

## C3 Platform

C3 (center for cross-discipline collaboration) is a web platform geared towards supporting collaborative websites for NASA researchers and their partners in the scientific community. The platform is a web application that can run one or many C3 instances (such as DASHlink, NEX, or Water). It is possible to host several C3 sites on the same hardware and use the common code base. Each C3 website can be customized in several ways. Different themes can be applied to change the look and feel of the site, while plugins (Django applications) can be enabled to extend functionality beyond what already exists. The code is written in python and uses a MySQL database to store the site content.

### C3 Features

The C3 code base has the following features:

1. NASA civil servants and onsite contractors with NDC accounts can create a C3 account on an instance. The site can be limited access to Ames, NASA only, or open to the public.
2. Open ID is available for outside collaborators' authentication. These accounts must be approved by the site's civil servant PI.
3. C3 projects have the following features:
  - a. Project description with thumbnail image.
  - b. Projects can have children resources. Resources are pages that can be used to define uploaded content. They can be a child of either a project or directly associated with a member.
    - i. Algorithm (used to post code or pseudo code.)
    - ii. Dataset (used to post data sets in file format.)
    - iii. Publication (used for published documents and can allow for other C3 members to be linked as authors.)
    - iv. Other (used as a generic resource type to post files or other content.)
  - c. Members define the project's contributors. They can take on 1 of 3 rolls:
    - i. Administrator: Can assign rolls to all project members, edit content, make comments, and view content if the project is a private project.
    - ii. Editor: Can edit content on the project, make comments, and view content if the project is a private project.
    - iii. Member: Can make comments and view content if the project is a private project.
  - d. Members can invite other C3 users to join a project with invite new member link.
  - e. Members can share and upload files to the project.
  - f. Blog functionality available.
  - g. Wiki functionality available.
  - h. Privacy features:
    - i. Who can join can be set to either:
      1. Any member can join a project.
      2. Member needs approval from project admin before joining.
    - ii. Project content views can be set to either:

1. Publicly viewable.
2. Only project members can view. (Note: quick view on all project list page does show the project description and members but access to any uploaded files, wiki, or blog content is restricted.)
  - i. Tagging features used to link projects that have common characteristics.
  - j. Members can post comments on the project.
  - k. Project can be tagged under hierarchical site categories called "Research Areas"
  - l. Project updates. Email preferences can be set to receive instant updates whenever a project is updated or a daily digest email. Members can also opt out of email updates for all or each project/resource. Members can subscribe to projects they are not members of and receive updates when the project is changed.
4. C3 has a Google search box that indexes the site and can be used to search any of the C3 instances. (Note: the box is old and may be reaching end of life. Cost to replace is approximately \$100K. We were exploring other more cost effective options with open source search features but so far we have not selected a feasible replacement. Fortunately, the Google search bar is not used extensively by the users and the filter bar has been more widely used.)
5. A site-wide moderation feature is available. This allows the site administrators to approve all or some content before the changes are posted to the site. This can be turned on or off for different components of the site.
6. C3 members can contact other members on the site by sending messages via email.
7. Events can be created with HTML formatted content and customizable navigational bar. (For example <https://c3.nasa.gov/dashlink/events/1/>)
8. Site admins can add new flat pages and can format the content with HTML.
9. Site admins have the ability to view the content and change permissions of private projects if needed. Admins can also remove projects and members from the site.

### C3 Contact Information

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