



THE SHIRE

Requesting a Data Export

Overview

The SHIRE is designed so that data cannot be removed or copied out of the environment. However, we know that users need a way to request to export deidentified and/or aggregate data (tables, figures, etc.) when they're ready to publish, create a poster, write a presentation, et cetera. This requires an export request. This documentation will detail how to make export requests in the SHIRE.

About Export Requests

At a high level, the Export process follows the steps below.

1. Prepare your data for export.
2. Submit your request via Airlock, a tool available in the SHIRE.
3. Submit the Airlock Approval Form.
4. After approval, export your files.

IMPORTANT: By submitting an export request, you are assuming responsibility for the content of your request. This includes implementing required data protections and deidentification.

There are two types of export requests:

Export Type 1: Aggregate data, figures, code, and models. Exportable artifacts include:

- Aggregate data tables
 - Cell sizes <10 must be masked as "<10"
 - If counts in other cells would allow a reader to reverse engineer the masked value, the counts in those other cells must be "jittered" by +/-5.
- Figures (charts, graphs, visualizations)
- Code
- Trained models
 - Models trained on deidentified data can be requested for export. Models trained on fully identified or HIPAA limited data cannot be exported by default. Requests to export models trained on fully identified data would need to be reviewed by the CDWH Committees on a case-by-case basis where, for example, any risk-minimizing measures taken by the study team can be carefully considered.

Export Type 2: Deidentified, row-level data. Deidentified, row-level data may be exported for the following purposes:

- External data sharing that was approved by the CDWH Operations or Oversight Committees.
 - Note: This use case is designed for projects that need to do some manipulation of the data before sharing. If you would like to share CDWH data with an external party without making your own changes to it, TraCS can facilitate this.
- For an NIH Inclusion Enrollment Report, which only contains row-level data with race, ethnicity, sex, and age (< age 89).

Prerequisite

You will need to download and install Azure Storage Explorer (ASE) to your local computer. (Not inside of the SHIRE, but on your laptop or other local machine.) ASE is free to download [from this link](#). You do not need to become an expert in ASE—we will show you exactly what you need to do to use ASE in this documentation. Go ahead and download/install ASE before proceeding.

Export Request Process

Step 1: Prepare your data

For Export Type 1

Prepare all data files. Ensure files do not contain any row-level data. For aggregate data tables, ensure cell sizes have been suppressed as required (See Export Type 1 in About section). Zip your files up into a single zip file, as Airlock can only handle one file or zipped folder per request. The maximum file size for export is 5 GB. If you need to upload a file larger than 5 GB, please contact the data analyst who worked on your CDWH request.

For Export Type 2

You are responsible for fully deidentifying the data. As part of the Airlock Approval form, you will be required to attest that you have completed the following deidentification steps:

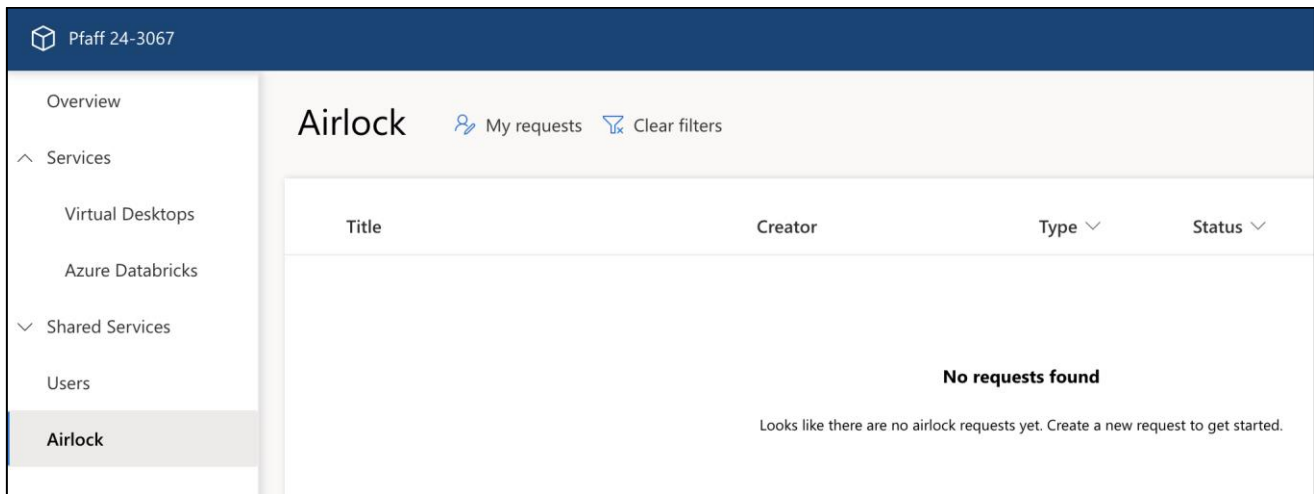
- Any direct patient identifiers (name, address, MRN, etc.) do not appear or are masked.
- Dates of birth, death, or service do not appear or are masked.
- Geographic units smaller than a state do not appear or are masked.
- Real ages for patients >89 years of age do not appear or are masked.
- Identifying details about providers do not appear or are masked.
- Free text data or clinical notes do not appear.
- Any other unique identifiers do not appear or are masked.

