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STANDARDIZED CENTRALIZED ALZHEIMERS AND RELATED DEMENTIAS NEUROIMAGING
v1.4.03/2021
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Standardized Centralized Alzheimer's and Related Dementias Neuroimaging (SCAN)

Quick Start Guide
CONTACT INFORMATION FOR THE SCAN STUDY

If you have any questions or concerns regarding MRI imaging, please contact the Mayo Clinic Aging and Dementia Imaging Research (ADIR) Laboratory:

| SCANmri@mayo.edu |

If you have any questions or concerns regarding the scan uploading to LONI, please contact:

| dba@loni.usc.edu |

MRI SCANNER/SITE QUALIFICATION

Prior to any SCAN participants being imaged, the site’s scanner must complete MRI Site Qualification. In most cases, for MRI systems that have been qualified for ADNI or similar studies, site qualification will only involve scanning a phantom with the electronically provided SCAN sequences, which will be provided by the Mayo Clinic’s ADIR Lab. For new sites or scanners not involved in the ADNI or similar studies, qualification will require scanning the complete protocol on a consented volunteer.

PROTOCOLS

There are two protocol options for SCAN – each site can choose which they prefer:

**Option 1:** MRI site only required to do two SCAN sequences:

1. Sagittal 3D Accelerated MPRAGE/IRSPGR (ADNI3 Sequence*)
2. Sagittal 3D FLAIR (ADNI3 Sequence*)

In this case the first 2 scans (approximately 12 minutes of imaging time would belong to SCAN, then remainder time imaging would be unique at each site.)

**Option 2:** MRI site performs the full ADNI3*/SCAN protocol (below)

1. 3 Plane/Tri-Planar Scout/Calibration Scan
2. Sagittal 3D Accelerated MPRAGE/IRSPGR
3. Sagittal 3D FLAIR
4. Axial T2 Star/GRE
5. Axial 3D pCASL
6. Axial DTI (Multiband if applicable)
7. Axial Field Mapping Sequence
8. Axial fcMRI (Subject should have eyes OPEN) - (Multiband if applicable)
9. Accelerated High Resolution Hippocampus Scan (Oblique – perpendicular to hippocampal tail)

**Except for the HRH sequence, all scans should be scan as straight axial or sagittal.**

Prior to scanning, all sites involved in the SCAN study will copy their certified ADNI3 protocol or receive an electronic protocol for importation onto their MRI scanner. The file (Exam Card – Philips; Protocol Exchange – GE; or .exar file – Siemens) and instructions for loading will be provided by the ADIR Lab. This will allow for all systems to have a uniform protocol loaded onto their system without the manual entering of parameters.
NOMENCLATURE

When entering information into the scanner console please use the following nomenclature:

**Phantom:** 1_P_0000 (Site ID*_P_Number) (Use this ID for upload to LONI as well)

**Volunteer:** 1_V_0000 (Site ID*_V_Number) (Use this ID for upload to LONI as well)

*Please note that there is no leading zeros in the site number.

**Subject:** Use local site ID for the participant.

When uploading data for SCAN, you will enter the local participant ID into the IDA Uploader (no site ID included). The IDA Uploader will pass the local participant ID and NACC site ID to NACC and receive from NACC either the existing NACC ID for the subject or a newly created one if necessary. The data in the SCAN database will automatically be identified by the NACC ID (same as SCAN ID).

As noted in section 8, any fields that may contain subject information will be de-identified and rendered HIPAA compliant as part of the upload process via MRI Scan Upload to LONI.

UPLOAD OF DATA

Prior to uploading the qualification data to the SCAN Document Repository on LONI, your site will need to obtain access to the database through the LONI helpdesk: Detailed information on performing the upload can be found in MRI technical manual.

https://ida.loni.usc.edu/services/NewUser.jsp?project=SCAN

In addition to sending to LONI, please archive all sequences acquired using your site’s standard practice as well.

DO YOU HAVE DATA ACQUIRED AFTER JANUARY 1, 2021 ON NACC PARTICIPANTS TO UPLOAD?

Make sure the subject is appropriate and the images have been acquired according to SCAN protocols. If so please plan to send them to LONI as you would with any other subject.

QUESTIONS?

