

CRIC A&A



The CRIC team
(presented by Aresh Vedae)

What is CRIC?

Computing Resource Information Catalog (CRIC) is the AGIS evolution:

- Information system non experiment specific but still experiment oriented, fitting the needs of multiple Collaborations, and providing:
 - Proper description of physical Computing/Storage resources and services.
 - Proper description of Experiment's Computing Models: its topology and implication to high level applications.
- Used by different categories of users: VO users, VO admins, Site admins etc.
 - With different privileges in accessing/manipulating the information.
 - And not necessarily registered in CERN DB.

CRIC Authentication & Authorization

The system supports several **Authentication** methods respect to Different **Authorization sources** to access WebUI pages or apply restricted actions

password-based authentication
(Local permissions)

Password based authorization (local)

Username:

Username

Password:

Password

Remember me

Sign In

SSL certificate authentication
(Local permissions)

Authenticate via SSL by approved certificate (sslauth, local)



Sign In

CERN Single Sign-On, Federated Identity
(SSO, external source of user privileges)

CERN Single-Sign on Authentication (SSO)



Shibboleth.

Sign In

SSL-based Authorization respect to user privileges defined in VOMS

The Virtual Organization Membership Service (VOMS)



Sign In

CRIC Access control & Info Protection

- Permission assignment:
 - List of specific Permissions directly associated to Users or **CRIC Groups/Roles** based on access policies
 - Each Experiment can configure its own data access policies
- Several types of permissions:
 - **Model permissions** (e.g. “can update all Site instances”)
 - **Instance specific permissions** (“can update only given site CERN-PROD” or “all sites from CH country”)
 - **Global permissions** (“can modify sensitive info in given form”)



CRIC Auth&Auth

- Flexible and extensible
 - Plugin based approach: CRIC "just" needs reliable modules to fetch info about users, also relevant for authorization, (via e.g. API/service/whatever) then easily plug them into the system.
- Use cases
 - Splitting and combining different authentication methods with different authorization policies via internal configuration (e.g. edit storage or site info, core-specific or VO-specific).
 - Offering VOs other use cases, internal for them: e.g. list of all CMS users and all the groups they belong to.
- Challenge:
 - to map users from different auth methods into a single CRIC user.

Useful links

- Gitlab: <https://gitlab.cern.ch/cric/cric>
- CRIC env setup “how-to”:
<https://twiki.cern.ch/twiki/bin/view/LCG/InstructionsToCreateAVMRRunningTheAuthentication>
- Jira tickets: <https://its.cern.ch/jira/projects/CRIC/issues/>
- More about CRIC:
 - https://docs.google.com/presentation/d/1uYwg4ZVb42ZfqBFshD-wFwM31X_mwuotqsm5VfJXro/edit#slide=id.g1d9afd71d9_1_317 (27.04.17)
 - https://docs.google.com/presentation/d/1O7vxGzuYKWHm3M8JQSNelS4_XVqkvzblth2IMBNYnNI/edit#slide=id.p25 (26.09.17)