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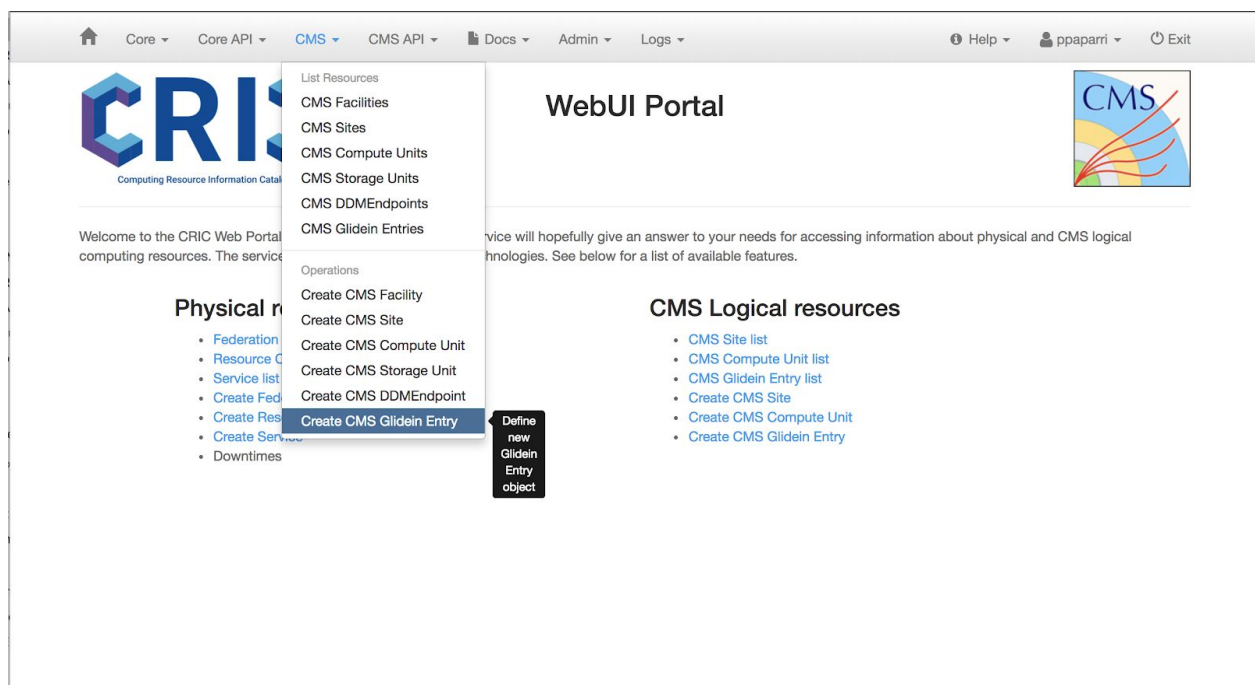
CRIC How-To

How GlideinEntries work in CRIC:

Glidein entries are being grouped inside CRIC. We have observed that many entries share the exact same configuration variables but they use different gatekeepers. Inside CRIC a glidein entry object is storing those common variables and link to multiple core queues.

When GlideinEntries are generated the queues are being used to create queue-specific fields (gatekeeper etc) while the rest of the fields are common for the GlideinEntries group.

If you want to create a brand new configuration you have to go to CMS tab in main menu and click “Create CMS Glidein Entry”



The screenshot displays the CRIC WebUI Portal interface. The top navigation bar includes a home icon, a search icon, and several menu items: Core, Core API, CMS (highlighted), CMS API, Docs, Admin, and Logs. On the right side of the navigation bar, there are links for Help, a user profile (ppaparri), and Exit.

The main content area is titled "WebUI Portal" and features a CMS logo on the right. Below the title, there is a brief introductory text: "This service will hopefully give an answer to your needs for accessing information about physical and CMS logical technologies. See below for a list of available features."

The interface is divided into two main sections: "Physical resources" and "CMS Logical resources".

- Physical resources:** This section includes a list of links: Federation, Resource Catalog, Service list, Create Federation, Create Resource, Create Service, and Downtimes.
- CMS Logical resources:** This section includes a list of links: CMS Site list, CMS Compute Unit list, CMS Glidein Entry list, Create CMS Site, Create CMS Compute Unit, and Create CMS Glidein Entry.

A dropdown menu is open under the "CMS" tab in the navigation bar. It contains two main categories: "List Resources" and "Operations".

- List Resources:** CMS Facilities, CMS Sites, CMS Compute Units, CMS Storage Units, CMS DDMEndpoints, CMS Glidein Entries.
- Operations:** Create CMS Facility, Create CMS Site, Create CMS Compute Unit, Create CMS Storage Unit, Create CMS DDMEndpoint, **Create CMS Glidein Entry** (highlighted).

A tooltip is visible over the "Create CMS Glidein Entry" option, containing the text: "Define new Glidein Entry object".

In order to have actual glidein entries generated you will need to attach some queues to this object:

Dependencies from Core Resources

Queues: ?

Extra Fields

Vo name: ?

Source XML File: ?

- ce02.lhep.unibe.ch:2811/CLUSTER
- ce01.lhep.unibe.ch:2811/CLUSTER
- arc-ce02.gridpp.rl.ac.uk:2811/EL7
- arc-ce01.gridpp.rl.ac.uk:2811/EL7
- ce01.atlas.cuhk.edu.hk:2811/HK-LCG2_ARC
- ce01.atlas.cuhk.edu.hk:2811/HK-LCG2_MCORE_ARC

Check input data

If on the other hand you want to add a glidein entry to an existing configuration you will need to edit the configuration and attach a new queue to it.

You can either list all configurations from CMS tab in main menu clicking CMS Glidein Entries

Core Core API CMS CMS API Docs Admin Logs Help ppaparri Exit

CRIC Computing Resource Information Catalog

WebUI Portal

CMS

Hopefully give an answer to your needs for accessing information about physical and CMS logical computing resources. The service... See below for a list of available features.

Physical resources

- Federation
- Resource C
- Service list
- Create Fed
- Create Res
- Create Ser
- Downtimes

CMS Logical resources

- CMS Site list
- CMS Compute Unit list
- CMS Glidein Entry list
- Create CMS Site
- Create CMS Compute Unit
- Create CMS Storage Unit
- Create CMS Glidein Entry

Or alternatively you can browse to a compute unit that contains entries with the configuration you want, click on the entry to go to it's configuration detailed page and click the edit button.