Questions about Uploading SCAN data:  data.coordinator@loni.usc.edu
Technical/QC questions: SCANmri@mayo.edu
Questions/concerns regarding individual subjects contact the study coordinator at your referral site.
Standardized Centralized Alzheimer's and Related Dementias Neuroimaging (SCAN)

MRI Procedures Manual
CONTACT INFORMATION FOR THE SCAN STUDY

If you have any questions or concerns regarding MRI imaging, please contact the Mayo Clinic Aging and Dementia Imaging Research (ADIR) Laboratory:

SCANmri@mayo.edu

If you have any questions or concerns regarding the scan uploading to LONI, please contact:

dba@loni.usc.edu

1. BACKGROUND AND SIGNIFICANCE OF THE SCAN STUDY

The goal of this study is to harmonize MR acquisitions across ADC sites to facilitate analyses of shared data.

2. SITE QUALIFICATION

2.1. Overview

Prior to any SCAN participants being imaged, the site’s scanner must complete MRI Site Qualification. In most cases, for MRI systems that have been qualified for ADNI or similar studies, site qualification will only involve scanning a phantom with the electronically provided SCAN sequences, which will be provided by the Mayo Clinic’s ADIR Lab. For new sites or scanners not involved in the ADNI or similar studies, qualification will require scanning the complete protocol on a consented volunteer.

2.2. Importing Electronic Protocols

Prior to scanning, all sites involved in the SCAN study will receive an electronic protocol for importation onto their MRI scanner. The file (Exam Card – Philips; Protocol Exchange – GE; or .exar file – Siemens) and instructions for loading will be provided by the ADIR Lab. This will allow for all systems to have a uniform protocol loaded onto their system without the manual entering of parameters.
NOTE: Only the scanner qualified for the SCAN study at your site should be used for ALL participant scans during the study. If the same MRI scanner is not used, the scan will fail and will need to be completed on the approved system unless change is pre-approved by MRI unit.

2.3. MRI Qualification Phantom Scan Instructions (Applicable to previously qualified ADNI or Similar study scanners)

For site qualification, the MR site must scan a phantom using the electronically loaded SCAN Human Scan protocols. *(This can be done prior to IRB approval.)*

- MRI qualification will consist of a complete scan of the entire human protocol done on an MRI phantom
- No adjustments should be made to these protocols

**COIL Selection:** Sites are encouraged to use their best phantom available to them for participant scans and, thus, request site certification scans are done with that coil as well.

*NOTE: The ADNI Phantom may not fit in 64 or 32 channel head coils. Sites are instructed to use any spherical MRI phantom that does fit in their best coil.*

Once the scan is received, the ADIR Lab QC team will review the scanned protocols for correct parameters, good image quality and scanner performance. This review will be completed within seven business days of receiving the data. If the scans do not pass ADIR Lab QC, the site will be asked to re-scan after making the suggested changes by the ADIR Lab QC team.

2.4. MRI Qualification Volunteer Scan Instructions (Applicable to new scanners/sites not previously qualified for ADNI or similar studies)

If a site is using a new scanner that was not previously qualified for the ADNI or similar study, the ADIR Lab will require a site to acquire the SCAN sequences on a human volunteer to complete MRI certification. In this case, the site will be asked to scan the entire protocol on consented human volunteer(s) without modification.

Once the scan is received, the ADIR Lab QC team will review the scanned protocols for correct parameters, good image quality and scanner performance. This review will be completed within seven business days of receiving the data. If the scans do not pass ADIR Lab QC, the site will be asked to re-scan after making the suggested changes by the ADIR Lab QC team.

2.5. Nomenclature for Qualification Scans

When entering information into the scanner console please use the following nomenclature:

**Phantom:** 1_P_0000 (Site ID_P_Number)

**Volunteer:** 1_V_0000 (Site ID_V_Number)

*Please note that there is no leading zero in the site number.*
2.6. Data Transfer of Qualification Scans

2.6.1. Upload of Qualification Scans

Prior to uploading the qualification data to the SCAN Document Repository on LONI, your site will need to obtain access to the database through the LONI helpdesk:

https://ida.loni.usc.edu/services/NewUser.jsp?project=SCAN

Please archive all sequences acquired for site certification using your site's standard practice and upload via the LONI Image Repository (Section 8).