If requesting an export for approved data sharing, you must also ensure the exported data aligns with your approval (e.g., if you are only approved to share data for a subset of your cohort, you must ensure this constraint is applied).

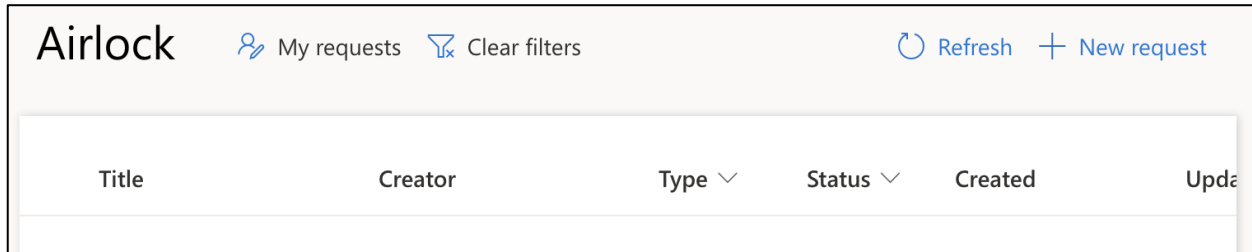
Zip your files up into a single zip file, as Airlock can only handle one file or zipped folder per request. The maximum file size for export is 5 GB. If you need to upload a file larger than 5 GB, please contact the data analyst who worked on your CDWH request

Step 2: Make an Airlock request.

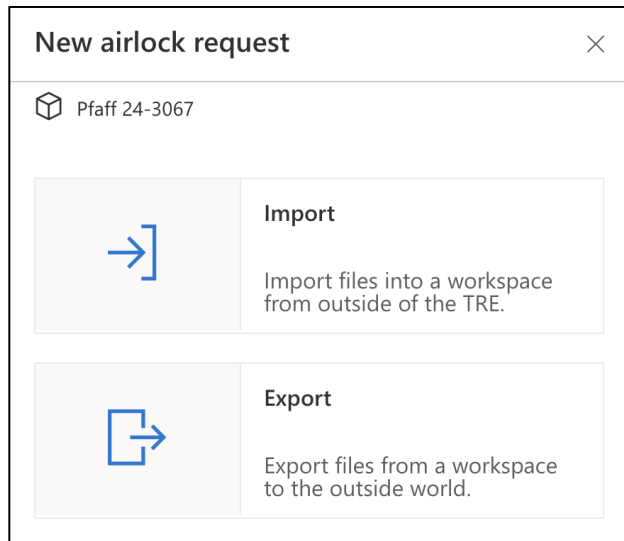
Navigate to your SHIRE workspace, then to Airlock. It is available on the lefthand navigation panel, as shown below.



To make a new request, while in Airlock, click the [+New request] button on the righthand side.



