

National Institute of Mental Health Data Archive (NDA)

# NDA Download Manager User Guide

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## Acronyms

AWS	Amazon Web Services
HTTP	Hypertext Transfer Protocol
NDA	NIMH Data Archive
NIH	National Institute of Health
NIMH	National Institute of Mental Health
OS	Operating System

# NDA Download Manager User Guide



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The <u>NDA</u> Download Manager application is a cross-platform desktop application, available for installation on Windows, Mac <u>OS</u> X, and Linux operating systems. The tool allows users to browse, filter, and download one or all the files included in each data package associated with their account. The tool also provides the capability to add available shared packages to the data packages in their account. The application is built using the <u>electron framework</u>, and requires installation for the best user experience.

### 1. Installation

For Windows and Mac operating systems, the Download Manager client is available as both a standalone executable that you run to launch the tool and a setup file that installs the tool. For Linux operating systems, only the standalone executable is provided. The setup file makes modifications to register the application with your operating system and may require elevated privileges to run. The standalone executable does not make system modifications, and therefore may not require any elevated privileges to run. Having Download Manager installed allows you to follow special links inside the NDA web application that will open the client, and it allows the application to receive automatic updates. Otherwise, there is no difference in functionality between the two distributions.

Links to all available distributions are provided as a part of this User Guide. To obtain the installation file, access the Data Packages dashboard from your NDA User Profile. The Data Packages dashboard can be accessed from the My Dashboard button on the <a href="https://nda.nih.gov">https://nda.nih.gov</a> page, from the login button, or by clicking the dashboard button if already authenticated.

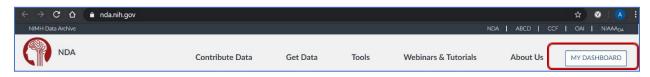


Figure 1: My Dashboard

	NIMH Data Archive								NDA   /	ABCD   CO	CF   OAI	NIAAA <sub>DA</sub>
		NDA										
Contribute Data Get Data Data Dictionary Data Standards Tools ▼ Webinars & Tutorials Request Access About Us log	Contribute Data	Get Data	Data Dictionary	Data Standards	Tools 🔻	Webinars & Tutorials	Request Access	About Us				login 💽

Figure 2: Login

After authentication your NDA User Profile will be loaded. After authentication you can return to the dashboard by clicking the dashboard button from the top menu.



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NIMH Data Archive								NDA   ABCD   CCF	OAI	NIAAA <sub>DA</sub>
	NDA									
Contribute Data	Get Data	Data Dictionary	Data Standards	Tools 🔻	Webinars & Tutorials	Request Access	About Us	se_user_	abcci   🌞	logout
										_

Figure 3: Dashboard Button

From the NDA User Profile, click the Data Packages tab which takes you to the Data Packages page.

NIMH Data Archive									NDA	ABCD	OAI	CCF	NIAAA <sub>DA</sub>
Contribute Data	Get Data	Data Dictionary	Data Standards	Tools 🔻	Webinars & Tutorials	Request /	Access	About Us		s	e_user_a	ibcd   🕺	logout
						rofile	Collecti	ions (0)	Data Permissions	Studies	5 (0)	Data F	Packages
Profile													?

Figure 4: Data Packages Link

On the Data Packages page, click the Download Manager button to download the installation file. The application will automatically detect and download the version specific to your operating system. For Linux systems, the standalone executable will be downloaded.

NIMH Data Archive								N	DA ABCD	OAI   CCF	NIAAA <sub>DA</sub>
Contribute Data	Get Data Data Dictiona	ry Data Standards To	ools 🔻 Web	inars & Tuto	rials Reques	t Access Ab	iout Us			se_user_abcd   🌞	logout
					Profile	Collections	(0) D	ata Permissior	ns Studie	Data Pa	ckages
Data Pac	kages (0)										?
Listed below a Shared Packag		associated miNDARs. T	here are two	o package t	ypes availabl	e, which you	can select	from the dro	p-down men	u, My Packages	and
		ve created or added to g the Actions dropdown						Download Ma	anager, and y	ou may also cre	ate
	es - Packaged dataset same name under My	s created by NDA or an Packages.	other user t	hat you ha	ve permissior	n to add to y	our accoun	t. Adding a S	hared Packa	ge creates a new	
All Packages								1	🕹 Down	load Manager	
All Fackages					2.5	miNDAR					
Package ID ≎	Package Name	Shared Package Description 🗘	Package Status	Package Size 0	Package Created Date 0	Last Message	miNDAR Status	miNDAR Created Date \$	Type 🗘	Actions	
1178060	HCPDUnprocessed		Ready to Download	3091 GB	06/09/2020				Personal	Actions 💌	
NDADownloadMa	.exe ^										Show all >

Figure 5: Data Packages page

.



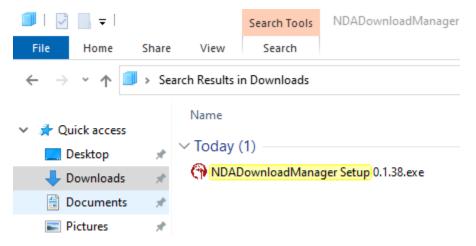
The application relies on the UserAgent string your browser provides when making HTTP requests. If the application cannot determine which operating system you are using, you may need to manually download the package for your operating system. Please refer to the following table for direct links.

File Name	Distribution	<b>Operating System</b>
NDADownloadManager Setup 0.1.39.exe	Setup	Windows
NDADownloadManager-0.1.39.dmg	Setup	Mac OS X
NDADownloadManager-0.1.39.AppImage	Standalone	Linux
NDADownloadManager 0.1.39.exe	Standalone	Windows
NDADownloadManager-0.1.39-mac.zip	Standalone	Mac OS X

Table 1: Download Manager Distributions

### 1.1. How to install NDA Download Manager for Windows

The Windows installer will be a .exe extension, and the default download location will be your Downloads directory.



*Figure 6: Windows Installation File* 

Double-clicking on the installation file or selecting the file and pressing the Enter key will launch the installer.



