



U.S. Environmental Protection Agency
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STORET Import Module (SIM)

Web Version

**User Guide and
Reference Manual**

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Introducing SIM

The STORET Import Module (SIM) is a Web program that helps users load data into STORET, an EPA-maintained database of ambient environmental data. STORET is a distributed system that allows individual agencies to manage their own data at a local level and to share their data with others via a national data warehouse.

To use SIM, you must perform the following tasks:

- Organize your data into delimited text files
- Establish SIM import configurations that describe the format of your text files
- Import your text files into SIM and migrate the data that pass validation into STORET.

This user guide and reference manual will

- Guide you in creating your delimited text files
- Teach you how to create a SIM import configuration
- Walk you through the process of using SIM to load data into STORET.

Note: To use SIM successfully, you need a clear understanding of STORET. Before you begin to use SIM, you should use the STORET Web Registration Application to establish all relevant metadata defaults in STORET.

Using This Guide

This guide is designed to provide you with “hands on” instruction for using SIM. Each lesson focuses on different functions included in SIM, describes the functions and associated concepts, and provides step-by-step instructions for using the tools. The step-by-step instructions are called out in boxes, which are separate from the text (see box below).

1. This is an example of a box that contains instructions for using the guide with the sample data.

For assistance, contact the Central Data Exchange (CDX) Help Desk at

- EPACDX@CSC.COM
- 888-890-1995

Formatting Your Data

Before using SIM, you must organize your data into delimited text files (ASCII flat files). Most organizations use common software products, such as Excel, Access, or Lotus 1-2-3, to create data tables that can be saved and exported as delimited text files. Larger organizations may produce these files as exports from existing data management or laboratory information management systems (LIMS). SIM accepts two different file types:

1. Station Descriptions—Locations where field measurements are made or samples are collected
2. Field Measurements and Samples—Results of field measurements or sample analyses.

The data in the two file types complement each other and the order in which you migrate data files to STORET is important. Station descriptions should always be loaded before field measurements and samples. This ensures that the key data elements will be registered in STORET and are ready for results to be associated with them.

For ASCII flat files, the data elements or fields in each file type are organized in a tabular format where the column delimiter is a tab (), pipe (|), tilde (~), or comma (,).¹ Additionally, a subdelimiter (\) is available for columns that can accept multiple values.² The required and optional elements for each file type are described in Appendix A. Many of these data elements have a list of valid values that you must select from. The order in which you place the data elements in your delimited text files is not important because SIM allows you to define the order before you import your file.

Note: Do not include a header row in the delimited text files that you create, and do not use text qualifiers for text values (e.g., “”), because header rows and text qualifiers can result in errors in your import files.

¹ If any of these characters appear in your data, you should not use that character as a delimiter because there is no way for SIM to tell which is the delimiter and which is simply part of the data.

² Certain fields, such as Project ID in the “Field Measurements and Non-Biological Samples” section, can accept multiple values in a single column and row of the import file. See Appendix A for a list of columns that support loading multiple values.

Lesson I. Defining an Import Configuration

The following lesson will show you how to create a custom import configuration that will describe the format of your text files.

1. First, log in to CDX and access “MyCDX” from <http://cdx.epa.gov/warning.asp>. Read the warning notice and privacy statement and click the link at the bottom of the page to advance.

Next, click the link for users who already have a CDX ID and password (the second choice in the bulleted list). Enter your CDX ID and password and click **LOGIN**. This will give you access to the MyCDX page. You should have access to the monitoring role to transmit beach monitoring data. If monitoring is not an option under the MyCDX Profiles, call the CDX Help Desk. Click on **eBEACHES: Monitoring** near the bottom of the page.

The screenshot shows the MyCDX user interface. At the top right, it says "U.S. Environmental Protection Agency". The main header is "MyCDX" with links for "Recent Announcements" and "Contact Us". The user is logged in as "CSF".

The main content area is titled "Central Data Exchange - MyCDX". It displays a welcome message for "Mrs. Dana L. Brown" and shows login details: Last Login: October 7, 2004; Registered Since: August 17, 2004; Recertification Date: August 17, 2004. The CDX Registration Status is "Active".