Here you have the opportunity to specify if you need an import or export. Click the appropriate option.



You will then see a simple form. Enter an informative title for your request (e.g., export aggregate tables for journal submission). For business justification, simply enter "Researcher export request." The screenshot below shows an example request.

New airlock export request

Pfaff 24-3067

Title *
Export figures for publication

Business Justification *
Researcher export request

Back Create

Once you click [Create], you will need to upload the files you want to export via Azure Storage Explorer. At this point in the process, your request is in draft status, as shown in the screenshot below.

Figures needed for an upcoming presentation

Id 256d0f25-2263-49b2-ae2f-568411fd7c32

Creator PE Pfaff, Emily

Type export

Status draft

Workspace Pfaff 24-3067

Created 14/07/2025

ⓘ This request is currently in draft. Add a file to the request's storage container and submit when ready.

Cancel request Submit

Scroll to the bottom of the dialog box above until you see a URL, as shown below. Copy that URL. You will need this in the next step. Note that this URL is only valid for about an hour.

SAS URL CLI

Use the storage container SAS URL to upload your request file.

https://stalexintws6cd0.blob.core.windows.net/256...

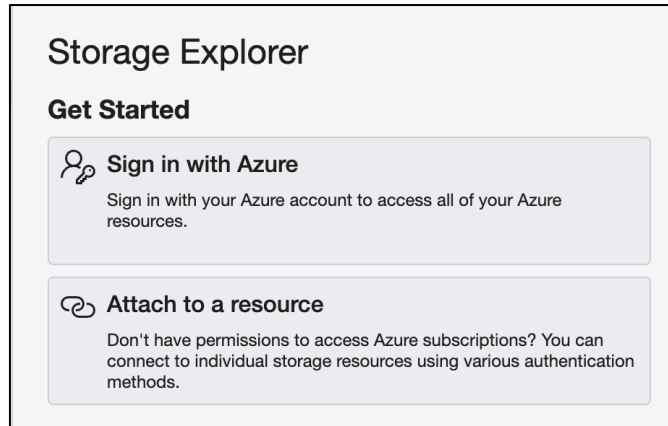
ⓘ Please upload a single file. Only single-file imports (including zip files) are supported.

ⓘ This request is currently in draft. Add a file to the request's storage container and submit when ready.

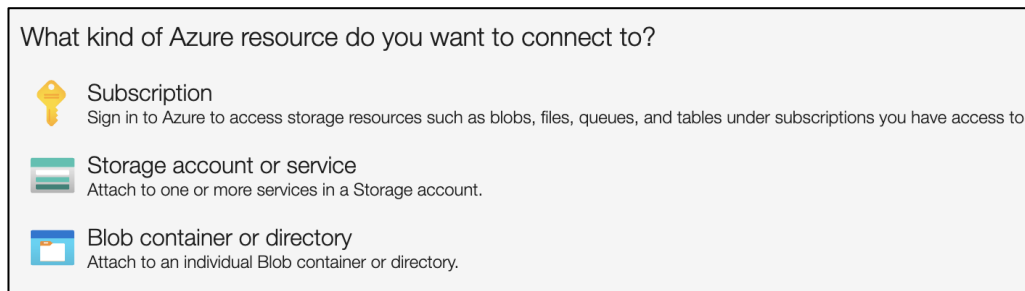
Cancel request Submit

To go get the files you would like to export from the SHIRE, open your SHIRE virtual desktop, and open Azure Storage Explorer *from within the SHIRE* (not your local version).

Once in Azure Storage Explorer, click on “Attach to a resource” as shown below.



On the next screen, select “Blob container or directory” as shown below.



On the next screen, select “Shared access signature URL (SAS)” as shown below.



On the next screen, enter a display name for the connection (a good choice would be the name or IRB number of the project you’re working on). Paste the URL you copied from Airlock into the “Blob container or directory SAS URL” box.