💮 NDAI	DownloadManager Setup	_	$\times$
	Installing, please wait		

Figure 7: Windows Installation

After installation completes, the download manager tool will open to the login screen, and a shortcut will be added to your desktop.

1.2. How to install NDA Download Manager for Mac OS X

The Mac OS X Installer will have a .dmg file extension, and the default download location will your Downloads directory.

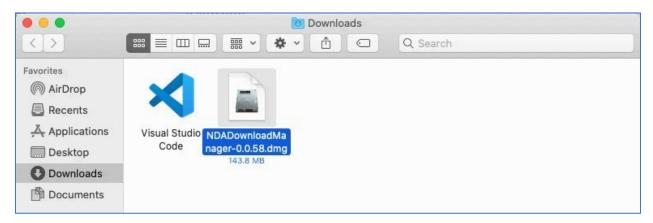


Figure 8: Mac OS X Installation File

By default, the file will be opened using the Mac DiskImageMounter. To install the application, drag the NDADownloadManager file to the applications folder. Depending on your level of system access and how the Applications directory is configured, this may require elevated or Administrator privileges.



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Figure 9: Adding NDA Download Manager to Mac OS X Applications Folder

NDADownloadManager I...
NDADownloadMana... 558.3 MB Modified: Today, 10:26 AM
Add Tags...
A General:
More Info:
Name & Extension:
NDADownloadManager.app
Hide extension
Comments:
Preview:
Sharing & Permissions:

You may also drag the application to your Desktop and run the file from there.

Figure 10: Adding NDA Download Manager to Mac OS X Desktop



Once the application is added to the Applications directory, or the .app file has been added to the Desktop, you should open the application.

The first time you try to open the application, you may be prompted with a warning indicating the app "can't be opened because Apple cannot check it for malicious software." You may get around this issue, by right-clicking on the application and selecting Open, rather than double clicking.

If you are experiencing issues with the .zip file, you may need to use the .dmg. Please contact NDA Help with any issues.

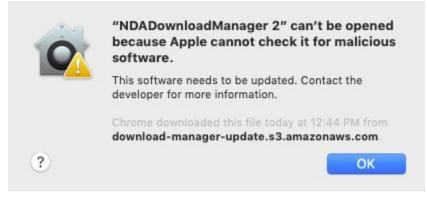


Figure 11: NDA Download Manager Warning on Mac OS X

### 1.3. How to install NDA Download Manager for Linux

The package for Linux will have a. AppImage file extension. Execute the tool to run the application. The <u>AppImage</u> format is compatible across Linux distributions.



O Applications Places		
	Downloads — Dolphin	~ ^ &
✓     ↓     ↓     ↓     ↓       Places       ✓     Home:       ▲     Network       ▲     Root       □     Trash       Recently Saved       □     Today       □     Yesterday       □     This Month       □     Last Month       Search For       ➡     Documents	Downloads Dolphin         Tools       Settings       Help         C       Find       Preview       Split         > Home >       Downloads         Image: NDADownloadManage       r-0.0.58.AppImage	
Images Images Videos Devices Coudimg-rootfs		
	1 File (139.2 MiB)	21.6 GiB free

Figure 12: NDA Download Manager AppImage File on Linux

Open the location where the AppImage file was downloaded and make the file executable. You can do this by viewing the File's properties in a file browser.

Owner:	Me	
Access:	Read and write	•
Group:	ubuntu 🔻	
Access:	Read and write	•
Others		
Access:	Read-only	•
Execute:	Allow executing file	as program
Security context:	unknown	

*Figure 13: Setting the NDA Download Manager AppImage File to be Executable from File Browser on Ubuntu Desktop* 

You may also make the file executable from the terminal.



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> Downloads : bash — Konsole <2>	~ ^	8
File Edit View Bookmarks Settings Help		
ubuntu@ip-10-0-0-121:~/Downloads\$ pwd		
/home/ubuntu/Downloads		
ubuntu@ip-10-0-121:~/Downloads\$ ls -al		
total 142572		
drwxr-xr-x 2 ubuntu ubuntu 4096 May 10 04:13 .		
drwxr-xr-x 31 ubuntu ubuntu 4096 May 10 04:02		
-rw-rw-r 1 ubuntu ubuntu 145983182 May 10 03:37 NDADownloadManager-0.0.58.AppImage		
ubuntu@ip-10-0-0-121:~/Downloads\$ chmod +x ./NDADownloadManager-0.0.58.AppImage		
ubuntu@ip-10-0-0-121:~/Downloads\$ ls -alh		
total 140M		
drwxr-xr-x 2 ubuntu ubuntu 4.0K May 10 04:13 .		
drwxr-xr-x 31 ubuntu ubuntu 4.0K May 10 04:02		
-rwxrwxr-x 1 ubuntu ubuntu 140M May 10 03:37 NDADownloadManager-0.0.58.AppImage		
ubuntu@ip-10-0-121:~/Downloads\$		

Figure 14: Setting the NDA Download Manager AppImage file to be executable from Linux Terminal

### 2. Updating NDA Download Manager

The NDA Download Manager will check for updates to the software automatically if the application has been installed (available on Windows or Mac OS X). If an update is available, the software will prompt the user to download the update. If the client is being run from a standalone executable, the application won't notify you of updates. You need to manually download an updated version of the standalone executable in these instances.

The tool does not block user activity while it checks for software updates. After logging in, you might receive a prompt to update. Clicking Yes to update the tool will result in the application closing and any current activity being interrupted. If you do not want the tool to close, choose No and update the tool later.



	COME H Data Archive (NDA)
Enter your NDA user r	name and password belov
USERNAME *	
PASSWORD *	×
Found updates, do you wa	
	Yes No

Figure 15: NDA Download Manager Update Prompt

If you click Yes, the tool will automatically download the update, close, and apply the update, and then relaunch the tool. If the tool is running on Linux as an AppImage, you must download the latest version from the packages dashboard, illustrated previously, and repeat the steps for installation.

### 3. Using NDA Download Manager

The NDA Download Manager tool can be launched by double-clicking on the desktop shortcut that was created during installation.



