



LONI IMAGE & DATA ARCHIVE USER MANUAL

Laboratory of Neuro Imaging
Dr. Arthur W. Toga, Director



Dr. Arthur W. Toga

Laboratory of Neuroimaging (LONI) Image & Data Archive (IDA)

USC Mark and Mary Stevens Neuroimaging and Informatics Institute

Keck School of Medicine

University of Southern California

2025 Zonal Avenue

Los Angeles, CA 90033

Phone: (323) 442-7246

Email: ida@loni.usc.edu

Website: <https://ida.loni.usc.edu>

Table of Contents

1. <u>INTRODUCTION</u>	4
2. <u>ABBREVIATIONS</u>	5
3. <u>USER REGISTRATION</u>	6
4. <u>DOWNLOAD DATA</u>	8
4.1 <u>Study Data</u>	8
4.2 <u>Image Collections</u>	9
4.2.1 <u>Simple Search</u>	10
4.2.2 <u>Advanced Search (beta)</u>	11
4.2.3 <u>Create a Data Collection</u>	14
4.2.4 <u>Edit and Share a Data Collection</u>	15
4.2.5 <u>Download Image Collections Options</u>	15
4.2.5.1 <u>1-Click Download</u>	16
4.2.5.2 <u>Advanced Download</u>	17
4.2.5.3 <u>Download Managers</u>	17
4.3 <u>Genetic Data</u>	18
5. <u>UPLOAD (ARCHIVE) DATA</u>	19
5.1 <u>Select an Archive Method (Single or Batch Archive?)</u>	20
5.2 <u>IDA Web Uploader</u>	21
5.2.1 <u>Single Archive</u>	21
5.2.2 <u>Batch Archive</u>	24
5.3 <u>IDA Uploader Application</u>	25
6. <u>TROUBLESHOOTING</u>	34
6.1 <u>User Account Issues</u>	34

6.2 Download Issues	35
6.3 Upload Issues	36
7. GLOSSARY	37

1. Introduction

The Image and Data Archive (IDA) is a secure online resource for archiving, exploring and sharing neuroscience data including MRI, PET, SPECT, EEG and other modalities. A flexible data de-identification engine and encrypted file transmission help ensure compliance with patient-privacy regulations. All data are stored on redundant servers with daily and weekly on- and off-site backups. Archiving data in the IDA is simple and secure. As part of the archiving process relevant metadata are extracted from files, allowing data to be searched within moments of being archived. The archive protects data from unauthorized access and allows investigators to share data with other researchers.

2. Abbreviations

CT	Computed Tomography
DICOM	Digital Imaging and Communication in Medicine
DTI	Diffusion Tension Imaging
EEG	Electroencephalogram
FMRI	Functional Magnetic Resonance Imaging
MINC	Medical Imaging NEtCFD
MRA	Magnetic Resonance Angiography
MRI	Magnetic Resonance Imaging
NIFTI	Neuroimaging Informatics Technology Initiative
PET	Positron Emission Tomography
SPECT	Single Photon Emission Computed Tomography

3. User Registration

Access to the IDA requires that you register for an account. Your initial IDA account will automatically give you access to any Open Use project, but access to most projects require that you submit a separate application that will be reviewed by the study's review committee.

1. Click **Instant free signup** in the top right corner of the [IDA home page](#) to begin the registration process.



2. Complete the New account registration process (3 steps).
 - a. Enter your email address and click **CONTINUE**. A security code will be sent to your email from dba@loni.usc.edu (you may need to add this email to your safe sender list).

A screenshot of the 'New account registration - Step 1 of 3' form. The form has a title bar with 'CANCEL UPDATE' and 'CANCEL' buttons. The main content area contains the text: 'Enter your email address below. After clicking CONTINUE you will receive an email containing the security code needed to complete the registration process. The security code will expire after your web browser is closed. To ensure you receive emails, you may need to add dba@loni.usc.edu to your safe sender list.' Below this text is an 'Email address*' input field. Underneath the input field is the text '* Required'. Further down is a reCAPTCHA widget with the text 'I'm not a robot' and a checkbox. At the bottom right of the form is a 'CONTINUE' button with a right-pointing arrow.

- b. Enter the security code emailed to you and click **CONTINUE**.

New account registration - Step 2 of 3

To complete the email verification process, enter the security code sent to your email address below.

CANCEL UPDATE **CANCEL**

Email address*

A security code has been emailed to your email address. Please paste the security code below.

Security code*

* Required

☐ I'm not a robot  reCAPTCHA
Privacy - Terms

CONTINUE

- c. Complete the New account registration form and click **REGISTER**. A link to set your password will be emailed to you.

New account registration - Step 3 of 3

Click **REGISTER** to complete the new account registration process. You will receive an email containing a link to the page to set your password.

SETUP NEW ACCOUNT

Email address*

Type in a user name*
(If you have a LONI account use your LONI user name)

PERSONAL INFORMATION

First Name*

Last Name*

Institution / Company*

Department

Zip / Postal Code

Country*

State/Province*

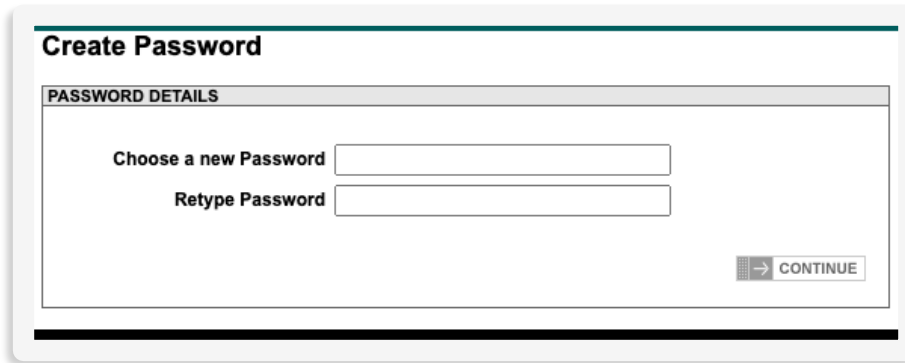
If you have a website, please enter the URL here

Required fields are denoted by an asterisk(*)

Once you click Register, we'll send you an e-mail message containing your temporary password. To ensure your temporary password is received, you may need to add dba@loni.usc.edu to your safe sender list.

BY CONTINUING, YOU ARE AGREEING TO THE [LONI TERMS OF USE](#) **REGISTER**

- d. Create a password and click **CONTINUE**.



4. Download Data

Depending upon the project, there will be up to three options under the DOWNLOAD menu: Study Data, Image Collections, Genetic Data.

1. Study Data is typically comprised of clinical assessments and analysis results data and documentation (when available from the study).
2. Image Collections contains images (MR/PET/CT, etc.) along with EEG (when available from the study).

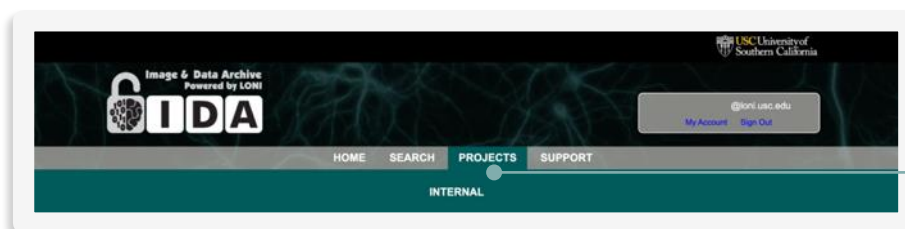
NOTE: Images must be added to a Data Collection in order to download. See the *SEARCH* section for instructions on forming Image Collections.

3. Genetic Data will contain genetic data files, often in VCF, idat or text format along with supporting documents (when available from the study).

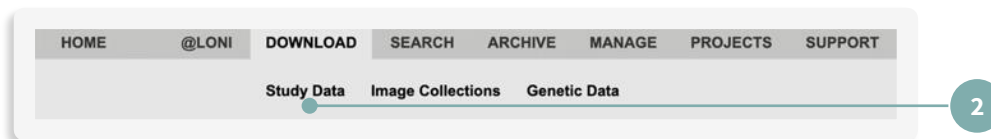
4.1 Study Data

Study data can be downloaded directly from the Study Data section in the IDA.

1. Log in to the IDA and click the project of interest from the **PROJECTS** (1) menu.

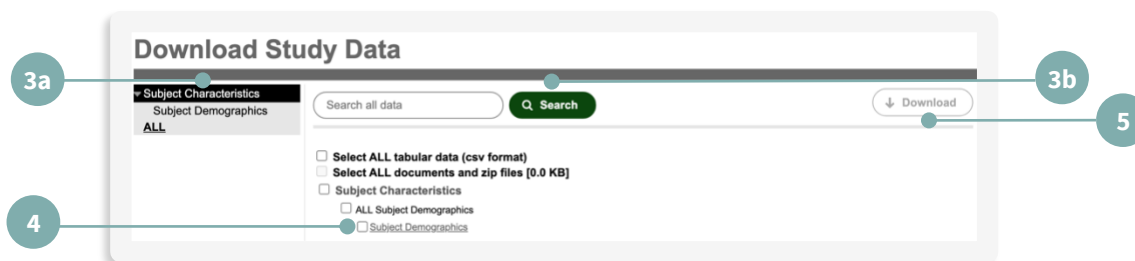


- To download clinical data or additional study documentation, select **Study Data** (2) from the DOWNLOAD menu.



- Click the left-hand panel (3a) of the Download Study Data page to view available datasets or type in key words in the search box and click **Search** (3b). Click the dataset check box (4) and then click **Download** (5).

NOTE: You can also download by clicking the dataset title.



4.2 Image Collections

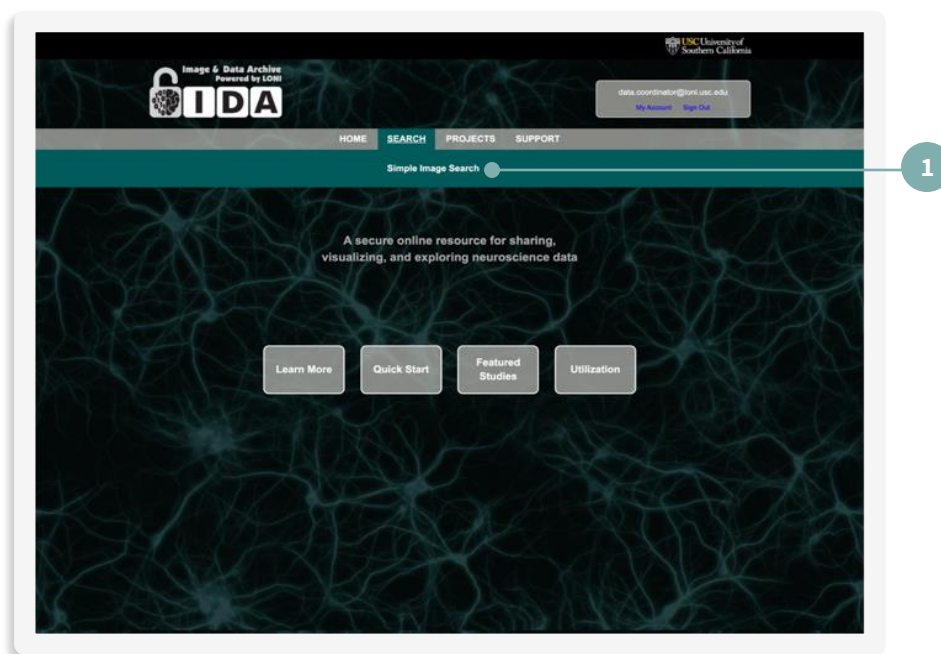
The overall process for downloading items from Image Collection is detailed in the table below:



4.2.1 SIMPLE SEARCH

Simple Search performs a basic database query on subjects and **raw images**, providing information such as subject age, sex and image modality or series description. Simple Search returns only original, unprocessed results. Processed images can only be searched with Advanced Image Search or Advanced Image Search (beta).