Enter Connection Info

Select Resource > Select Connection Method > **Enter Connection Info** > Summary

Display name:

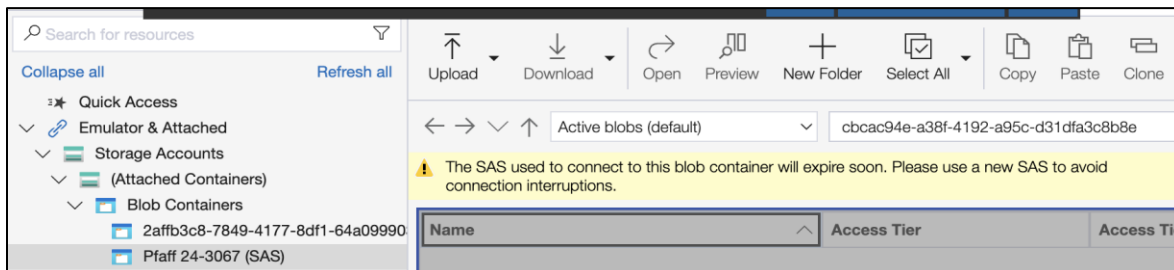
Pfaff 24-3067

*Blob container or directory SAS URL:

https://stalmexunchtrep01.blob.core.windows.net/cbcac94e-a38f-4192-a95c-d31dfa3c8b8e?st=14T16%3A38%3A02Z&sp=rwdl&sv=2024-11-04&sr=c&skoid=aef8ec9c-c53a-49fe-b7a6-80dcf14T15%3A23%3A02Z&ske=2025-07-14T16%3A38%3A02Z&sks=b&skv=2024-11-04&sig=e0rT

The next page will show a summary of everything you've entered so far. Click [Connect].

ASE will open a new connection for you to upload your files for export. You can ignore the yellow warning that says "The SAS used to connect to this blob container will expire soon." Click the [Upload] button in the top toolbar, then Upload Files in the menu that pops up.



Click on the [...] to browse the SHIRE for the file or zip folder you want to upload. You don't need to change any of the other values on this screen—they can be left as the default values. Click [Upload].

Upload Files

Select the files you want to upload, the type of blob you want to upload as, and the destination directory.

Selected files:

No files selected ...

Once the file has been successfully uploaded, return to your Airlock request in the SHIRE and click the blue [Submit] button. Note the name of your Airlock request and the Airlock request ID, as you will need these in the next step. If your Airlock request dialog box is still open, your request name and ID can be found there as shown below. If you have closed the dialog box, you can reopen it from your workspace's Airlock page by double-clicking your request in the list.

This completes the Airlock request step; however, in order for your request to be reviewed and approved, you will need to complete the SHIRE Airlock Approval form.

Step 3: Submit SHIRE Airlock Approval form.

Please fill out the form linked here: <https://wkf.ms/3L2uCBc>. Once submitted, your request will be reviewed and processed by an Honest Broker. The review process and timeline differ depending on the level of identification of your CDWH request.

If your CDWH request was for deidentified or HIPAA limited data, please expect a 1 business day turnaround.

If your CDWH request was for fully identified data, please expect a 3 to 5 business day turnaround.

Step 4: Downloading Your Files Post-Approval

You will receive an email when your export request has been approved and your file is ready for download. On the Airlock screen, you will see that the status of your request has changed to “approved.”

	Test request for Paul	Pfaff, Emily	export	approved	22/05/2025	2 months ago
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Double-click on your approved request in Airlock and scroll down to the bottom of the dialog box, where you can copy the URL as you did earlier. Use the same steps as described above to connect to that URL in your local version of Azure Storage Explorer (*not* the version in the SHIRE this time). Now, when you connect to that URL, you’ll see your data waiting for you.

If you requested Export Type 1: Click [Download] in the top toolbar to download the files to your local machine. Your export request is now complete.

If you requested Export Type 2: The exports require extra protections. You will need to download the files to a secure folder on the TraCS file server.

- Map to the network drive folder. In your approval email, you should have received path to a folder on the TraCS network drive. Instructions on mapping to the drive are [here](#).
- Return to your local version of Azure Storage Explorer. Click [Download] and specify the network drive location as your target. Your export request is now complete.

DOCUMENT VERSION TRACKING

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