Figure 16: Download Manager Shortcut

3.1. Log in



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All users are required to authenticate and sign in by clicking the Sign In link. This authentication step also retrieves your data packages and any shared data packages available to you.

NDA Download Manager		- 🗆 X
ile		
MDA NDA		? sign in
	Welcome	
	Sign in to the NIMH Data Archive (NDA)	
	Enter your NDA user name and password below.	
	USERNAME *	
	se_user_abcd	
	PASSWORD *	
	•••••	
	SIGN IN	
	NIH) National Institutes of Health CSA.gov Turning Discover line Institutes	v0.0.56   22a23c3

Figure 17: Sign in to Authenticate

After you click the Sign In button, you will experience a slight delay while the application retrieves and verifies access to your data packages. If your account has many packages, this could take more than a minute.



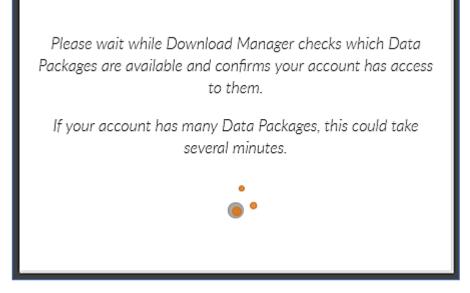


Figure 18: Loading Application

After the application loads for the first time, you should pick a location with sufficient disk space for storing the files, by clicking the Settings tab and choosing the location. For each data package that is downloaded, the tool will create an individual directory in this location with the Package Id in the name.

NDA NDA	My Data Packages	Shared Data Packages	Settings	se_user_abcd	
<20% Download Used					
	Setting	(S			
Please	select directory into which	you wish to download files.			
Download Direc	tory: C:\Users\obenshaind	dw\Downloads\Test	OOSE DOWNLOAD	DIRECTORY	
Download Batch	Size: 50				
User Download Thresh	nold: 21990.23 GB				
Local 30-Day Download Volu	ume: 424.77 GB				
Local 30-Day Download Volume Remai	ning 21565.46 GB				

Figure 19: Select Download Directory



### 3.2. User Interface

The interface for the tool is divided into different views representing your available data packages, package contents (folders and files) for each package, shared data packages available to you, and settings. The layout for the user interface is illustrated below. Details for how each of the views work is provided in the following sections.

	MDA NDA			My Data Packag	ges Shared Da	ata Packages	Settings	se_user_a	abcd
Package Tree	<20% Download Used								
	🛞 My Data Packages	My Data Pa	ickages						
My Packages	<ul> <li>(*) 1183935 - testEARSRawData (3)</li> <li>(*) 1183932 - HCPD (189,458)</li> </ul>		Name	Package Id	Created	Total Files	Size	Downloaded	Size
Shared Data	<ul> <li>Isocrol Here (107,58)</li> <li>1183260 - HCPEPRelease (117,58)</li> </ul>	4)	٩	Q	7				
Packages	▷ m 1183238 - HCPAPreprocessed (85)	DOWNLOAD	testEARSRawData	1183935	2020-12-15	3	100.95Kb	0	Ob
Settings	<ul> <li>1183198 - HCPDPreprocessed (55</li> <li>1183096 - ClincalAssessmentsVolu</li> </ul>	1	HCPD	1183932	2020-12-15	189458	3226.15Gb	0	Ob
Help Center	<ul> <li>1182355 - ABCDstudyNDA (241)</li> </ul>	DOWNLOAD	HCPEPRelease	1183260	2020-11-19	117584	1302.49Gb	0	Ob
	<ul> <li>(*) 1180793 - npd210verification (7)</li> <li>(*) 1180326 - NDA6747DownloadDa</li> </ul>	DOWNLOAD	HCPAPreprocessed	1183238	2020-11-19	85015	204.05Gb	0	Ob
	I177257 - HCPATstDTIManifestNI 1177257		HCPDPreprocessed	1183198	2020-11-18	55408	134.63Gb	0	Ob
	<ul> <li>Image: Image: provide the state of the stat</li></ul>	DOWNLOAD	ClincalAssessmentsVolume	1183096	2020-11-15	41	100.99Kb	0	Ob
	▶ 676856 - HCPWF (0)	DOWNLOAD	ABCDstudyNDA	1182355	2020-11-02	241	6.72Gb	0	Ob
	<ul> <li>▶ (1) 633746 - wof (4)</li> <li>▶ (1) 633745 - wf (24,908)</li> </ul>	Rows per Page	100 🔻					« «	1 >
	<ul> <li>626178 - prodwofile (3)</li> </ul>	Disk Space Ava	ilable on C: is 156.90Gb						
ain Window splay ————————————————————————————————————									
зрау			NIH National Institutes of He	$\sim$	USA.gov				21   aeb0cf2

Figure 20: User Interface

The user download volume graphic is always displayed. This provides you a visual indicator of data accessed from internet addresses outside of <u>AWS</u> relative to the volume available to you over a 30-day period. Placing the mouse pointer over this graphic will show the actual percentage used, and more detail is available from the <u>Settings</u> interface. See <u>User Download Threshold</u> for more detail.

<20% Download Used	
My Packages	Discover Packages >

#### Figure 21: Download Volume

The navigational locations listed above the Main Display window can help you keep track of your location within the tool, indicating the current view (i.e., <u>Shared Data Packages</u>, <u>My Data Packages</u>, etc.), the data package name (if selected), and the folder within the data package (if selected). You can click on any of the navigational locations (breadcrumbs) to navigate to a parent folder within the <u>Package</u> <u>Contents</u> view, or to the <u>Data Package List</u> view.



