User Interface User Guide

The User Interface User Guide is targeted at users of the DC Reference UI.

Introduction

The Reference User Interface (UI) is a web-based UI, designed to meet the needs of data managers at Johns Hopkins and partner Data Conservancy institutions. This document articulates the capabilities of the UI, and intends to set users' expectations regarding UI functionality. The UI supports basic features pertaining to data management (discussed below). New features and functionality are continually being added, and will be available (and documented) in future releases.

Installation of the Reference User Interface is covered in the Reference User Interface Administration Guide. This document assumes a working installation of the UI. The UI depends on an installation of the Data Conservancy Service (DCS) being available; the relationship between the UI and the DCS are discussed in the Reference User Interface Administration Guide.

Data Model Overview

It is useful to have a conceptual understanding of the data model underlying the UI, because the functionality of the UI is organized around the objects of the model and their relationships.

Project

Generally speaking, a Project is meant to align with a topic or area of sponsored research (e.g. a grant, or faculty research project). It records information important to data managers, such as the sponsors of a project, the administrators (e.g. the Principle Investigators and/or their proxies), and the beginning and end dates of the research project. A Project will be one of the first things a data manager creates with the UI.

Projects are created by UI *Instance Administrators* (more on roles below), and serve as a point of administration for aggregations of Collections. A Project defines the parameters by which a *Project Contributor* (or simply, *Contributor*) interacts with the Collections (e.g. available storage, Collections available for deposit, etc.). *Project Administrators* have authorization to create Collections and grant deposit permissions to other users on Collections (that is, promote users to *Contributors*).

Collection

A Collection is an aggregation of Data Items (or simply, Items). The Collection maintains metadata that pertain to the aggregated Items and the Collection itself. Collections may be published and cited. Collections cannot contain sub-collections (though we anticipate supporting this in future releases). A Collection belongs to a single Project.

Notably, Collections are one of two objects in the model which are archived in the DCS. Any time a Collection is created or its metadata are updated, a representation of the Collection (the Collection itself, not the members of the Collection) is archived in the DCS.

Project Administrators grant permission to deposit on a Collection by Collection basis. By default, *Project Administrators* have permission to deposit to all Collections under the Projects they administer. Users who are allowed to deposit to a Collection are known as *Project Contributors*.

Data Item

Data Items (Items) are the unit of deposit, and serve as a container for describing the file or files contained therein. Items must be deposited to a Collection; currently an Item can only be a member of a single Collection, and they cannot be moved between Collections. In this release, Data Items are restricted to containing a single file, though we anticipate allowing multiple files per Data Item in future releases.

Each time a file is deposited to the system, a Data Item is created behind the scene and archived in the DCS.

Workflow

The following sections provide an overview and walk-through of the main user activities that can be carried out in the User Interface.

Administrator Login

One of the first actions taken after installing the UI will be to login with an *Instance Administrator* (Administrator) account. Configuring login credentials for administrative users is covered below in User Management. Once an Administrator logs in, they have access to all parts of the system: creating or updating Projects and Collections, depositing data, and approving new user registration requests.