1. Log in to the IDA and click **Simple Image Search** (1) from the SEARCH menu.



2. Enter the search criteria and click **SEARCH** (2).

The screenshot shows the IDA Search form. The form includes fields for Subject ID, Sex, Age, Modality, Series Description, Weighting, Slice Thickness, and Acquisition Plane. The 'SEARCH' button is highlighted with a red circle and the number 2.

3. From the Search Results page you may:
 - a. Click **VIEW** to visualize scans (3).

NOTE: This function is not available for all modalities.

 - b. Click one or more checkboxes to select items you would like download. Once selected, click **ADD TO COLLECTION** (4).

The screenshot shows the Search Results table. The table has columns for Subject, Research Group, Sex, Scan Date, Age, Modality, Series Description, Weighting, Slice Thickness, Acquisition Plane, View, and Select All. The 'VIEW' button is highlighted with a red circle and the number 3. The 'ADD TO COLLECTION' button is highlighted with a red circle and the number 4.

Subject	Research Group	Sex	Scan Date	Age	Modality	Series Description	Weighting	Slice Thickness	Acquisition Plane	View	Select All
PAD_0001	Control	M	3/11/1995	22	MRI	T1-FFE	T1	1.0	SAGITTAL	VIEW	<input checked="" type="checkbox"/>
PAD_0002	Control	M	4/04/1995	19	MRI	T1-FFE	T1	1.0	SAGITTAL	VIEW	<input type="checkbox"/>
PAD_0003	Control	F	3/18/1995	19	MRI	T1-FFE	T1	1.0	SAGITTAL	VIEW	<input type="checkbox"/>

4.2.2 ADVANCED SEARCH (BETA)

Advanced Search supports a more extensive exploration of the database, *including processed images*, and provides additional information about subjects and images.

This manual will only overview Advanced Image Search (beta), but there are two advanced search functions:

1. Advanced Image Search allows users to SAVE search criteria
2. Advanced Image Search (beta) has more capabilities
 - a. Query the database using a more extensive list of elements than the Simple Search
 - b. Choose additional elements or image types, original or processed data, and set the sort order of the results.

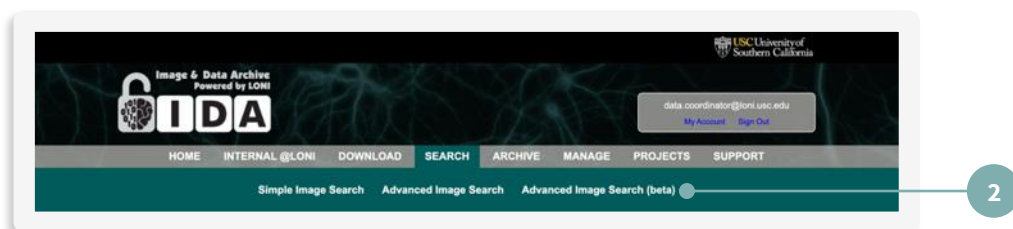
NOTE: The availability of elements varies according to project and user access level.

Follow the steps below to use Advanced Search (beta):

1. Log in to the IDA and click the project of interest from the **PROJECTS** (1) menu.



2. Click **Advanced Image Search (beta)** (2) from the SEARCH menu.



- Use the Search Options box on the left to expand Search Criteria categories on the right.

The screenshot shows the Advanced Search interface. On the left, the 'Search Options' sidebar contains a 'SEARCH SECTION' with checkboxes for 'Project/Phase', 'Subject', 'Subject Specific Information', 'Assessments', 'Study/Visit', 'Image', 'Imaging Protocol', 'Image Status', and 'Image Processing'. Below this is the 'IMAGE TYPES' section with checkboxes for 'Original', 'Pre-processed', and 'Post-processed'. At the bottom of the sidebar is the 'Display Options' section with a dropdown for 'Order by' and a search input. The main search area on the right is titled 'Search Criteria' and includes a 'RESET ALL' button and a 'SEARCH' button. It contains several sections: 'PROVESTAGE' with a 'Projects' checkbox and 'Display in result' checkbox; 'SUBJECT' with fields for 'Subject ID', 'Age (years)', 'Sex', 'Weight (kg)', and 'Research Group'; 'STUDY/VISIT' with fields for 'Study Date', 'Archive Date', and 'Baseline'; 'IMAGE' with fields for 'Image Description', 'Image ID', and 'Modality'; and 'IMAGE STATUS' with checkboxes for 'Available', 'User Quarantine', 'IRB/HPAA Quarantine', 'Flagged for Deletion', and 'Failed QC'. Each section has a 'RESET' button and a 'Display in result' checkbox. Numbered callouts point to: 3. 'SEARCH SECTION' in the sidebar; 4. 'IMAGE TYPES' in the sidebar; 5. 'Display in result' checkboxes in the main search area; and 6. the 'SEARCH' button.

- Specify the categories in the **SEARCH SECTION** (3).
 - Specify **IMAGE TYPES** (4). Preprocessed may be in a variety of formats.
 - Select image search criteria using the checkboxes and drop-down menus.
 - Select data you want listed in the results using the Display in result checkboxes (5).
- NOTE: Data with corresponding grayed out boxes are displayed by default.*
- Click **SEARCH** (6).

The Advanced Search Results tab displays images matching your search criteria where you may:

The screenshot shows the Advanced Search Results table. On the left is a 'Refine Your Search' sidebar with a tree view showing 'Subject Age' (19 years (2), 22 years (1)) and 'Subject Sex' (Male (2), Female (1)). The main table is titled 'Displaying Results 1-3 of 3' and '1 Image selected'. It has columns for 'SUBJECT', 'STUDY', 'IMAGE', and 'Description'. The 'SUBJECT' column has a 'Select' checkbox and a 'Subject ID' dropdown. The 'STUDY' column has a 'Select' checkbox and an 'Age' dropdown. The 'IMAGE' column has a 'Select' checkbox, a 'View' button, and a 'Description' dropdown. The 'Description' column shows 'T1-FFE'. Numbered callouts point to: 1. 'Select' checkbox in the SUBJECT column; 2. 'Add to Collection CSV Download' button; 3. 'View' button; 4. 'Description' dropdown; and 5. the 'Description' column header.

SUBJECT	STUDY	IMAGE	Description
<input checked="" type="checkbox"/> PAD_0001	M 22.0	<input checked="" type="checkbox"/> View	T1-FFE
<input type="checkbox"/> PAD_0002	M 19.0	<input type="checkbox"/> View	T1-FFE
<input type="checkbox"/> PAD_0003	F 19.0	<input type="checkbox"/> View	T1-FFE

- Click one or more checkboxes (1) to select items you would like download. Once selected, click **Add to Collection** (2).
- Click **VIEW** (3) to visualize scans.
- Click the **Series Description** (4) to review the Image Data Details.

NOTE: The Image Data Details page provides additional protocol information about the image such as weighting, pulse sequence, acquisition type, etc. Processed images

display an additional section describing information such as package name, process name, program name, etc. Users can also visualize images from this page.

- Click **CSV Download** (5) to download a list of all the metadata in the Search Results list.



NOTE: You can edit the displayed metadata (or columns) by returning to Advanced Image Search (beta) and clicking the Display in Result checkbox for desired data.

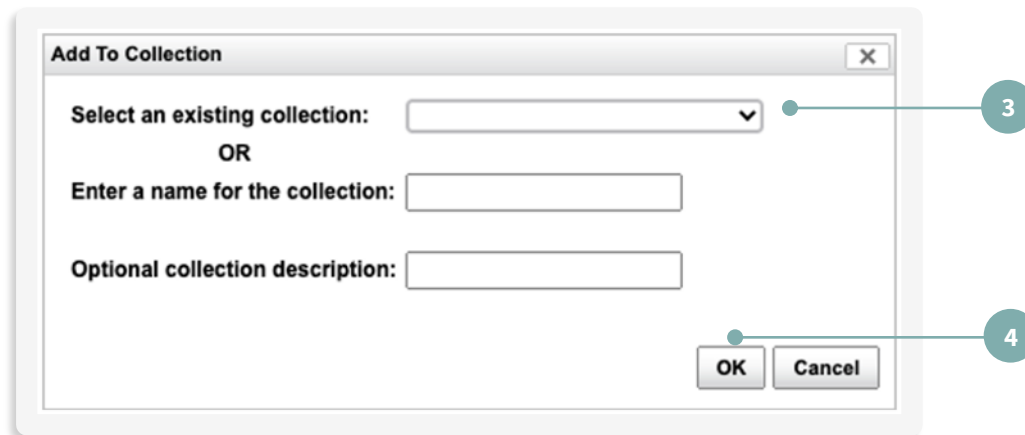
4.2.3 CREATE A DATA COLLECTION

Images must first be added to a Data Collection in order to download. There is a nested listing of Collections on the left side of Data Collections. Use this listing to navigate between your personal and shared collections.

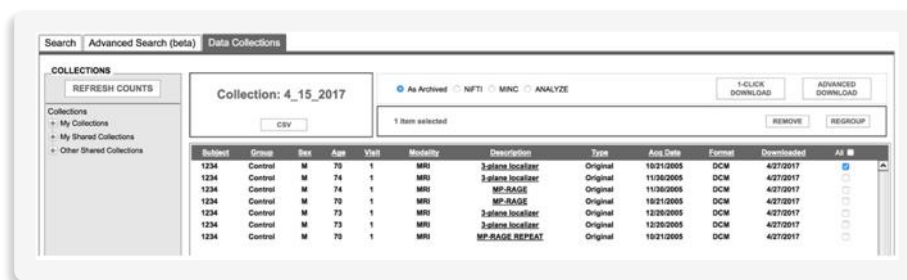
- Perform a Simple Image Search or Advanced Image Search.
- On the Search Results page, choose images by selecting their corresponding checkboxes (1) and click **Add to Collection** (2).



- Enter a collection name or select an existing collection name (3) and click **OK** (4).



