

EIC Coll Tools - Intro

08/14/2024

- Updates and follow up on previous meetings
- Last meeting was on July 10th...

Since last meeting

- Groups, including ePIC organization, have been implemented in the Digital Directory. Still waiting, for full ePIC membership list...
- Requirements from ePIC for Digital Directory have been finally published (08/08): <https://zenodo.org/records/13273309>
- Meeting with JLAB on CoManage/InvenioRDM
- InvenioRDM [v12](#) (Long Term Support Release) has been released (08/01)

ePIC requirements

1

ePIC requirements

1. **Extensibility of attributes:** there needs to be the possibility of adding attributes to objects (e.g. members) as needed, without disruptive or extensive changes to the database schemas and with minimal changes to the interfaces. Equally, there must be a way to *remove* attributes no longer required by the Collaboration. Examples:

In progress



a. ePIC needs information on whether a member belongs to a specific working group (or multiple working groups) at a specific point in time, hence group membership needs to be formalized as an attribute.



b. It must be possible to access whether an individual has a specially defined status e.g. “early career” status, and others



c. ePIC shall maintain its official ePIC *Author List* which will change over time. The list is generated by the *Collaboration Council*, and information contained in it should be reflected in the Collaboration Database. The Collaboration must be able to keep track of who is included in the list, for a specific period in time. Such information may not (and likely should not) be reflected in the Web UI itself and only available through data export (see a note on CLI below)



d. **Members in Good Standing and Institutions in Good Standing:** as is common in many experiments, there shall be criteria defined for declaring individuals and their home institutions as having the “Good Standing” in ePIC, which can be a prerequisite for inclusion in the Author List.



e. **Foreign keys:** in order to assure interoperability of the “phone book” with other databases and systems used in ePIC and elsewhere, there must be a possibility to add “foreign keys” for querying external systems. An example of a foreign key could be the use of an ORCID (or other unique identifiers) which would then be used to query additional community databases.

2. **History:** The Collaboration Database must be capable of producing a “history report” for any of the attributes assigned to entities stored, e.g.

ePIC requirements 2

Who?



a. It must be possible to trace affiliation of a member with his/hers institution(s) over time. History should be preserved - and example of use is that it should be possible to generate author lists from past years or periods.



b. Same for the Author List and "Member in Good Standing" data (see above)



c. For accountability, the history should identify who/whom modified the record and when.



3. **Protection of PII:** ePIC shall abide by all applicable rules and policies regarding the protection of the Personally Identifiable Information (PII). In following this principle, information that is, or can be construed as PII must not be accessible via any open (public) interface.

a. Access to attributes should keep privacy in mind. Not considering service sysadmin access (by default seeing everything) or aggregate information (global pie chart distribution), some attributes may be viewable and accessible by the user only. Attributes may also be made public at the discretion of the member. An example of the former may be non-binary gender information (useful for a demographic / DEI statistics but may not be appropriate for access by any roles). An example of the second may be a phone number, not made public.

b. To achieve this goal, attributes may be private (no access other than the individual), public or have multiple restricted properties (visible to a community manager, visible by the institution's representative, etc ...). In general, the relation between "roles" and access to attributes need to be flexible (to preserve fields considered PII, community administrators may see some but not all). The tool should be flexible enough to accommodate for the suggested use-cases.

c. ePIC requires a reliable and secure way of performing auth/auth to the managerial functions that give personnel access to the PII. The "authorization" part of auth/auth should include "roles" assigned to specific authorized members of the Collaboration