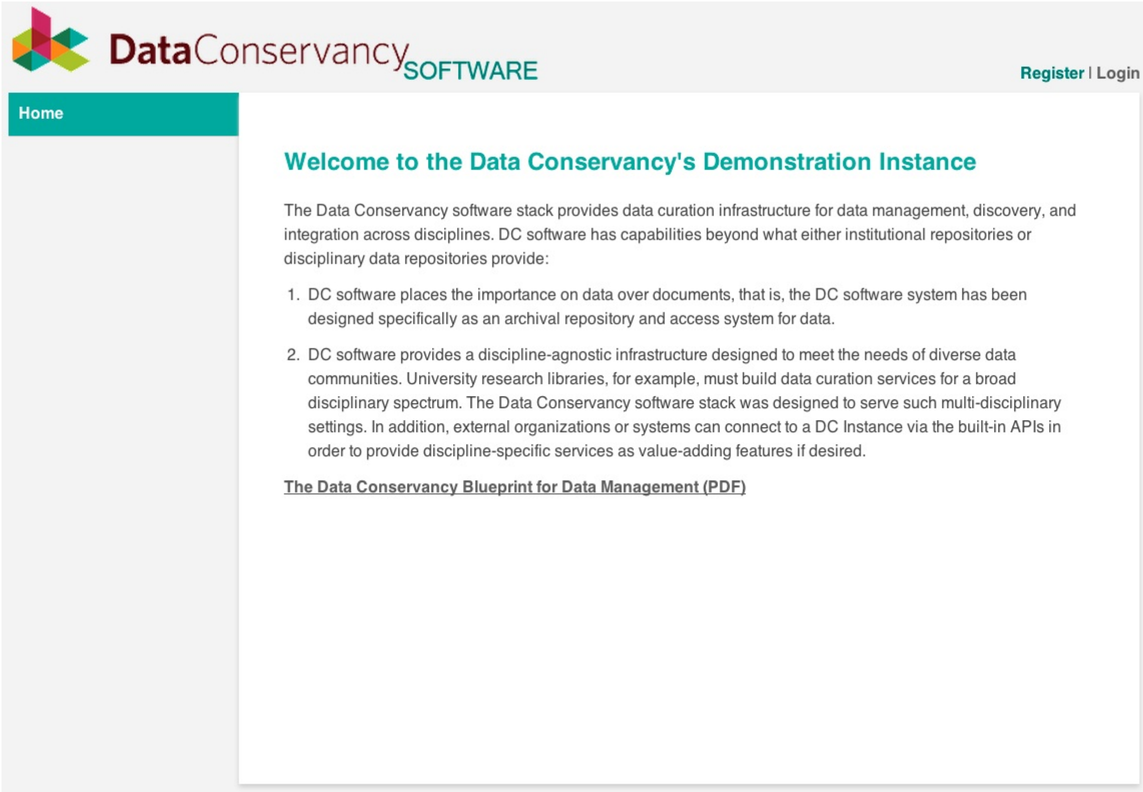


Fig. 1: Reference UI Home Page

Logging in is accomplished by visiting the home page of your UI and clicking on the “Login” link in the upper right, and then submitting your user name (the same as your email address) and password when prompted.

Administration of users are discussed in the User Management section, below.

User Registration and Login

- New User Registration

New User Registration

If you are not an *Instance Administrator*, you will need to request the creation of a *Instance User* (User) account, and have that request approved by an Administrator before you are able to successfully login and use the system.

To register for an account, visit the home page of your UI and click on the “Register” link in the upper right. You registration status on the system will be “**PENDING**.”