4. A new window displays the collection contents. Similar to the Search Results page, the image descriptions link to the Image Data Detail page.

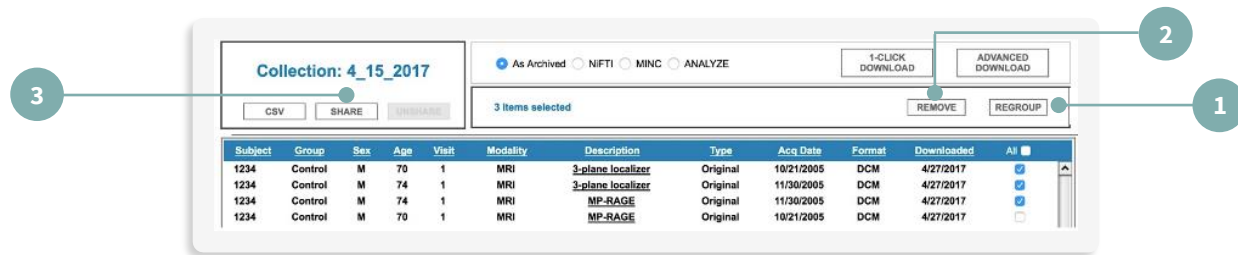


5. You can access collections in the Collections box by clicking:
- My Collections - contains collections you created.
 - My Shared Collections – contains collections you have created and shared with others (Leader access level required).
 - Other Shared Collections – contains standardized collections created by Study Leaders that are available to all users of the project.

4.2.4 EDIT AND SHARE A DATA COLLECTION

Data collections can be created by users of any access level, but only the owner of the collection can edit it. **Project Leader access is required to share a data collection.** Images can be selected (using checkboxes) and moved to other collections using the **REGROUP** (1) button or deleted using the **REMOVE** (2) button. Share collections with Co-Investigators (based on user access level) using the **SHARE** (3) button. User access level can

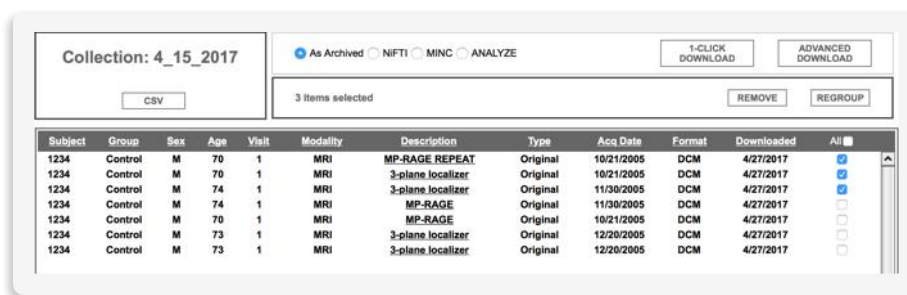
be reviewed in the ‘My Account’ section. Once a collection has been shared, it may be ‘unshared’ with the ‘UNSHARE’ button (greyed out in the screenshot).



4.2.5 DOWNLOAD IMAGE COLLECTIONS OPTIONS

Image collection data can be downloaded with the 1-Click Download or Advanced download options. Select the checkboxes of the images you want to download or use the ‘All’ checkbox to select all images within a collection.

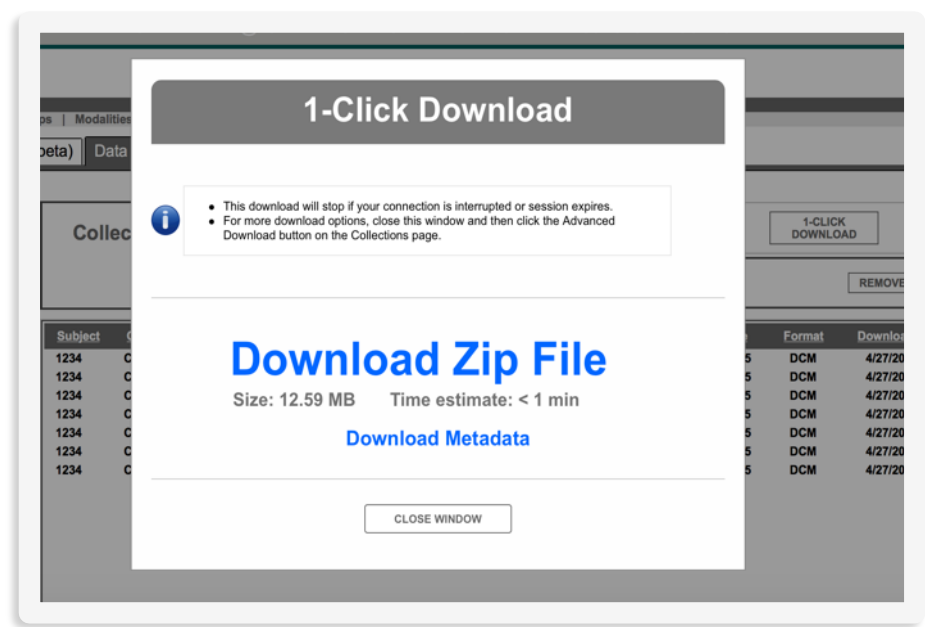
- Select a file format to download the images (As Archived, NiFTI, MINC, ANALYZE).
- Select 1-Click Download or Advanced Download (see specific instructions below).
- To generate a list of all the data in a Data Collection, click **CSV**.



4.2.5.1 1-CLICK DOWNLOAD

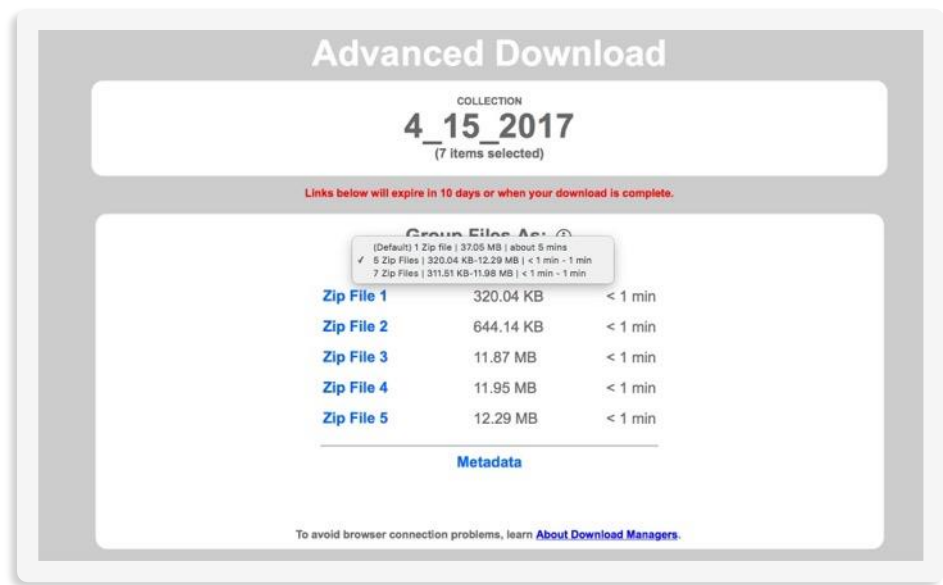
Use the built-in functionality of your web browser to quickly download all the files in your collection to a single zip file. After selecting **1-Click Download** a pop-up window with information about your download (size and time estimate) will appear. Click on the

Download Zip File link to start downloading. The **Download Metadata** link is also available, which provides image identification details.



4.2.5.2 ADVANCED DOWNLOAD

The Advanced Download option will allow you to split your download into multiple files. Click **Advanced Download** and select a grouping option from the drop-down menu. You may click each link to download the zip files or use your favorite Download Manager software to optimize your download speed and experience.



4.2.5.3 DOWNLOAD MANAGERS

Software applications known as Download Managers may help you manage your IDA file downloads. They can automate downloads of multiple files and can keep track of large files seamlessly while you do other things or are away from your computer. A major advantage of most Download Managers is that if a download is briefly interrupted due to poor connectivity, that download will continue from the point where it was interrupted instead of restarting from the beginning.

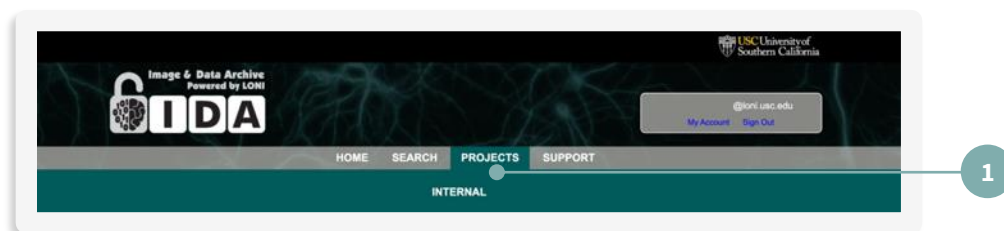
IDA does not endorse or support any download managers and is not responsible for download errors or subsequent issues resulting from use of any third-party products. However, IDA has tested and suggests the following free products for your consideration:

Product Name	Platforms	Site
jDownloader	Linux, Mac or Windows	www.jDownloader.org
uGet	Linux or Windows	www.ugetDM.com
FDM	Mac or Windows	www.FreeDownloadManager.org

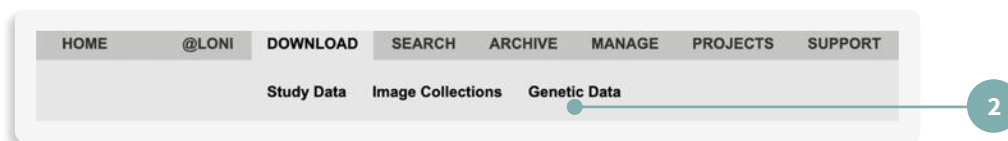
4.3 Genetic Data

Genetic data can be downloaded directly from the Genetic Data section in the IDA.

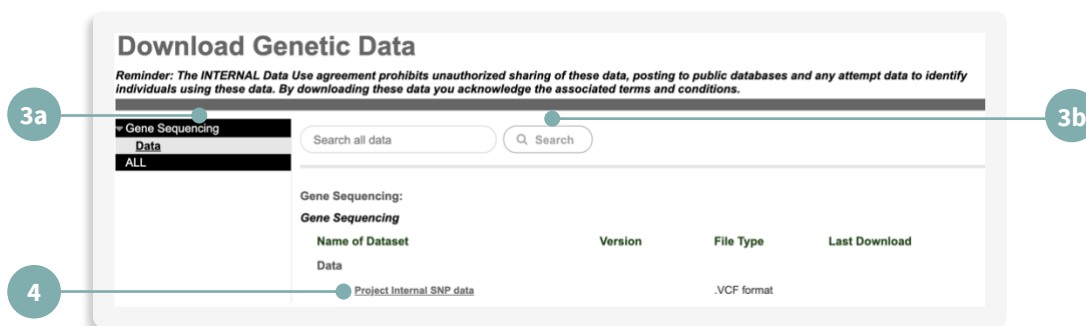
1. Log in to the IDA and click the project of interest from the **PROJECTS** (1) menu.



