ACCESS CyberInfrastructure Description Repository

Quick Start Guide

Logging In

Go to: https://cider.access-ci.org/. You will be required to login using your ACCESS credentials. By default users have access to view resource information.

If you need to add or edit resources in CIDeR, request this access by sending a message via https://support.access-ci.org/open-a-ticket with the organization name that you need permissions to manage resources for.

Getting Started

If you are a new Resource Provider:

If you need to request access to CIDeR, make a request at https://support.access-ci.org/open-a-ticket. If you have access, a good place to start would be to login and view other resources previously added, noting the information provided. Continue on to 'Adding a Resource.'

If you are an existing Resource Provider and adding a new resource:

Follow the instructions for 'Adding a Resource'

If you are an existing Resource Provider and managing an existing resource:

Follow the instructions for 'Viewing Resource Data' where you can filter to the resource you'd like to manage. Continue on to 'Editing Resource Data.'

Viewing Resource Data

- Listing Active or All Resources

At https://cider.access-ci.org/ the default view is a listing of all active resources. To view all resources, including inactive resources, click the "View All Resources" under the navigation bar
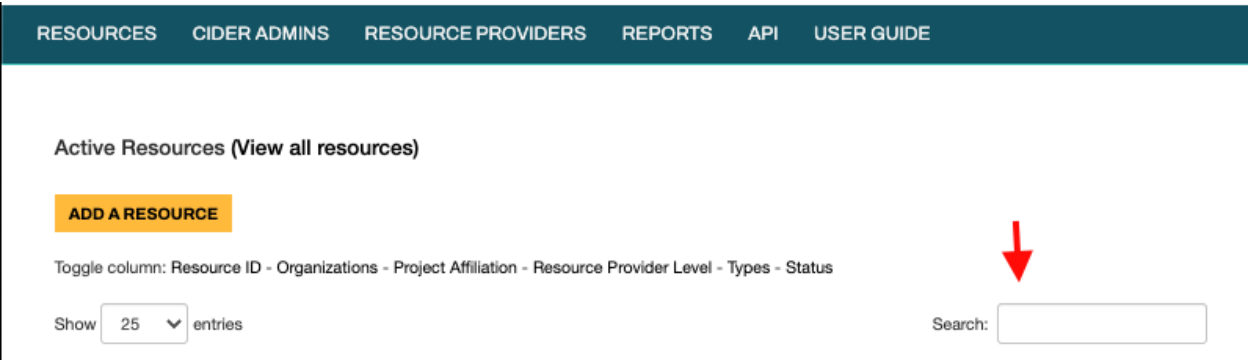

- ● Filtering and Toggling Resource Data

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

- ● Viewing a Resource

To view the resource: click the resource name to view the data or if you want to edit the resource and have sufficient privileges click Edit.

Adding a Resource
- ● Resource

What's a "resource"? — For the purposes of CIDeR, a "resource" is:

- a system, possibly heterogeneous, managed under a common set of policies. In particular, if you are allocating a system (or part of a system) separately, it should be a separate resource.
- This may be best explained by examples:
  - While Bridges-2 may sometimes be considered a single system, because it is allocated as Bridges-2 Extreme Memory, Bridges-2 GPU, Bridges-2 GPU-AI, Bridges-2 Regular Memory, and Bridges-2 Ocean, *each* of those allocated components must be entered as a separate "resource" in CIDeR.
  - In contrast, the Stampede-2 system comprises KNL and Skylake nodes, but it is allocated as one system; therefore, it is entered as a *single resource* with two partitions (a KNL partition and a Skylake partition).
  - If your resource is not being allocated by ACCESS, you should follow the Stampede-2 approach. Do *not* enter your research computing facility or department as a "resource"; each system should be entered separately.

Add a Resource by clicking Add a Resource from the main page of CIDeR
https://cider.access-ci.org/

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Active Resources **(View all resources)**

ADD A RESOURCE ⬅

- For details about what information to add to fields, see the User Guide available within the CIDeR Navigation Bar

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Editing Resource Data

- Resource

- The Edit Resource Form allows editing of the same data as described in the *Add a Resource* section of the manual.
- 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 1) a correction or entering new data without

the resource really changing or 2) the update is denoting an actual change to the resource showing a new distinct state of the resource.**

- Adding and Editing Partitions

    From the edit resource page you can add or edit specific partitions for the resource. Specific resources can be added or edited by clicking in the menu on the left of the screen.