CMS Compute Unit CU_T1_ES_PIC

General Information

Name CU_T1_ES_PIC
Last modification time 2018-04-20 14:14:51,181438
CMS Experiment Site [T1_ES_PIC](#)

Capacity Information

Pledge Fraction 1.0
Pledged to CMS 27540.0 cores
Potential max 0 cores
CPU bound max 0 cores
I/O bound max 0 cores

Edit

Glidein Entries



Name	keeper	ref	gridtype	GLIDEIN_CMSSite	GLIDEIN_CPUS	GLIDEIN_Country	GLIDEIN_I
CMS_T1_ES_PIC_ce05.pic.as.8443/cream-pbs-mcores_s8	ce05.pic.as.8443/cream-pbs-mcores_s8	WholeNodes = False; HostNumber = 1; CPUNumber = 8	cream	T1_ES_PIC	8	Spain	20040
CMS_T1_ES_PIC_ce07.pic.as.8443/cream-pbs-mcores_s8	ce07.pic.as.8443/cream-pbs-mcores_s8	WholeNodes = False; HostNumber = 1; CPUNumber = 8	cream	T1_ES_PIC	8	Spain	20040

CMS Glidein Entry CMSHTPC_T1_ES_PIC_ce07-multicore

Deployed at
State ACTIVE
State Comment
State Updated None
Status production
Support Level 24/7 support for critical services
Corepower 0.0
Administrator
Technical
Last Modified April 20, 2018, 2:14 p.m.



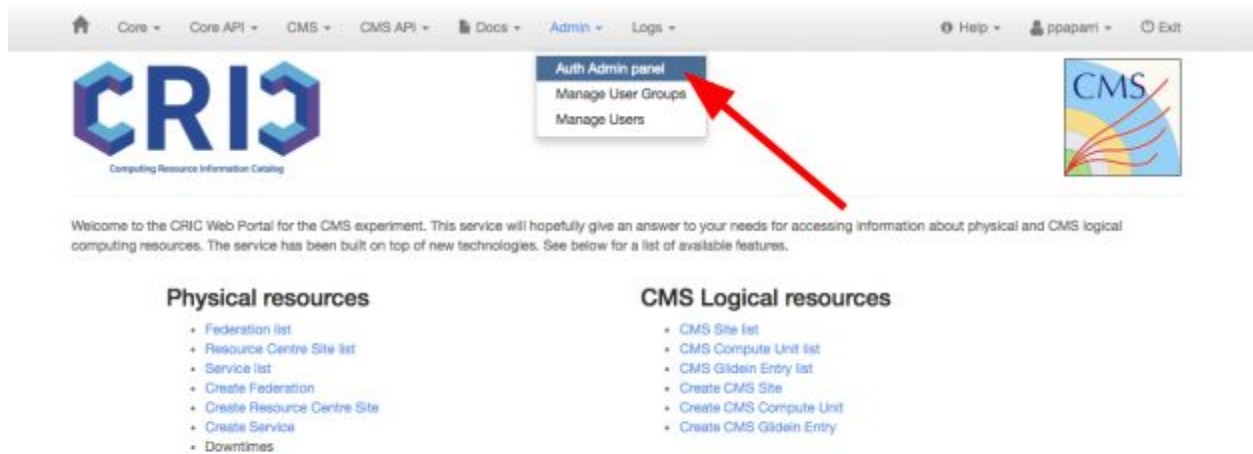
Edit

Common GlideinWMS Attributes

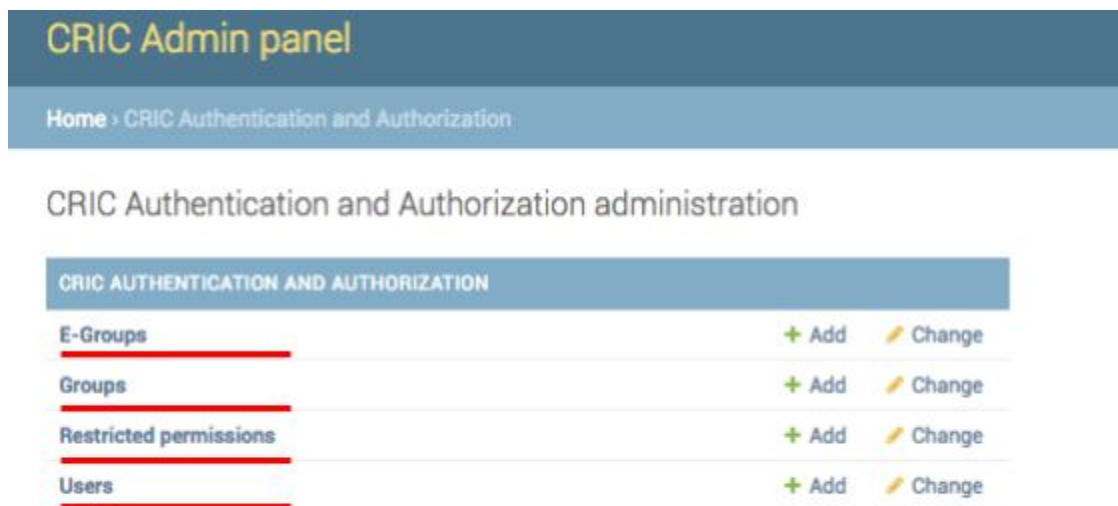
Show/Hide

How Authentication Authorization Works

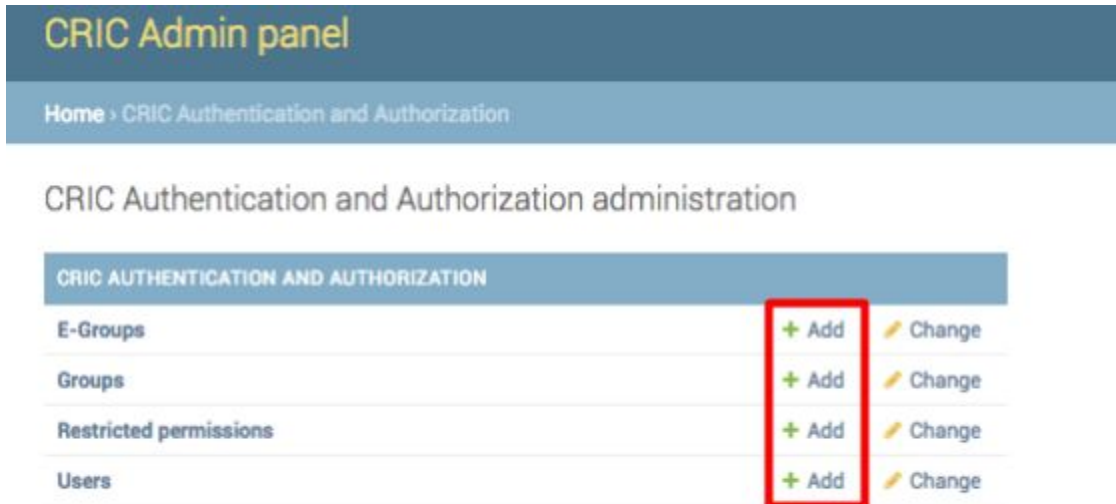
How to access and use Authentication/Authorization (A&A) admin panel
Clicking the `Auth Admin panel` option on the `Admin` tab of the main menu will open A&A admin panel.



