



How Do I Use the EIS Bridge?

Introduction

To help users convert their NIF 3.0 formatted data to the new EIS CERS XML format, the EPA has developed the EIS Bridge. It is the place for you to:

- Download a set of Staging Tables in MS Access format for each data category.
- Convert your populated Staging Tables to an EIS CERS XML file.
- Take data from the EIS CERS XML format and load them into Staging Tables.

This section of the EIS User's Manual includes step-by-step instructions for

1. Downloading the EIS Bridge, beginning on page 2.
2. Generating blank Staging Tables, beginning on page 6.
3. Converting populated Staging Tables to CERS XML, beginning on page 12.
4. Converting CERS XML to Staging Tables, beginning on page 19.

At the end of this document is a set of Questions and Answers about the EIS Staging Tables.



Step 1:

From within the EIS Gateway, you will see on the left side of the page a heading entitled “Tools.” Under this heading, select the option “EIS Bridge.”

The screenshot shows the EIS Gateway interface. At the top, there is a banner with the text "EIS Gateway" and "Authenticated Role, S/L/T User Role". Below the banner, the page is divided into two main sections. On the left is a navigation menu with several categories: "FACILITY INVENTORY", "ACCOUNT DATA", "TOOLS", and "SUPPORT". Each category has a list of links. The "TOOLS" category is highlighted with a red circle, and the "EIS Bridge" link is highlighted with a red circle. An orange arrow points from the "EIS Bridge" link to the right. The right section of the page contains a "Home" link, the heading "Emissions Inventory System", a "Welcome To EIS" message, and a "CURRENT ANNOUNCEMENTS" section with the text "There are no current announcements". At the bottom of the page, there is a footer with links for "Home", "Your Profile", and "Contact Us".

EIS Gateway
Authenticated Role, S/L/T User Role

FACILITY INVENTORY

- » View and Edit Data
- » Inventory Snapshot
- » View Potential Duplicate Facilities
- » Reporting Code Tables

ACCOUNT DATA

- » My Account
- » My Agency

TOOLS

- » EIS Bridge

SUPPORT

- » Show All Announcements
- » View Support Requests
- » Create Support Request

Home

Emissions Inventory System

Welcome To EIS

CURRENT ANNOUNCEMENTS

There are no current announcements

Home | Your Profile | Contact Us



Step 2:

After you have selected the EIS Bridge option from the main page, you will be presented with the EIS Bridge page. It contains information on the functions of the EIS Bridge, any news pertaining to new versions, things you need to be aware of when working with the EIS Bridge and the Staging Tables, and the link to download the EIS Bridge.

EIS Gateway
Authenticated Role: SALT User Role

FACILITY INVENTORY

- » View and Edit Data
- » Inventory Snapshot
- » View Potential Duplicate Facilities
- » Reporting Code Tables

ACCOUNT DATA

- » My Account
- » My Agency

TOOLS

- » EIS Bridge

SUPPORT

- » Show All Announcements
- » View Support Requests
- » Create Support Request

[Home](#) » [EIS Bridge](#)

EIS Bridge

WELCOME

The EIS Bridge helps you transform your emissions inventory data into CERS XML files. It accomplishes this by providing a set of staging tables into which you may load your data. It then generates a valid CERS XML file using your loaded data.

Here is how to get started:

1. Read the features of the EIS Bridge provided below.
2. Download and install the EIS Bridge application.
3. Download the desired set of staging tables to your desktop.
4. Load your EIS data into the staging tables.
5. Generate a CERS XML file.

LATEST NEWS

Version 0.3:
This release includes the ability to download a new set of staging tables to the desktop. It also includes the ability to detect any changes made to downloaded staging tables (into which you have loaded data) that would prevent the system from generating an EIS CERS XML file.

Version 0.2:
This release includes the ability to download and install the Bridge from the EIS Gateway.

FEATURES

Downloading Staging Tables

Use this feature to download a new set of staging database tables that correspond to a specific data category. Your choices are *Facility Inventory, Point, Nonpoint, Onroad, Nonroad, or Events*.

Special Instructions

1. While the tables for Facility Inventory and Point Emissions are combined into one set, when run through the EIS Bridge, a separate EIS CERS XML file will be generated for Facility Inventory and for Point Emissions. Both categories of data do not have to be present within the staging tables to generate an XML file. You only need to load the required elements that pertain to the selected data category.
2. Generated XML files are CERS compliant. This means they contain the required data elements; however, there is no guarantee that the EIS will accept your submission. It may reject part or all of your submission if the provided data does not pass QA checks. The Bridge does not perform the EIS QA checks. For more information, refer to the reporting instructions detailed in Sections 5-12 and Appendix 5 of the NEIP.
3. Generated XML files may not include all of your staging data if you do one of the following: :
 - i. Alter the original database file structure. The Bridge will not use your data if you change or remove the original table and column names or data types. It will ignore any data stored in tables or columns you add to a staging file.
 - ii. Supply data with no referential integrity.

Validating Existing XML Files Against the CERS

Do you already have an XML file generated? This feature will verify the structure of your XML file against the CERS. Basic content constraints are also checked.

Special Instructions

1. Validating your XML file against the CERS is mandatory. The EPA will not accept your file if you do not complete a successful validation before submitting via the CDX Node.
2. If you are submitting an unaltered EIS Bridge-generated XML file, you do not need to use this feature. Your file is already CERS compliant. For more information about the XML schema validation rules, refer to Section 5 of the NEIP.

Importing CERS XML Data into Staging Tables

If you want to view your CERS XML data in Microsoft Access 2003 format, use this feature. It imports data from your XML file into a set of staging tables that correspond to a specific data category. Your choices are *Facility Inventory, Point, Nonpoint, Onroad, Nonroad, or Events*.

Special Instructions

1. This feature only works with CERS XML files downloaded from the EIS Gateway.
2. CERS XML files must contain only one category of data.

TECHNICAL SPECIFICATIONS

System Requirements

- Microsoft Windows XP
- Microsoft Access 2003*
- Java Virtual Machine 1.6.0_4 or higher

* If you are a Microsoft Access 2007 user, please remember to save your staging files in 2003 format.

DOWNLOAD THE EIS BRIDGE

Click on the link to the right to download the EIS Bridge. A shortcut will be placed on your desktop, which will allow you to access the EIS Bridge.
[Download EIS Bridge](#)

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Step 3:

Once you have reviewed the information on the EIS Bridge page, you can download the EIS Bridge by clicking on the link at the bottom of the page.

TECHNICAL SPECIFICATIONS

System Requirements

- Microsoft Windows XP
- Microsoft Access 2003*
- Java Virtual Machine 1.6.0_4 or higher

* If you are a Microsoft Access 2007 user, please remember to save your staging files in 2003 format.

DOWNLOAD THE EIS BRIDGE

Click on the link to the right to download the EIS Bridge. A shortcut will be placed on your desktop, which will allow you to access the EIS Bridge.
[Download EIS Bridge](#)

Step 4:

After you select the Download EIS Bridge link, a Java window will appear and you will be asked to verify the application. Select YES and the EIS Bridge download process will be completed.

Do you already have an XML file generated? This feature will verify the structure of your XML file against the CERS. Basic content constraints are also checked.

Special Instructions

1. Validating your XML file against the CERS is mandatory. The EPA will not accept your file if you do not complete a successful validation.
2. If you have an XML file, you can use the EIS Bridge to generate a staging file. Your file is already CERS compliant.

Importing XML

If you want to import an XML file into the EIS Bridge, you will need to select the XML file from your XML file into a set of staging tables the EIS Bridge will use to generate the staging file. The staging file will be named *Nonroad, Nonroad, or Events*.

Special Instructions

1. The EIS Bridge will generate a staging file for you.
2. CE

TECHNICAL SPECIFICATIONS

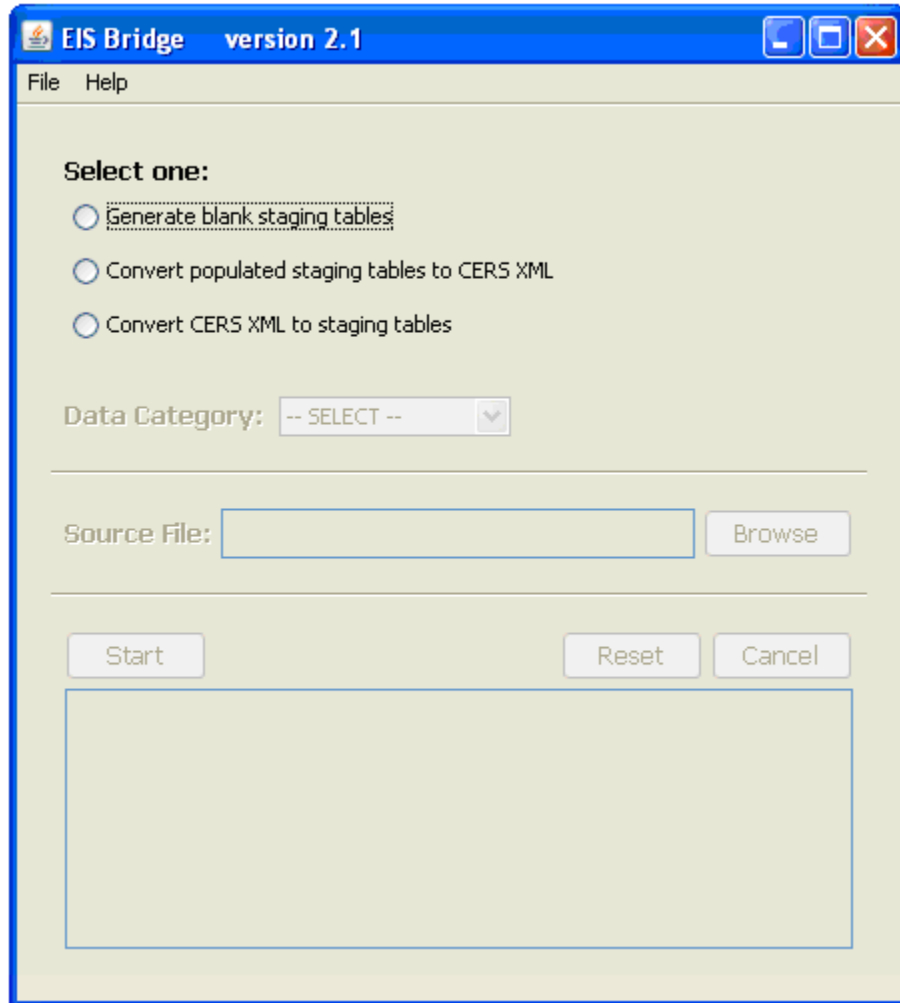
System Requirements

An EIS Bridge shortcut will be added to your desktop. This will be the way for you to access the EIS Bridge.