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NDA Download Manager							10 <b></b> 71	0 >
File Help								
MDA NDA			My Data Packages	Shared Data Packages	S	ettings	se_user_abcd	?
<20% Download Used				_				
My Data Packages	My Data Packag	es > HCPD > e	xperiments > experiment_1210					
<ul> <li>1183935 - testEARSRawData (3)</li> <li>1183932 - HCPD (189,458)</li> </ul>	DOWNLOAD	Name	Path		Total Files	Size	Downloaded	Size
experiments		Q,	٩,					
<ul> <li>experiment_1210</li> <li>block_1</li> </ul>	V DOWNLOAD	block_1	block_1		1	164b	0	Ob
block_2	V DOWNLOAD	block_2	block_2		1	164b	0	Ob

Figure 22: Navigational Locations

Throughout the interface, you can click on the orange question mark icon to bring up a Help Center on an individual screen to read targeted help content.

NDA He	elp Center	
Settings		
to prior to be downloaded location you files within d	u have identified the location you wish your eginning downloading your files. Information and the size of the files downloaded will be I have selected for files to be downloaded. Yo ifferent folders that you have created to mak ne if you choose to change folder locations at	reflecting the files based on the initial u can manually move e sure these statistics
	lownload details can be found on this page. A nit of 20 Terabytes within a 30-day window. I	

Figure 23: NDA Help Center



You can logout of NDA Download Manager by clicking on your username and then selecting Log Out.



#### Figure 24: Log Out

Hovering over various fields within the interface will pop up text that provides useful explanations about using and navigating through the tool.

My Data Packag	Download all selected files. To select more than one file, select the check mark next to each file.
DOWNLOAD	To select multiple files at once, select the first file, press and hold the 'Shift' key, then select the last file;
DOWNLOAD	all files in between the first and last file will be selected.
DOWNLOAD	HCD1330228_V1_MK HCD1330228_V1_MK

#### Figure 25: Hover Text

When you interact with each of the views, the Main Display window will update to display the detail for that view.

The tool also includes several options in the File menu that are primarily used for debugging and advanced troubleshooting issues.



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File		Reload App UI: Start a new session with the tool and bring
Reload App UI	F5	the user back to the login screen.
Open Chrome DevTools	F12	Open Chrome DevTools: Provides detailed information for
Reset Current Package Databa	se	debugging and troubleshooting issues with the tool.
Reset App Databases		Reset Current Package Database: This button will remove
Exit		any cached data for the selected package (if a package has been selected), the tool will immediately retrieve package data again which may take several minutes depending on the number of files in the package.
		Reset App Databases: This tool will clear any cached data within the application. This feature may be necessary after some updates to the tool and will reset the tool to the state it was in after initial installation. After this operation, the tool will need to retrieve package data again from any package that is subsequently selected.
		Exit: This will close the application, and it has the same
Eigura 26: Eila Manu		behavior as closing the application window.

Figure 26: File Menu

Clicking on the Help Menu will bring up this User Guide.

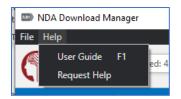


Figure 27: Help Menu

### 3.3. My Data Packages

The My Data Packages interface is comprised of two elements, the <u>Data Package Tree</u>, and the a table view that you interact with to display a <u>Data Package List</u> and explore <u>Data Package Contents</u>.

### 3.3.1. Data Package Tree

The Data Package Tree allows you to view all your data packages, select an individual data packages, and then navigate to the contents of a selected data package using a familiar directory tree interface. Each directory in the data package can be expanded to show sub-directories, and if a directory is



selected in the Data Package Tree, the <u>Package Contents</u> view will update to display all folders and files contained within the selected directory or any of its subdirectories.

My Data Packages	N	ly Data Packag	es > HCPDPreprocessed	> fmriresults01 > HCD0001305_V1_MR > N	NINonLin	ear > ROIs	
<ul> <li>M 1183935 - testEARSRawData (3)</li> <li>M 1183932 - HCPD (189,458)</li> <li>M 1183260 - HCPEPRelease (117,584)</li> </ul>		DOWNLOAD	Name Q	Path	Total Files	Size	Download
<ul> <li>1183238 - HCPAPreprocessed (85,015)</li> <li>1183198 - HCPDPreprocessed (55,408)</li> </ul>	~	DOWNLOAD	ROIs.2.nii.gz	fmriresults01/HCD0001305_V1_MR/MNIN	1	16.36Kb	0
<ul> <li>Internet interpretensed (55, 166)</li> <li>fmriresults01</li> </ul>	~	DOWNLOAD	wmparc.2.nii.gz	fmriresults01/HCD0001305_V1_MR/MNIN	1	98.33Kb	0
<ul> <li>HCD0001305_V1_MR</li> <li>MNINIsclasses</li> </ul>	~	DOWNLOAD	Atlas_ROIs.2.nii.gz	fmriresults01/HCD0001305_V1_MR/MNIN	1	15.42Kb	0
<ul> <li>MNINonLinear</li> <li>fsaverage_LR32k</li> <li>Native</li> <li>ROIs</li> <li>rtms</li> </ul>	~	DOWNLOAD	Atlas_wmparc.2.nii.gz	fmriresults01/HCD0001305_V1_MR/MNIN	1	85.08Kb	0

Figure 28: Data Package Tree

When a data package is selected from the Data Package Tree there will be a delay while the application retrieves the data packages files and creates a virtual directory tree. For data packages containing many files, this could take several minutes.

If you accidently select the wrong data package you can cancel the process. If you cancel, you need to repeat this process the next time you select the package.

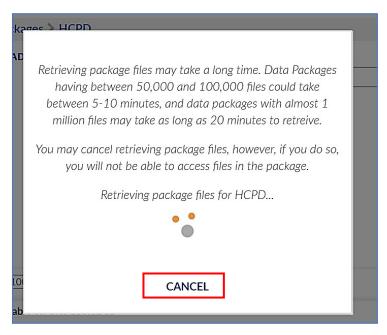


Figure 29: Retrieving Package Files Message and Cancel Button



### 3.3.2. Data Package Table

The Data Package Table is interactive and allows you to:

- sort contents of the table by selecting a column heading,
- filter the table contents by entering text into the text input fields that appear beneath the column headings,
- change the order of the columns,
- choose which columns to display,
- resize the columns,
- scroll through many results as a series of pages,
- export the contents of the table to an Excelfile,
- download packages, folders, or individual files,
- and open the location where folders/files are downloaded.