From there you can edit, delete or create defined e-groups, groups, permissions and users
In order to see the list egroups, groups, permissions, or users click the corresponding area:



In order to add any of these objects either click the add button on the A&A admin panel



The image shows the 'CRIC Admin panel' header in yellow text on a dark blue background. Below it is a breadcrumb trail: 'Home > CRIC Authentication and Authorization'. The main heading is 'CRIC Authentication and Authorization administration'. A table lists four categories: 'E-Groups', 'Groups', 'Restricted permissions', and 'Users'. Each category has a '+ Add' button (highlighted with a red box) and a 'Change' button with a pencil icon.

CRIC AUTHENTICATION AND AUTHORIZATION	
E-Groups	+ Add Change
Groups	+ Add Change
Restricted permissions	+ Add Change
Users	+ Add Change

Or click the add button inside the list view of these objects:



The image shows the 'CRIC Admin panel' header with 'WELCOME, NAME VIEW SITE / LOG OUT' on the right. The breadcrumb trail is 'Home > CRIC Authentication and Authorization > E-Groups'. Below the header, it says 'Select E-Group to change'. There is an 'Add E-Group' button on the right. Below that is a table with columns: 'E-GROUP NAME', 'DETAILS (URL)', and 'LAST MODIFICATION DATE'. A red arrow points to the 'Add E-Group' button.

E-GROUP NAME	DETAILS (URL)	LAST MODIFICATION DATE
cris-devs	https://e-groups.com/e/e-groups/igroup.do?groupname=cris-devs	May 8, 2016, 11:32 a.m.

1 E-Group

How groups work

Clicking on 'Groups' from the A&A admin panel will get you to the list of all cric groups.

There are two kinds of groups (local & sso) for every group.

The sso group is where you can map cern egroups to cric-groups.

When somebody logs in CRIC he will be assigned to cric-groups based on this mapping.

The local group is where you can add additional users to the cric groups (which they don't need to be a member of any egroups) and you can also modify the permissions of the group if needed.

How to add/remove an egroup to an existing cric-group

In order to associate an egroup to a cric-group you need to define a new egroup inside cric (giving the exact same name of the cern egroup).

This can be done through A&A admin panel. Clicking on E-Groups will get you to the list of defined egroups where you can add new ones.

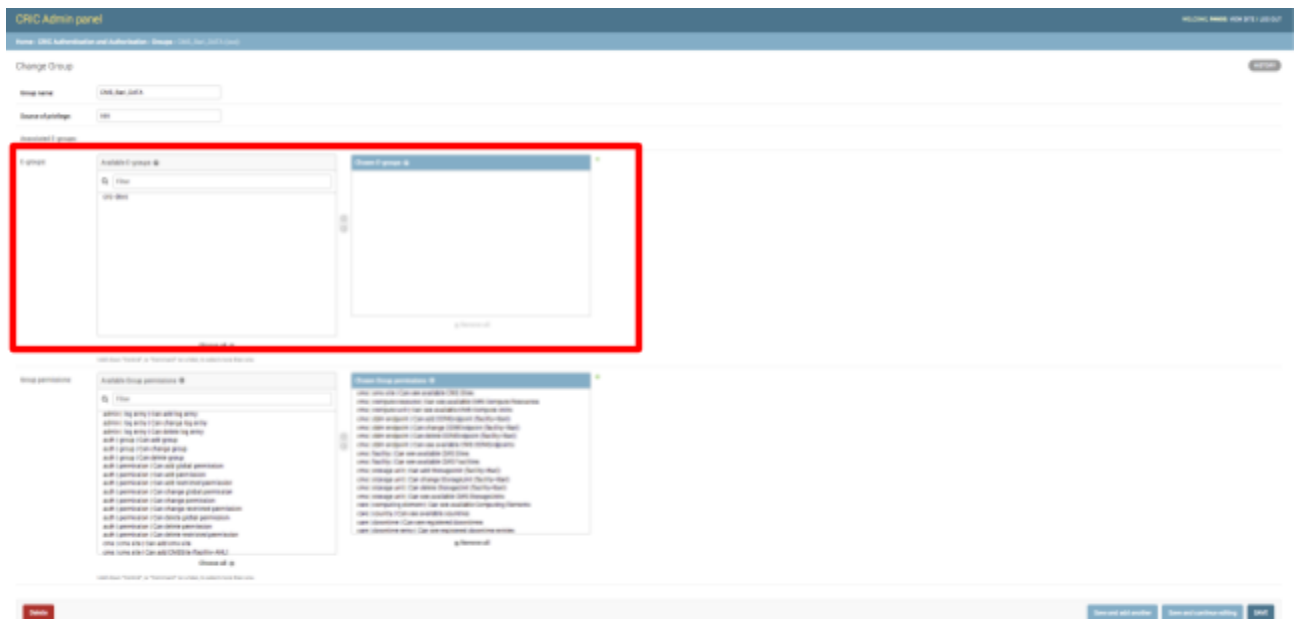
There is also an easier way to define an egroup directly from the group editin form.

Here is how to do that:

From A&A admin panel click on groups and find the sso group you want to modify (in case you mistakenly click the local group you will see that you cannot associate any egroups anyways).

Click it to get to the edit page.

There you will see the E-Groups area.



You can double click an egroup from the list of available e-groups to assign it to the cric-group you are editing.

You can also double click an egroup from the selected egroups to remove it.