Step 5:

Click on the EIS Bridge shortcut to open the application. You will be presented with this view.



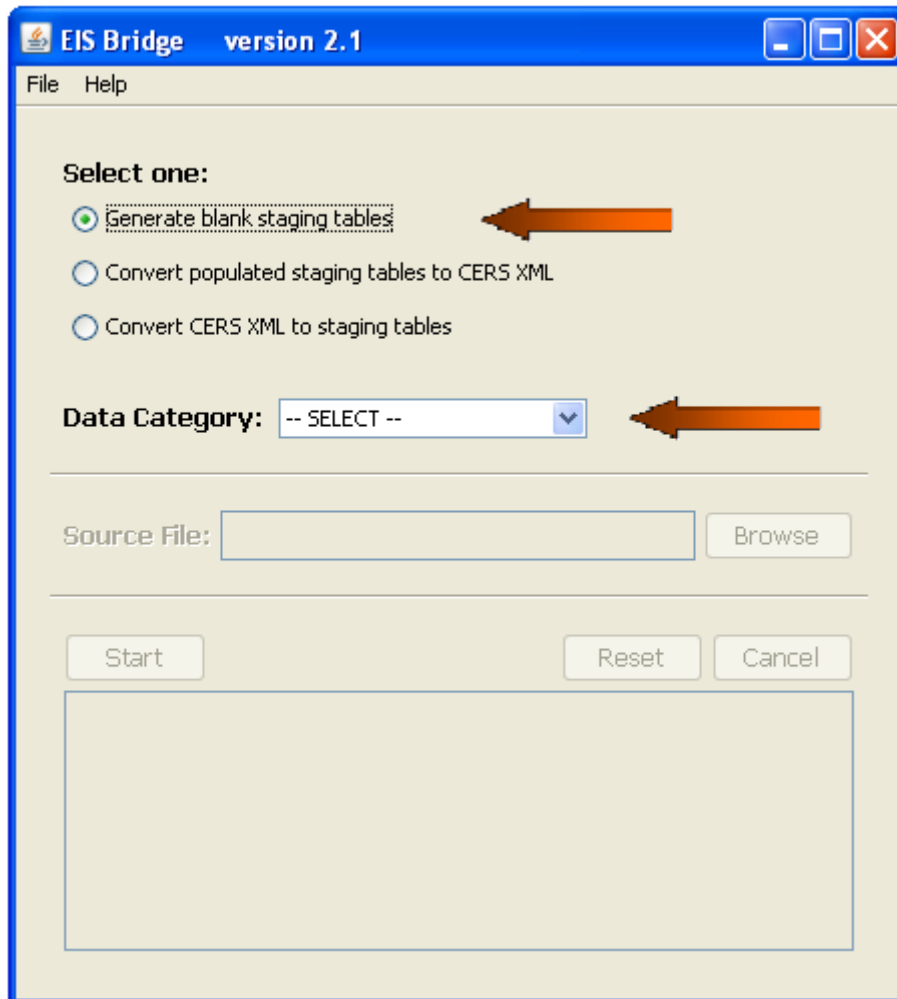
All of the functionality is contained on this one page. From here you can

- Generate blank Staging Tables
- Convert populated Staging Tables to CERS XML
- Convert CERS XML to Staging Tables

Generate Blank Staging Tables

Step 1:

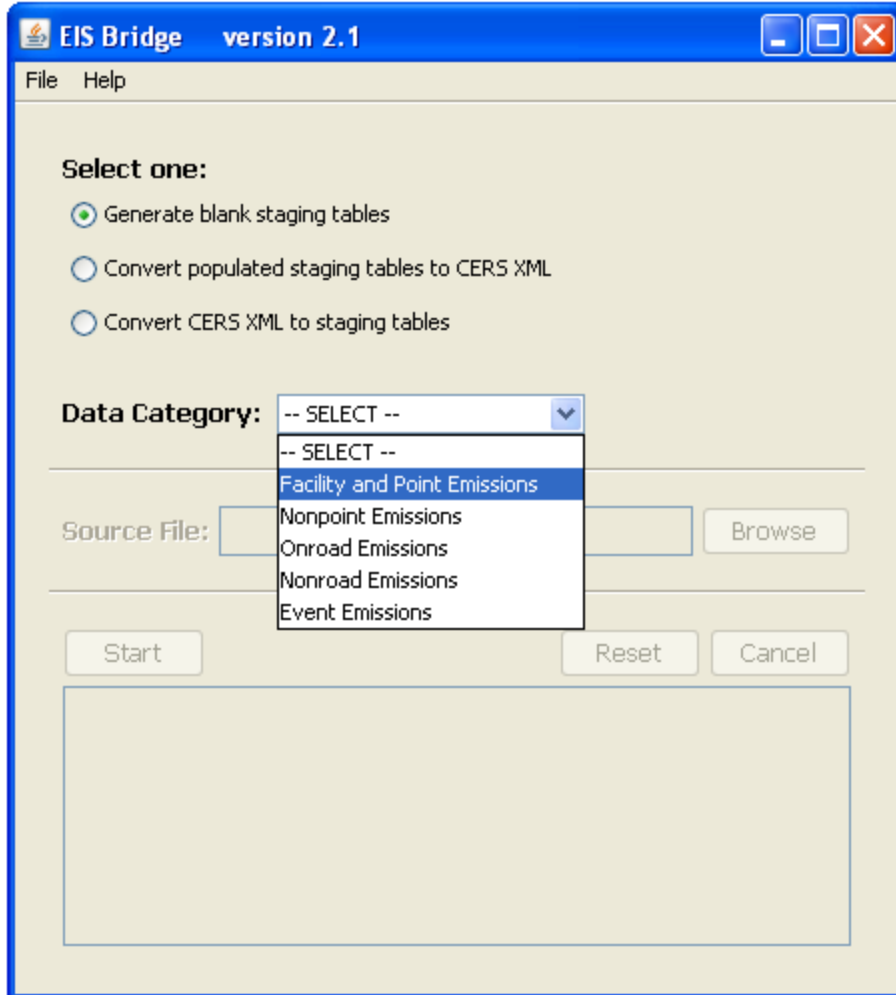
To generate a blank set of Staging Tables, select the first radio button.



When you select the radio button, the Data Category box will highlight.

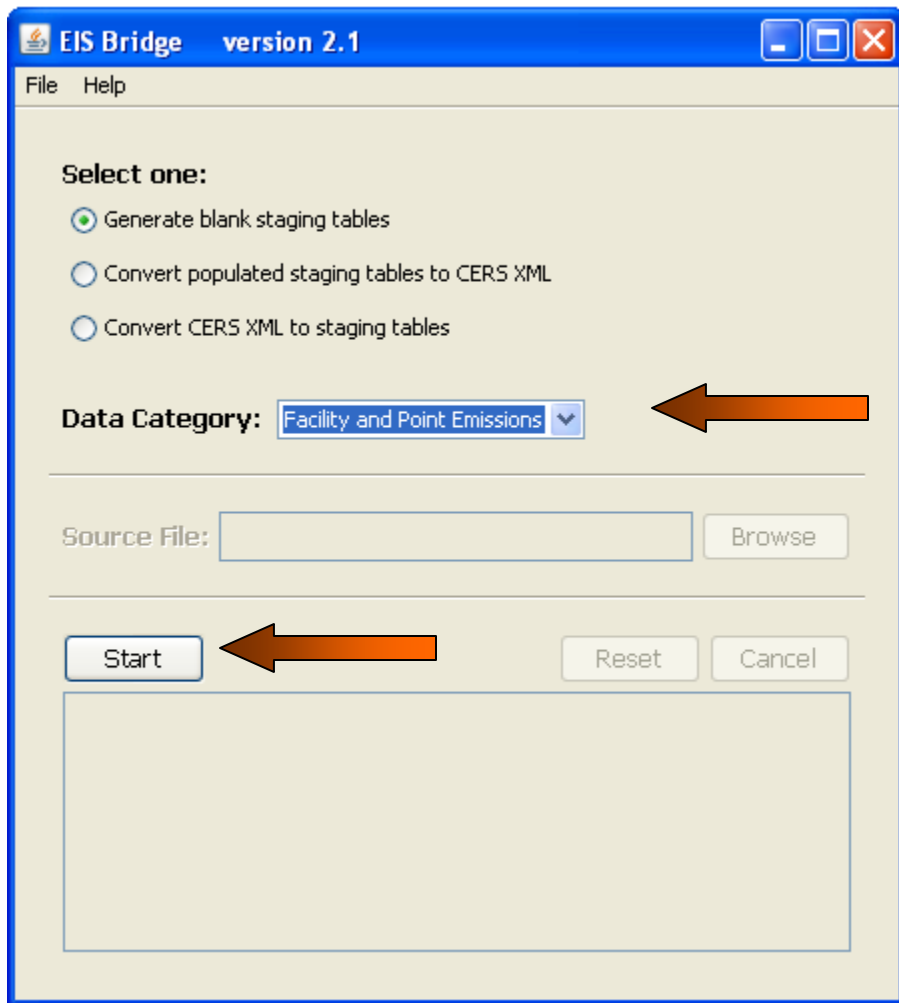
Step 2:

Select from the Data Category drop down the type of blank Staging Tables you want to download.