    - ACCESS Resources should always be a 1 to 1 relationship between Resource and a Partition.

        For example for PSC Bridges there are 4 Partitions defined. One each for Regular Memory, Large Memory, GPU, Storage. Any resource that will be separately allocated in ACCESS must have its own Resource for various tools in ACCESS to function correctly.

The four specific partition types each have distinct fields. Please refer to the User Guide for a more detailed description.

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User Manual

Table of Contents

Finding Resource Data

Logging In

Resources can be found on the front page of the CIDeR Application at
https://cider.access-ci.org/. You will be required to login using your ACCESS portal credentials. By default users have access to view resource information. If you do need to add or edit resources in CIDeR, request it by sending a message via
https://support.access-ci.org/open-a-ticket with the organization name that you need permissions to manage resources for.

Listing Active or All Resources

At https://cider.access-ci.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 CIDeR. If you'd like to view all resources, including inactive resources, click the "View All Resources" link near the top of the page.

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

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.
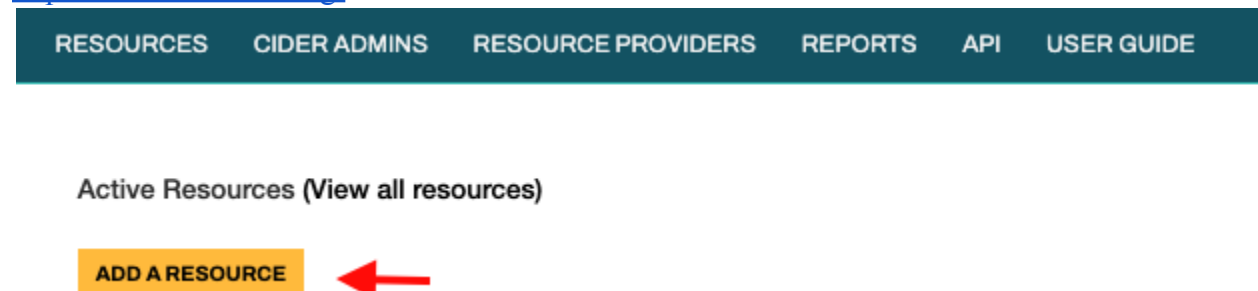
Adding a Resource

Resource

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

What's a "resource"? — For the purposes of CIDeR, a "resource" is:
- a system, possibly heterogeneous, managed under a common set of policies. In particular, if you are allocating a system (or part of a system) separately, it should be a separate resource.
- This may be best explained by examples:
- While Bridges-2 may sometimes be considered a single system, because it is allocated as Bridges-2 Extreme Memory, Bridges-2 GPU, Bridges-2 GPU-AI, Bridges-2 Regular Memory, and Bridges-2 Ocean, *each* of those allocated components must be entered as a separate "resource" in CIDeR.
- In contrast, the Stampede-2 system comprises KNL and Skylake nodes, but it is allocated as one system; therefore, it is entered as a *single resource* with two partitions (a KNL partition and a Skylake partition).
- If your resource is not being allocated by ACCESS, you should follow the Stampede-2 approach. Do *not* enter your research computing facility or department as a "resource"; each system should be entered separately.

Add a Resource by clicking Add a Resource from the main page of CIDeR
https://cider.access-ci.org/

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Active Resources (View all resources)

ADD A RESOURCE

Clicking the Add a Resource button brings up a 2-part 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.

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Add a Resource: Step 1 of 2

* Resource Descriptive Name [_____]

* Short Name [_____]

Global Resource ID [_____]

Global Resource ID is the globally unique user friendly identifier for a resource. It is DNS like and often visible to users when browsing resource information. Something like resource.site.access.org. For ACCESS Resources it should have the form name.site.access.org, for example comet.sdsc.access.org. For non-ACCESS Resources, Level 3 resources, or Campus resources it should have the form name.domain, for example, cheyenne.ncar.ucar.edu or bw.ncsa.uiuc.edu. NOTE: The 'name' portion of the ID should not contain any periods '.'. If your resource is being allocated as multiple resources enter each resource with a hyphenated name. ie bridges-gpu.psc.xsede.org and bridges-large.psc.xsede.org.