Finally to define a new egroup you can click the plus button near the Chosen E-Groups panel:

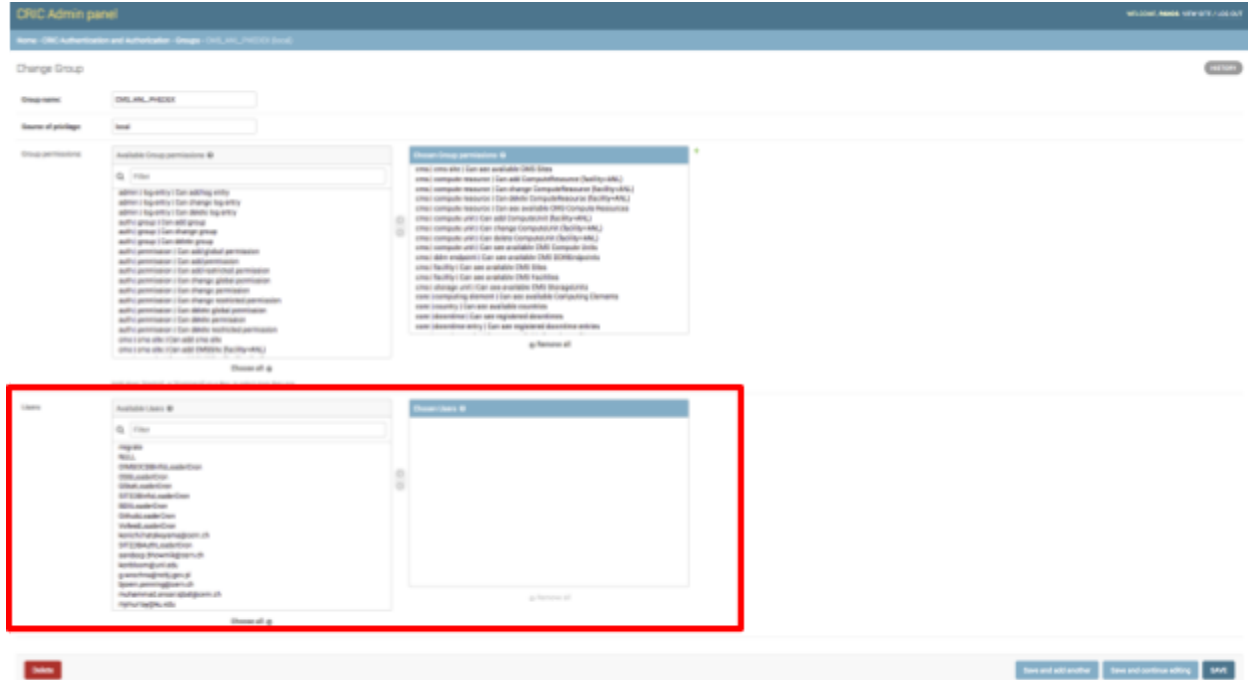


Clicking the save button will save the changes.

How to associate/remove a specific user to a cric-group

From A&A admin panel click on groups and find the local group you want to modify (in case you mistakenly click the sso group you will see that you cannot associate any users anyways). Click it to get to the edit page.

There you will see the Users area:



You can double click a user from the list of available users to assign him or her to the cric-group you are editing. You can also double click a user from the chosen users to remove him or her from the group.

Be aware that if you remove a user from the group but he/she is a member of an egroup associated with the corresponding sso group he/she will not lose any of the privileges of this cric-group. These local groups is essentially the way to white-list people who are not part of the associated egroups giving them the same privileges without having to add them on the egroup.

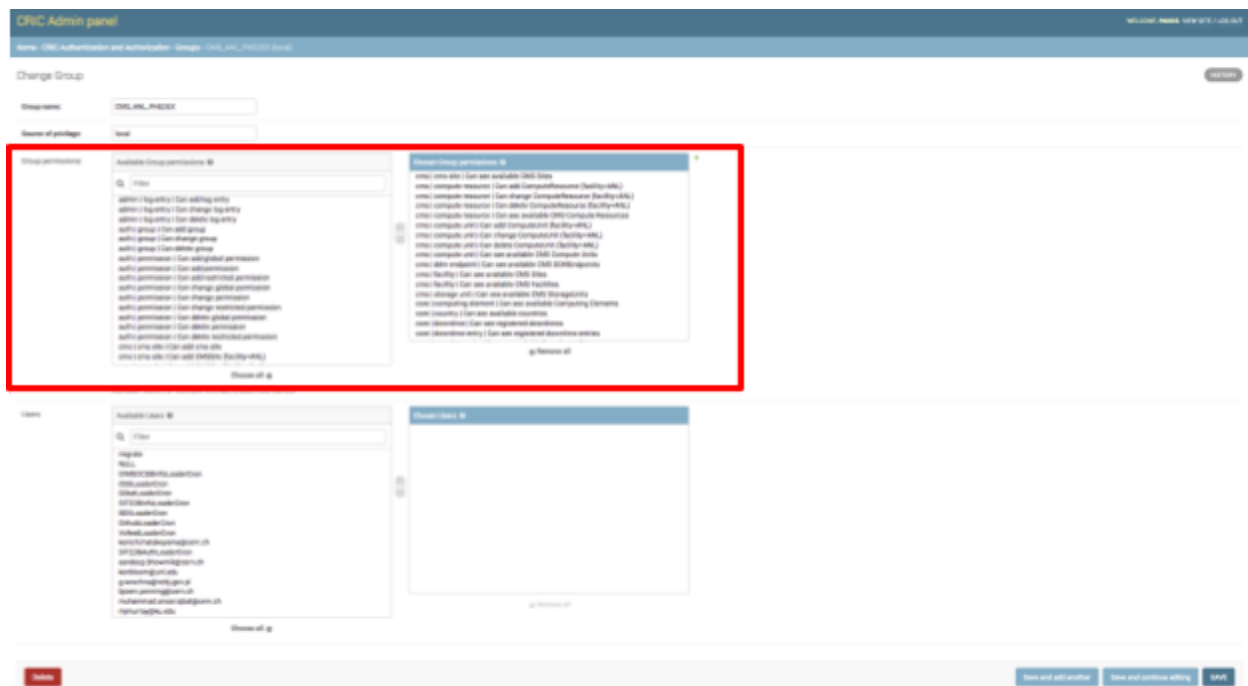
After you are done click `Save` to save the changes.

How to associate/remove permissions to a cric-group

In order to assign a permission to a group this permissions needs to be created from the Permissions area of the A&A admin panel. In order to do that see the corresponding part of these docs.