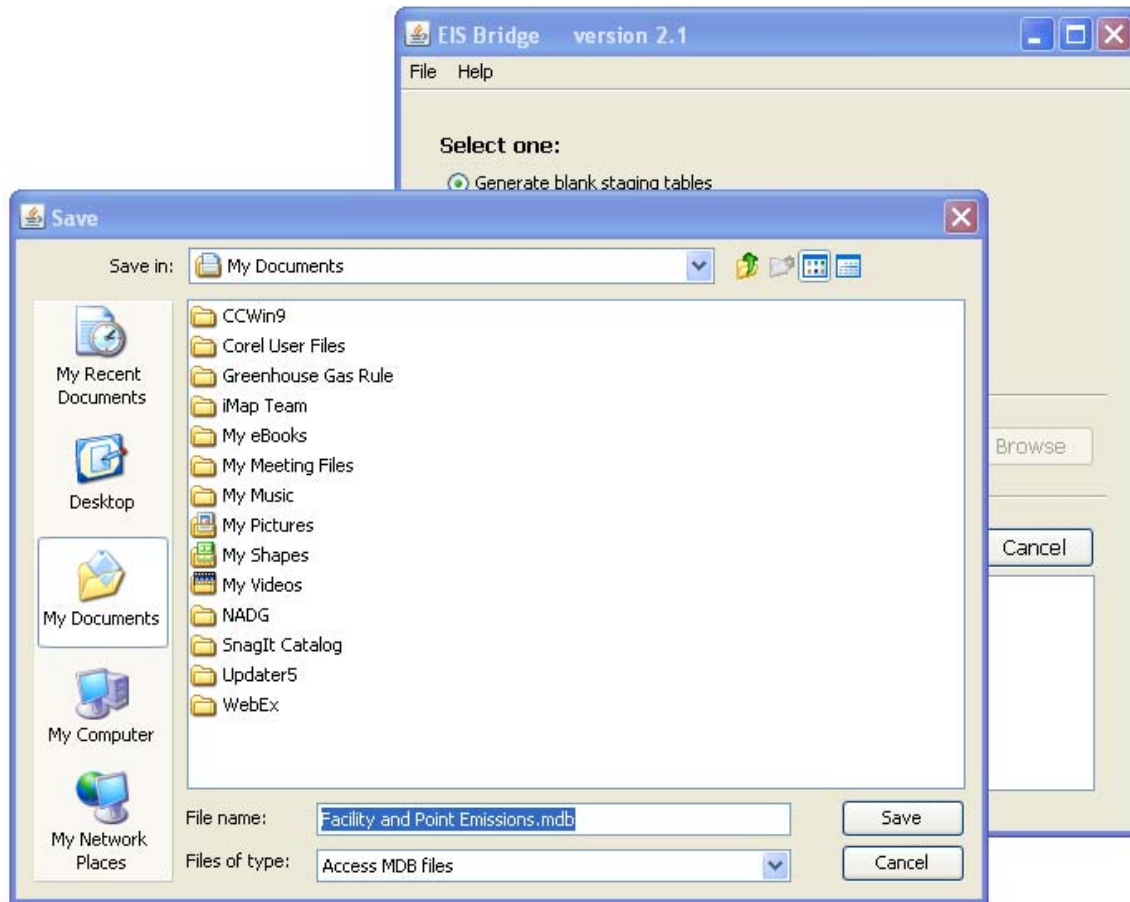
Step 3:

Once you've selected a Data Category, it will appear highlighted in the Data Category Box. The Start Button will also appear highlighted. Select the Start button to begin the process of downloading the blank set of Staging Tables for the data category you selected.



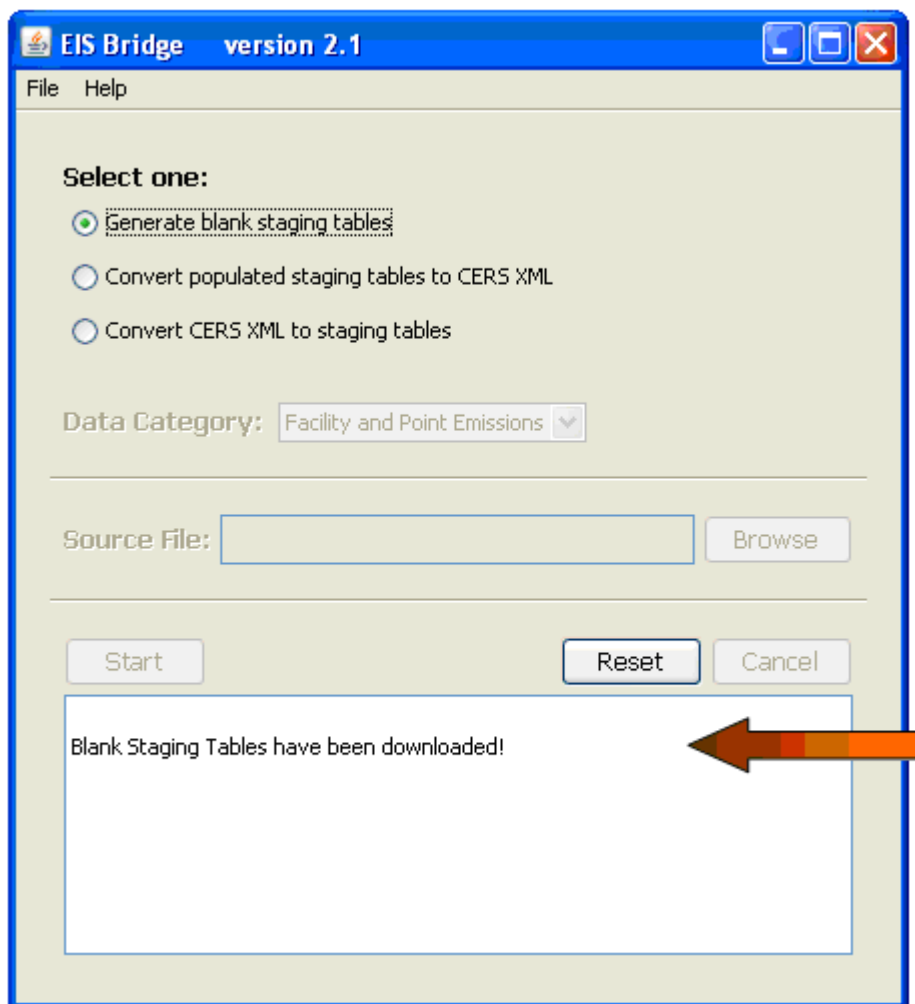
Step 4:

After you select the Start button, you will be presented with a Save window. You can change the location to which you are saving the Staging Tables and/or change the name of the Staging Tables. When you have selected the appropriate location, select the Save button.



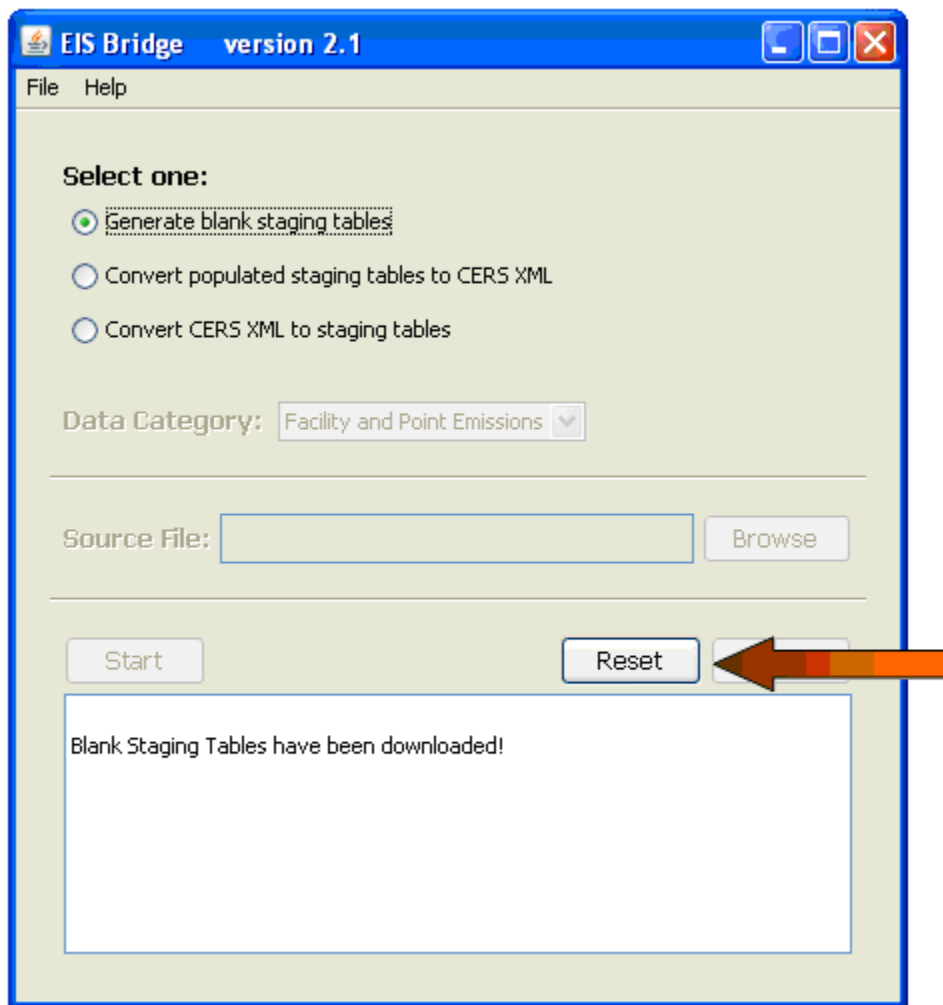
Step 5:

A message will appear when the Staging Tables have been successfully downloaded.