- To download genetic data, click **Genetic Data** from the DOWNLOAD menu.



- Click the left-hand panel (3a) of the Download Genetic Data page to view available datasets or type in key words in the search box and click **Search** (3b). Click the dataset title (4) to download.



5. Upload (Archive) Data

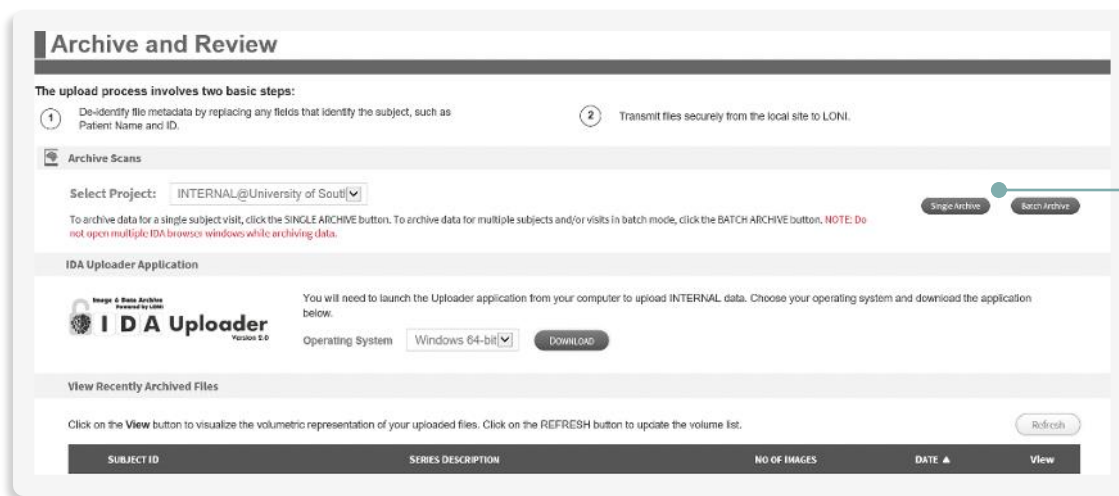
There are two steps in the archive process: de-identification and file transmission. The de-identification step removes or replaces potentially identifying subject information from the image headers. Once the results of the de-identification process have been validated, the files are transmitted from the user's local computer to LONI. Upon arrival at LONI, the data are stored in a fault-tolerant storage area network and the database is populated with relevant metadata attributes.

There are two methods to upload data:

- From within the **Archive and Review** web page: This option is supported only on specific browser versions and requires enabling the Java Plug-in. See section 5.2 for further information.

2. Using the **IDA Uploader application**: This option requires downloading the IDA Uploader from the ARCHIVE page and installing it on the computer. See section 5.3 for further information.

NOTE: If the Single and Batch Archive buttons (1) are visible on the Archive and Review page then uploading via the web page is an option. Otherwise, if the Single and Batch Archive buttons are not visible (2) download and install the IDA Uploader. Refer to the IDA Uploader Application section for more details on how to install.



Archive and Review

The upload process involves two basic steps:

- 1 De-identify file metadata by replacing any fields that identify the subject, such as Patient Name and ID.
- 2 Transmit files securely from the local site to LONI.

Archive Scans

Select Project:

To archive data for a single subject visit, click the SINGLE ARCHIVE button. To archive data for multiple subjects and/or visits in batch mode, click the BATCH ARCHIVE button. **NOTE: Do not open multiple IDA browser windows while archiving data.**

Single Archive **Batch Archive**

IDA Uploader Application

You will need to launch the Uploader application from your computer to upload INTERNAL data. Choose your operating system and download the application below:

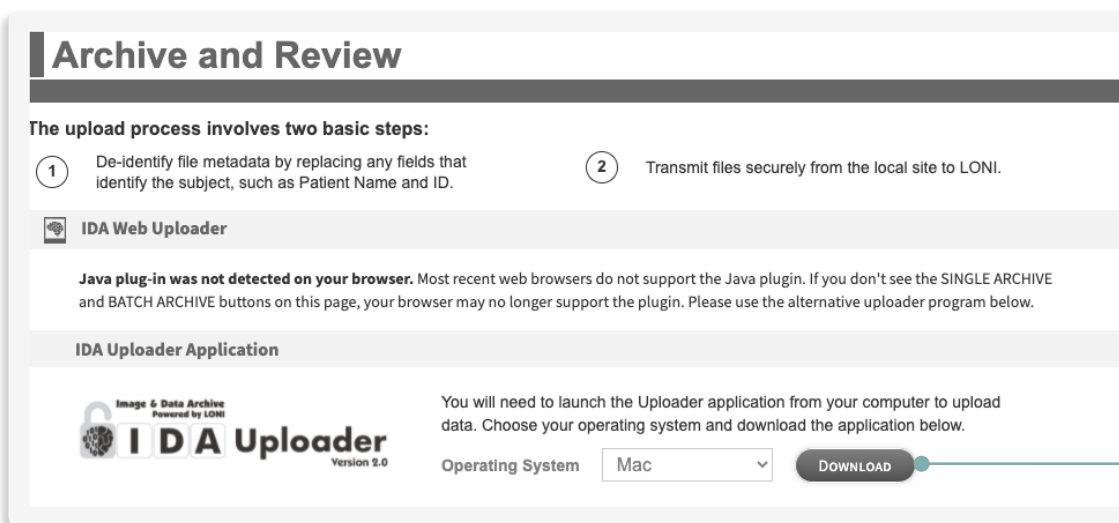
Operating System: **DOWNLOAD**

View Recently Archived Files

Click on the **View** button to visualize the volumetric representation of your uploaded files. Click on the **REFRESH** button to update the volume list.

Refresh

SUBJECT ID	SERIES DESCRIPTION	NO OF IMAGES	DATE ▲	View
------------	--------------------	--------------	--------	------



Archive and Review

The upload process involves two basic steps:

- 1 De-identify file metadata by replacing any fields that identify the subject, such as Patient Name and ID.
- 2 Transmit files securely from the local site to LONI.

IDA Web Uploader

Java plug-in was not detected on your browser. Most recent web browsers do not support the Java plugin. If you don't see the SINGLE ARCHIVE and BATCH ARCHIVE buttons on this page, your browser may no longer support the plugin. Please use the alternative uploader program below.

IDA Uploader Application

You will need to launch the Uploader application from your computer to upload data. Choose your operating system and download the application below.

Operating System: **DOWNLOAD**

There are two options for uploading images – Single and Batch Archive, each with its own distinct advantages.

Batch Archive	VS	Single Archive
Archive image files from multiple subjects simultaneously.		Archive images files from only one subject at a time.
Less time-consuming alternative for archiving multiple studies.		Allows for more user interaction.
Automated Process requiring minimal interaction.		Examine list of de-identified files and corresponding header information before transmission.
Subject and phantom scans acquired on a single day may be uploaded in the same session.		Select which series should be archived when multiple series are available.

5.1 SELECT ARCHIVE METHOD (SINGLE OR BATCH ARCHIVE)

If you are archiving a set of images from only one subject, Single Archive will be suitable. To upload images from multiple subjects, Batch Archive is preferable.

NOTE: Before any processed images can be uploaded, the original raw images must be archived. Only select users are given permissions to upload processed images. Contact the IDA team for details.

REQUIREMENTS:

- Place all image files for each subject within a single directory (**source directory**) which may contain subdirectories.
- Create an empty directory where the de-identified files will be written (**target directory**).
- The browser window must remain open during the entire upload process. Closing the browser window cancels the upload. You may minimize the window.

IMPORTANT:

Once you select ARCHIVE, the Single Archive and Batch Archive buttons may not be present on the Archive & Review page.

1. If the buttons are present, proceed with the appropriate upload. Refer to the IDA Web Uploader (section 5.2).
2. If the buttons are NOT present, you will need to download the IDA Uploader Application and then proceed with the steps listed in the IDA Web Uploader section (section 5.3).

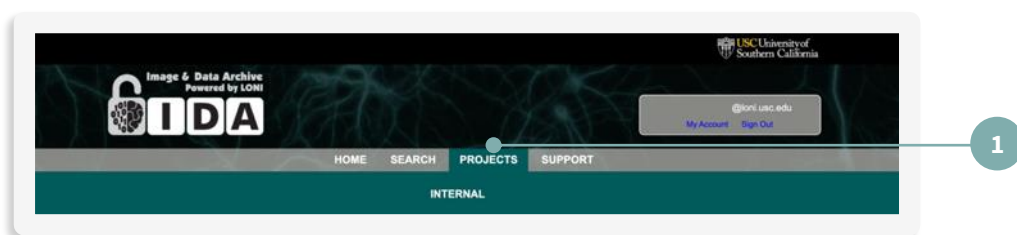
5.2 IDA WEB UPLOADER

The IDA web uploader ‘Single Archive’ and ‘Batch Archive’ buttons are available to users with the Internet Explorer (IE) web browser (minimum version 9) and java plug-in (minimum version 1.8, 32 bit)

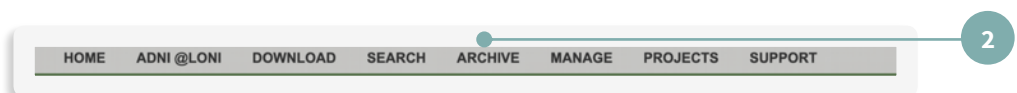
5.2.1 SINGLE ARCHIVE

Use the Single Archive process to upload one or more files from a single subject.

1. Log in to the IDA and click the project of interest from the **PROJECTS** (1) menu.



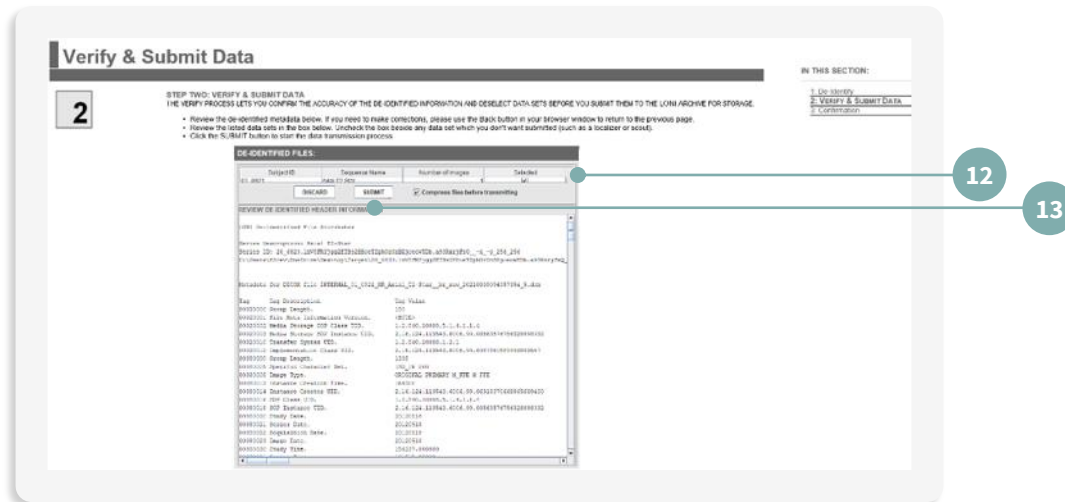
2. Click the **ARCHIVE** (2) menu.