From A&A admin panel click on groups and find the local group you want to modify (in case you mistakenly click the sso group you will see that you cannot associate any permissions anyways). Click it to get to the edit page.

There you will see the Group Permissions area:



You can double click a permission from the list of available permissions to assign it to the cric-group you are editing. You can also double click a permission from the chosen permissions to remove it from the group.

After you are done click `Save` to save the changes.

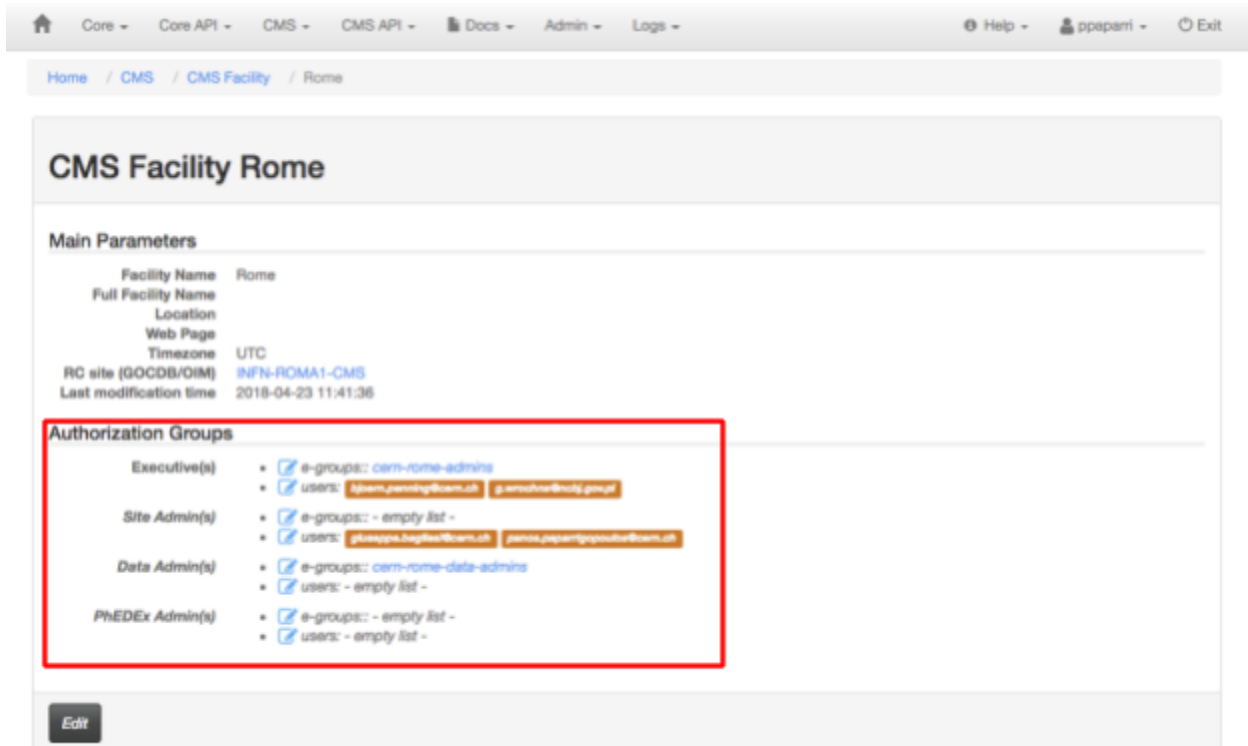
How to create the 4 cric-groups needed for a facility

These groups are automatically created every time a facility is created. They are by default empty and they have the necessary permissions pre assigned.

What you need to do is associate egroups or users to them editing the sso or the local group respectively (based on the instructions of these document).

How to see groups/users associated with a specific Facility

Going on the facility detailed view you can see an overview of egroups and users associated with the groups of this facility:



The screenshot shows the configuration page for 'CMS Facility Rome'. The page has a navigation bar at the top with links for Home, CMS, CMS Facility, and Rome. Below the navigation bar, the title 'CMS Facility Rome' is displayed. Underneath, there is a section for 'Main Parameters' with the following details:

- Facility Name: Rome
- Full Facility Name: Rome
- Location: Rome
- Web Page: Rome
- Timezone: UTC
- RC site (GOCDB/OIM): INFN-ROMA1-CMS
- Last modification time: 2018-04-23 11:41:36

The 'Authorization Groups' section is highlighted with a red box and contains the following information:

- Executive(s)**
 - e-groups: [csm-rome-admins](#)
 - users: [gdem.pasini@com.it](#) [g.rosolva@ndj.gssi.it](#)
- Site Admin(s)**
 - e-groups: - empty list -
 - users: [g.mazza@legno@com.it](#) [p.mos.papari@proton@com.it](#)
- Data Admin(s)**
 - e-groups: [csm-rome-data-admins](#)
 - users: - empty list -
- PhEDEx Admin(s)**
 - e-groups: - empty list -
 - users: - empty list -

An 'Edit' button is located at the bottom left of the page.