Step 6:

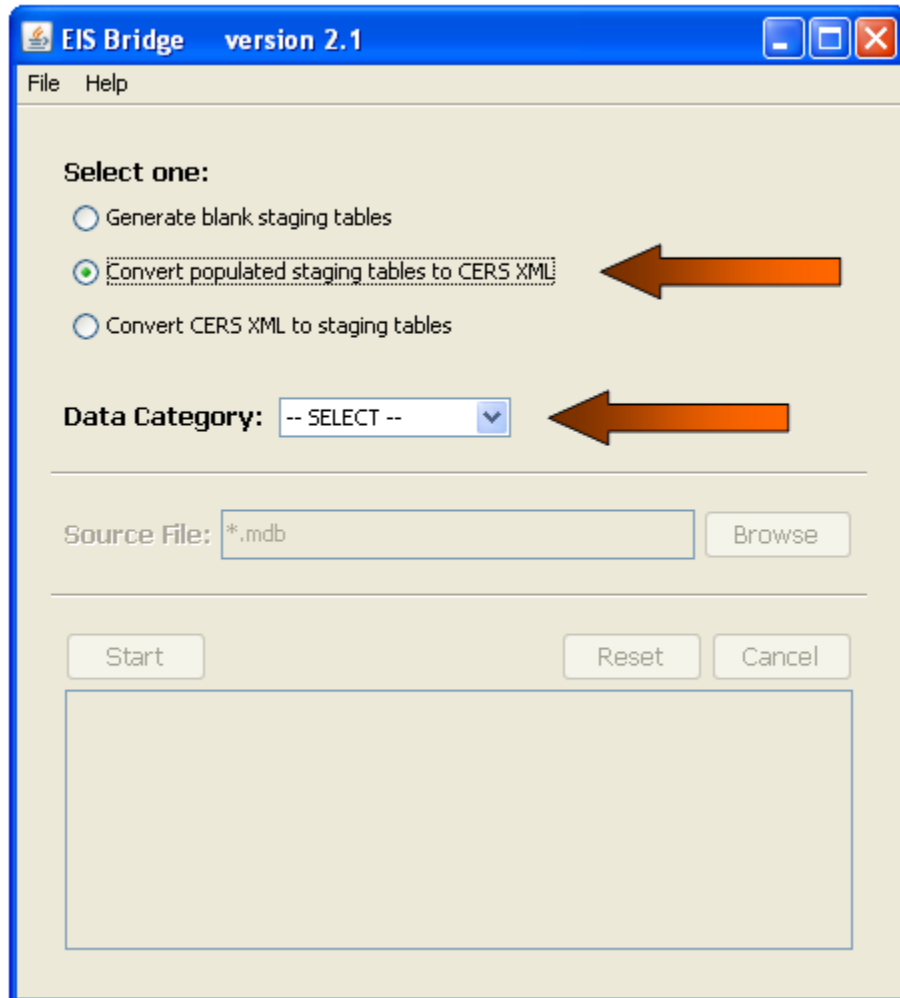
To download a set of Staging Tables for another data category, you must first clear your present selections by hitting the Reset button, then repeat steps 1-6 as many times as necessary.



Convert Populated Staging Tables to CERS XML

Step 1:

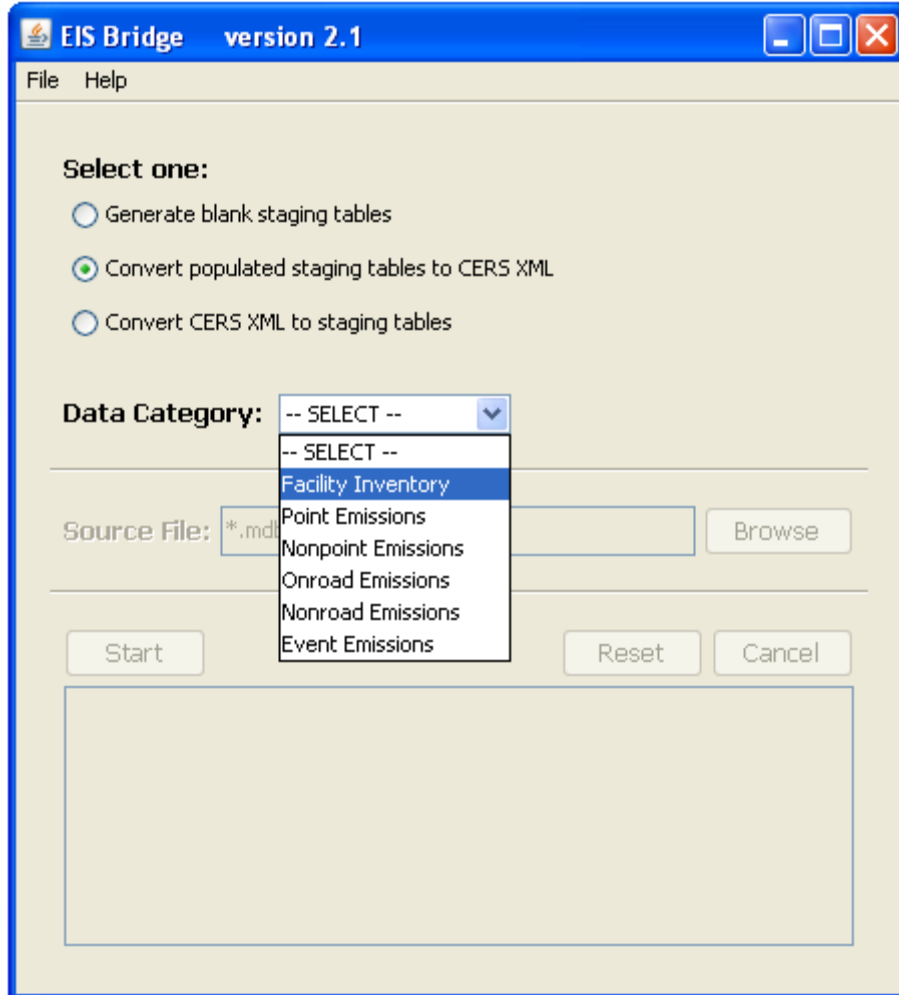
To generate a CERS XML file from your populated Staging Tables, select the second radio button from the list in the EIS Bridge.



When you select the radio button, the Data Category box will highlight.

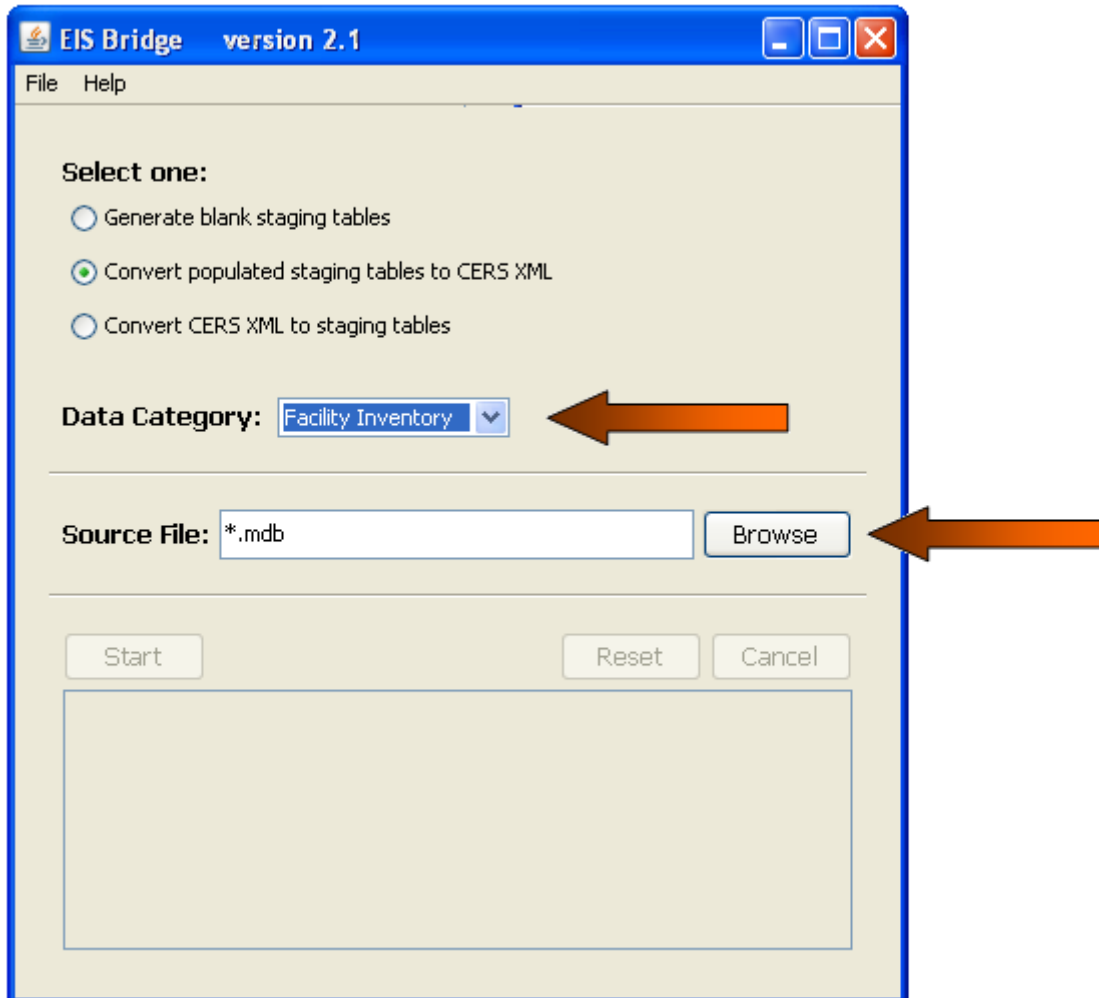
Step 2:

Select from the Data Category drop down the type of blank Staging Tables you want to download.