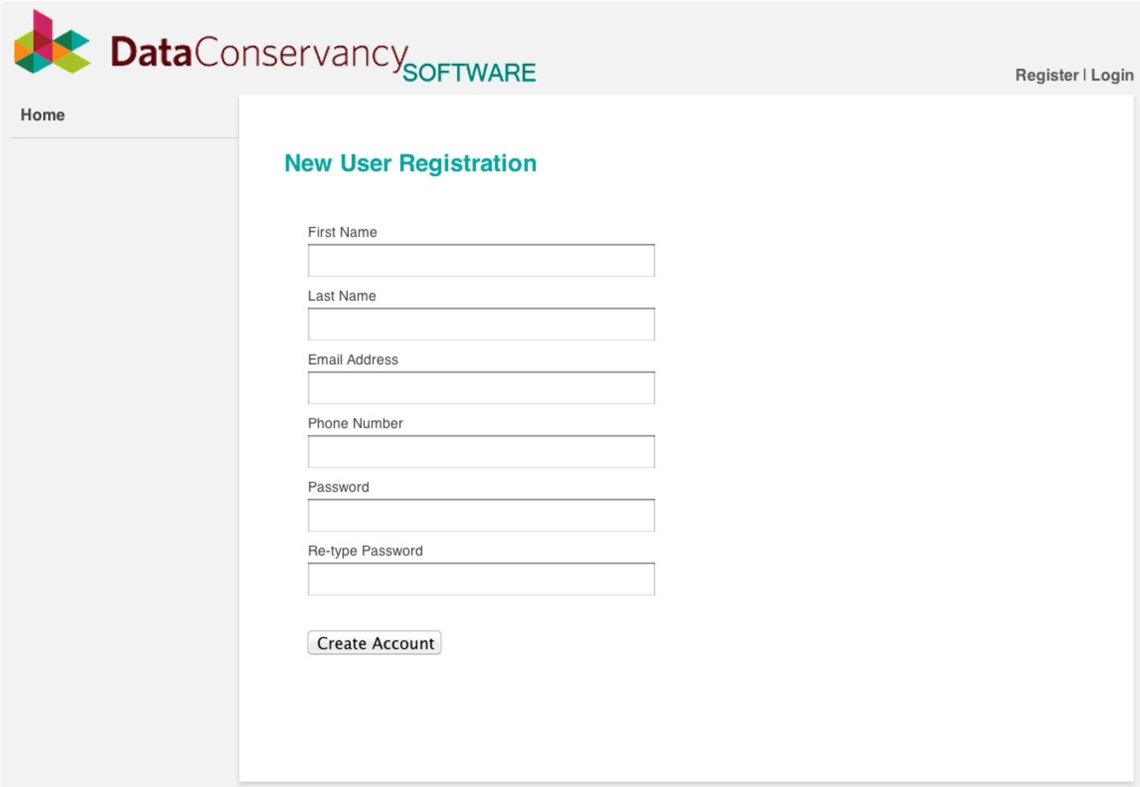


Fig. 2: New User Registration Page

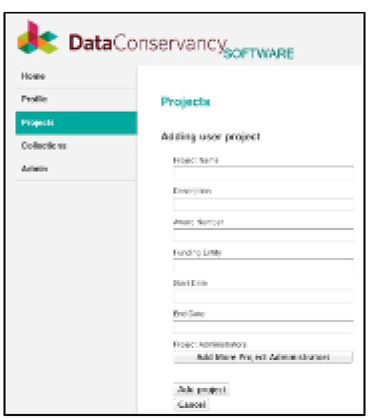
An email will be sent to the provided email address upon approval. After being approved, you will be able to login to the system using the email address and password you registered with.

Project Creation

To create a Project, login as an *Instance Administrator* and click on the Projects tab on the left hand side of the screen. A list of existing Projects are presented. Click on the “Add Project” link at the top of the list.

Project List Page

Fill in the the form fields for the new project. All fields are required, and can be updated after the Project is created.



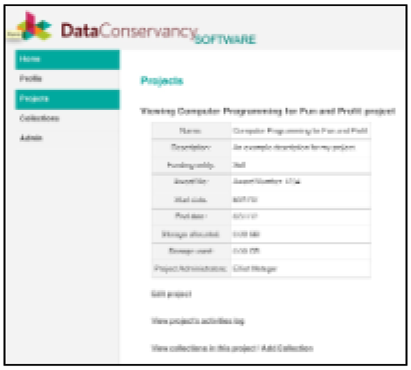
New Project Creation Page

The creator has the option to add *Project Administrators*. *Project Administrators* are able to create Collections under the Project and edit Project metadata. In order to add a *Project Administrator* to the Project, the User must already exist in the system. If they do not exist in the system, you can update the Project at a later time, when the User does exist in the system.

After creating your Project, find it in the list of Projects and click on the Project's title.

Example of a Project in the Project List Page with its Title, Award Number, and Actions

Clicking on the Project title brings you to the Project's Splash Page, where information about the Project is displayed. You can edit Project metadata, view Deposit activity that have occurred for this Project, view Collections in the Project, and add Collections to the Project.



Project Splash Page

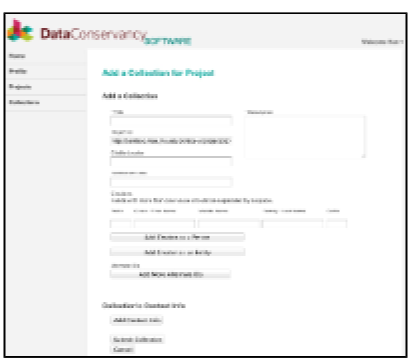
You need to add a Collection to a Project before you can deposit any data. It should also be noted that almost all of the information on the Project splash page can only be viewed by *Instance Administrators* and *Project Administrators*. When viewing Collections in the Project, users will be able to see the Project Name, but that will be all.

