requirements for Stampede and Maverick.

In the below image you can see for XSEDE allocations how XRAS Name “PSC Regular Memory (Bridges)” is displayed. The allocations description “1 Service Unit = 1 Core Hour” is displayed in the body area of the form under Bridges after Bridges is clicked. The required resources that have not yet been added to the allocations request are displayed in the yellow box.

## Editing Request: [Untitled Request] Advanced

New Submission for XRAC - December 2017

PERSONNEL
TITLE/ABSTRACT
RESOURCES
DOCUMENTS
GRANTS
PUBLICATIONS
SUBMIT

### Specify Resources [Help](#)

Here are the code development support, compute, visualization, and storage resources that are available for this submission opportunity. From the Available Resources list, you can select each resource you want to request and fill out the available related information. To remove a selected resource please click on the highlighted resource name in the list to the left to remove the resource itself from this request. Certain resources have secondary requirements, please make sure to pay attention to those. To assist with resource selection please visit the [XSEDE Resource listing](#) and the [XSEDE Software Search](#).

💡 For additional assistance selecting an appropriate resource please contact the XSEDE Help Desk at [help@xsede.org](mailto:help@xsede.org)

#### Advanced Services

**SGCI**

The Science Gateways Community Institute

**XSEDE Extended Collaborative Support**

#### Bridges PSC Regular Memory

1 Service Unit = 1 Core Hour

In order to request this resource, you must also request one of the following resources:

- [Bridges Pylon PSC Storage](#)

**Amount requested \***

 SUs

**Comments**

Will you use Hadoop? If so please specify estimate of Hadoop nodes needed if possible.

**Please enter your answer below: \***

#### Compute

**Bridges**

PSC Regular Memory

**Bridges GPU**

PSC GPU

**Bridges Large**

PSC Large Memory

**Comet**

SDSC Dell Cluster with Intel Haswell

## XSEDE Accounting Data

If the resource has XSEDE and a project affiliation the edit specific resource page menu will also display an XSEDE Accounting option. Here you can specify the information for the resource needed by the XSEDE Accounting database

The XDCDB Accounting Data is automatically updated with changes made here. If you are not sure what you need please contact help@xsede.org

Accounting Resource Name:

Resource Type:

Accounting Organization:

Resource Code:

POPS Name:

Allocation State:

Activation Start Date:

\*\*\*Activation End Date\*\*\*:

Should this resource be shown as an allocable resource in the XSEDE User Portal?

Conversion Factors

Leave historical data. If the factor has changed for the resource give the existing record an end date and enter the new factor in the empty row.

Conversion	Factor	Begin Date	End Date
<input type="text" value="Teragrid"/>	<input type="text" value="6.185"/>	<input type="text" value="01/01/2016"/>	<input type="text" value="mm/dd/yyyy"/>
Select the Conversion Factor Type.	<input type="text"/>	<input type="text" value="mm/dd/yyyy"/>	<input type="text" value="mm/dd/yyyy"/>

### Form Notes:

- Accounting Resource Name should be the same as the info resource id except with the .org removed from the end. Ie comet.sdsc.xsede
- Accounting Organization is typically the same as the base resource organization. If there are multiple base resource organizations then the accounting organization must be the organization that will handle the AMIE account data processing for the resource
- Resource Code is an all caps code for the Resource. Ie SDSC-COMET
- Allocation State, Activation Start Date, and Activation End Date are extremely important fields. They control when AMIE packets will start and end for the resource. The allocation state should be active and activation end date blank should not be changed until the resource will no longer have XSEDE users because turning the resource off in the accounting database will trigger deactivating all XSEDE projects for the resource.
- Conversion factors determine the transfer rate between resources.
  - The Teragrid Conversion factor is based on original Teragrid DTF resources.
  - Conversion factors should be kept historically. If the factor changes because of hardware upgrades or software optimization give an end date to the previous conversion factor and add another with the new start date.

## SP Resource Dashboard and SP Resource Operational Status Console

For a resource to be displayed in SP Resource Dashboard and SP Resource Operation Status Console

- The Base Resource must have a row with Project Affiliation “XSEDE” and a provider level of XSEDE Level 1, 2, or 3
- The Base Resource must have at least one specific Compute or Storage resource.
- The Base Resource and Specific Resource must have a current status as defined by the Resource Status Dates of at least one of:
  - Friendly
  - Coming Soon
  - Pre-Production
  - Production
  - Post-Production

## Administration Tools

Links to the admin tools to which you have privileges appear in the navigation bar at the top of the screen



### Organization Reps

RDR Admins and Organization Admins can add Organization Reps. Organization Reps have privileges to add and edit resource data for the specified organizations.

### Organization Admins

RDR Admins and Organization Admins can add Organization Admins. Organization Admins have privileges to add Organization Reps for the specified organizations.

### RDR Admins

RDR Admins can add RDR Admins, Organization Admins, and Organization Reps. RDR Admins can add or edit resources for any organization.

### Resource Providers

RDR Admins can specify that an organization is a Resource Provider. If the organization is not found to add please request that the organization be added to the XSEDE accounting database via [help@xsede.org](mailto:help@xsede.org). Until the organization is in the XSEDE accounting database it can not be added as a resource provider. RDR Admins can also upload a logo for all Resource Providers from the Resource Providers Admin page.

Organization Admins can upload a logo for the organizations for which they are an admin from the Resource Providers admin page.

## API

The RDR API is documented at <https://rdr.xsede.org/apipie>. XSEDE Information Services keeps an up to date copy of much of this data and is the correct method for accessing RDR data programmatically for most cases.