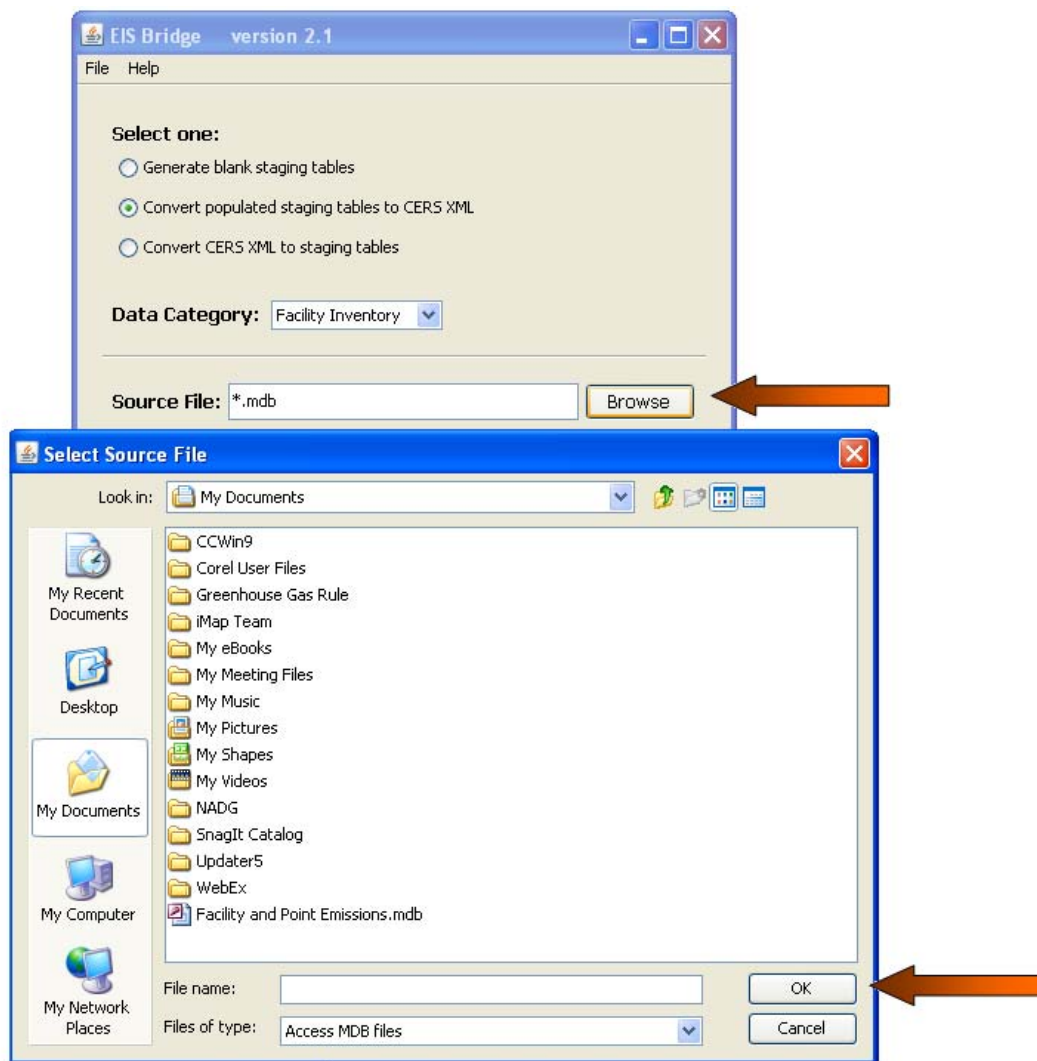
Step 3:

Once you've selected a Data Category, it will appear highlighted in the Data Category Box. The Browse button will also appear highlighted. Select the Browse button to locate the populated staging table you want converted to CERS XML.



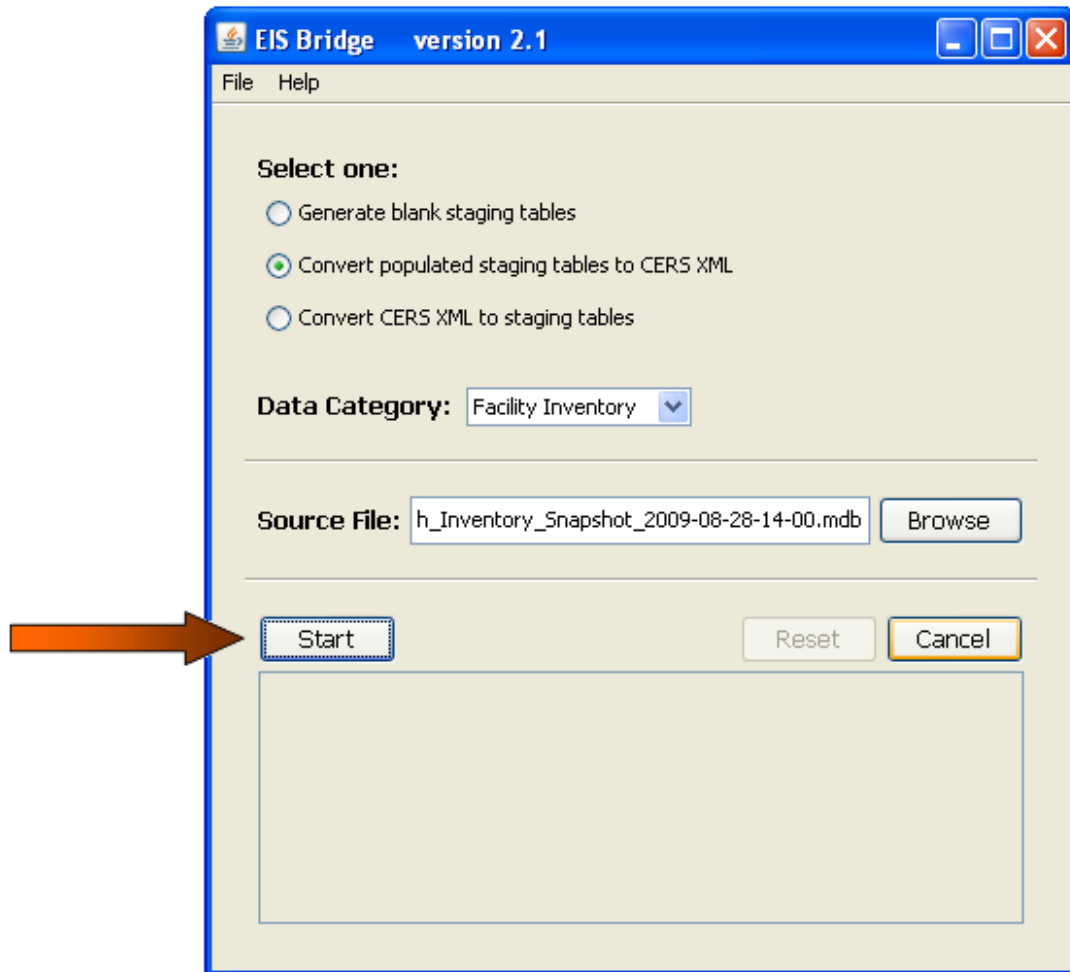
Step 4:

After you select the Browse button, you will be presented with a Select Source File window. Here you will select the Staging Tables file that you want to convert to CERS XML. When you have selected the appropriate location, select the OK button.



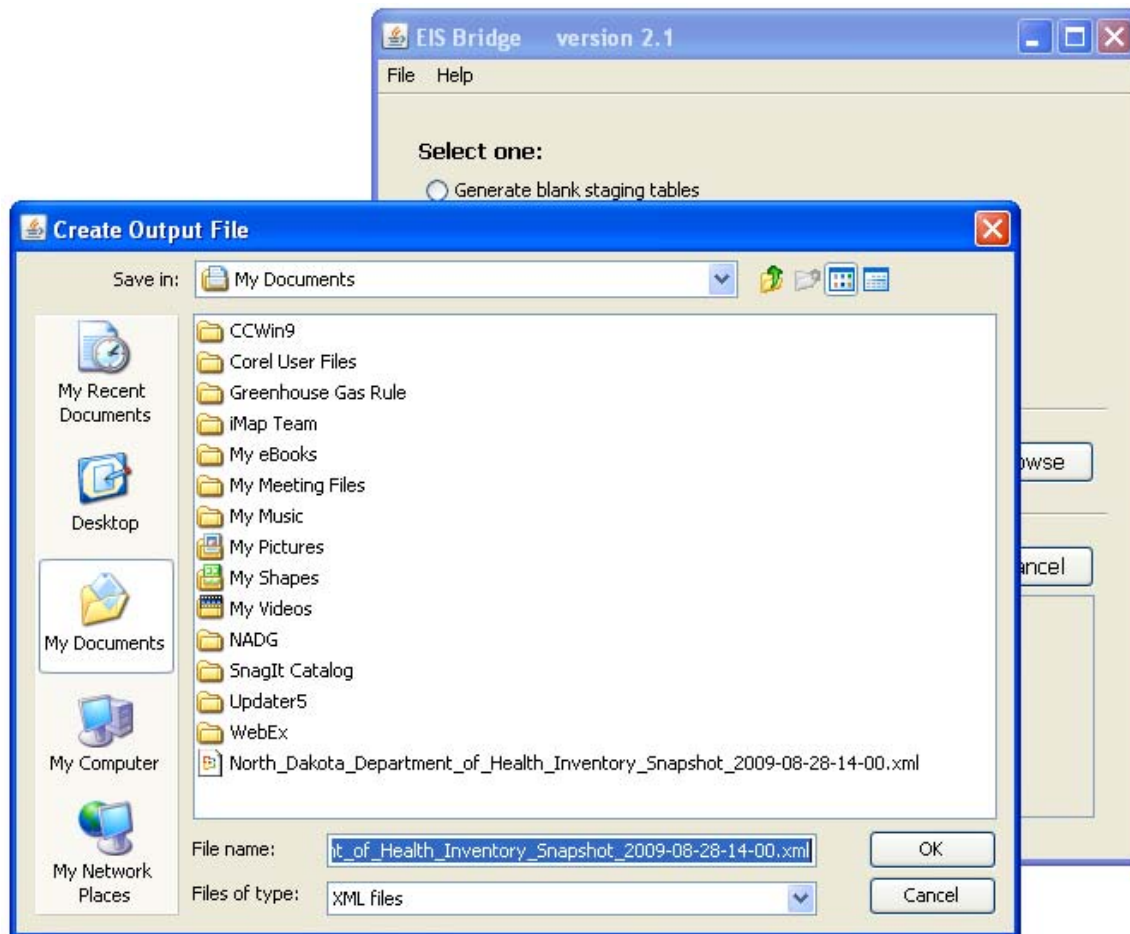
Step 5:

When the source file has been selected, it will appear in the Source File window. To begin the process of converting the Staging Tables to CERS XML, select the Start button.