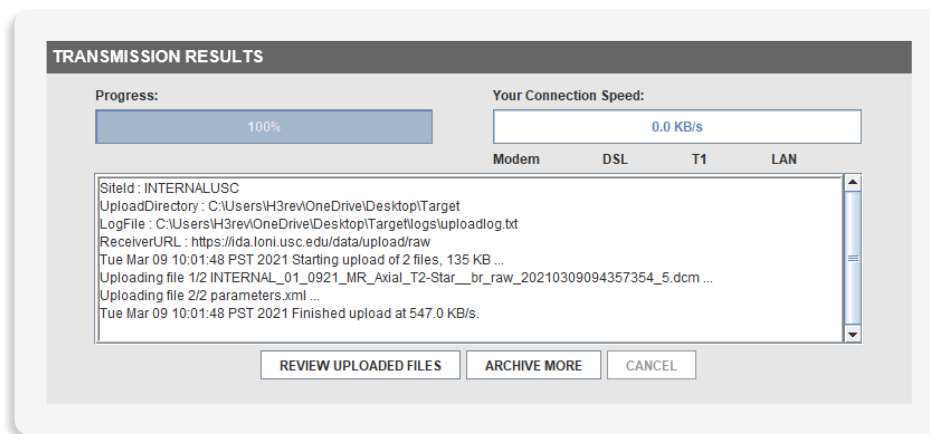
3. On the Archive and Review page select:
 - a. **Project / Site** (3) from the drop-down menu.
 - b. Select the **Single Archive** (4) button.

4. You will be directed to the De-Identification page, where you will select/enter:
 - a. The type of data being uploaded – in this case, **Original** (5).
 - b. The **Research Group** (if requested by the study) (6).
 - c. The **Visit number** (if requested by the study) (7).
 - d. The **Subject ID** (8). The Subject ID you provide replaces the existing Patient ID in the image file(s). It is recommended that a separate cross reference of original and replacement subject identifiers are kept externally.
 - e. The **Source Directory** (9) where the images are contained
 - f. The **Target Directory** (10) for de-identified files to be written to.
 - g. Click **CONTINUE** (11) to begin the de-identification process

5. You will be directed to the Verify & Submit page:
- Any image you do not want to be archived can be deselected (12) by checking the corresponding checkbox.
 - Click **SUBMIT** (13) to begin the transmission process.
- NOTE: This is not a feature with Batch Archive.*



6. Once transmission has begun, a progress bar will show the status of the upload. Once the transmission is complete, you can either:
- Click **REVIEW UPLOADED FILES** to view a list of the archived images on the Archive and Review page.
 - Click **ARCHIVE MORE** to upload files for another subject.

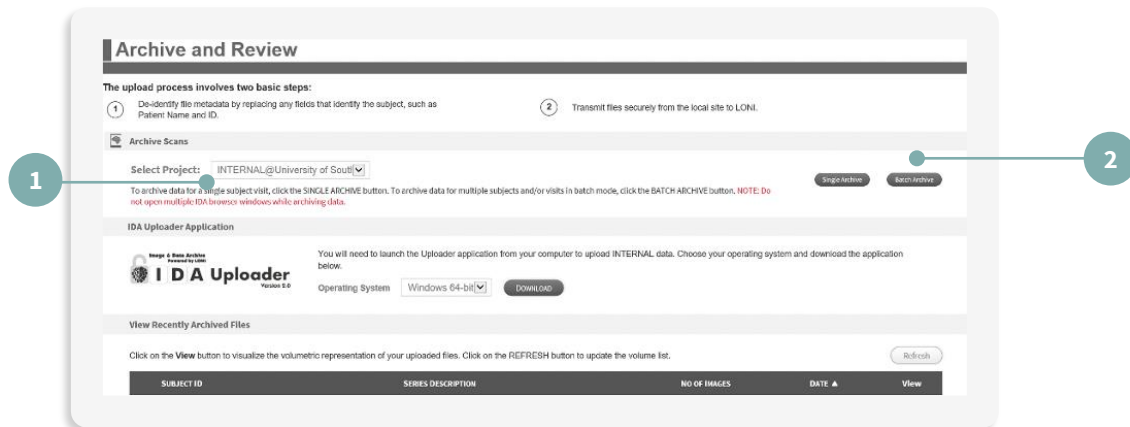


5.2.2 BATCH ARCHIVE

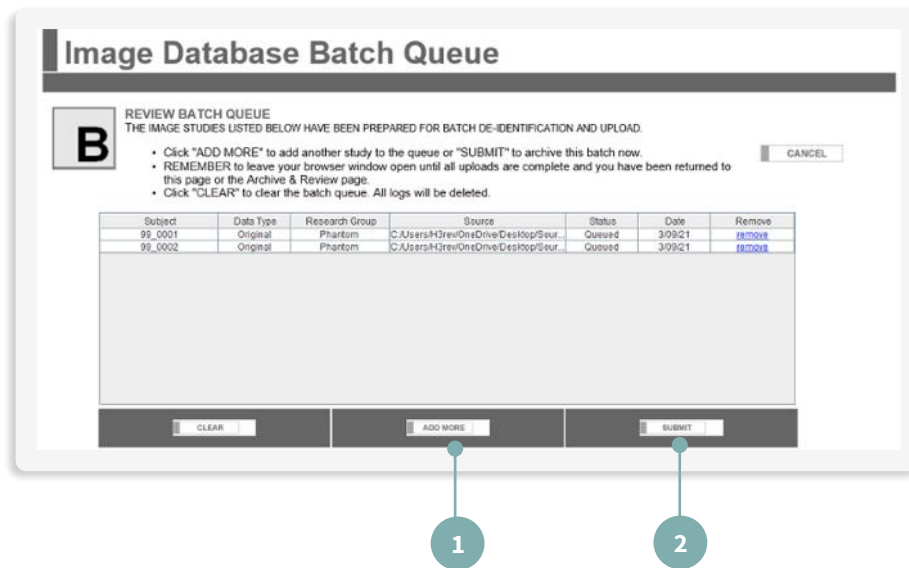
The Batch Archive process is similar to Single Archive, except that multiple subjects and image series can be submitted in a batch. Batches can be of the same or different file formats and modalities. However, users cannot review the results of the de-identification process prior to the batch upload.

Navigate to the Archive and Review page from the Archive menu.

1. Select your **Project/ Site** (1) from the drop-down menu.
2. Click the **Batch Archive** (2) button.



3. Proceed to follow the **De-identification** steps in the Single Archive section.
4. The Batch Archive will skip the Verify and Submit step that is available in Single Archive and direct you to the Image Database Batch Queue page.
5. Select **ADD MORE** (1) to add more images to the Batch. Repeat this process until you have added everything you intend to archive.
6. Click **SUBMIT** (2) to begin both the de-identification and transmission processes.



Once transmission has begun, each subject will be de-identified, and then archived, consecutively. A progress bar will show the status of each upload.

Once complete, click **REVIEW UPLOADED FILES** to view a list of the archived images on the Archive and Review page, or click **ARCHIVE MORE** to upload files for another subject. If you need to continue archiving files for separate subjects, consider using the Batch Archive function instead.

5.3 IDA-UPLOADER APPLICATION

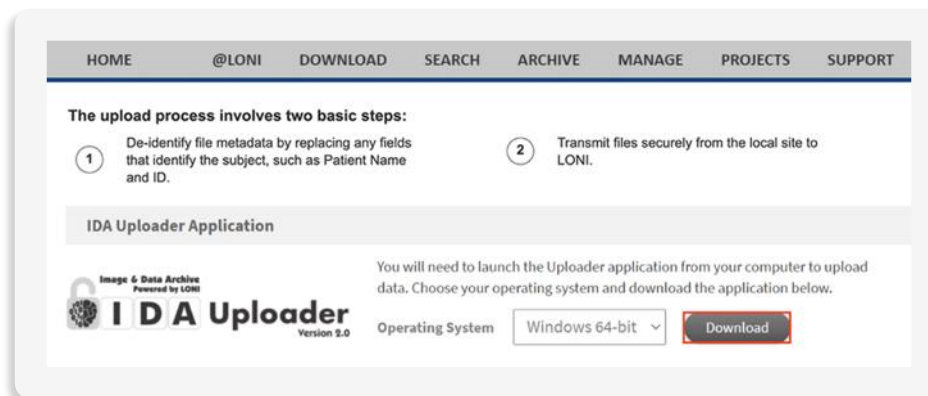
If you do not see the 'Single Archive' or 'Batch Archive' buttons on the Archive and Review Page, you will need to download and install the IDA Uploader Application following the instructions below. If you do not have rights to install software on your computer, please work with your local IT support to complete the installation. The IDA Uploader uses the standard internet ports (80 and 443).

Obtaining and Installing the IDA-Uploader

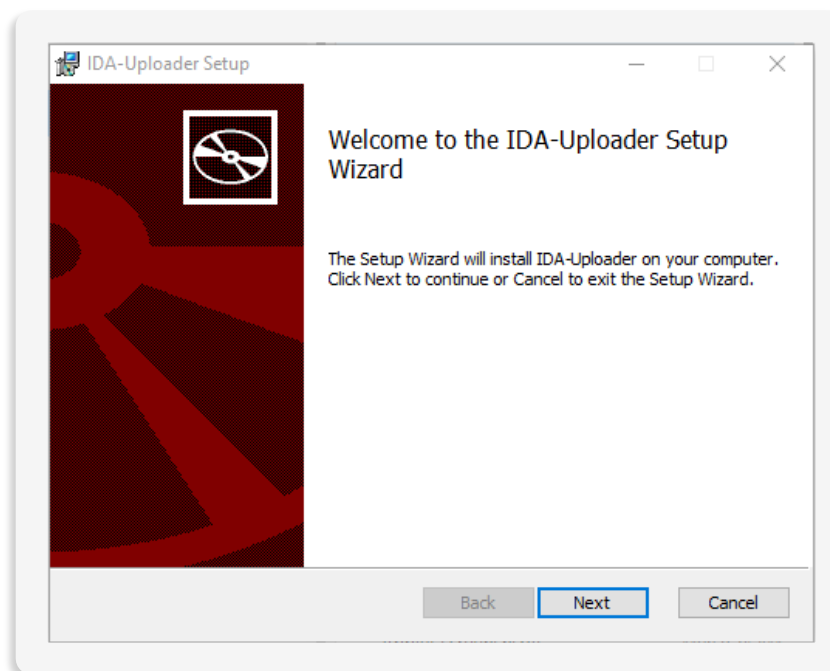
- Installing the IDA-Uploader for Windows
- Installing the IDA-Uploader for Mac
- Installing the IDA-Uploader for Linux