2.7. Site Certification Scan Results

The ADIR Lab QC team will perform a quality control check on the phantom and/or volunteer scan data within seven business days of data received. ADIR Lab QC team will determine if the correct parameters have been met and assure there are no other underlying problems seen during the scanning of these sessions. After successful qualification scanning and successful scan of the first participant, an official Site Certification e-mail will be sent to the SCAN study contacts notifying them their site has been approved and is ready to scan participants.

3. ONGOING QUALITY CONTROL AND PHANTOM SCANS

There are no ongoing quality control phantom scans for SCAN. The MRI site scanners will only be required to scan the MRI phantom at initial site qualification and again if there are scanner software and/or hardware upgrades.

Please see instructions for scanning the phantom in the MRI Site Qualification, Section 2.3.

3.1. Hardware and Software Upgrades

To avoid any delays or mistakes in scanning, the ADIR Lab QC team requires notification at least 2 weeks PRIOR to any software and/or hardware upgrades for any scanner involved in the SCAN imaging study so they can provide you the correct upgraded protocols if needed.

At the time of the MRI scanner upgrade, you will be required to scan a phantom prior to continue scanning study participants.

IMPORTANT:
If a site fails to perform these phantom scans and/or they have not been performed within 2 weeks of the upgrade, SCAN may not accept or reimburse the subsequent participant scans. The study coordinator and the principal investigator at the site will be notified if a phantom scan has not been received within that time frame.

If you have questions regarding this procedure, please contact: SCANmri@mayo.edu.
3.2. Phantom Results and Site Notification

The ADIR Lab QC team will examine each phantom data set to ensure that there are no underlying problems with the scanning session. Within seven business days of receiving the data, if there is an issue that needs to be addressed, an email will be sent notifying you of the problem.

4. MRI PARTICIPANT PRE-SCAN PROCEDURES

4.1. Participant Pre-screening

All participants should have been screened by the consenting study coordinator for standard MRI contraindications. However, participants must be screened for MRI contraindications immediately before the MRI scan using your local standard protocol. Contraindications include, but are not limited to:

- The presence of non-removable ferrous metal objects
- Aneurysm clips
- Pacemakers
- Other contraindications such as defibrillators, etc.

4.2. Participant Safety and Monitoring

1. All sites should follow the standard participant consent protocols as approved by your local IRB.
2. Explain the scan procedure to the participant so that they know what to expect during the MRI.
3. Provide the participant with the opportunity to use the restroom before the scan begins.
4. Please use universal MRI safety precautions. Make sure that participant does not have any large ferrous metal on or inside of him/her such as shrapnel, a metal fragment in the eye, aneurysm clips, ear implants, spinal nerve stimulators, permanent makeup, or a pacemaker. Make sure that all loose metal objects are removed.
5. Offer the participant hearing protection.
6. Please use standard local practice for monitoring the participant during the scan. These may include MRI safe devices to monitor pulse and O\textsubscript{2} levels.

4.3. Head Coil Selection

Sites are encouraged to use the best head coil available to them for participant scans. *(Typically this is a 64 or 32 channel head coil for most Siemens and Philips sites.)*

4.4. Participant Positioning

1. Proper participant positioning is crucial for successful reproduction of serial MRI exams. Therefore, it is important that each participant is positioned in the same manner for each and every MRI exam.
2. Please follow the procedures below for positioning the participant in the head coil:
   - Place clean sheet on scanner table and coil cradle.
   - Besides standard room exclusions, ensure the participant has removed their dentures as well as any hair clips, combs, earrings, necklaces, etc.
   - Remove all upper body clothing with metallic trim, such as zippers, buttons or embroideries that may cause artifacts in the MRI images.
   - Provide each participant with ear protection.
   - Position the participant so their head and neck are relaxed, but without rotation in either
plane. Proper placement in the head coil is crucial because scans are acquired straight, not in an oblique orientation. The participant should also be well supported in the head coil to minimize movement. Motion artifacts may result in data rejection and request for a re-scan in many cases.