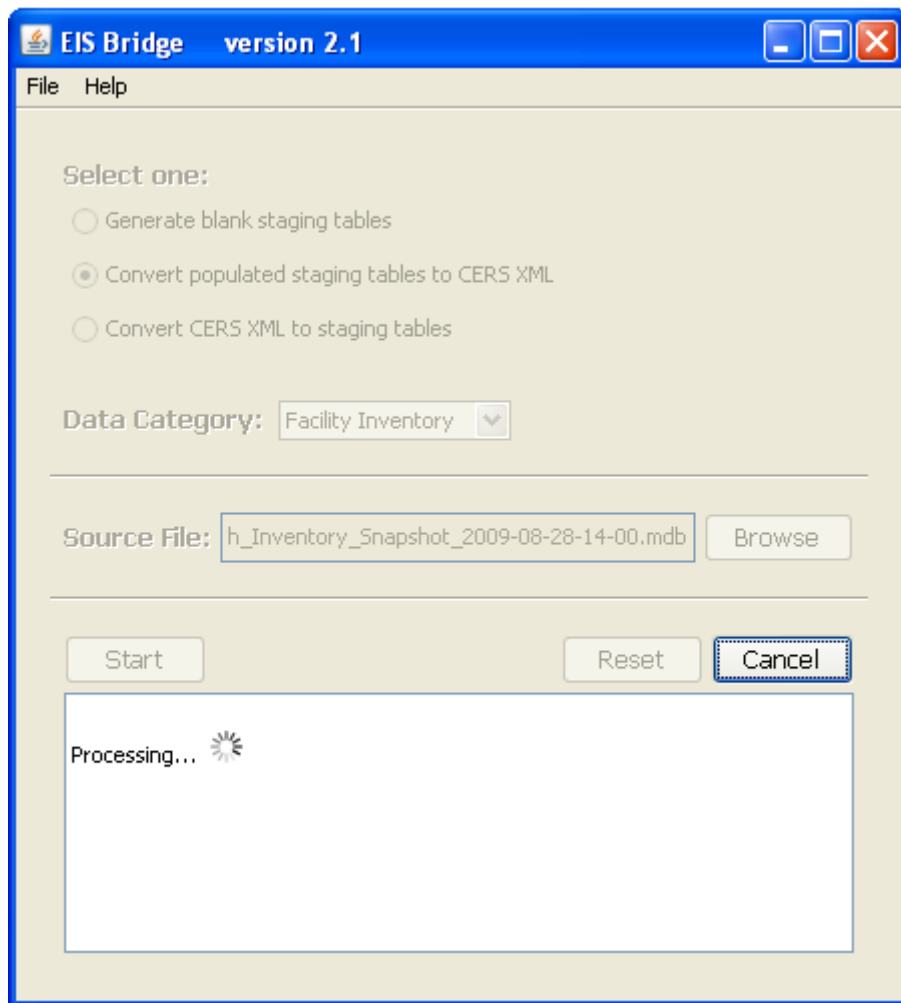
Step 6:

Selecting the Start button will cause a Create Output File window to appear. You can change the location to which you are saving the CERS XML file and/or change the name of the CERS XML file. When you have selected the appropriate location, select the OK button.

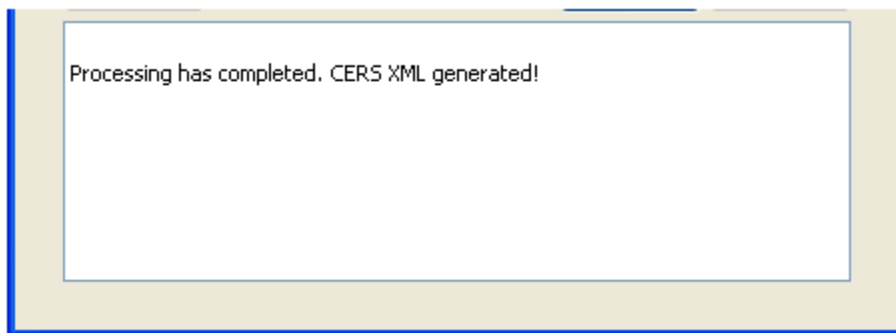


Step 7:

A status marker will appear as the bridge is processing the file and converting it to CERS XML.



When the processing is complete, a message will appear.

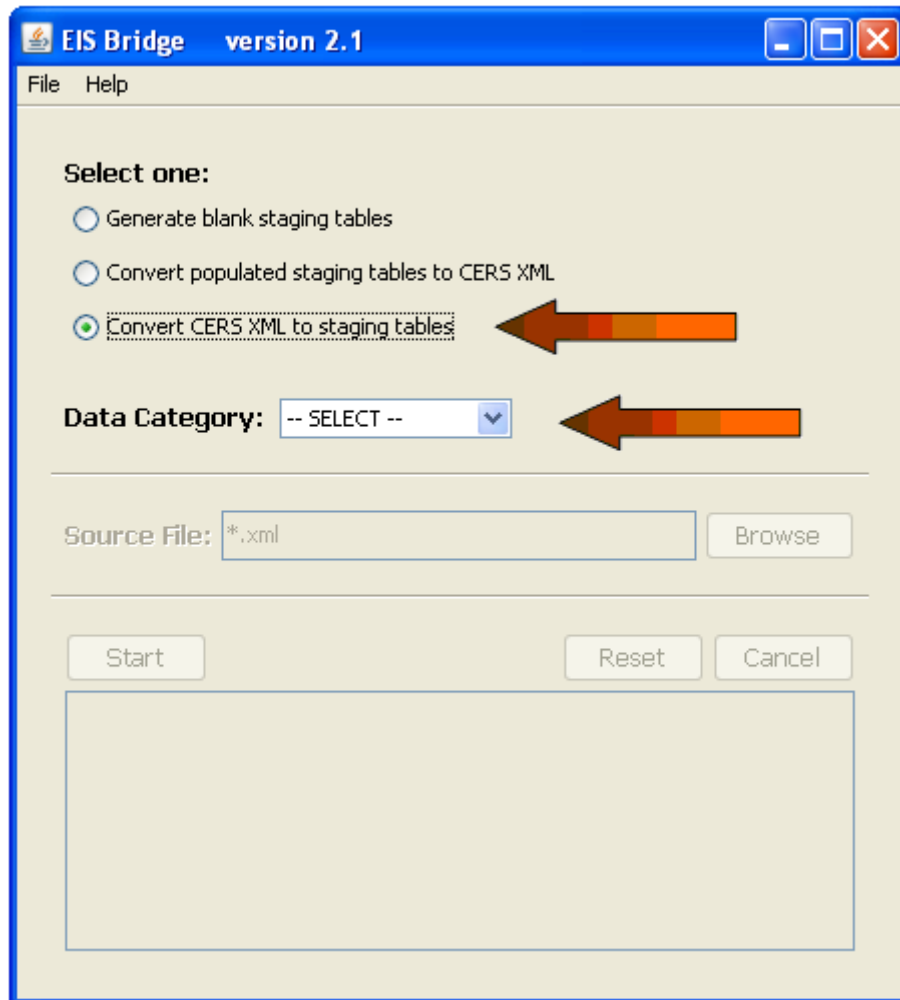


Select the Reset button to clear your selections and to process another set of Staging Tables.

Convert CERS XML to Staging Tables

Step 1:

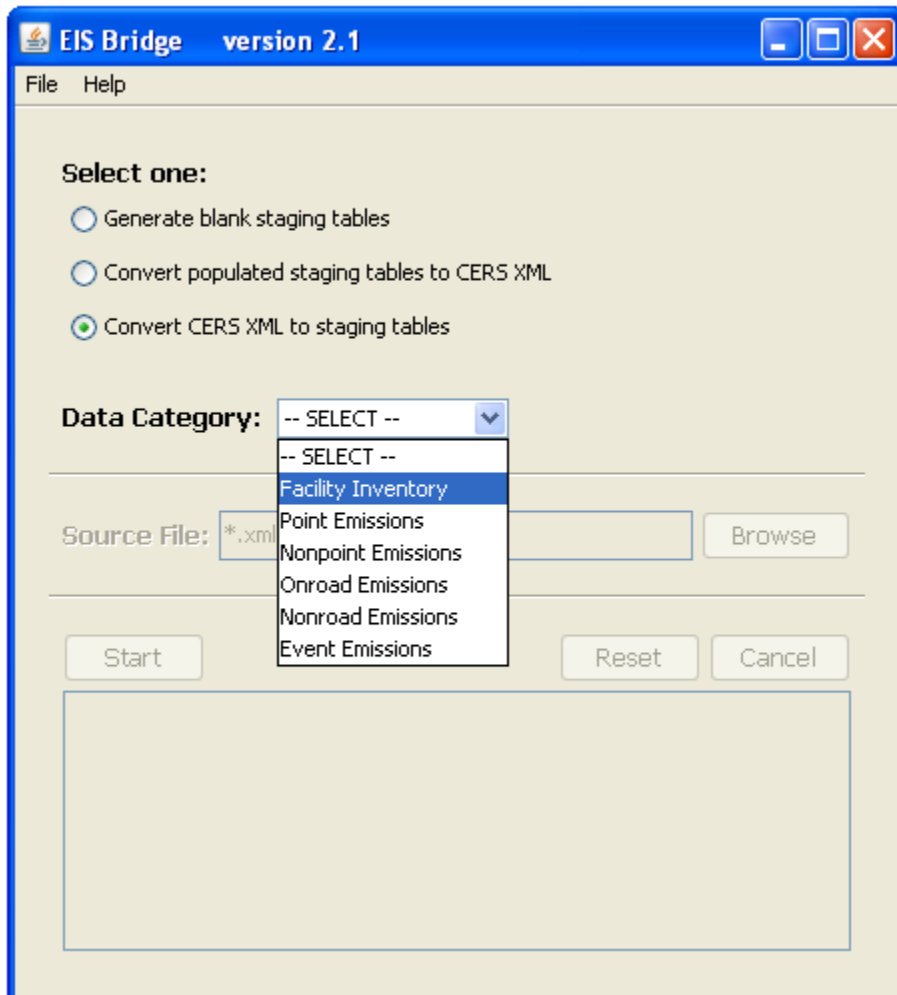
To populate the Staging Tables with data from a CERS XML file, select the third radio button from the list in the EIS Bridge.