* Organizations* [_____]

☐ Is an internal ACCESS resource not visible to users

Resource Project Affiliations*

For XSEDE resources please select the appropriate Provider Level. Other affiliations are used to make the resource available for an XRAS allocations process and do not require the Provider Level

Affiliation*	Provider Level
[▾]	[▾]

Resource Publishing

☐ Check this box to give permission to share a public URL for this resource. If you give CIDeR permission, CIDeR will host a public and persistent URL for this resource. If you give permission and do not provide your own URL, CIDeR will create and host a public page and persistent URL using this resource's data. Such permission is required for ACCESS to include this resource in allocation projects posted to ORCID.

Public URL [_____]

* Resource Type   ○ Compute
               ○ Storage
               ○ Grid
               ○ Online Service
               ○ Other

[CREATE RESOURCE]

Some notes on the Resource form:
- A resource should NOT represent an entire center. Each resource inside the center should be its own resource.
- Resource Descriptive Name is required. For an ACCESS resource the entered name should be consistent with other ACCESS resources "RP 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 an internal ACCESS resource not visible to users" checkbox denotes a resource used by ACCESS staff and services that should not be advertised to 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 ACCESS resource and also using the Blue Waters XRAS allocations system for handling some allocations. Blue Waters needs two rows here. One with Project Affiliation ACCESS and empty Provider Level and one row with Project Affiliation BW and an empty Provider Level
- Global Resource ID is the globally unique user friendly identifier for a resource. It is DNS-like and often visible to users when browsing resource information. This

field is required for all resources publishing information to information services. The domain portion of a Global Resource ID must represent a real resolvable internet domain for the organization operating the resource or of the federation that the resource is affiliated with.

- o For ACCESS Resources this ID should have the form name.site.access-ci.org. For example comet.sdsc.access-ci.org
- o For non-ACCESS Resources, Level 3 resources, or Campus resources it should have the form name.domain, for example, cheyenne.ncar.ucar.edu or bw.ncsa.uiuc.edu
- o *Note the "name" portion of the ID should not contain any periods "."*
- o If an ACCESS resource has multiple separately allocated divisions each should be created as its own resource with a distinct Info Resource ID. For example bridges.psc.access-ci.org, bridges-gpu.psc.access-ci.org where GPU nodes are separately allocated.
- ● 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. *Until appropriate resource status dates are entered the resource will not be visible to users*.
- ● Resource Publishing
    - o Check this box to give permission to share a public URL for this resource. If you give CIDeR permission, CIDeR will host a public and persistent URL for this resource. If you give permission and do not provide your own URL, RDR will create and host a public page and persistent URL using this resource's data. Such permission is required for ACCESS to include this resource in allocation projects posted to ORCID.
        - ▪ ORCID (www.orcid.org) provides a persistent digital identifier that distinguishes a researcher from every other researcher and, through integration in key research workflows such as manuscript and grant submission, supports automated linkages between you and your professional activities ensuring that your work is recognized.
    - o XRAS will publish allocation information on behalf of a researcher if the researcher and service provider for the allocation have both given permission
    - o Check the checkbox to provide CIDeR permission to provide a public URL to XRAS
    - o If you provide a Public URL that is the URL that will be provided to XRAS. If you give permission, but leave Public URL blank a URL to a public RDR generated page for the resource will be saved into the field. A provided URL should be guaranteed not to change.

After Submitting the Resource Form successfully you'll be taken to the Partition page for that resource. The Partition Page is the starting point for adding additional data about the specific partition.

***Please note that if Part 1 of the form is submitted, but then Part 2 is abandoned, progress will be lost and submission will need to be redone.

Most ACCESS services require that part 2 be defined for the resource before they will be displayed, so please continue to the Edit Resource section below.

Editing Resource Data

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 Partition Information

From the edit resource page you can edit partition information for the Resource. For example in the screenshot above the Resource is ACCESS Amazon Web Services (AWS) Platform General

Information which has an Online Service Resource Partition. Partitions can be edited by clicking in the menu on the left of the screen.

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

The four specific partition 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. CIDeR 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.

If your resource is a compute resource supporting gateways you must fill in the fields **Gateway Recommended Use** and **Gateway Support Attributes**

If your resource is a compute resource and has Community Software Area (CSA) support you must **check the box indicating that the resource has Community Software Area Support** and then fill in the **CSA Email Contact** and **CSA Feature User Description** fields that appear when the support checkbox is checked. The description should include the following:

- eligibility requirements for obtaining installation spaces on the resource
- whether or not quotas are enforced
- whether or not installations are backed up
- whether or not installation spaces are accessible thru data transfer services
- how to request that modules be published for an installation

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- any other relevant policies or constraints the RP wishes to advertise to current and prospective installation owners

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

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 ACCESS User Portal or other XRAS Allocation Submission Client for non ACCESS allocations processes. It is best to keep this name consistent with other resources in the same allocations process
  - ACCESS Example: PSC Regular Memory (Bridges)
- For most ACCESS 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 ACCESS 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.