- Support under the back and/or legs can help to decrease strain on the knees and back as well as assisting in the stabilization of motion in the lower body.
- Once participant has been positioned, place sponges along the sides of head and a Velcro strap across forehead (if available) for stabilizing support and reduction of motion.
- **Align the centering crosshairs on the participant’s nasion (directly between the eyebrows) at every scanning session.**
- Center the head coil over the participant’s head, making sure the participant is high enough in the coil to prevent signal loss at the inferior aspect of the brain.
- Offer each participant a panic button in case of emergencies or claustrophobia if common local practice at your facility (for example, a squeeze ball alarm).
- Remind participant to hold as still as possible and advance participant to the iso-center of the scanning bore.

**NOTE**
- If a deviation from these instructions is required to accommodate a participant, the MRI technologist should notify the ADIR Lab QC team (SCANmri@mayo.edu).

5. MRI ACQUISITION SEQUENCES

5.1. MRI Human Brain Scan Sequences

SCAN Participant Scanning Sessions: (ALL SCANS SHOULD BE STRAIGHT - NON OBLIQUE)

**There are two protocol options for SCAN – each site can choose which they prefer:**

**Option 1:**

MRI site only required to do two SCAN sequences:

3. Sagittal 3D Accelerated MPRAGE/IRSPGR (ADNI3 Sequence*)
4. Sagittal 3D FLAIR (ADNI3 Sequence*)
In this case the first 2 scans (approximately 12 minutes of imaging time would belong to SCAN, then remainder time imaging would be unique at each site.)

**Option 2:**

MRI site performs the full ADNI3*/SCAN protocol (below)

### 5.1.1. Full SCAN (ADNI) Human Brain Scan Protocol

1. 3 Plane/Tri-Planar Scout/Calibration Scan
2. Sagittal 3D Accelerated MPRAGE/IRSPGR
3. Sagittal 3D FLAIR
4. Axial T2 Star/GRE
5. Axial 3D pCASL
6. Axial DTI (Multiband if applicable)
7. Axial Field Mapping Sequence
8. Axial fcMRI (Subject should have eyes OPEN) - (Multiband if applicable)
9. Accelerated High Resolution Hippocampus Scan (Oblique – perpendicular to hippocampal tail)

(* = Protocol will updated to ADNI4 when applicable *)

### 5.2. MRI Example Images

**5.2.1. Human Scan Sequences - Image Examples**

The following pages are example images of what will be acquired for the SCAN study, as well as positioning recommendations.
• If the participant is not positioned properly, please adjust the participant in the head coil and re-scout. Continue repositioning and scouting until the participant is correctly centered in the head coil.

5.2.1.1. 3 Plane/Tri-Planar Scout

1. A quick acquisition in 3 orthogonal planes for anatomical orientation. One slice acquired in the middle of each plane (sagittal, coronal, transverse). The head should be centered laterally along the inter-hemispheric fissure and centered on the thalamus for the anterior/posterior and superior/inferior planes. Please use the images below as reference when determining if the subject is positioned properly.

2. Proper placement of the subject’s head inside the head coil is crucial because scans are acquired straight, not in an oblique orientation.

3. If the subject is not positioned properly please adjust the subject in the head coil and re-scout. Continue repositioning and scouting until the subject is correctly centered in the head coil.

4. **Pre-scan Adjustments/Calibration Scans:** Most modern MRI scanners provide automated adjustment procedures for RF coil tuning and frequency adjustments after the subject is positioned in the magnet. Follow the adjustment procedures provided by the manufacturers.
5.2.1.2. Sagittal 3D Accelerated MPRAGE/IRSPGR

Figure 1. Example of Sagittal 3D Accelerated MPRAGE/IRSPGR
5.2.1.3. **Sagittal 3D FLAIR [Straight, no oblique]**

Figure 7. 5.2.1.2. Sagittal 3D FLAIR
5.2.1.1. Axial T2 Star/GRE

Figure 6. Example of Axial T2 star / GRE

5.2.1.1. Axial 3D ASL (Arterial Spin Labeling) [Straight axial, no oblique]

Example:

Orientation: Straight Axial. Prescribe the 3D Slab inferior to superior. **DO NOT oblique the slab to compensate for subject held tilt. Scan as straight axial.
5.2.1.2. Axial Diffusion Weighted Image (DTI) [Straight axial, no oblique]