🖙) NDA Download Manager File Help							- 0 X
NDA			My Data Packages	Shared Data Packages	S	iettings	se_user_abcd
<20% Download Used							
🛞 My Data Packages	My Data Packag	es > HCPD					
<ul> <li>1183935 - testEARSRawData (3)</li> <li>1183932 - HCPD (189,458)</li> <li>1183260 - HCPEPRelease (117,584)</li> </ul>	DOWNLOAD	Name	Path		Total Files	Size	Downloader Size
<ul> <li>1183238 - HCPAPreprocessed (85,015)</li> <li>1183198 - HCPDPreprocessed (55,408)</li> </ul>	V DOWNLOAD	imagingcollection01	imagingcollection01		134034	3091	▼ Clear all Filters
<ul> <li>Iles I/o Her Direptocessed (55,400)</li> <li>Iles I/o Her Direptocessed (55,400)</li> <li>Iles I/o Her Direptocessed (55,400)</li> </ul>	V DOWNLOAD	fmriresults01	fmriresults01		55405	134.	Clear all Sorting
1182355 - ABCDstudyNDA (241)	DOWNLOAD	experiments	experiments		13	12.8	☎Toggle Filter Row
<ul> <li>1180793 - npd210verification (7)</li> <li>1180326 - NDA6747DownloadDateFo</li> </ul>	V DOWNLOAD	imagingcollection01.txt			1	3.00	Export to Excel
1177257 - HCPATstDTIManifestNDA6(	DOWNLOAD	ndar_subject01.txt			1	283.	Refresh Dataset Columns
<ul> <li>▷ (1) 676864 - HCPInNull (3)</li> <li>▷ (1) 676863 - HCPExNull (3)</li> </ul>	V DOWNLOAD	edinburgh_hand01.txt			1	265.	
676856 - HCPWF (0)	V DOWNLOAD	fmriresults01.txt			1	152.	<ul> <li>✓ Name</li> <li>✓ Path</li> </ul>
<ul> <li>◊ 633746 - wof (4)</li> <li>◊ 633745 - wf (24,908)</li> </ul>	Rows per Page 100	•					✓ Total Files
<ul> <li>626178 - prodwofile (3)</li> </ul>	Disk Space Available	on C: is 156.77Gb					✔ Size
							✓ Downloaded
							✓ Size
	N	National Institutos of Mos		SA and			✓ Force fit columns

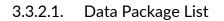
Figure 30: Table Component - Sort, Filter, Resize and Export



• You can customize the number of rows per page and use the pagination buttons to navigate between pages and to view rows not displayed on the initial screen.

NDA			My Data Packag	ges Shared D	ata Packages	Settings	se_user_a	abcd
<20% Download Used								
My Data Packages	My Data Pa	ckages						
1183935 - LeslEARSRawData (3)		Name	Package Id	Created	Total Files	Size	Downloaded	Size
1183260 - HCPEPRelease (117,584)		٩	٩					
1183238 - HCPAPreprocessed (85,015) 1183198 - HCPDPreprocessed (55,408)	DOWNLOAD	testEARSRawData	1183935	2020-12-15	3	100.95Kb	0	Ob
1183096 - ClincalAssessmentsVolume (-	DOWNLOAD	HCPD	1183932	2020-12-15	189458	3226.15Gb	0	Ob
1182355 - ABCDstudyNDA (241)	DOWNLOAD	HCPEPRelease	1183260	2020-11-19	117584	1302.49Gb	0	Ob
1180793 - npd210verification (7) 1180326 - NDA6747DownloadDateFo	DOWNLOAD	HCPAPreprocessed	1183238	2020-11-19	85015	204.05Gb	0	Ob
1177257 - HCPATstDTIManifestNDA6	DOWNLOAD	HCPDPreprocessed	1183198	2020-11-18	55408	134.63Gb	0	Ob
676864 - HCPInNull (3) 676863 - HCPExNull (3)	DOWNLOAD	ClincalAssessmentsVolume	1183096	2020-11-15	41	100.99Kb	0	Ob
676856 - HCPWF (0)	DOWNLOAD	ABCDstudyNDA	1182355	2020-11-02	241	6.72Gb	0	Ob
🔭 633746 - wof (4) (🕅 633745 - wf (24.908)	Rows per Page	100 🔻					« « «	1 >
<ul> <li>(m) 633745 - WF (24,908)</li> <li>(m) 626178 - prodwofile (3)</li> </ul>		ilable on C: is 156.90Gb						
~	Disk Space Ava	nable on C. 13 130.700b						
			1000 m					

Figure 31: Results per Page and Pagination



The Data Package Table will default to displaying a list of the user's data packages. Both the <u>Data</u> <u>Package Tree</u> and the <u>Data Package Table</u> will list only data packages that are ready for download. Data packages that are still in the process of being created will not appear until the data package creation process is completed. It is important to note that each time you log in and out of the Download Manager application, you will return to this view and previous search filters and detailed download activity from prior sessions will not be displayed. The tool will display the current download progress for each package.

By default, data packages are sorted by creation date, with the most recently created data package appearing first.

Users can download an entire data package directly from the My Data Packages screen by clicking on the Download button. Once the package is downloaded, the Download button will be replaced with a Show button, that will open the download location for that package.

While downloads are in progress, the user interface will be deactivated, and a new button Interrupt Downloads will be displayed; information regarding in-progress downloads including percentage



complete, files remaining, and current file being downloaded is found at the bottom of the display window.

If you click Interrupt Downloads, in-progress downloads will stop (partial progress will be saved), and control will be returned to you.