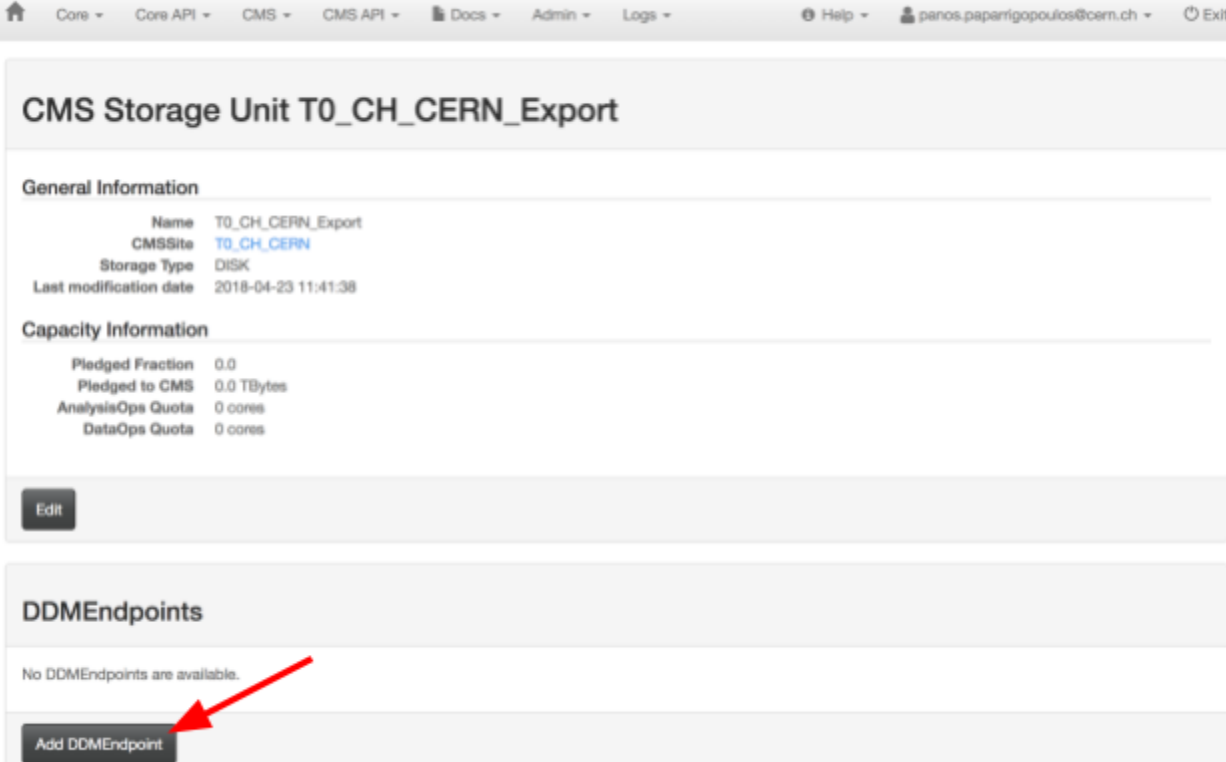
How CMS Storage Works

How to access or add a Storage Unit

From the CMS tab in the main menu you can select the option to see all Storage Units or create a new one

How to add a Resource (DDMEndpoint) to a Storage Unit

If you go to the list of Storage Units and click to one of them you will get to the detailed page of the Storage Unit. From there you have the option to add a new Resource by clicking the `Add DDMEndpoint` button.



The screenshot shows a web interface for a CMS Storage Unit. The breadcrumb navigation at the top includes: Home, Core, Core API, CMS, CMS API, Docs, Admin, Logs, Help, panos.paparrigopoulos@cern.ch, and Exit. The main title is "CMS Storage Unit T0_CH_CERN_Export".

General Information

Name	T0_CH_CERN_Export
CMSite	T0_CH_CERN
Storage Type	DISK
Last modification date	2018-04-23 11:41:38

Capacity Information

Pledged Fraction	0.0
Pledged to CMS	0.0 TBytes
AnalysisOps Quota	0 cores
DataOps Quota	0 cores

An "Edit" button is located below the capacity information.

DDMEndpoints

No DDMEndpoints are available.

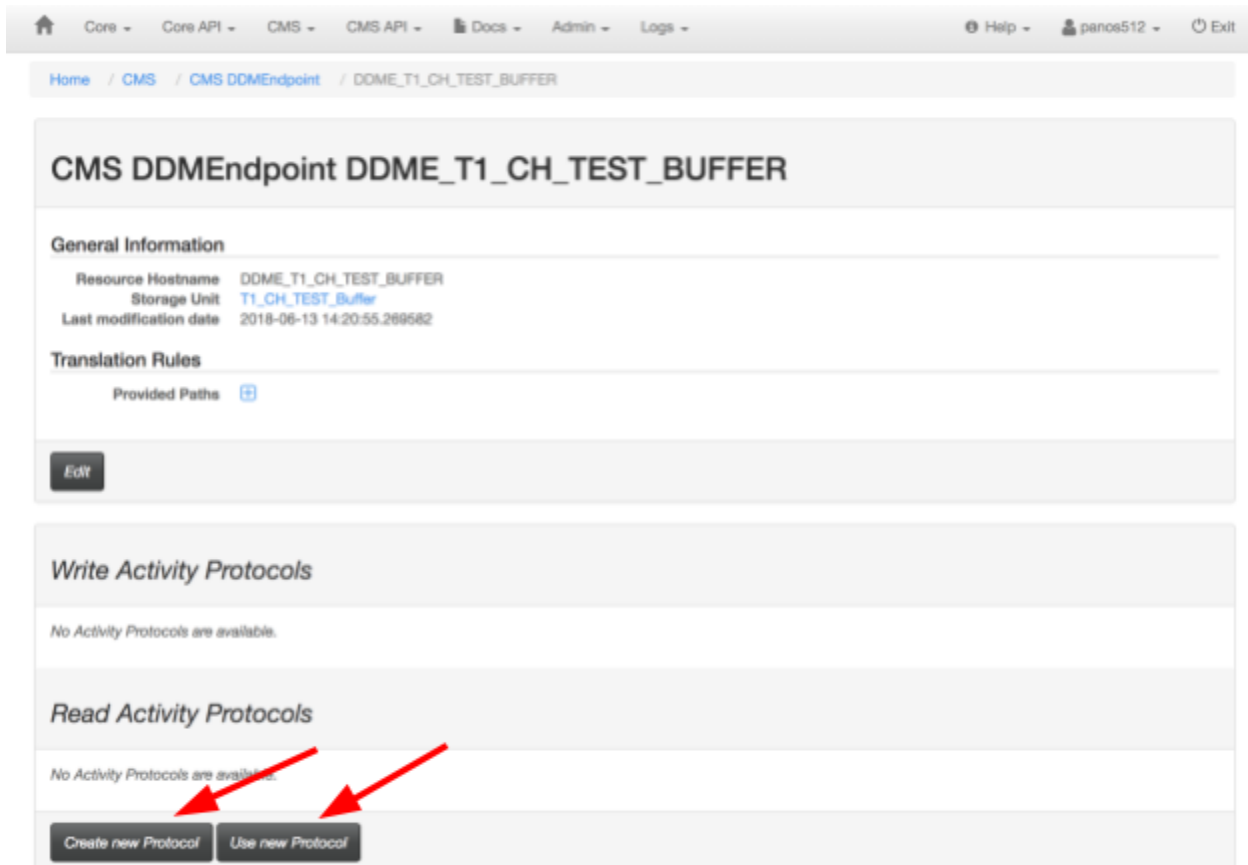
An "Add DDMEndpoint" button is located at the bottom of the DDMEndpoints section, with a red arrow pointing to it.

From the creation form you can add a name to the new Resource and select the storage technology (DPM, EOS or dCache).

When you create the new DDMEndpoint you will be redirected to it's detailed page.