Below this, it states "You have 1 new message in your [Inbox](#)". There are four buttons: "Change System Password", "Edit Personal Information", "Edit Current Account Profiles", and "Add New Employer Profile".

Under "Available Account Profiles:", there are two options: "eBeaches: Locational" and "eBeaches: Monitoring".

At the bottom, a red message says "You are in an encrypted secure session." and the Help Desk contact information is provided: (888) 890-1995. Links for "EPA Home", "Privacy and Security Notice", and "Contact Us" are also present.

2. Click **Load, validate, and migrate your data** (item 4 near the bottom of the page).

U.S. Environmental Protection Agency

Logged in as, AAA

eBEACHES / Monitoring

What is CDX eBEACHES?
The CDX eBEACHES (electronic Beach Environmental Assessment and Coastal Health System) is a system that helps states submit Beach Locational, Monitoring and Notification Data to the EPA via CDX. These resources will assist you in meeting data reporting requirements under the BEACH Act Grants Program.

How will Beach Monitoring data be submitted?
Beach monitoring data (advisories and closings) can be submitted using the Central Data Exchange (CDX).

CDX is a single portal on the Web for environmental data entering EPA. It offers States, Territories, Tribes and other entities a faster, easier, more secure reporting option. CDX is EPA's point of entry on the National Environmental Information Exchange Network (NEIEN).

Can Notification data also be submitted using CDX?
Yes. While you may only be responsible for Monitoring data, another organization within your state or territory may be responsible for submitting Notification data. To submit Notification data, return to the "My CDX" page, and go to "Available Account Profiles", select "eBEACHES:Notification", and follow the instructions.

This web site provides resources for submitting Beaches Monitoring data to the EPA. To change your STORET password, please [click here](#).

How can this tool be used?
The Beaches Monitoring Data Roadmap describes how to submit Beaches Notification data to the EPA. The Roadmap contains the following steps:

1. [Prepare the CDX Database](#) for your data by using the Web Registration application.
2. [Prepare your data](#) in the necessary format.
3. [Upload your data](#) to CDX.
4. [Load, validate and migrate your data](#) to the CDX Database using the WebSIM application.
5. [Check your MyCDX Inbox](#) for confirmation that your Beaches Monitoring Data submission to the EPA is complete.

3. Click the **WebSIM application** link. Next, log on to WebSIM by clicking **Log on to SIM**. Enter the appropriate user name and password.

WebSIM - v2.0.1 - STORET Import Module

Log on to SIM

Welcome to the WebSIM v2.0.1 - STORET Import Module

STORET is the Environmental Protection Agency's largest computerized data system. STORET is a repository for water quality, biological, and physical data used by federal and state agencies.

WebSIM v2.0.1 - STORET Import Module is an application designed to load data into local instances of the STORET database. WebSIM parses data contained in a specially formatted text file, verifies the data is acceptable to STORET, and migrates the data to STORET.

Log on to SIM

[STORET Home](#) - [EPA Office of Water](#) - [Gold Systems, Inc.](#)

4. You can either start a new import of data or access an existing import that you may have brought into SIM but have yet to migrate to the STORET database. For this lesson, click on **Stations** on the toolbar, then click on **New Import**.

The screenshot displays the 'WebSIM - STORET Import Module' interface. At the top, there is a navigation menu with 'Home', 'Stations', 'Results', 'Import Configuration', 'Advanced', 'Site Help', and 'Logout'. Below the menu, a dropdown menu is open under 'Stations', showing 'New Import', 'Import Log', and 'View'. The main content area is titled 'Fast Track Import Process' and includes a 'Getting Started' section with three numbered steps, each with a 'Step X Help' link. To the right, there is a 'Take a Tour!' button with an information icon and a 'Quick Links' section with links to 'Stations Import Log', 'Imported Stations', 'Results Import Log', 'Imported Results', and 'Migration Log'. At the bottom, there is a footer with the text 'STORET Home - EPA Office of Water - Gold Systems, Inc.'.