2. Positioning: Position on mid-sagittal slice from tri-planar scout. Make sure to get full BRAIN coverage. The acquisition stack should be placed just above the most superior point in the brain and should fully cover the cerebellum as well as all brain in the lateral and the anterior to posterior planes. If extra transverse slices are required to achieve this coverage please acquire those slices.
5.2.1.3. **Field Mapping Sequence [Straight axial, no oblique]**

![Image of Field Mapping Sequence](image)

5.2.1.4. **Axial functional connectivity MRI (fcMRI) [Straight axial, no oblique]**

![Image of Axial functional connectivity MRI (fcMRI)](image)

**Figure 8. Example of Axial functional connectivity MRI (fcMRI)**

1. Subject should have eyes OPEN
2. Orientation: Straight Axial DO NOT Oblique Scans.
3. Subject Instruction: Please instruct the subject to keep their eyes open during the entire scan. You can instruct them to focus on a point on the mirror or scanner. Also remind the subjects of the importance of holding their head still for the entire scan.
5. **Figure 9.** Acquisition stack should be placed just above the most superior point in the brain and should cover the cerebellum, if possible.

5.2.1.5. **High Resolution Hippocampus Scan (Oblique)**
Instructions for positioning

Hippocampus
(sagittal cross-section and image position defined on coronal plane)
Most Superior portion of the FOV should be placed so that top of the skull is included.

Position the FOV so that it covers the entire Hippocampus from head to tail.
Use only the electronically imported SCAN sequences as described in Section 2.2.

6. MRI PARTICIPANT SCAN PROCEDURES

6.1. Entering Participant Information into the Scanner

MRI sites are encouraged to enter the SCAN subject ID in the Patient ID and Patient Name fields whenever possible, as described in Section 6.2. If this is not feasible, the technologist should enter the participant information into the scanner per the local site’s standard. The scan header will be de-identified and rendered HIPAA compliant as part of the upload process via MRI Scan Upload to LONI (Section 8).

6.2. Participant Anonymization Nomenclature

Patient ID: use local site ID for patient (for upload, don’t precede with “ADRC”).

When uploading data for SCAN, you will enter the local participant ID into the IDA Uploader (no site ID included). The IDA Uploader will pass the local participant ID and NACC site ID to NACC and receive from NACC either the existing NACC ID for the subject or a newly created one if necessary. The data in the SCAN database will automatically be identified by the NACC ID (same as SCAN ID).

As noted in section 8, any fields that may contain subject information will be de-identified and rendered HIPAA compliant as part of the upload process via MRI Scan Upload to LONI.

6.3. Scan Discontinuation

If the participant elects to discontinue the MRI because of discomfort, every effort should be made to adjust the table, head coil, etc. and finish acquiring the scan. However, if the participant still does not want to complete the scan, then the MRI should be abandoned and an email should be sent to SCANmri@mayo.edu including the reason the participant was unable to complete the MRI.

6.4. On-Site Clinical Reads

Every participant must receive a clinical read by an on-site radiologist at the MRI facility. The handling of the MR interpretation should follow standard local practice at the referral site. Scan interpretations for diagnostic clinical purposes will not be provided by the ADIR Lab (MRI Core) for SCAN.

6.5. Archive Procedures

Every MRI scan for the SCAN study must be archived following your site’s standard practice. Additional data transfers or copies may be requested in the event that a data transfer is interrupted or incomplete. Possible MRI archive mediums include:
- PACS
6.6. Request for Repeat/Additional MRI Scans

A request for a re-scan may be required in the event that the Axial T2 Start/GRE, Axial T2 FLAIR, and/or Sagittal 3D Accelerated MPRAGE/IRSPGR is found to be unacceptable due to participant motion or an incomplete/incorrect MRI acquisition.

The ADIR Lab QC team will check all SCAN scans to be sure that the exam was conducted on the site’s scanner qualified for the SCAN study, and that the correct electronically loaded sequences have been used to scan each participant. Repeat exams may also be required if the incorrect scan sequence, orientation, or angulations were used. It is imperative to use the SCAN approved acquisition sequence with every SCAN participant. Scans with image degradation due to the incorrect scan sequence, orientation, or angulations may not be reimbursed nor will scans acquired on any scanner other than the one qualified for SCAN without authorization of the MRI unit. Re-scans will be reimbursed if the correct scan sequence, orientation, and angulations were used.