When you select the radio button, the Data Category box will highlight.

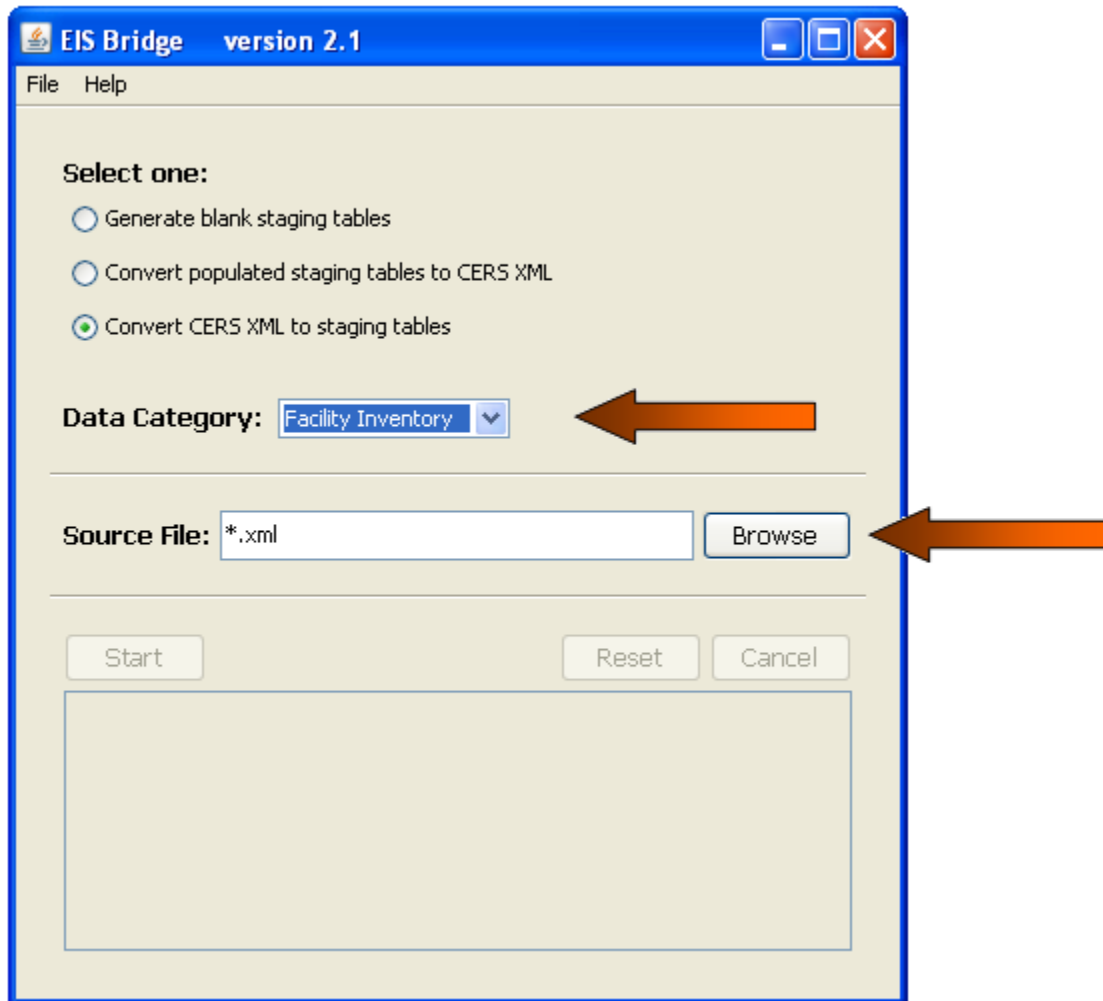
Step 2:

Select from the Data Category drop down the type of blank Staging Tables you want to download.



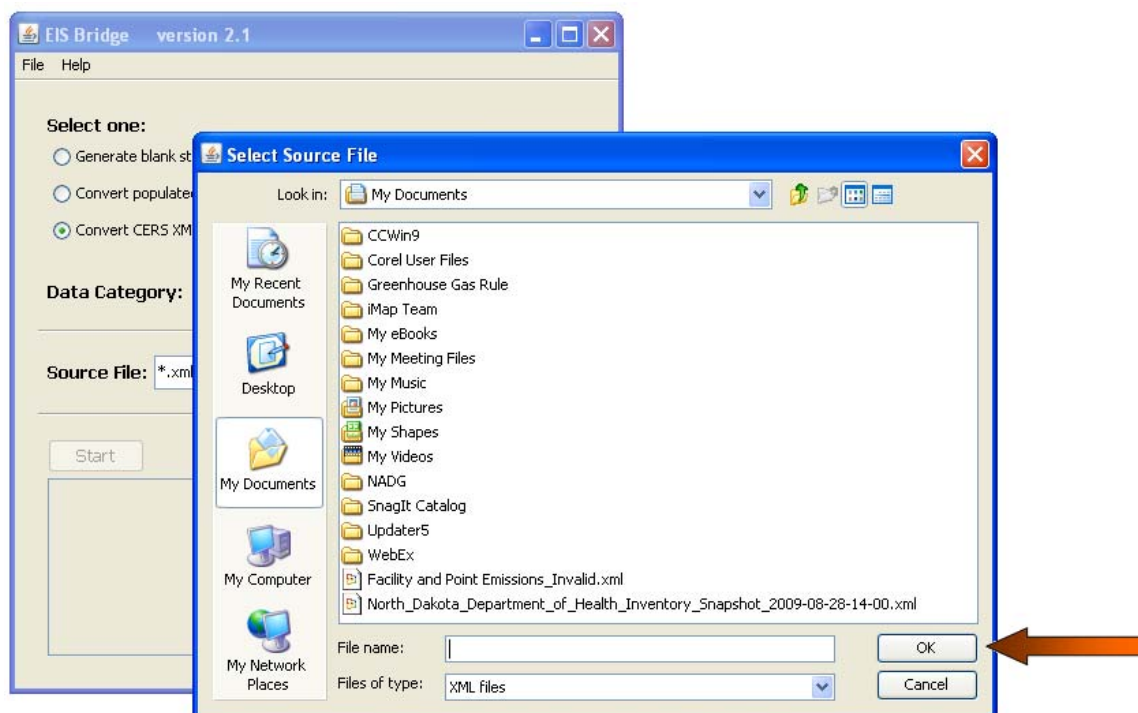
Step 3:

Once you've selected a Data Category, it will appear highlighted in the Data Category Box. The Browse button will also appear highlighted. Select the Browse button to locate the XML file that you want to populate into the Staging Tables.



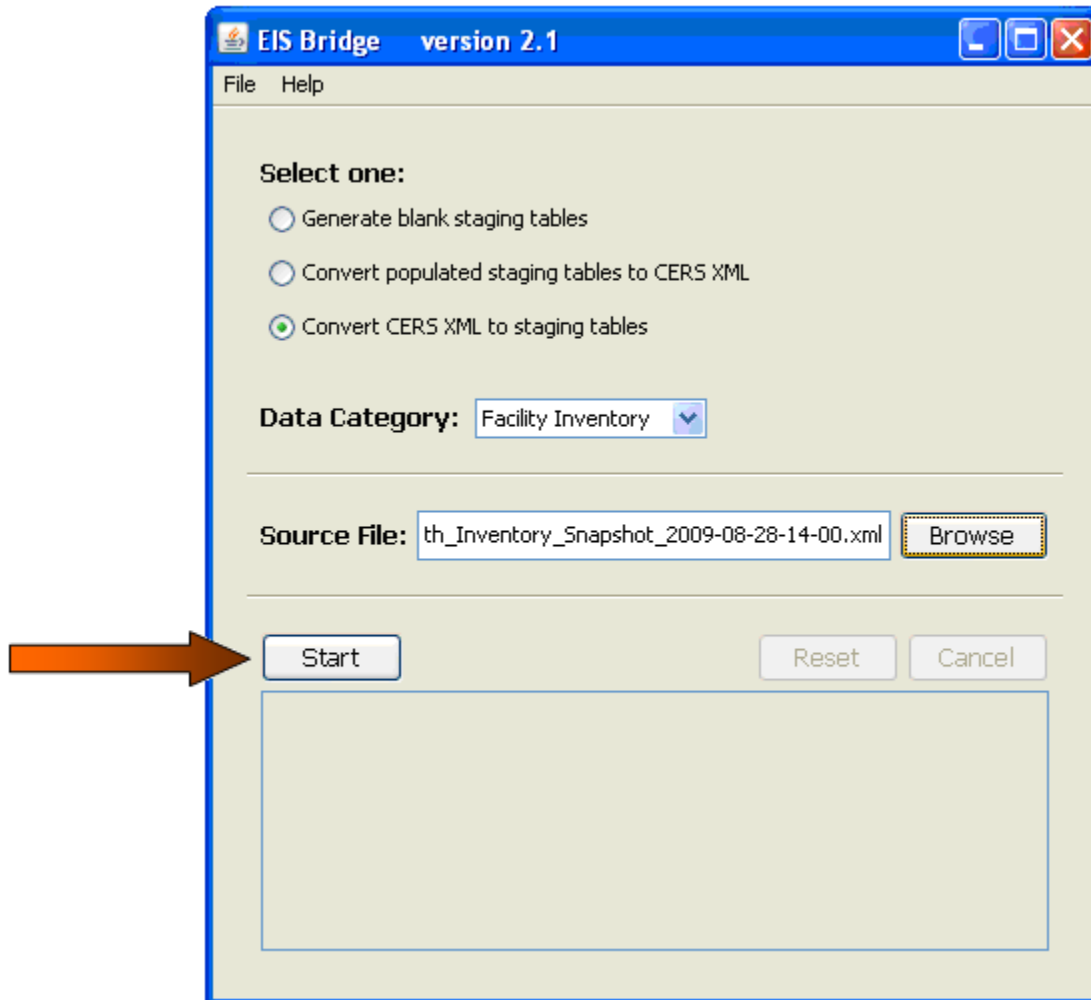
Step 4:

After you select the Browse button, you will be presented with a Select Source File window. Here you will select the XML file that you want to populate in the Staging Tables. When you have selected the appropriate location, select the OK button.