NDA Download Manager					-	D X
File Help						
MDA NDA		My Data Packag	ges Shared Data Packages	Settings	se_user_abcd	2
<20% Download Used						
My Data Packages	My Data Packag	es > NDA6747DownloadDat	eForTesting6 > imagingcollection01 >		INTERRUPT DOV	VNLOADS
1183935 - testEARSRawData (3) 1183932 - HCPD (189,458)	DOWNLOAD	Name	Path	Total Files	Size	Download
1183260 - HCPEPRelease (117,584)		٩	٩			
<ul> <li>1183238 - HCPAPreprocessed (85,015)</li> <li>1183198 - HCPDPreprocessed (55,408)</li> </ul>	SHOW	HCA6037457_V1_MR_Spin	imagingcollection01/HCA6037457_V1_MR/	1	2.86Kb	1
1183096 - ClincalAssessmentsVolume (41)	DOWNLOAD	HCA6037457_V1_MR_Spin	imagingcollection01/HCA6037457_V1_MR/	1	2.86Kb	0
<ul> <li>1182355 - ABCDstudyNDA (241)</li> <li>1180793 - npd210verification (7)</li> </ul>	SHOW	HCA6037457_V1_MR_Spin	imagingcollection01/HCA6037457_V1_MR/	1	1.22Mb	1
Insolves inpuzitovernication (7)	DOWNLOAD	HCA6037457_V1_MR_Spin	imagingcollection01/HCA6037457_V1_MR/	1	1.23Mb	0
<ul> <li>1180326 - NDA6747DownloadDateForTestin</li> </ul>						
<ul> <li>Imagingcollection01</li> <li>HCA6037457_V1_MR</li> </ul>						
▲ ☐ unprocessed						
Diffusion	Rows per Page 50	T			« « <b>1</b>	> »
CTHER_FILES     HCA6051047_V1_MR     HCA6053758_V1_MR     Manifests	49.86% complete - D imagingcollection01/ files, 1.23Mb of 2.45 Downloaded	HCA6037457_V1_MR/unproces	used/Diffusion/OTHER_FILES/HCA6037457_V	1_MR_SpinEct	hoFieldMap4_PA.r	nii.gz 1 of 3

Figure 32: Download Progress

Prior to downloading your files, it is important you review the location you select. This is where your downloaded files will reside. You can review this under the Settings Tab. The interface displays information reflecting the files downloaded and the size of these files based on the initial location you selected. After the download is complete, you can manually move files within different folders you've created if you choose.

Users will find that some Download buttons are gray and cannot be clicked on. When you roll over the tool tip, it will let you know that the size of this package is too large to save in the current download location. You must select a different download location, free up disk space, or download specific folders/files within the package.



	Name	Package Id	Created	Total Files	Total Bytes	Files Downloaded	Bytes Downloaded
	٩	٩					
DOWNLOAD	guidcheck	1184799	2021-01-22	64	102.19Kb	0	Ob
DOWNLOAD	ABCDStudyNDA	1184798	2021-01-22	334	11.66Gb	0	Ob
DOWNLOAD	Not enough free disk space	to download this pac	age 021-01-20	85015	204.05Gb	0	Ob
DOWNLOAD	ABCDStudyNDA	1184679	2021-01-19	334	11.66Gb	0	Ob
DOWNLOAD	HCPAUnprocessed	1184612	2021-01-15	118300	2930.21Gb	0	Ob
DOWNLOAD	HCPA	1184611	2021-01-15	203315	3134.26Gb	0	Ob
vs per Page 50	) •					« ‹	1 >

Figure 33: Gray Download Button

You can explore the contents of an individual data package by clicking on the package name in either the Data Package Table, or the Data Package Tree. If package files have not been retrieved yet, the tool will retrieve package files.

	Name	Package Id	Created	Total Files	Size	Downloader	Size
SHOW	testEARSRawData	1183935	2020-12-15	3	100.95Kb	3	126.34Kb
DOWNLOAD	HCPD	1183932	2020-12-15	189458	3226.15Gb	0	Ob
DOWNLOAD	HCPEPRelease	1183260	2020-11-19	117584	1302.49Gb	0	Ob
DOWNLOAD	HCPAPreprocessed	1183238	2020-11-19	85015	204.05Gb	0	Ob
DOWNLOAD	HCPDPreprocessed	1183198	2020-11-18	55408	134.63Gb	0	Ob
SHOW	ClincalAssessmentsVolume	1183096	2020-11-15	41	100.99Kb	41	2.90Mb
	ABCDstudvNDA 50 • ilable on C: is 156.62Gb	1182355	2020-11-02	241	6.72Gb	0 ( 1	Ob > »

Figure 34: Data Package Name



There will be a delay while the application retrieves the data packages files and creates a virtual directory tree. For data packages with large numbers of files this could take several minutes.

If you accidently select the wrong data package and wish to stop loading the packages files, there is a Cancel button available. If you cancel the operation, you will need to repeat this step the next time you select the package.

kares	> HCPD	
AD F	Retrieving package files may take a long time. Data Packages having between 50,000 and 100,000 files could take between 5-10 minutes, and data packages with almost 1 million files may take as long as 20 minutes to retreive.	
Y	ou may cancel retrieving package files, however, if you do so, you will not be able to access files in the package.	
	Retrieving package files for HCPD	
	••	
101 ab	CANCEL	

Figure 35: Retrieving Package Files Message and Cancel Button

### 3.3.2.2. Data Package Contents

After you select a data package, the Data Package Table content will update to display the individual folders and files within the package. You may choose individual folders or files for download by selecting the check mark next to the folder or file. The interface also supports selection of a range by selecting a row, holding down the Shift key, and then selecting another row. All rows between the first and second selections will be selected.

The user may download selected folders and files by clicking the Download button that is located to the left of the column headers, above the text fields used for filtering the list of files.