7. MRI CONTACT INFORMATION

<table>
<thead>
<tr>
<th>ADIR Lab PI</th>
<th>Clifford R. Jack, M.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADIR Lab Project Manager</td>
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<td>ADIR Lab MRI Technologist</td>
<td>Bret Borowski (<a href="mailto:borowski.bret@mayo.edu">borowski.bret@mayo.edu</a>)</td>
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<td>ADIR Lab E-mail Address</td>
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</tr>
<tr>
<td>ATRI Data Transfer Inquiries</td>
<td><a href="mailto:dba@loni.usc.edu">dba@loni.usc.edu</a></td>
</tr>
</tbody>
</table>
8. DATA TRANSFER INSTRUCTIONS

INTRODUCTION
This document provides instructions for account registration and uploading images for the SCAN project in the Laboratory of Neuro Imaging's Image & Data Archive (IDA). For sites needing to upload site qualification scans, instructions for uploading to the SCANQUAL project are also included. The IDA utilizes a data de-identification process and encrypted file transmission to help ensure compliance with subject-privacy regulations.

TOPICS
A. USER REGISTRATION
B. OBTAINING AND INSTALLING THE IDA-UPLOADER
C. UPLOADING (ARCHIVING) TO SCAN
D. UPLOADING (ARCHIVING) TO SCANQUAL (Qualification scans only)

SYSTEM REQUIREMENTS
The IDA system requires the following:
• a computer with Internet access
• newer web browser software (IE/Edge, Firefox, Chrome, Safari)
• a valid user account with upload access for SCAN and/or SCANQUAL
• installation of the IDA Uploader application

A. USER REGISTRATION (Skip this step and go to Step B if you already have an IDA account)
1. To register for a user account, go to the Image & Data Archive Log-In website (https://ida.loni.usc.edu) and select “Instant free signup” in the top right corner.

2. Complete New account registration (3 steps).
   a. Enter your email address and select “CONTINUE”. A security code will be emailed to you.
b. Enter the security code sent to your email and click “CONTINUE”.

c. Complete the New account registration form and click “REGISTER”. A link to set your password will be emailed to you with subject line “Welcome to the LONI Image & Data Archive”.

d. Create a password and click “CONTINUE”.
3. Your account is created, if you need upload access to SCAN or SCANQUAL, please send an email to the appropriate contact following the steps below:
   For access to SCAN or SCANQUAL, email data.coordinator@loni.usc.edu
   a. Enter “SCAN Upload Access Request” or “SCANQUAL Upload Access Request” in the subject line of your email.
   b. Provide the email address you used when creating your account, your site name and site number in your email request.
   c. You will receive an email when your account access has been set, generally within one working day.

B. OBTAINING AND INSTALLING THE IDA-UPLOADER
   a. Installing the IDA-Uploader for Windows
   b. Installing the IDA-Uploader for Mac
   c. Installing the IDA-Uploader for Linux

   a. Installing the IDA-Uploader for Windows
   1. Log in to the IDA and select SCAN 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”.
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.

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”.

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8. Click “Install”.
   Note: If you receive a popup asking for permission to run the application, click “yes”.

9. Click “Finish” to exit the Setup Wizard.
10. Locate the application on your device by typing in “IDA-Uploader” in the Windows Start Menu.

**b. Installing IDA-Uploader for Mac**

1. Log in to the IDA and select SCAN from the PROJECTS menu.
2. Click ARCHIVE from the Menu.
3. Select your operating system (Mac) from the dropdown menu.
4. Click “Download”.
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 Uploader Application

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

- Operating System: Mac
- 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”.

[Image of the Finder application with the 'IDA-Uploader-2.0.pkg' file highlighted]
7. Next, choose a destination for the installation. Click “Continue”.

Select a Destination

Select the disk where you want to install the IDA-Uploader software.

Macintosh HD
779.92 GB available
1.02 TB total

Macintosh HD
779.03 GB available
1.02 TB total

Installing this software requires 134.6 MB of space.
You have chosen to install this software on the disk “Macintosh HD”.

Continue
8. For Installation Type, you can review the details of the installation. Click “Install”.

![Installation Type window](image)

This will take 134.6 MB of space on your computer.

Click install to perform a standard installation of this software on the disk “Macintosh HD”.