Collection Workflow

The following pages provide an overview of the steps and activities involved in collection workflows.

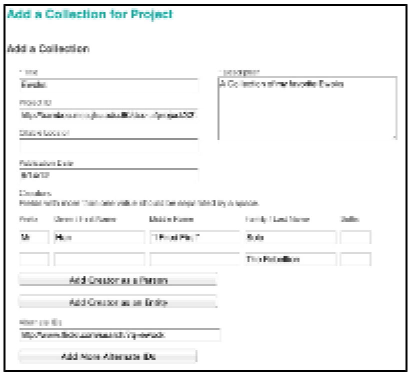
Creating A Collection

Collections are added to Projects. To create a Collection, navigate to a Project's splash page, as shown in Project Creation. Click on the "Add Collection" link in the bottom right. You will be presented with a form, asking for various information about the new Collection.



Collection Creation Page

Only the Title and Description of the Collection are required, but the figure below shows some additional fields filled in.



Collection Creation Page, with field values filled in.

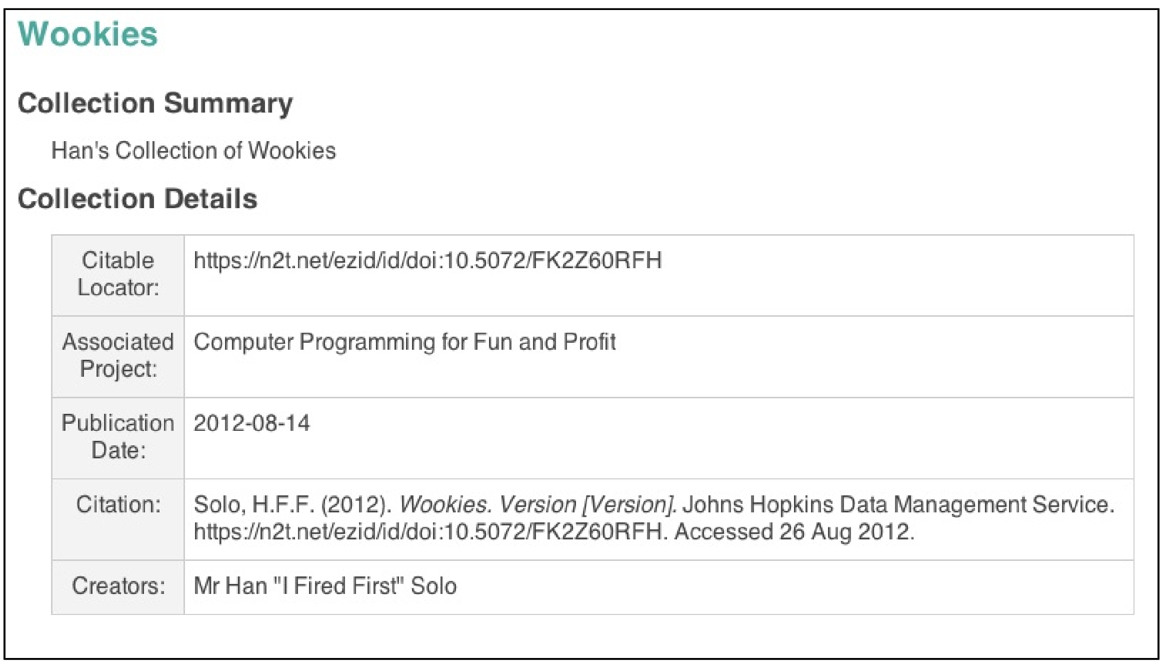
After creating the Collection, navigate to the Project's splash page, click the "View collections in this project", then click on the Title of the Collection. This displays the Collection Splash Page:

The Collection Splash Page *(Project Administrator view*)
Collection splash pages are public, but the view of a splash page may differ slightly depending on whether or not you have logged into the UI, and what your roles in the UI are. The Collection Splash Page (Project Administrator View) shown above is displayed to a logged in Project Administrator, whereas the Collection Splash Page in Citing A Collection is displayed to a user who hasn't logged into the system.