MDA		My Data	Packages	Shared Data Packages	Settings	se_user_a	bcd	
<20% Download Used								
My Data Packages	My Data Packag	ges > HCPDPreprocessed						
<ul> <li>1183935 - testEARSRawData (3)</li> <li>1183932 - HCPD (189,458)</li> <li>1183260 - HCPEPRelease (117,584)</li> </ul>	DOWNLOAD	Name Q	Path		Total Files	Size	Downloade	•
<ul> <li>1183238 - HCPAPreprocessed (85,015)</li> <li>1183198 - HCPDPreprocessed (55,408)</li> </ul>	V DOWNLOAD	fmriresults01	fmriresults01		55405	134.62Gb	0	(
1183198 - HCPDPreprocessed (55,408) 1183096 - ClincalAssessmentsVolume (41)	✓ DOWNLOAD	fmriresults01.txt			1	296.56Kb	0	
March 1182355 - ABCDstudyNDA (241)     March 1182359 - act 210 act (21)     March 1182359 - act (21)     March 1182359 - act (21)     March 1182359     March 118235     March 118235     March 118235     March 118235     March 118235     March 118235     March 11823     March 118235     March 11823     March 11823     March 11823     March 1182     March 1182     March 118     Ma	V DOWNLOAD	README.pdf			1	100.95Kb	0	
<ul> <li>M 1180793 - npd210verification (7)</li> <li>M 1180326 - NDA6747DownloadDateForTesting6</li> </ul>	V DOWNLOAD	md5_values.txt			1	9.46Mb	0	
M 1177257 - HCPATstDTIManifestNDA6018 (19,8	✓ DOWNLOAD	package_info.txt			1	145b	0	(
	Rows per Page 50	•				« ‹	1 >	»
<ul> <li>626178 - prodwofile (3)</li> </ul>	Disk Space Available	on C: is 156.77Gb				L		

Figure 36: Selecting Individual Files for Download

The user may also select the Download button next to an individual row, which will immediately download that folder or file.

Downloaded folders and files will replace the Download button with a Show button, which when selected will open the download location for that folder or file.

DA Download Manager Help							
NDA			My Data Packa	ges Shared Data Packages	Settings	se_user_abc	d 🕜
<20% Download Used							
My Data Packages	1	My Data Packag	ges > NDA6747DownloadDa	teForTesting6 > imagingcollection01	> HCA6037457	V1_MR >u	inprocessed
🕎 1183935 - testEARSRawData (3) 🕎 1183932 - HCPD (189,458)		DOWNLOAD	Name	Path	Total Files	Size	Download
🕎 1183260 - HCPEPRelease (117,584)			٩	٩			
1183238 - HCPAPreprocessed (85,015) 1183198 - HCPDPreprocessed (55,408)	1	SHOW	HCA6037457_V1_MR_Spin	imagingcollection01/HCA6037457_V1_M	1R/ 1	2.86Kb	1
1183096 - ClincalAssessmentsVolume (41)	~	DOWNLOAD	HCA6037457_V1_MR_Spin	imagingcollection01/HCA6037457_V1_M	1R/ 1	2.86Kb	0
M 1182355 - ABCDstudyNDA (241)	1	SHOW	HCA6037457_V1_MR_Spin	imagingcollection01/HCA6037457_V1_M	1R/ 1	1.22Mb	1
M 1180793 - npd210verification (7) ▷ □ results	4	SHOW	HCA6037457_V1_MR_Spin	imagingcollection01/HCA6037457_V1_M	1R/ 1	1.23Mb	1
m 1180326 - NDA6747DownloadDateForTes	tin,						
<ul> <li>imagingcollection01</li> <li>HCA6037457_V1_MR</li> </ul>							
▲ ☐ unprocessed							
Diffusion	Rov	vs per Page 50	•			« < 1	L > »
C OTHER_FILES ► C HCA6051047_V1_MR	Do						
▶ 🗖 HCA6053758_V1_MR		chronizing Direct 0.00% complete -					
manifests	ima	gingcollection01	/HCA6037457_V1_MR/unproces	ssed/Diffusion/OTHER_FILES/HCA603745	7_V1_MR_SpinEch	oFieldMap4_A	P.nii.gz

Figure 37: Show Button



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You can also filter the list of files displayed in the Package Contents View by entering text into the File Name and Path input fields. As text is entered into these fields, the list of folders and files will update dynamically to show only results that contain the entered text.

The Path column represents the relative directory within the package where the file is located. You can also filter to a specific directory by selecting the directory from the Data Package Tree, or by selecting the folder name from the table. Using the Path column, however, will enable the user to filter for a common subdirectory across multiple parent directories (i.e., fMRI) or a partial match on directory name (i.e., \_V1\_).

If the Package Contents view contains hundreds of thousands of folders and files, there may be a delay after you enter text into the input field, before the table of results will update, as the tool tries to filter the list as each character is entered.

### 3.4. Shared Data Packages

The Shared Data Packages interface allows the user to view any Shared Data Packages that may be available to them. Shared Data Packages are prepackaged data from <u>featured datasets</u>, which are generally available to users with approved data access for the featured dataset of interest.

The first screen you will see when clicking on the Shared Data Package interface is the Data Repositories screen. A Data Repository is a group of NDA Collections with different access governance. When a user accesses the screen, they will see the specific data repositories to which they have access. To request access, go to the <u>Data Permissions</u> tab in your NDA User Dashboard.



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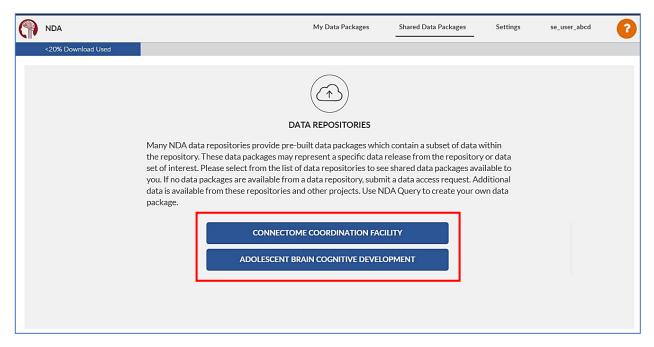


Figure 38: Data Repositories

This interface lists available data packages, provides details related to each shared data package, and allows you to add a shared data package to My Data Packages, which will then make a copy of the shared data package within your own account. The newly created data package will be present <u>My Data Packages</u>, where you can access the contents.