Form notes:
- 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 ACCESS leave this blank
- Required Resources
  o 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.
  o 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 ACCESS 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**

Advanced Services

SGCI The Science Gateways Community Institute

| XSEDE Extended
Collaborative Support |

Compute

Bridges **PSC Regular Memory**

| Bridges GPU
PSC GPU |

| Bridges Large
PSC Large Memory |

| Comet
SDSC Dell Cluster with Intel Haswell Processors |

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: *

ACCESS Accounting Data

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

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RESOURCE: COVID-19 HPC CONSORTIUM / RESOURCE PARTITION: COVID-19 HPC CONSORTIUM / ACCOUNTING INFO

Edit COVID-19 HPC Consortium ACCESS Accounting Info

Data Sections

Resource

Allocations

ACCESS Accounting

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

Global Resource ID	covid19.xsede.xsede.org
Display Name	COVID-19 HPC Consortium
Resource Type	High-performance computing
Accounting Organization	XSEDE
Allocation State	active
Activation Start Date	03/19/2020
Activation End Date	mm/dd/yyyy

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. The source column should be used to explain the source for the factor value and/or how the value was determined.

Factor	Begin Date	End Date	How was the value sourced / determined?
1.0	03/19/2020	mm/dd/yyyy	n/a
	mm/dd/yyyy	mm/dd/yyyy	

UPDATE ACCOUNTING INFO

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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 resource organization. If there are multiple 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 ACCESS users because turning the resource off in the accounting database will trigger deactivating all ACCESS 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.

RP Resource Dashboard and RP Resource Operational Status Console

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

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- The Resource must have a row with Project Affiliation "ACCESS"
- The Resource must have at least one specific Compute or Storage resource.
- The 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

ACCESS Campus SSO

Only a limited amount of data is required for an ACCESS Campus SSO resource.
For the resource
- Descriptive Name
- Organization
- An ACCESS Resource Project Affiliation
- A Production Start Date for Resource Status
- One Specific Resource of the most appropriate type
  - Specific Resource Descriptive Name
  - Resource Status Production Begin Date
  - After creating the specific resource

    - Under Allocations

      - XRAS Name
      - Allocable Resource Type
      - Unit Type should be the Yes,No option

    - After adding the Allocation info in the Allocations section

      - Click Add for ACCESS Campus SSO Integration
        - For Allowed Actions select All Actions Allowed

    - Under ACCESS Accounting

      - Accounting Resource Name should be the same as the Info Resource ID without the final suffix. Ie for bridges.psc.xsede.org the Accounting Resource Name should be bridges.psc.xsede
      - Select the most appropriate Resource Type
      - Select the Accounting Organization
      - Resource code should be an all caps and dashes representation of the resource name. Example PSC-BRIDGES-GPU
      - Set Allocation State to active
      - Set Activation Start Date to today's date

Administration Tools

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

CIDeR Admins

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

Resource Providers

The Resource Providers menu item at the top of the screen is available to CIDeR Admins and some Organization Admins.

CIDeR Admins can specify that an organization is a Resource Provider from this page. If the organization is not found to add please request that the organization be added to the ACCESS accounting database via the form at https://support.access-ci.org/open-a-ticket. Until the organization is in the ACCESS accounting database it can not be added as a service provider. CIDeR Admins can also upload a logo for all Resource Providers from the Resource Providers Admin page.

From this page users can click on Resource Providers for which they have permission to edit the settings. On the Resource Provider page there are two section options: Administrators and Settings.

On the Settings Page users can upload a logo for the organizations for which they are an admin from the Resource Providers admin page; enter ORCID settings; enter a URL for the RP.

On the Administrators page users can be given administrator privileges for the RP. All organization admins for an RP can edit and create resources for the RP. There is also a choice to set whether the user should be able to edit the organization admins and settings. This setting can also be updated later by clicking the current value for "Can Edit Settings?" in the Organization Admins table

API

The CIDeR API is documented at https://cider.access-ci.org/apipie. ACCESS Information Services keeps an up to date copy of much of this data and is the correct method for accessing CIDeR data programmatically for most cases.