Please note that ***all metadata*** entered about a Collection, and ***all Data Items*** deposited to any Collection are ***public***. They are available to anyone, including users who do not have a login to the system.

Citing A Collection

Collections should only be cited using their *Citable Locator*. The Citable Locator is a durable reference that will resolve to the Collection's splash page. When a Citable Locater has been assigned to the Collection, it will be visible on the Collection's splash page. In the Collection Splash Page image below the Citable Locator has the value https://n2t.net/ezid/id/doi:10.5072/FK2Z60RFH; users who wish to cite the Collection should reference the Collection using that value. The Citable Locator is also included in the *Citation*, which is a format suitable for references in a publication.


Wookies

Collection Summary

Han's Collection of Wookies

Collection Details

Citable Locator:	https://n2t.net/ezid/id/doi:10.5072/FK2Z60RFH
Associated Project:	Computer Programming for Fun and Profit
Publication Date:	2012-08-14
Citation:	Solo, H.F.F. (2012). *Wookies. Version [Version]*. Johns Hopkins Data Management Service. https://n2t.net/ezid/id/doi:10.5072/FK2Z60RFH. Accessed 26 Aug 2012.
Creators:	Mr Han "I Fired First" Solo

The Collection Splash Page, with a UC3 EZID Citable Locator (*Public view*)

Collections do not automatically receive Citable Locators. They must be assigned by a *Project* or *Instance Administrator*. ***Once you have assigned a Citable Locator to a Collection, it cannot be removed or changed.***

A Collection can be assigned a Citable Locator when the Collection is created, or afterwards, when updating Collection metadata. We recommend creating a Citable Locator as an update to the Collection, instead of creating the Citable Locator when the Collection is created.

Waiting to create the Citable Locator has the following advantages:

1) You will be able to use the UC3 EZID service to create Citable Locators, instead of creating your own Citable Locator scheme.

2) It insures that the necessary metadata are available before creating the Citable Locator (Publication Data and Collection Creator).

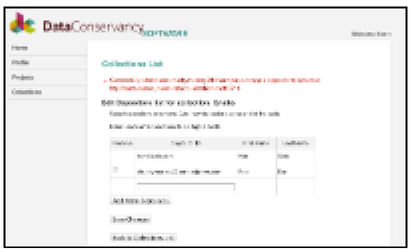
Granting Deposit Permission to a Collection

Project Administrators may want to grant permissions to deposit to a Collection to other users. This, in effect, promotes those users to *Project Contributors*. Project Contributors are users who can deposit to selected Collections in a Project, but do not carry the Project Administration role.

To grant deposit permissions to a user, login to the UI as a Project Administrator, and click on the Collections tab on the left hand side of the screen. From the list of Collections, find the Collection that you wish to add depositors to. You must be a Project Administrator (or an Instance Administrator) of the Collection's Project in order to grant deposit permissions.

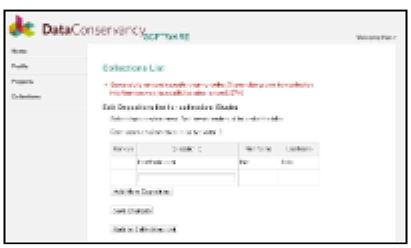
Editing Depositors for a Collection.

Click on the "Edit Depositors" link, and you will see a screen similar to the **Editing Depositors for a Collection** screen above. Enter in the email addresses of the users you wish to add deposit permissions for. The user must already have an account in the UI before they can be added as a depositor to the Collection.



Successfully adding a Depositor to a Collection

Depositors can be removed from a Collection by selecting the "Remove" checkbox, and clicking "Save Changes".