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

![User Name and Password window](image)

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 SCAN from the PROJECTS menu.
2. Select the ARCHIVE Menu option.
3. Select your operating system (Linux) from the dropdown menu.
4. Click “Download”.

The installation was successful.

The software was installed.
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.

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

C. **UPLOADING (ARCHIVING) TO SCAN**

1. Open the IDA-Uploader application.
2. Enter your email and password, then click “Log In”.

3. Select SCAN from the Project dropdown menu.
4. Then, select your site from the Site dropdown menu. Click “Continue”.

5. Enter the Subject ID. Click “Browse” to select the Source Directory. Then click “Upload”.
   NOTE: The Source Directory is the directory containing the files to be uploaded. If your Source Directory contains subdirectories, choose to include/exclude those files by checking “Search subdirectories”.
6. You will be able to see the progress of your upload in the De-identify and Upload section.

7. Once the files are de-identified and transferred to the IDA, you will need to complete the upload in
8. Your web browser should automatically open a new “Log In to Continue” page. Enter your IDA email and password. Click “Log In”.

![Log In toContinue](image)
NOTE: If your web browser does not automatically open the “Log In to Continue” page, please click “Complete Upload” and you can copy-paste the link in your browser.

9. In the “Your Upload is Not Complete” page you can review the details of your upload.
a. For PET image uploads, additional information is required in order to complete the upload.
   1. In the Metadata section, click “Complete Form”.
   
   NOTE: Fields marked (*Required) are required to complete the upload.
   2. Once the information is entered in the form, click “Update”.

   ![Complete Metadata Form]

   NOTE: If any data was mistakenly uploaded, you can click the “X” in the Delete column and it will be deleted from your upload. A window will appear to confirm the deletion. Click “Delete” to confirm file deletion or “Cancel”.

10. Once all required information has been entered, click “Finish Upload”.

11. You will see a screen that informs you that the upload is being processed.
12. Once the upload is processed, a summary page for the upload will be displayed. Please note that you have the option of clicking “Download CSV Files” to keep a record of the upload.

13. You can close the IDA-Uploader application or to upload images for another subject, click the “Upload More” button in the IDA-Uploader application.
D. UPLOADING (ARCHIVING) TO SCANQUAL

1. Open the IDA-Uploader application.
2. Enter your email and password, then click “Log In”.
3. Select SCANQUAL from the dropdown menu. Once you select SCANQUAL, a dropdown with the sites will appear. Select your site and click Continue.
4. Click “Single Archive” or “Batch Archive”.

   ![IDA Uploader Diagram]

   a. **Single Archive**

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

   1. After clicking “Single Archive” the De-Identification page will be displayed.

   ![IDA Uploader Form]

   a. Click the type of data being uploaded – in this case, “Original”.
   b. Enter the Phantom/Volunteer ID in the Subject ID field.
   c. Select the Source Directory in which the original files are located.
d. Select the Target Directory for de-identified files to be written to.

e. Click “CONTINUE” to begin the de-identification process.

2. On the Verify and Submit page
   a. Deselect any image you do not want to be archived (if any) by unchecking the Selected checkbox.
   b. Click “SUBMIT” to begin the transmission process.

Note: This is not a feature during Batch Archive. Once the transmission has begun, a progress bar will show the status of the upload.

b. 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 modalities. However, users cannot review the results of the de-identification process prior to the batch upload.

1. Proceed to follow the De-identification steps in the Single Archive section.

2. 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.

3. Click “ADD MORE” to add more images to the Batch. Repeat this process until you have added everything you intend to archive.

4. Click “SUBMIT” to begin both the de-identification and transmission processes.
<table>
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<tr>
<th>Subject</th>
<th>Data Type</th>
<th>Research Group</th>
<th>Source</th>
<th>Status</th>
<th>Date</th>
<th>Remove</th>
</tr>
</thead>
<tbody>
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<td>Original</td>
<td>Phantom</td>
<td>/Users/i</td>
<td>Queued</td>
<td>2/08/21</td>
<td>remove</td>
</tr>
<tr>
<td>131_P_9090</td>
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<td>Phantom</td>
<td>/Desktop...</td>
<td>Queued</td>
<td>2/08/21</td>
<td>remove</td>
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<td>Original</td>
<td>Volunteer</td>
<td>/Users/i</td>
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<td>remove</td>
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