a. Installing the IDA-Uploader for Windows

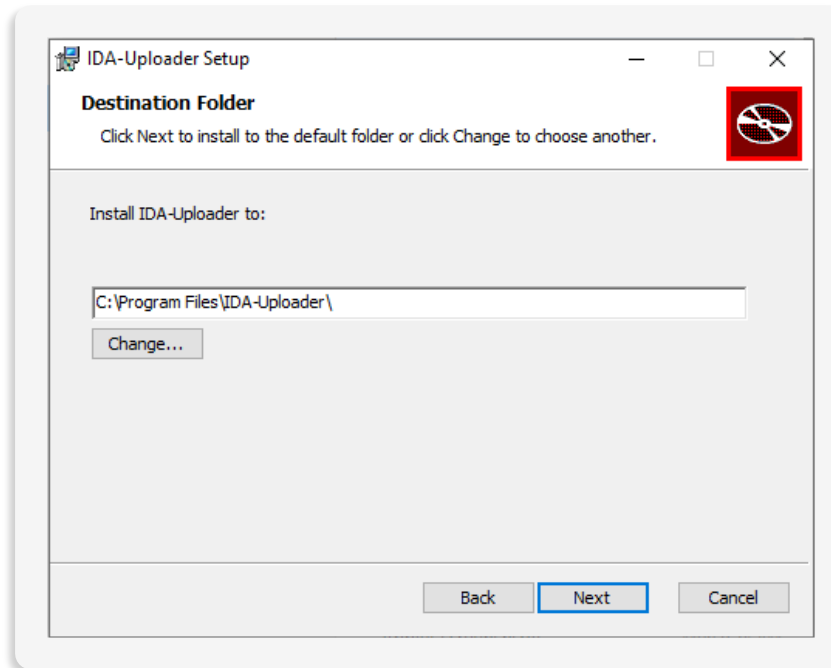
1. Log in to the IDA and select your project from the **PROJECTS** menu.
2. Select the **ARCHIVE** Menu option.
3. Select your operating system (Windows 32-bit or 64-bit) from the dropdown menu.
4. Click **Download**.



5. Open the application by clicking on the download in your browser or by locating the IDA-Uploader-2.0.msi application in the Downloads section of your File Explorer.
6. You will be taken to the IDA-Uploader Setup Wizard – click **Next** to continue.

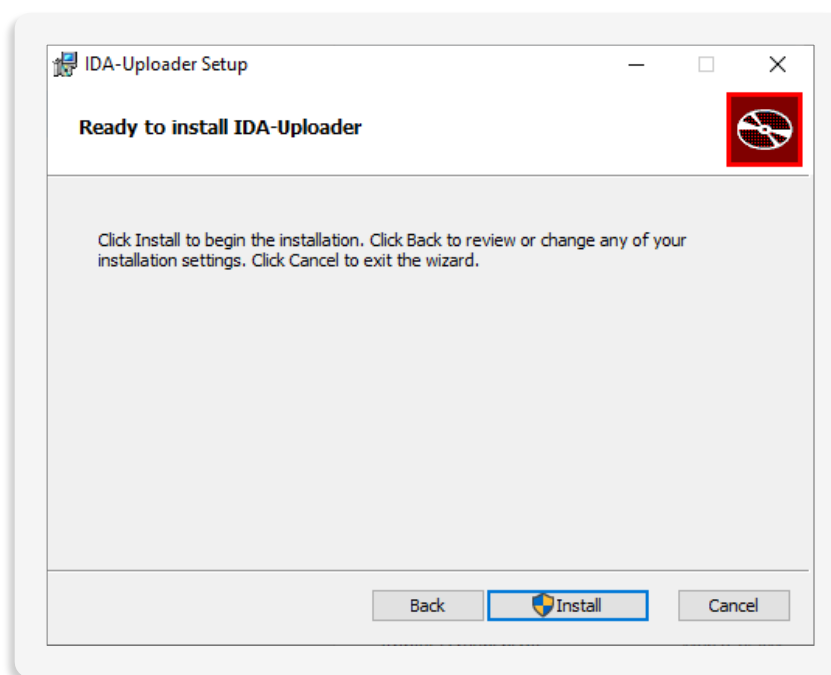


7. Choose your destination folder and click **Next**.

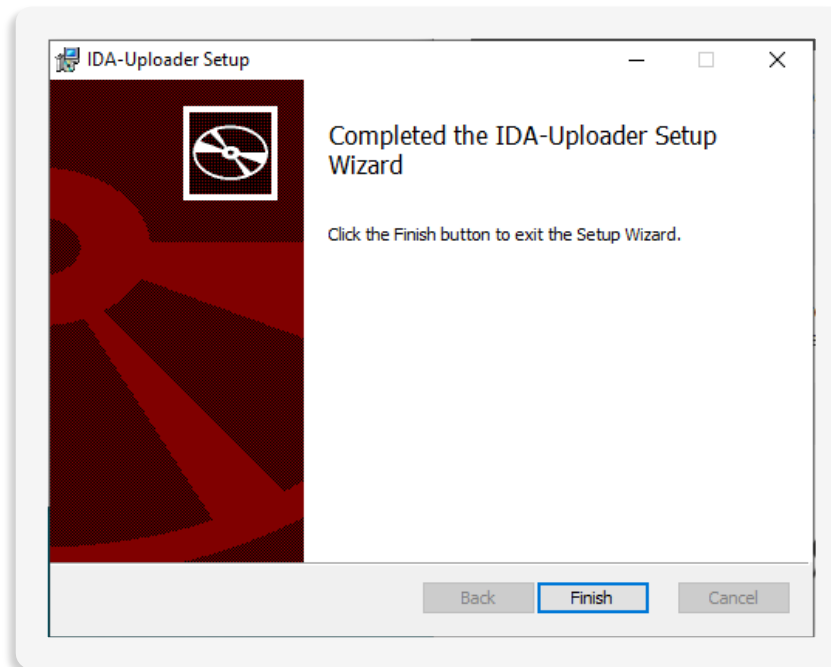


8. Click **Install**.

*NOTE: If you receive a popup asking for permission to run the application, click **Yes**.*



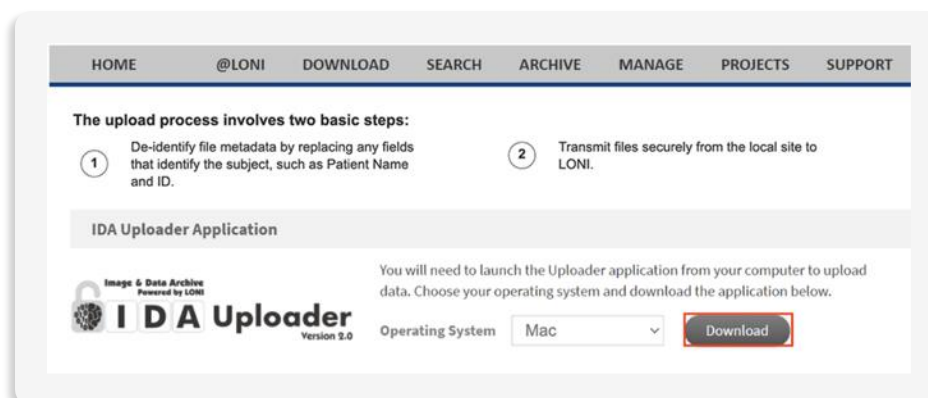
- Click **Finish** to exit the Setup Wizard.



- Locate the application on your device by typing in **IDA-Uploader** in the Windows Start Menu.

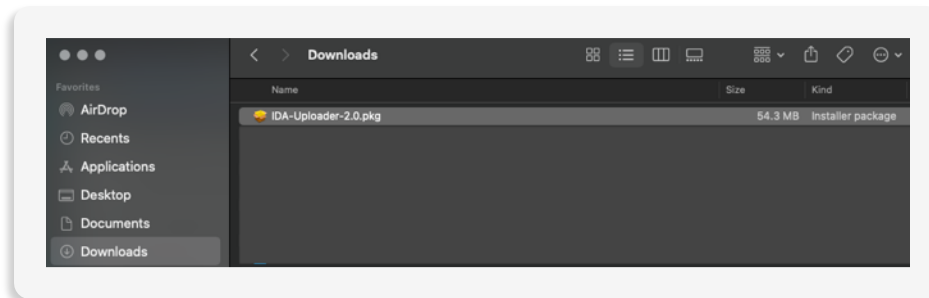
b. Installing IDA-Uploader for Mac

- Log in to the IDA and select your project from the PROJECTS menu.
- Click ARCHIVE from the Menu.
- Select your operating system (Mac) from the dropdown menu.
- Click **Download**.

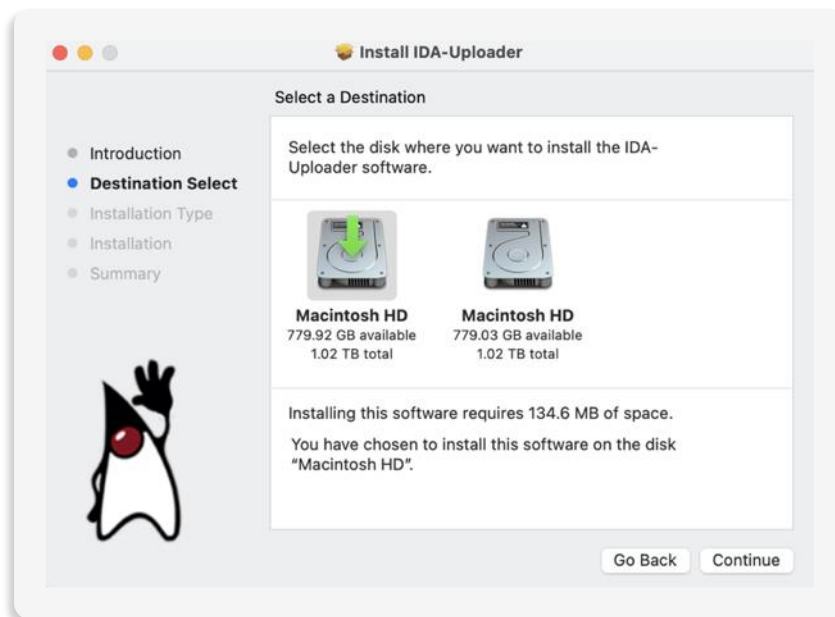


5. Open your Finder application, click Downloads, right-click **IDA-Uploader-2.0.pkg** and select **Open**.

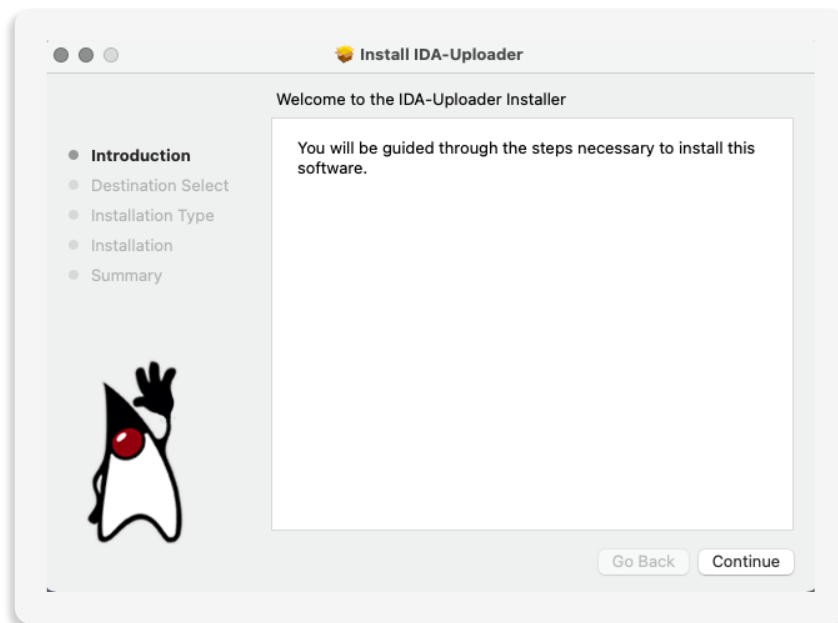
NOTE: If you try to install by double-clicking on 'IDA-Uploader-2.0.pkg', you may receive a message that it cannot be opened. Please ensure that you follow the instructions above to successfully open.