Removing a Depositor from a Collection

Depositing Data

1. Overview

To deposit data, select the Collection you wish to deposit data to, and select the "Deposit Data" link (see the Collection Creation Page figure). Choose the file you want to deposit, and click "Deposit". Files must less than two gigabytes in size.

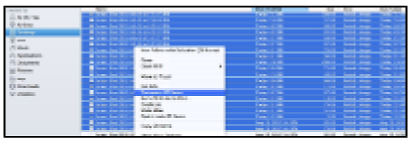
Note that once you upload a Data Item, it cannot be removed! All uploaded Data Items are publicly viewable, so do not upload anything that should be kept confidential. Future releases of the UI will allow privacy permissions to be set on uploaded items.

Depositing a file

If a file is larger than two gigabytes, then you will either need to compress the file (i.e. create a ZIP file) or split the into smaller-sized files.

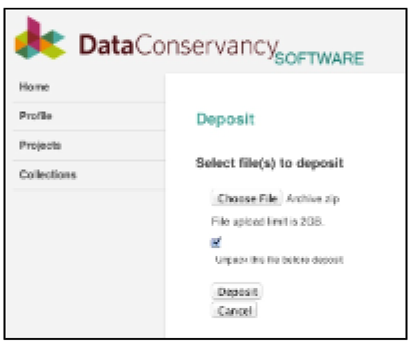
If you want to deposit multiple files at once, you must prepare a ZIP file containing the files, select the ZIP file to deposit, and then check the box that reads “Unpack this file before deposit”. Each file in the ZIP file will be treated as if it was deposited independently of the other files.

For example, if you want to upload a batch of 20 files, create a ZIP file on your local machine containing the 20 files.



Creating a ZIP archive of 20 files (Mac platform)

Next, browse to the Collection you want to deposit the 20 files to, and select “Deposit Data”, then select the ZIP file you just created, and check the “Unpack this file before deposit”, then click “Deposit”.



Uploading a batch of files in a single deposit

After successfully depositing the ZIP file, you can browse to the Data Items in the Collection and see that each file in the ZIP was deposited.

2. Disciplines

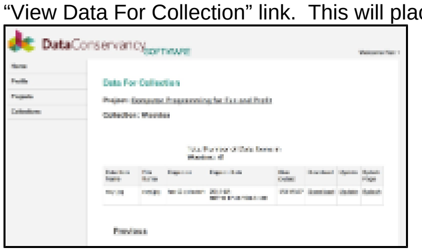
Disciplines exist as a controlled vocabulary in DCS and are used to describe metadata formats. For example

Format Name	Version	Identifier	Discipline(s)
STC	1.0	dc:format:metadata/STC	Astronomy
AVM	1.0	dc:format:metadata/AVM	Astronomy
Audubon Core	1.0	dc:format:metadata/AudubonCore	Biology
TaxonX	1.0	dc:format:metadata/TaxonX	Biology
CGDSMFGDC	1.0	dc:format:metadata/CGDSMFGDC	Earch Science
ISO19115	1.0	dc:format:metadata/ISO19115	Earch Science
DarwinCore	1.0	dc:format:metadata/DarwinCore	Biology

Currently these are used when asserting a Discipline and Metadata format for Collection Metadata files. Currently DCS does not perform validation of specific metadata file formats against particular schemas. It is up to the Collection creator to ensure the metadata file is well formed and adheres to the stated metadata format schema.

Browsing and Downloading Data

To see a list of Data Items in a Collection, navigate to the Collection's splash page (see the Collection Creation Page figure), and click on the "View Data For Collection" link. This will place you in a browse interface, displaying all of the Data Items that are in the Collection.



Data Item browse interface

Data Items can be downloaded, updated, and linked to using their splash page. Data Items can not be deleted or removed. Click on the "Download" link to download the content of a Data Item. If you wish to *replace* the content of a Data Item, click on "Update", and you'll be prompted to upload a new file to replace the content of the Data Item.

> **Citable Locators for Data Items**
> Please note that the Reference UI does not allow Citable Locators to be created for Data Items. While you can reference a Data Item using its "Splash Page", please be aware that the URL will not be durable, and will not be guaranteed to exist in future releases.