ePIC requirements

3

4. **Collaboration Council (CC):** the ePIC organization has a Collaboration Council, composed of representatives from participating institutions, that makes all major policy decisions within the Collaboration by means of voting and elections. The database needs to keep record of collaborators with the role of representative in the Collaboration Council and the associated voting/election entity. In many/most cases, the voting/election entity will simply be a participating institution and the representative a collaborator at that institution. However, the database needs to allow for the possibility that the voting/election entity is not a single institution; it could instead be a group of institutions that identifies itself by a chosen name. Furthermore, the database needs to allow for the possibility that a single voting/election entity has more than one representative, as is currently the case for the larger participating institutions in ePIC. The Collaboration Council has an elected Chair and vice-Chair from among its membership and these roles have defined terms. The database needs to keep a record of collaborators in these roles, who need to have access to the database with privileges to update its contents.
5. **The Command-Line Interface:** in addition to the Web UI, the Collaboration Database must be equipped with a *Command Line Interface (CLI)* incorporating most of the query and management functions. This CLI must be well-documented. Examples of queries that the CLI will provide:
 - a. List of members for particular institutions, exported in CSV or a comparable format (YAML etc)
 - b. History of member affiliation with different ePIC institutions
 - c. A valid Author List for specific dates in the past
 - d. Any type of queries based on additional object attributes (see bullet point "1") which are not necessarily represented in the Web UI but can still be supported in the CLI
 - e. Based on a list of members assigned to a specific service task (which can be defined via an attribute), the CLI will be used to determine the level of support to the task provided by the ePIC institutions



Virtual institutes and sub-institutes



6. **Data Import/Export:** ePIC will need methods to import and export all data as needed, into and from the database. Some of these import/export operations will be limited to the CLI (see above), and some will exist in the GUI. Examples:
 - a. Bulk ingestion of membership and institutions data into the database. A primary key should be used for disambiguation (for example, an ORCID). There should be a way to handle disambiguation (name change / what name to use?).
 - b. Export (e.g. as a file) of the member data based on certain criteria, or simply bulk export

Groups

The screenshot shows the ePIC COLLABORATION web application interface. The browser address bar displays "phonebook.sdcc.bnl.gov". The page title is "GROUPS". A search bar labeled "Quick Search" is located at the top of the main content area. A sidebar on the left contains navigation options: STATISTICS, REPRESENTATIVES, WORLD MAP, AUTHOR LISTS, INSTITUTIONS (with sub-options: INSTITUTIONS, FILTER INSTITUTIONS, ADD NEW INSTITUTION, INSTITUTIONS HISTORY), MEMBERS (with sub-options: MEMBERS, FILTER MEMBERS, ADD NEW MEMBER, MEMBERS HISTORY), GROUPS (highlighted), DOCUMENTS (with sub-options: DOCUMENTS, FILTER DOCUMENTS, ADD NEW DOCUMENT), EVENTS (with sub-options: EVENTS, FILTER EVENTS, ADD NEW EVENT), and DESCRIPTORS (with sub-option: INSTITUTION FIELDS).

NAME	PARENT GROUP ↑	EMAIL	PRIVACY	MEMBERS	SUBGROUPS
Spokesperson's Office (Management)			public	2	3
Collaboration Council			public	6	5
Executive Board			public	8	0
Inclusive Physics	Analysis Coordinators	eic-projdet-inclusive-l@lists.bnl.gov	public	2	0
Semi-inclusive Physics	Analysis Coordinators	eic-projdet-semiincl-h@lists.bnl.gov	public	2	0
Jet and Heavy Flavor	Analysis Coordinators	eic-projdet-jethf-l@lists.bnl.gov	public	2	0
Exclusive Diffraction and Tagging	Analysis Coordinators	eic-projdet-excldiff-l@lists.bnl.gov	public	2	0
BSM and Precision EW	Analysis Coordinators	eic-projdet-semiincl-h@lists.bnl.gov	public	2	0
Technical Coordination Office	Spokesperson's Office		public	4	0
Software and Computing Coordinator	Spokesperson's Office		public	4	6

At the bottom of the table, there is a pagination control: "Rows Per Page" set to 10, showing "1-10 of 10" items, with navigation arrows for first, previous, next, and last.