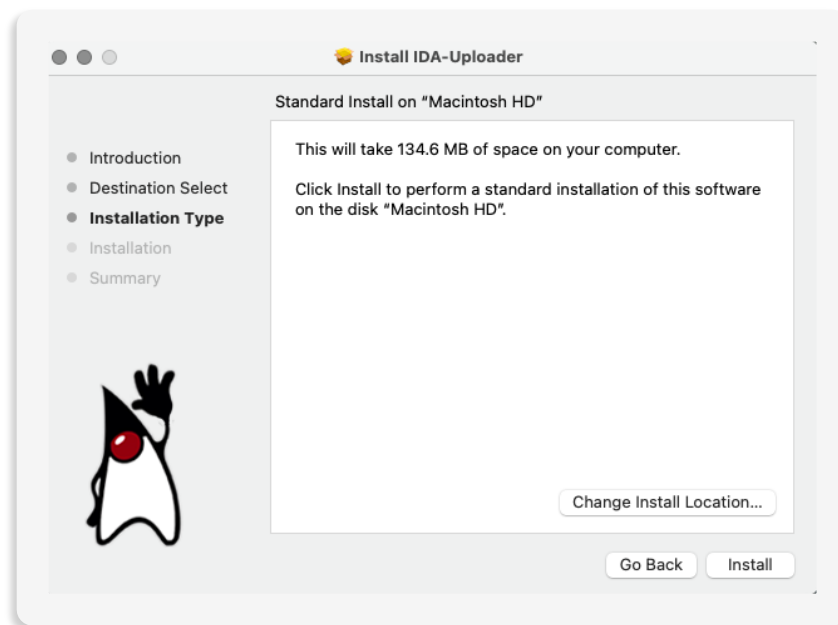
6. An Install IDA-Uploader window will appear. Click **Continue**.



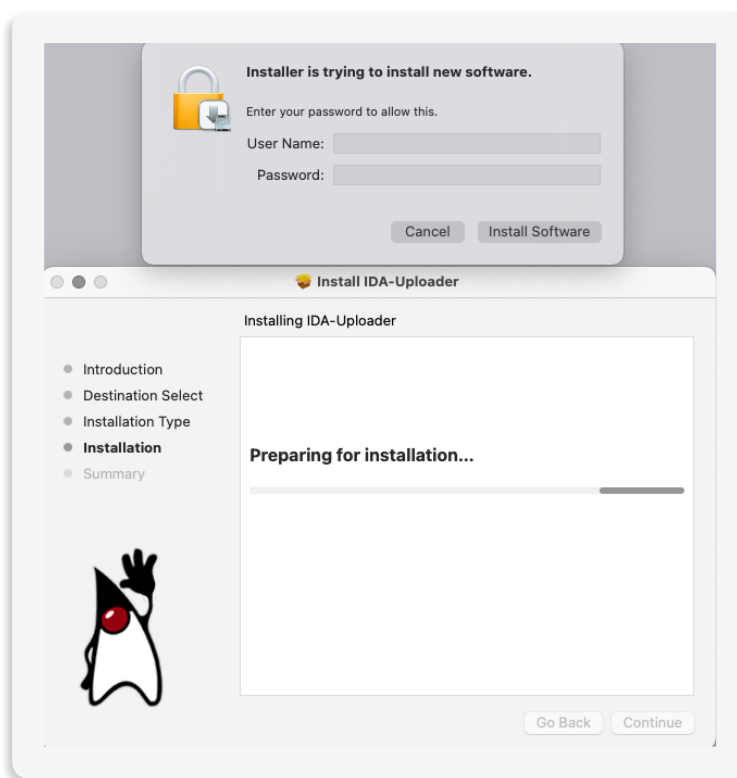
7. Next, choose a destination for the installation. Click **Continue**.



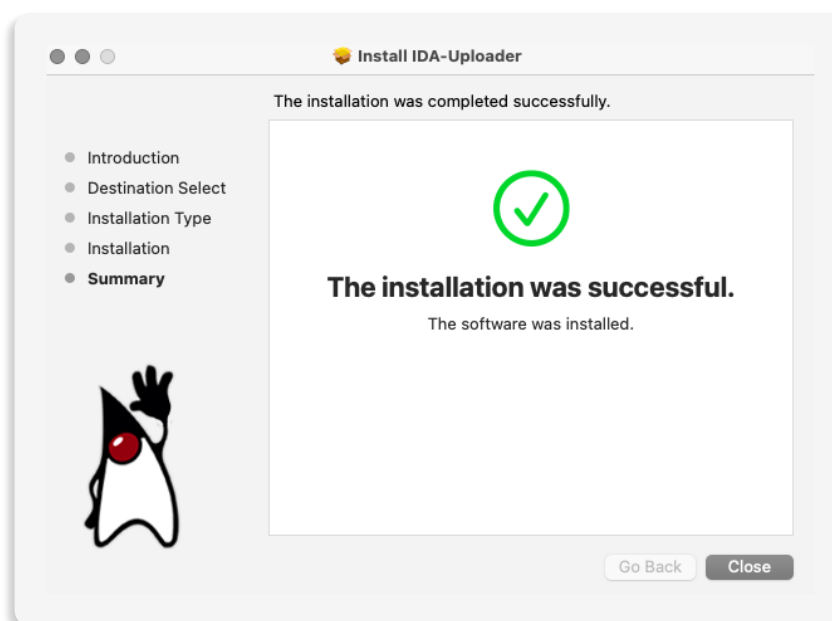
8. For Installation Type, you can review the details of the installation. Click **Install**.



9. During the installation, you will need to enter the User Name and Password for the computer. Click **Install Software**.



10. Once the installation is complete, the window will provide a summary of a successful installation. Click **Close**.

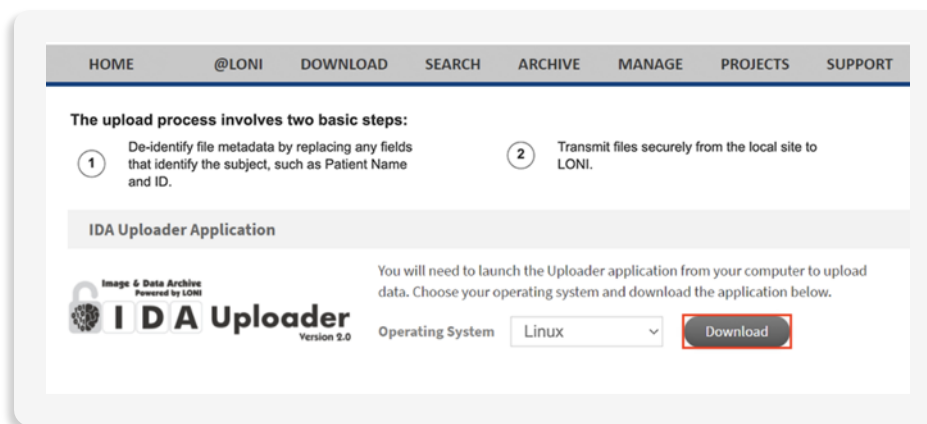


NOTE: A window will appear to ask “Do you want to move the “IDA-Uploader” installer to the trash?”. You can choose Keep or Move to Trash.

11. Locate the application in your computer by opening your Finder application. Click on Applications and double-click IDA-Uploader.

c. Installing IDA-Uploader for Linux

1. Log in to the IDA and select your project from the **PROJECTS** menu.
2. Select the **ARCHIVE** Menu option.
3. Select your operating system (Linux) from the dropdown menu.
4. Click **Download**.



5. Please visit <https://www.oracle.com/java/technologies/javase-downloads.html> to download the latest Oracle JDK.

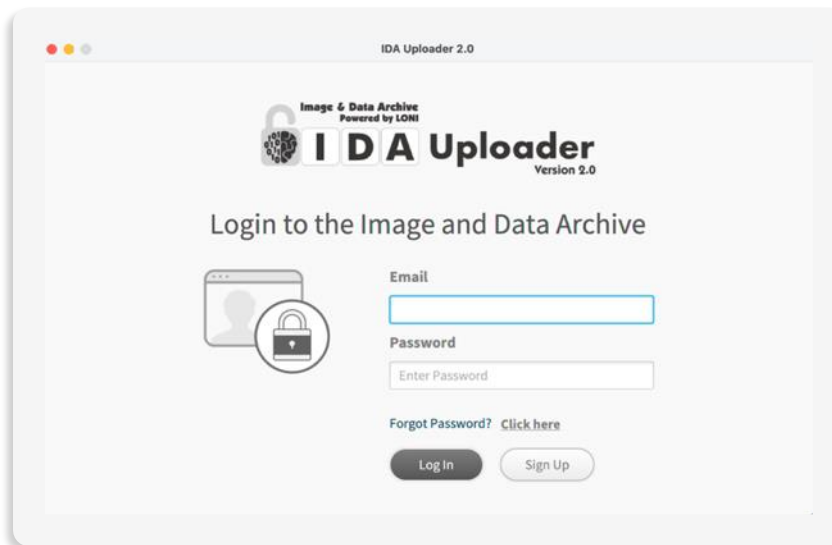
NOTE: A minimum version of 15.0.1 is required to run IDA-Uploader-2.0.jar

6. Choose DEB, PRM or the compressed archive depending on your Linux Distribution.
7. Once you have completed the installation, open the terminal and run: `java -jar IDA-Uploader-2.0.jar`