Home Stations Results Import Configuration Advanced Site Help Logout

WebSIM - STORET Import Module

New Import
Import Log
View

Fast Track Import Process

Getting Started: Complete the steps listed below for the Fast Track Import Process. Help is given on the link to the right of every step.

- 1 Step One:** [Step 1 Help](#)
Select the Import Configuration - Select this option to select from a list of existing Import Configurations regardless of import type.
Current Status: No Configuration Selected
- 2 Step Two:** [Step 2 Help](#)
Select the File to be Imported - Select this option to select a file uploaded to the organization specific FTP Site.
Current Status: No Import File Selected
- 3 Step Three:** [Step 3 Help](#)
Import Step - Select this option to initiate the import process.

Take a Tour! 
Click here to find out how to use the **Fast Track Import Process**

Quick Links:

- [Stations Import Log](#)
- [Imported Stations](#)
- [Results Import Log](#)
- [Imported Results](#)
- [Migration Log](#)

STORET Home - [EPA Office of Water](#) - [Gold Systems, Inc.](#)

5. This menu allows you to specify the import configuration and the path to the file that you want to import.

Click **Define New Configuration**.

Home Stations Results Import Configuration Advanced Site Help Logout

WebSIM - v2.0.1 - STORET Import Module

STORET Stations

Import Stations [Page Help](#)

Configuration:

Text File Name:

[→ Define New Configuration](#)

[→ Edit Existing Configuration](#)

Import File To SIM

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6. This page allows you to specify the type of file that you want to import, either an ASCII flat file or an XML file. (XML files can only be imported for results.)

Click **Define New Station Import Configuration** under “ASCII Flat File Import Configuration.”

The screenshot displays the 'WebSIM - v2.0.1 - STORET Import Module' interface. At the top, there is a navigation bar with tabs for Home, Stations, Results, Import Configuration, Advanced, Site Help, and Logout. Below the navigation bar is a header section with the STORET logo and the text 'WebSIM - v2.0.1 - STORET Import Module'. The main content area is titled 'Import Configuration' and is divided into two sections: 'ASCII Flat File Import Configurations' and 'XML Import Configurations'. The 'ASCII Flat File Import Configurations' section includes a 'Page Help' link and two options: 'Define New Station Import Configuration' (with a description: 'Select this option to configure the system to accept a new Station file in ASCII flat file format.') and 'Define New Activities / Result Import Configuration' (with a description: 'Select this option to configure the system to accept a new Activity/Result file in ASCII flat file format.'). The 'XML Import Configurations' section includes one option: 'Define New Activities / Result Import Configuration' (with a description: 'Select this option to configure the system to accept a new Activity/Result file in XML format.'). At the bottom of the page, there is a footer link: 'STORET Home - EPA Office of Water - Gold Systems, Inc.'

You will reach the Import Configuration window.

Note: Data elements that are checked and shaded out are required by STORET.

From the “Flat File Import Configuration” menu, you can

- Provide a name and description for the import configuration
- Define the organization that the data will load into
- Indicate the delimiter that will be used in the text file
- Save the configuration
- Set instructions to review translations and establish general import instructions
- Select the data elements that will be included in the text file by checking the boxes under the “Incl” column header
- Define the position or order in which the data elements will appear in the file
- Establish default values for the data elements in the import file that are left null or blank
- View the format that each row in the import file must adhere to if this configuration is used

- Specify additional formatting for individual data elements (if appropriate)
- Establish translation parameters that change values while a file is being imported.

7. Click the **Back** button in your Web browser.

The screenshot displays the 'Import Configuration' page of the WebSIM - v2.0.1 - STORET Import Module. The page features a navigation menu at the top with links for Home, Stations, Results, Import Configuration, Advanced, Site Help, and Logout. Below the navigation menu is a header section with the STORET logo and the text 'WebSIM - v2.0.1 - STORET Import Module'. The main content area is titled 'ASCII Flat File Import Configurations' and includes a 'Page Help' link. Under this section, there are two options: 'Define New Station Import Configuration' and 'Define New Activities / Result Import Configuration', each with a brief description. Below this, there is a section for 'XML Import Configurations' with one option: 'Define New Activities / Result Import Configuration'. At the bottom of the page, there is a footer with the text 'STORET Home - EPA Office of Water - Gold Systems, Inc.'