Details

The screenshot shows the 'ePIC COLLABORATION' web application. The left sidebar contains navigation options: STATISTICS, REPRESENTATIVES, WORLD MAP, AUTHOR LISTS, INSTITUTIONS (with sub-options: INSTITUTIONS, FILTER INSTITUTIONS, ADD NEW INSTITUTION, INSTITUTIONS HISTORY), MEMBERS (with sub-options: MEMBERS, FILTER MEMBERS, ADD NEW MEMBER, MEMBERS HISTORY), GROUPS (with sub-options: GROUPS, ADD NEW GROUP), DOCUMENTS (with sub-options: DOCUMENTS, FILTER DOCUMENTS, ADD NEW DOCUMENT), EVENTS (with sub-options: EVENTS, FILTER EVENTS, ADD NEW EVENT), and DESCRIPTORS (with sub-option: INSTITUTION FIELDS). The 'GROUPS' section is currently selected.

The main content area displays the details for the 'Group: Membership Committee'. At the top, there are tabs for VIEW, EDIT, MEMBERS, and ROLES. The details are as follows:

- PARENT GROUP:** Collaboration Council
- NAME:** Membership Committee
- DESCRIPTION:** The ePIC membership committee (eMC) is responsible for the development of the Membership policy and oversight of its fair implementation. The Membership
- EMAIL:** epic-cc-membership-committee-l@lists.bnl.gov
- URL:**
- PRIVACY:** PUBLIC

Below the details is a table titled 'Members' with the following data:

ROLE	NAME	EMAIL	INSTITUTION
Vice-Chair	Pietro Antonioli	pietro.antonioli@bo.infn.it	INFN Sezione di Bologna and Dipartimento di Fisica e Astronomia, Università di Bologna
Member	Friederike Bock	bockf@ornl.gov	Oak Ridge National Laboratory
Member	Helen Caines	helen.caines@yale.edu	Yale University
Member	Douglas Higinbotham	doug@jlab.org	Jefferson Lab
Member	Bedangas Mohanty	bedanga@niser.ac.in	National Institute of Science Education and Research (NISER)
Member	Silvia Niccolai	silvia.niccolai@ijclab.in2p3.fr	IJCLab (Orsay)
Member	Marzia Rosati	mrosati@iastate.edu	Iowa State University
Chair	Peter Steinberg	steinberg@bnl.gov	Brookhaven National Laboratory

Acronyms for the workflow management system

TRACE <ul style="list-style-type: none">•Tracking•Resource•Analysis•Collaboration•Engine	VISIO: <ul style="list-style-type: none">•Versatile•Integrated•System for•Informationand•Organization	STREAM: <ul style="list-style-type: none">•Scientific•Tool for•Research and•Experiment•Access and•Management	MIRROR: <ul style="list-style-type: none">•Management•Interface for•Research•Resource•Organizationand•Reporting	SPARK: <ul style="list-style-type: none">•System for•Project•Analysis,•Research,and•Knowledge	FLARE: <ul style="list-style-type: none">•Frameworkfor•Logistical•Analysis and•Research•Environment	SCRIBE: <ul style="list-style-type: none">•Scientific•Collaboration•Resource•Integration•Based•Environment
---	---	--	--	---	---	--

Suggestions please!

Acronyms for the workflow management system

TRACE <ul style="list-style-type: none">•Tracking•Resource•Analysis•Collaboration•Engine	VISIO: <ul style="list-style-type: none">•Versatile•Integrated•System for•Informationand•Organization	STREAM: <ul style="list-style-type: none">•Scientific•Tool for•Research and•Experiment•Access and•Management	MIRROR: <ul style="list-style-type: none">•Management•Interface for•Research•Resource•Organizationand•Reporting	SPARK: <ul style="list-style-type: none">•System for•Project•Analysis,•Research,and•Knowledge	FLARE: <ul style="list-style-type: none">•Frameworkfor•Logistical•Analysis and•Research•Environment	SCRIBE: <ul style="list-style-type: none">•Scientific•Collaboration•Resource•Integration•Based•Environment
---	---	--	--	---	---	--

Suggestions please!

Dmitry's suggestion
CRISP: Collaborative Research Information Sharing Platform

Meeting Day & Time

- The current Wednesday 3:00 pm ET meeting time may not work for everyone. Will circulate a poll to find a better time slot.