How to add a protocol in a DDMEndpoint

In order to declare the usage of a protocol in a DDMEndpoint you have to first create it. From the DDMEndpoint detailed page you can create a new protocol by clicking the `Create new protocol` button or you can connect an existing protocol by clicking the `Use new protocol` button.



The screenshot displays the configuration page for the CMS DDMEndpoint `DDME_T1_CH_TEST_BUFFER`. The page includes a navigation bar at the top with links for Home, CMS, CMS DDMEndpoint, and DDME_T1_CH_TEST_BUFFER. The main content area is divided into several sections:

- General Information:** A table showing details such as Resource Hostname (`DDME_T1_CH_TEST_BUFFER`), Storage Unit (`T1_CH_TEST_Buffer`), and Last modification date (`2018-06-13 14:20:55.269582`).
- Translation Rules:** A section with a 'Provided Paths' field and a plus icon.
- Edit:** A button to edit the configuration.
- Write Activity Protocols:** A section with the message 'No Activity Protocols are available.'
- Read Activity Protocols:** A section with the message 'No Activity Protocols are available.'
- Buttons:** At the bottom, there are two buttons: 'Create new Protocol' and 'Use new Protocol'. Red arrows point to these buttons.

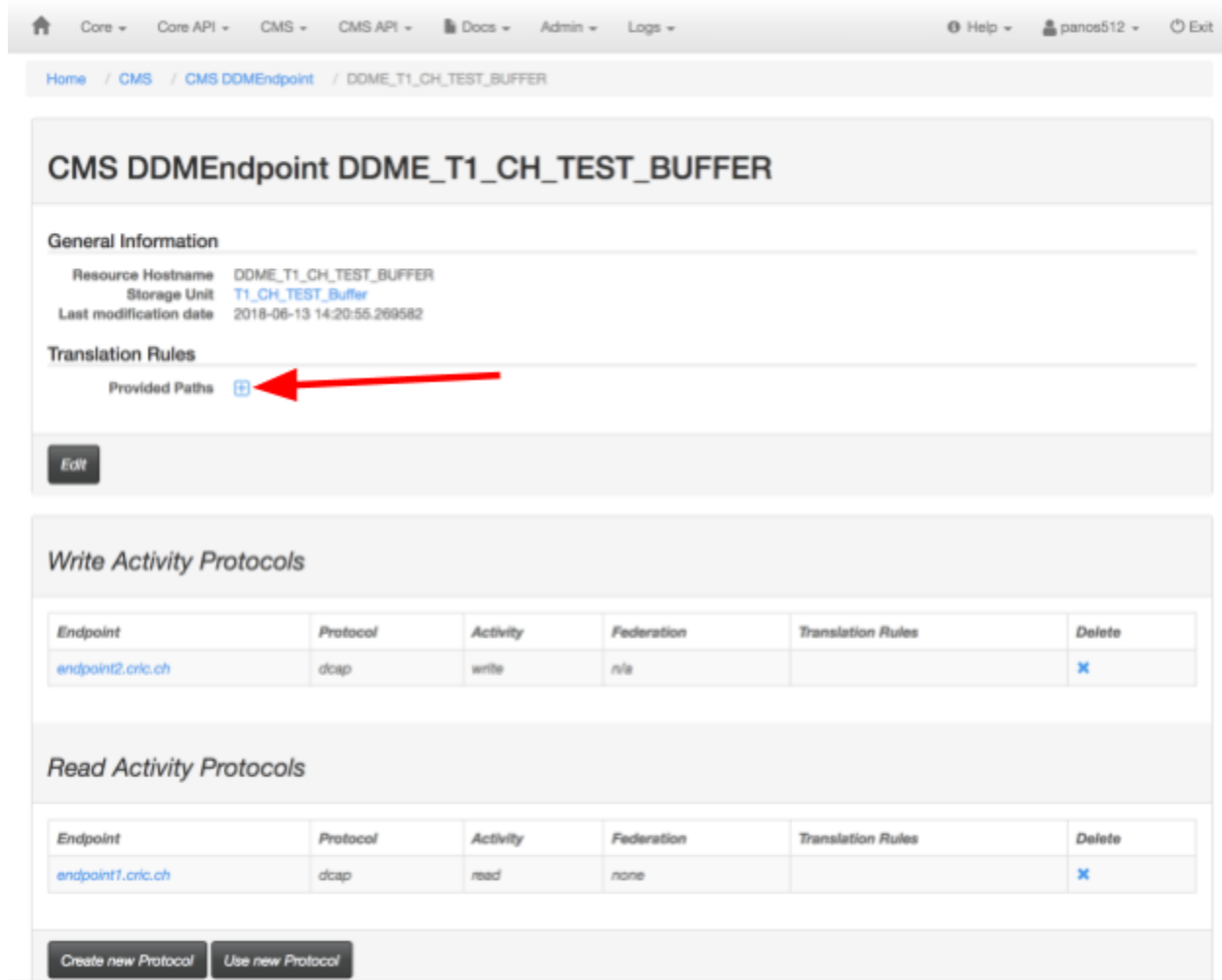
How to remove a protocol from a DDMEndpoint

From the detailed view of the DDMEndpoint you can see the list of all the protocol that this DDMEndpoint is using (and also the activity this protocol is meant for). From that list you have the option to delete any protocol by clicking the `x` icon.

This will not remove the protocol for the system but it will remove the association of the protocol with this specific DDMEndpoint for the specified activity ('read' or 'write' currently).

How to add a translation rule for the protocols of a ddmendpoint

From the detailed view of a DDMendpoint you can add a new translation rule for the protocols. By clicking the `+` button on the `provided paths` section of the DDMEndpoint details




Home / CMS / CMS DDMEndpoint / DDME_T1_CH_TEST_BUFFER

CMS DDMEndpoint DDME_T1_CH_TEST_BUFFER

General Information

Resource Hostname	DDME_T1_CH_TEST_BUFFER
Storage Unit	T1_CH_TEST_Buffer
Last modification date	2018-06-13 14:20:55.269582

Translation Rules

Provided Paths 

[Edit](#)

Write Activity Protocols

Endpoint	Protocol	Activity	Federation	Translation Rules	Delete
endpoint2.cric.ch	dcap	write	none		X

Read Activity Protocols

Endpoint	Protocol	Activity	Federation	Translation Rules	Delete
endpoint1.cric.ch	dcap	read	none		X

[Create new Protocol](#) [Use new Protocol](#)

After adding a provided path the option to edit result paths for all protocols will appear:

The screenshot displays the configuration page for the CMS DDMEndpoint DDME_T1_CH_TEST_BUFFER. The page is divided into several sections:

- General Information:** Shows Resource Hostname (DDME_T1_CH_TEST_BUFFER), Storage Unit (T1_CH_TEST_Buffer), and Last modification date (2018-06-13 14:20:55.269582).
- Translation Rules:** Shows a single provided path: (1) /provided_path* with edit and delete icons.
- Write Activity Protocols:** A table with columns: Endpoint, Protocol, Activity, Federation, Translation Rules, and Delete. A red arrow points to the Translation Rules column for the endpoint endpoint2.cric.ch.
- Read Activity Protocols:** A table with columns: Endpoint, Protocol, Activity, Federation, Translation Rules, and Delete. A red arrow points to the Translation Rules column for the endpoint endpoint1.cric.ch.