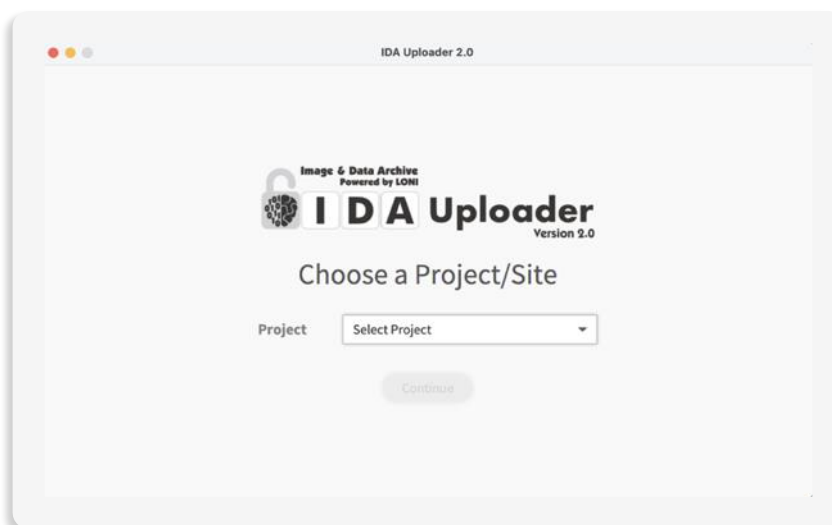
UPLOADING (ARCHIVING)

1. Open the IDA-Uploader application.

2. Enter your email and password, then click **Log In**.

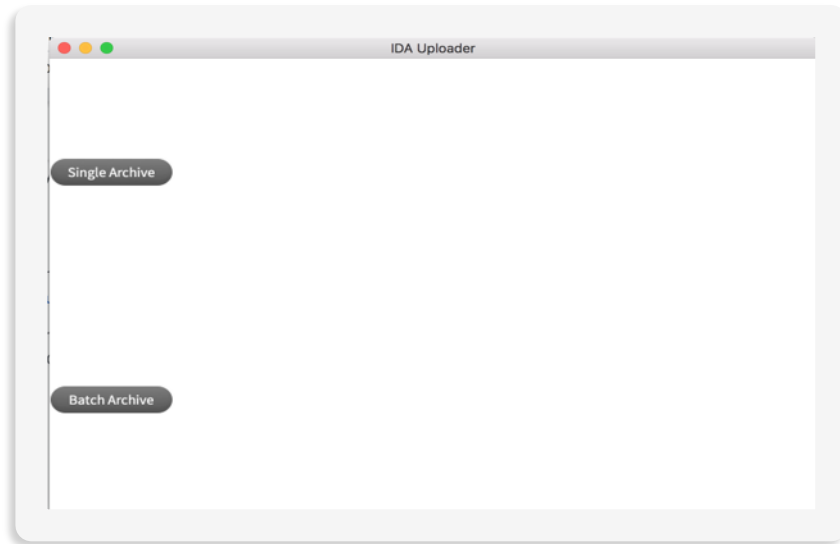
A screenshot of the IDA Uploader 2.0 web application. The page has a light gray background. At the top, it says "Image & Data Archive Powered by LONI" and "IDA Uploader Version 2.0". Below this, the heading "Login to the Image and Data Archive" is centered. To the left of the login fields is an icon of a person's head and shoulders inside a circle, with a padlock icon overlaid. To the right, there are two input fields: "Email" and "Password". The "Password" field has a placeholder text "Enter Password". Below the "Password" field is a link "Forgot Password? Click here". At the bottom, there are two buttons: "Log In" (dark gray) and "Sign Up" (light gray).

3. Select your project from the dropdown menu. Once you select your project, a dropdown with the sites will appear. Select your site and click **Continue**.

A screenshot of the IDA Uploader 2.0 web application. The page has a light gray background. At the top, it says "Image & Data Archive Powered by LONI" and "IDA Uploader Version 2.0". Below this, the heading "Choose a Project/Site" is centered. Below the heading, there is a "Project" label and a dropdown menu with the text "Select Project". Below the dropdown menu is a "Continue" button.

4. Click **Single Archive** or **Batch Archive**.

NOTE: Please refer to the Single Archive or Batch Archive sections of this manual to complete your upload.



6. Troubleshooting

6.1 USER ACCOUNT ISSUES

Q. How do I reset my password?

A: On the IDA homepage, select **Forgot Password** to receive an email link to reset your password.

Q. How do I check the status of my project access in IDA?

A: Please verify your study account is active by following the steps below:

1. Log in to IDA.
2. Select **My Account** in the upper right-hand corner of the IDA.
3. You should see a **Project Accesses** section with the list of projects you have access to.

If you think there is an error with your account, please provide a screenshot and we can confirm your account access.

Q. How do I update my email?

A: To update your email account in IDA please follow these steps:

1. Log in to the IDA
2. Select **My Account** in the upper right-hand corner of the IDA.
3. In the **User Account** section, select the **Update** button.
4. Then select the **Change Email** button.
5. Enter the new email address.
6. Select the **Continue** button.

You should receive an email with a security code, which will be required to complete the update process.

Q. Can I cancel my IDA account?

A: You can cancel an association to an IDA project by individually cancelling the account.

Please follow the steps to cancel account:

1. Log in to IDA.
2. Select **My Account** in upper right-hand corner of page.
3. In the Data Use section, select **Update**.
4. **Cancel** the account.

6.2 DOWNLOAD ISSUES

Q. Why do I get this message when I try to download from the IDA: “Access to utilities.loni.usc.edu was denied. You don't have authorization to view this page. HTTP ERROR 403”?

A: Please ensure that the images are being downloaded from the same computer in which the collection was created. Other issues could be that the URL expired or a dynamic IP address. If it is a dynamic IP issue, we suggest that users work with their IT department to establish a static IP address.

Q. Do you have any suggestions on how to successfully download large files from the IDA?

A: We suggest using Firefox which automatically tries to restart the download if a network interruption occurs.

Q. How do I download data with different modalities?

A: You might consider creating separate collections for each modality and then downloading the different collections. Alternatively, you can just create a collection based on one modality, then search for another modality and add it to the previous collection.

6.3 UPLOAD ISSUES

Q. How do I obtain upload access to a specific project?

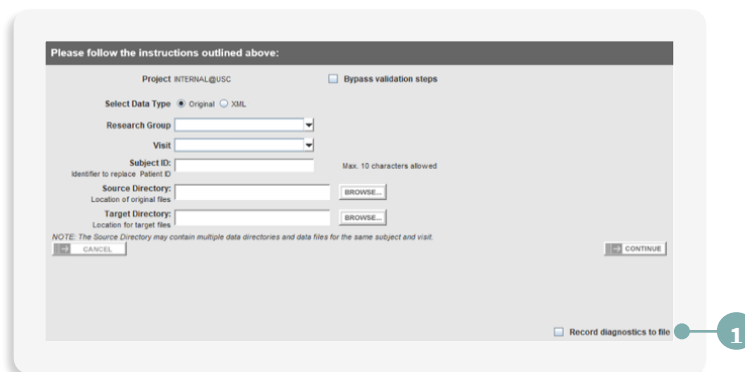
A: Please register for an IDA account. Once registered, send us an email with your registered IDA email, your site name and site number.

Q. Where can I find the option to Archive in my main menu?

A: Select the project you need to upload to in the PROJECTS menu first. The Archive menu will then appear if you have been granted upload access.

Q. I'm having trouble uploading data. What should I do?

A: Look for any error messages. If the error indicates an "Illegal file" see the specific recommendations below. If you are not seeing error messages, please click the **Record diagnostics to file** (1) checkbox and then send us an email with the diagnostics file when the process terminates.



The screenshot shows a web form titled "Please follow the instructions outlined above:". The form includes a "Project" dropdown set to "INTERNAL@USC", a "Bypass validation steps" checkbox, and a "Select Data Type" section with "Original" selected and "XML" as an option. Below this are dropdowns for "Research Group" and "Visit", and a "Subject ID" field with a "Max. 10 characters allowed" note. There are "Source Directory" and "Target Directory" fields, each with a "BROWSE..." button. A "NOTE" at the bottom states: "The Source Directory may contain multiple data directories and data files for the same subject and visit." At the bottom right, there is a checkbox labeled "Record diagnostics to file" with a callout bubble containing the number "1". "CANCEL" and "CONTINUE" buttons are at the bottom.

- Only Original | Primary or Derived | Primary files are accepted.
- The pixel data in the file(s) is stored as JPEG compressed. Only native DICOM formatted data is accepted.

7. Glossary

Term	Definition
[Apply] project	Project requires IDA registered users to submit separate application for use
Advanced Search	Advanced search allows users to search with a combination of subject, study, and image descriptors (including processed images). Users can search several modalities simultaneously and save search results
Batch archive	Uploading data from multiple subjects simultaneously; Batches may be different file formats and modalities
Collections	Data selected from the results of a Simple or Advanced Search and given a meaningful description (collection name)
Delete	Removing image files from archive
De-identification	Removal or replacement of certain image header contents to protect the identity of the subject
DICOM	Digital Imaging and Communication in Medicine
DTI	Diffusion Tension Imaging
Download	The ability to transfer data collections via 1-CLICK DOWNLOAD and ADVANCED DOWNLOAD options
Edit Metadata	Modifying information such as sex, age, and weight, as well as other project-specific attributes

Files with TYPE 1/comprehensive headers	File formats: DICOM, GE, Philips, HRRT and ECAT
Files with TYPE 2/ limited headers	File formats: NIfTI, Analyze, MINC
FMRI	Functional Magnetic Resonance Imaging
Image metadata	Information contained in the image header describing the subject and image
MINC	Medical Imaging NEtCFD
MRA	Magnetic Resonance Angiography
MRI	Magnetic Resonance Imaging
Magnetic NIFTI	Neuroimaging Informatics Technology Initiative
[Open Use] project	Project available to all IDA registered users
Original data	Raw images files pre- or post-processed
PET	Positron Emission Tomography
[Private] project	Project is not available for application or use by IDA registered users
Processed data	Image data files transformed or modifies from their original form, i.e, registered, warped or corrected data
Series description	An identifier (name) given to a data set
Sequence name	Same as series description
Simple Search	Searches based on a limited set of criteria such as subject ID, research group, sex, age, weight, modality, series description

Single archive	Upload of data for one subject at a time; File headers must be of the same type for upload
Source directory	Directory or folder containing the files to be de-identified; Contains single format, single subject images files only
Study	One or more files from the same subject acquired on the same visit and scanner
Target directory	The Target Directory can be an existing folder or a new directory; A temporary location to contain de- identifies files, information and a copy of the logs of the upload process
Upload (Archive)	The de-identification of images to remove potentially identifying subject information, and securely transmit files to be stored in the LONI Image & Data Archive for future retrieval
Validation	The process of verifying results of de-identification and removing images which are not to be uploaded; The validation button appears only with the Single Archive process