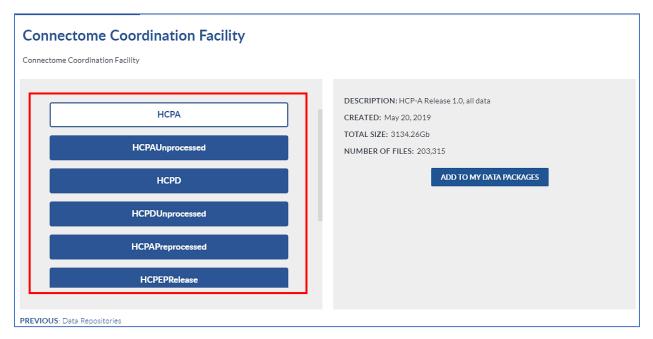


Figure 39: Shared Data Packages



### 3.5. Settings

From the Settings page, you can set the download directory and the tool will default to the host operating system default download location. You can also specify the Download Batch Size, or the number of files to attempt to download at a single time before trying the next set of files.

The settings page also displays the User Download Threshold, the Download Volume to internet addresses outside of <u>AWS</u>, and the Download Volume Remaining for the next 30 days. For more details, please see <u>User Download Threshold</u>.

A download meter is included a part of the header and depicts the total volume of data downloaded to internet addresses outside of <u>AWS</u> over the total available to you.

	Settings	
Please selec	ct directory into which you wish to download	i files.
Download Directory:	C:\Users\obenshaindw\Downloads\Test	CHOOSE DOWNLOAD DIRECTORY
Download Batch Size:	50	
User Download Threshold:	21990.23 GB	
Local 30-Day Download Volume:	424.77 GB	
Local 30-Day Download Volume Remaining	21565.46 GB	



### 3.6. Request Help

The Request Help screen is found under the Help dropdown on the top menu of the interface. Selecting this screen allows you to create a Help Desk ticket directly from the tool. You can also send an email to <u>NDAHelp@mail.nih.gov</u>, however using the request help feature directly from the tool will attach the tool's log file, providing useful data for troubleshooting more efficiently. The NDA Help Desk will reach out to you from the NDA Help Desk email account to assist you. Each NDA Help Center within the interface also provides a Contact Help Desk link that will allow you to begin an email directly to the NDA Help Desk.



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UIRED ERNAME * _user_abcd		Request Help
User Manual UR NAME * URED ERNAME *		
UR NAME * URED ERNAME *User_abcd UR EMAIL * EASE SPECIFY DATA PACKAGES WITH WHICH YOU'RE EXPERIENCING A PROBLEM		If you are experiencing an issue with particular packages, please list the Package IDs.
URED ERNAME * _user_abcd UR EMAIL * EASE SPECIFY DATA PACKAGES WITH WHICH YOU'RE EXPERIENCING A PROBLEM		User Manual
ERNAME *sec_abcd UR EMAIL *SASE SPECIFY DATA PACKAGES WITH WHICH YOU'RE EXPERIENCING A PROBLEM	YOUR NAME *	
ERNAME *sec_abcd UR EMAIL *SASE SPECIFY DATA PACKAGES WITH WHICH YOU'RE EXPERIENCING A PROBLEM	]	
_user_abcd UR EMAIL * EASE SPECIFY DATA PACKAGES WITH WHICH YOU'RE EXPERIENCING A PROBLEM	REQUIRED	
UR EMAIL *	JSERNAME *	
EASE SPECIFY DATA PACKAGES WITH WHICH YOU'RE EXPERIENCING A PROBLEM	se_user_abcd	
	OUR EMAIL *	
	PLEASE SPECIFY DATA	ACKAGES WITH WHICH YOU'RE EXPERIENCING A PROBLEM
ASE DESCRIBE THE PROBLEM YOU'RE EXPERIENCING *		
EASE DESCRIBE THE PROBLEM YOU'RE EXPERIENCING *		
EASE DESCRIBE THE PROBLEM YOU'RE EXPERIENCING *		
	PLEASE DESCRIBE THE	PRORI FM YOLI'RE EXPERIENCING *

Figure 41: Request Help

### 4. User Download Threshold

NDA has put into effect a reasonable limit on the rate at which individual users can transfer data out of <u>AWS</u> storage to non-AWS internet addresses.

- All users have a download limit of 20 Terabytes.
- This limit applies to the volume of data an individual user can transfer within a 30-day window.
- Only downloads to non-AWS internet addresses will be counted against the limit.

This limit has been introduced to control infrastructure costs and to share finite resources more fairly for data storage and access across the NDA user base. The allowance of 20 terabytes is considered large enough for most exploratory data analyses, or for prototyping a computational workflow on local infrastructure.

More importantly, data transferred to AWS internet addresses will not count toward this threshold. No download limit is imposed for data transferred this way. NDA provides direct support for accessing and analyzing data using AWS resources through a Computational Credits program.



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Users that exceed this 20 Terabyte threshold will receive an email stating that their access to transfer data has been suspended and the date when data transfer will be available again. The email will also include the total volume transferred to non-AWS internet addresses. Data can be transferred again after the prior 30-day download volume falls below 20 Terabytes.

Users that are concerned about their download volumes can email the <u>NDA Help Desk</u> at any time to check their download volume over the past 30 days.

User Download Threshold Examples:

A new user that has never accessed data creates a package whose total volume is 70 Terabytes. The user's account is created with a 20 Terabyte download threshold, and the user has no downloads over the prior 30 days.

<u>Example 1</u>: The user begins downloading the entire package to an internet address associated with a data storage server in their laboratory (outside of AWS) for data exploration and analysis. The user leaves this download to continue and begins working with the files that are initially downloaded.

If data are transferred at a rate of 1 Terabyte per day, the threshold will be reached after 20 days and the data transfer access will be suspended, at which point the download will be interrupted. After waiting another 11 days, the download volume over the prior 30 days will be 19 Terabytes, which is less than their allotted threshold and data transfer access will be restored.

If data are transferred at a higher rate of 10 Terabytes per day, the threshold will be reached after 2 days, and the user will need to wait another 29 days before they will be able to transfer additional data.

<u>Example 2</u>: The user transfers data to compute instances or storage that have an AWS internet address. Their download volume will not count toward the download threshold, and access to transfer data will not be suspended. Users can request an AWS account through NDA Computational Credits program.