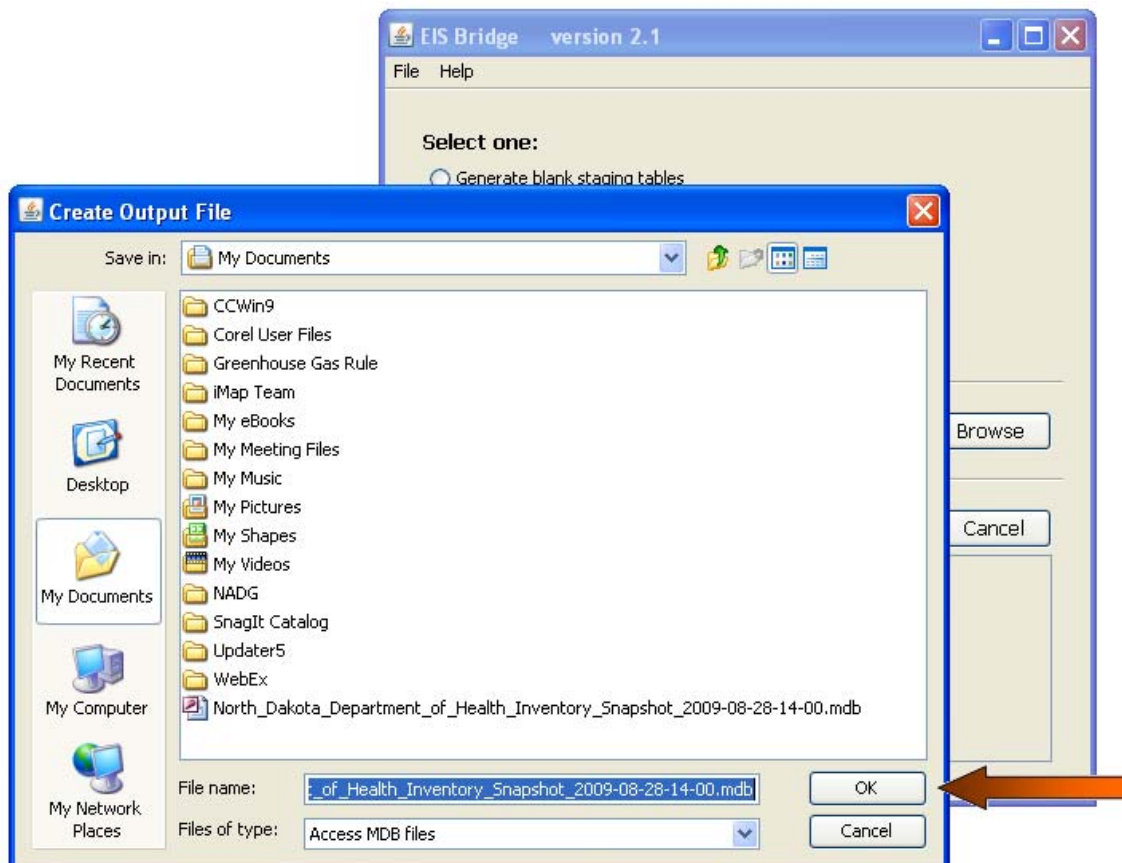
Step 5:

When the source file has been selected, it will appear in the Source File window. To begin the process of populating the Staging Tables with the data from the CERS XML, select the Start button.



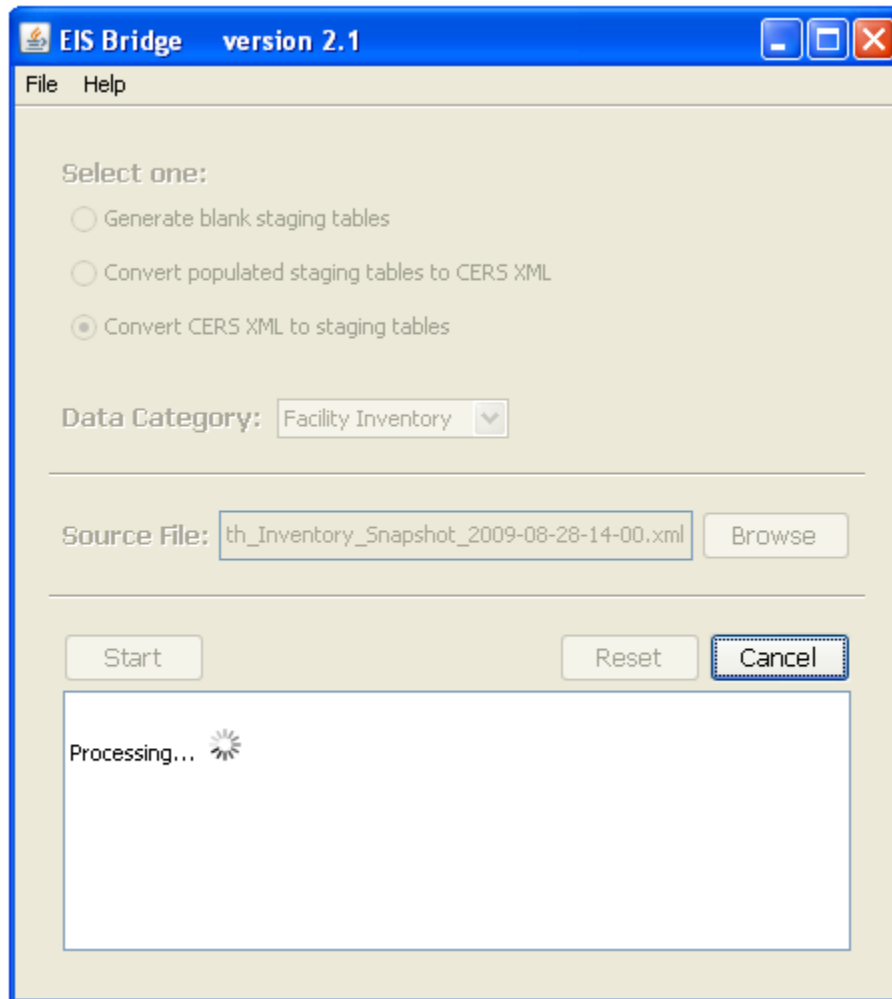
Step 6:

Selecting the Start button will cause a Create Output File window to appear. You can change the location to which you are saving the Staging Tables and/or change the name of the Staging Tables. When you have selected the appropriate location, select the OK button.

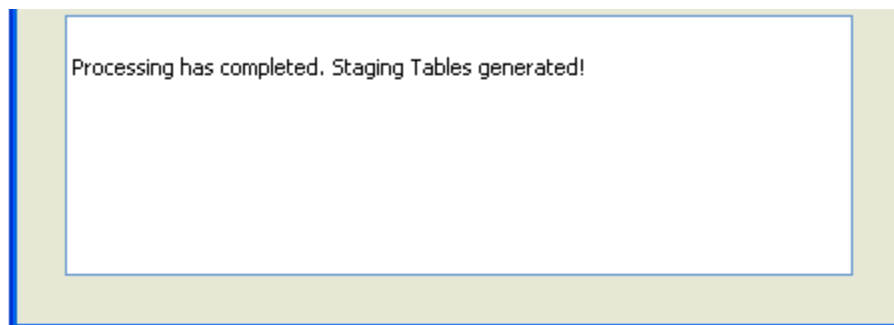


Step 7:

A status marker will appear as the bridge is processing the file and loading the data into the Staging Tables.



When the processing is complete, a message will appear.



Select the Reset button to clear your selections and to process another set of CERS XML files.



EIS Staging Tables Q&A

Question 1: The EIS Staging Tables are not formatted according to the reporting instructions for each CERS component. Why are all the fields in the Staging Tables set to their maximum length of 255 characters?

Answer 1: One of the main concepts built into the EIS is that all QA is performed from within the system. This includes the enforcement of data types, formats, and data element lengths. The data types within the EIS Staging Tables are all set to Text, which have a maximum length of 255 characters. This was done to mitigate the risks associated with using Microsoft Access, such as the truncation of decimals.

Users should ensure that the data they load into the EIS Staging Tables conform to the reporting instructions for each data category. EIS will perform a series of QA checks to ensure that data elements are correctly formatted after data stored in the Staging Tables are transformed into EIS CERS XML and submitted.

PLEASE NOTE that you should not modify the data types within the EIS Staging Tables as this will cause a validation error and the EIS Bridge will not include this data in the EIS CERS XML file.

Question 2: The EIS Staging Tables did not come pre-populated with Primary Keys. Can I add my own primary keys to assist me when I import my data to the tables? Will I need to take these out before submitting them for conversion to XML? Will the EIS Bridge generate an EIS CERS XML file if the Staging Tables contain primary keys?

Answer 2: You are free to add primary keys to the EIS Staging Tables if it aids you in the data loading process. This means that you can designate existing staging columns as primary keys or add new columns for this purpose. You do not have to remove the primary keys in the Staging Tables in order to generate a CERS XML file.

PLEASE NOTE that the EIS Bridge will ignore any columns you add to the EIS Staging Tables. For example, if you add a new column titled, “Facility Identifier Primary” and designate it as a primary key, then any data entered in this column will be ignored by the EIS Bridge and will not be incorporated into the EIS CERS XML file.

Question 3: In the past, NIF users submitted all data in their tables that replaced all data previously submitted. If we have to submit only changes in data, how should this be submitted via the staging table format supplied? For example, if only one or two of the tables had changed data, do we submit the entire set of tables as they are consolidated in the Access .mdb file?

Answer 3: The CERS provides the ability to report only data that has changed. You can do this by loading into the Staging Tables only the data you want to submit. However, you must ensure that all the requirements are met for the submittal data block as



described in the reporting instructions for that specific data element. Once uploaded to the Bridge, an XML file will be generated containing only the data provided in the Staging Tables.

While you are encouraged to submit only changes to your emissions inventory data when making a resubmission, rest assured that the EIS still supports the submission of a complete emissions inventory data category. This may be helpful when correcting issues with previously submitted data. In many instances, a new submission replaces previously submitted data for the same set of processes and pollutants.