Endpoint	Protocol	Activity	Federation	Translation Rules	Delete
endpoint2.cric.ch	dcap	write	n/a	(1) ✎	✕

Endpoint	Protocol	Activity	Federation	Translation Rules	Delete
endpoint1.cric.ch	dcap	read	none	(1) ✎	✕

Buttons at the bottom: Create new Protocol, Use new Protocol.

How to allow a site to use a StorageUnit

StorageUnits can be used from sites that are being hosted in the same Facility. In order to allow a site to use a StorageUnit of another facility you need to explicitly specify that. You can click the "Allow a site" button from the detailed view of a StorageUnit to add a cmssite to the allowed_sites list. This will redirect you to the edit form of the StorageUnit pre-selecting the related field. After that you can edit the CMSSite and add the storage unit in the `used storage units` field.

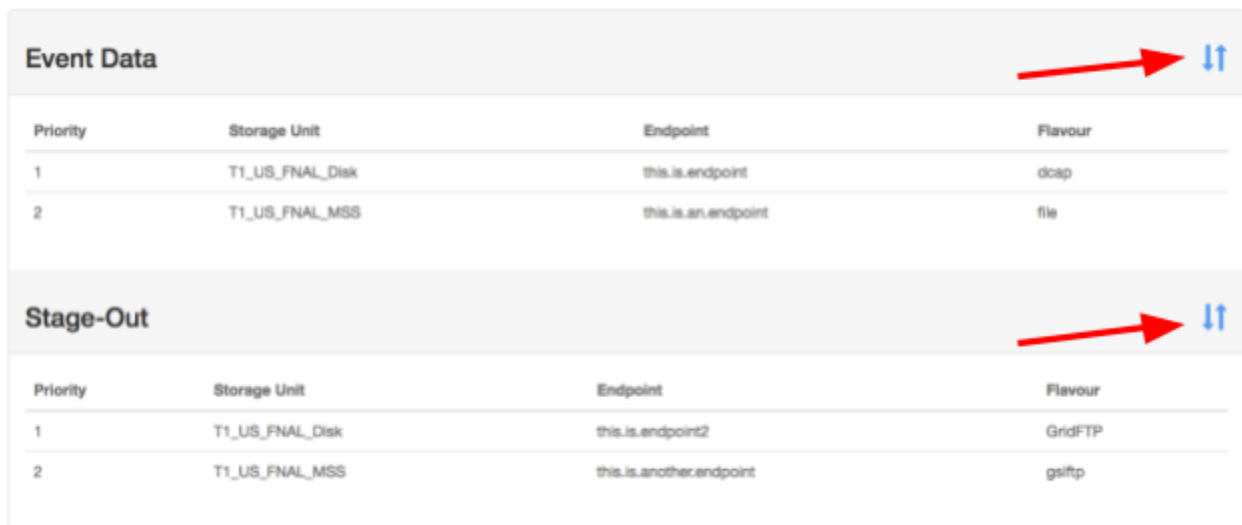
How CMS Sites Work

How to access or add a new CMSSite

From the CMS tab in the main menu you can select the option to see all CMSSites or create a new one

How to add Storage Units to the site and manage their protocols

Clicking “Link a Storage Unit” button from the CMSSite detailed view will redirect you to the storage units field of the edit form of this CMSSite. There you can link StorageUnits to the site. Only storage units of the same Facility of storage units that specifically allow this site to use them will be available for linking. Once linked the protocols of all the DDMEndpoints of this StorageUnit will be available to rearrange on the CMSSite detail view:



Event Data			
Priority	Storage Unit	Endpoint	Flavour
1	T1_US_FNAL_Disk	this.is.endpoint	dcap
2	T1_US_FNAL_MSS	this.is.an.endpoint	file

Stage-Out			
Priority	Storage Unit	Endpoint	Flavour
1	T1_US_FNAL_Disk	this.is.endpoint2	GridFTP
2	T1_US_FNAL_MSS	this.is.another.endpoint	gsiftp

Clicking the re-arrange button will bring you to the interface of the image below in which you will be able to rearrange all the protocols by clicking and dragging them.

Re-arrange protocols

Available Protocols:

⇅ this.is.another.endpoint (gsiftp)

⇅ this.is.endpoint2 (GridFTP)

Submit

How to add a new frontier squid to a CMSSite

In the CMSSite detailed page you will find the DB Frontier Config panel.

There you can click the “Attach Frontier Proxy” button to go to the linking interface.

There you can select one of the available endpoints or continue typing a new endpoint and hit enter to add it. (The changes will be saved on submit to avoid adding services by mistake)

How CMS Facilities Work

How to access or add a Facility

From the CMS tab in the main menu you can select the option to see all Facilities or create a new one. Clicking to a facility will get you to the facility detailed page

How to manage Facility Resources

From the facility detailed page you can manage the Resources this facility is hosting. Clicking the + button will get you to the linking form. Be aware that this linking in practice changes the facility pointer of the selected object to the current facility. This is a feature to avoid having to navigate through multiple object and change the facility pointers one by one.

This doesn't apply for Backup Squids and Frontiers for which from the linking interface you can select one of the available endpoints or continue typing a new endpoint and hit enter to add it. (The changes will be saved on submit to avoid adding services by mistake)

You can also deattach any resources from the facility clicking the X button after every service.

How to manage Facility Related User groups

From the facility page you can have an overview of all the groups related to this Facility. Clicking on the edit button of each button will redirect you to the admin panel, and specifically to the edit form of the group you selected. You can refer to "How Authentication Authorization Works" section of this document for more information regarding A&A.