User Management

The following pages give an overview of user management in the DCS User Interface, including user registration, approval and default users.

Registration Status

1. Registration Status

Users of the UI have three available statuses within the system. Their status affects what they are able to do with the system. Currently users cannot be deleted from the system.

1.1. Pending

The *Pending* registration status means that the user has requested an account; all users except for the built-in administrative users start with this status. Users with this status cannot login to the system at this point. Once an *Instance Administrator* approves their registration, their status shifts to *Approved*.

1.2. Approved

The *Approved* registration status means that the user can login and use the system. Most of your users will have this status.

1.3. Black Listed

The *Black-listed* status means that the user cannot login to use the system, and that email address will not be allowed to re-register for a user account. If a user is being troublesome, or you wish to revoke their access, you can update their status to *Black-listed*. This will probably be an atypical status.

2. Roles

Roles are a function of registration status. Users' roles are changed by changing their registration status in the UI admin menu. Only users with an "Approved" registration status can have a role in the system.

2.1. ROLE_USER

Newly registered and approved users are given a role of ROLE_USER, and a registration status of APPROVED.

2.2. ROLE_ADMIN

Note there is currently no way to promote a user to an admin role via the UI. System administrators are managed via the defaultUsers.properties property file Default Users.

Approving User Registrations

Instance Administrators will receive a notification each time a registration request is received, prompting the Administrator to approve or deny the request. To approve registration requests, login as an Administrator, and click the Admin tab on the left side of the screen.

Administration Home Page

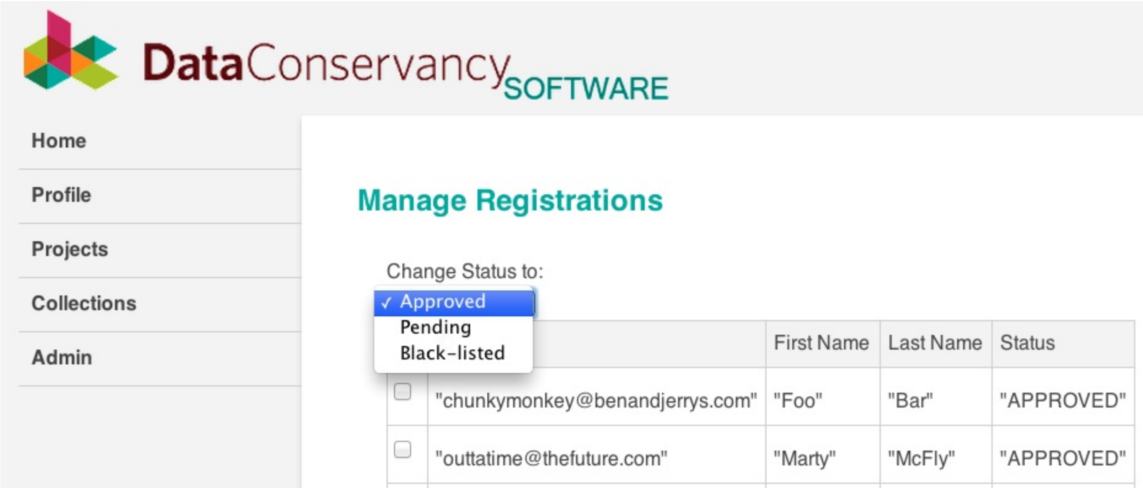
Click on the "Manage Pending Registrations" link. This will list all users who have registered, but have not been approved. Click the checkbox of the user to approve, and then click the "Approve" button.

Pending Registrations Page

Once the user has been approved, they will receive an email letting them know they can login to the system.

Update User Registration Status

To update a user's registration status, navigate to the Administration Home Page and click on the "Update Registrations" page. This lists all users and their registration status. Select the user(s) you wish to modify, select the registration status you want them to have, and click the "Update" button.



Manage Registrations Page

Default System Users

A list of the default users that come with the system, and their system roles. Reference the User Interface Administrative Guide Default Users for how to change the default users.