Lesson I. Defining an Import Configuration

- Choose **Define New Activities/Result Import Configuration** under “XML Import Configurations.” You can perform essentially the same functions here as listed earlier for flat files. You do not, however, need to indicate the delimiter, because delimiters are not necessary for XML.

Column	Default	
Trip ID	<input type="text"/>	Translation
Trip Start Date	<input type="text"/>	Translation
Trip Stop Date	<input type="text"/>	Translation
Trip Name	<input type="text"/>	Translation
Station Visit Number	<input type="text"/>	Translation
Station Visit Arrival Date	<input type="text"/>	Translation
Station ID	<input type="text"/>	Translation
Station Visit Conditions and Other Comments	<input type="text"/>	Translation
Activity ID	<input type="text"/>	Translation

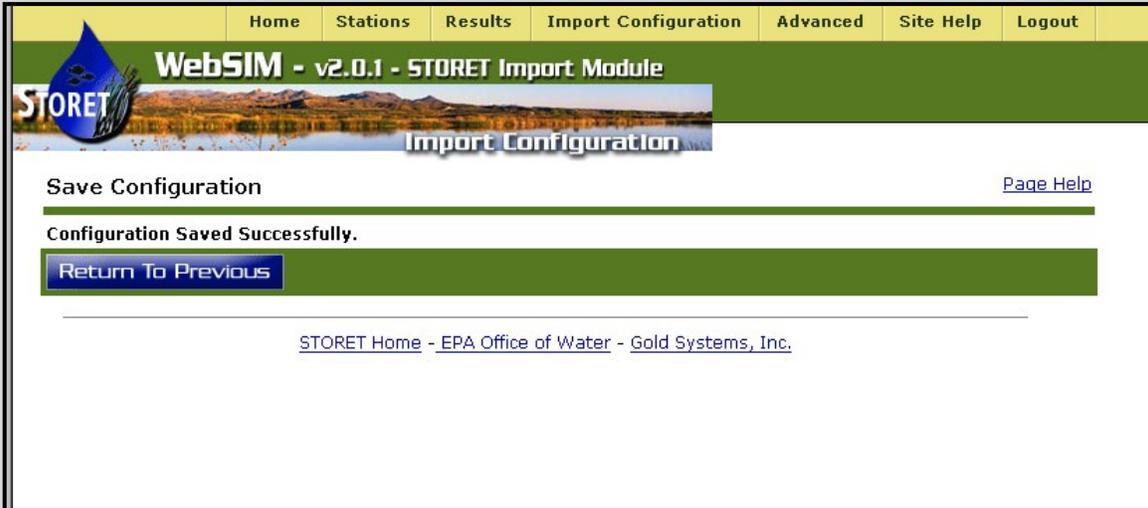
- Click the **Back** button in your Web browser.
- Provide a name and your ORG ID and click **Save Configuration**. Now you can access the Translation feature.

You can use a translation to convert a number or phrase in your current data to one that is accepted by STORET. If you wish to perform a translation after defining an import configuration, click the **Translation** button for the column you want to translate.

The main purpose of the XML import configuration is to set translations. You may want to establish translations to clarify your data. For example, if you have a characteristic in your data, “DO,” for dissolved oxygen, you may want to translate “DO” to “Dissolved Oxygen” through the import configuration’s Translation feature.

(To set up your XML schema, review the example schema on your MyCDX page. From the MyCDX page, click **eBEACHES: Monitoring**. Next, choose item 2, **Prepare your data**, to see the example.)

11. Click on **Return to Previous** to return to the XML Import Configuration window.



12. Click the **Translation** button next to Station ID.



13. You can select **New Translation** or **Return to Previous**. For this lesson, click **New Translation**.



Lesson I. Defining an Import Configuration

Translations transform codes in your data set into allowable values in STORET. You can establish a translation by defining the “code” that should be translated and the value that it should be “translated to.” A single data element can have several translations.

14. If you are working with test data, just click **Cancel** from this window. If you are using your own data, type in a “code” from your data file and enter the appropriate “translation.” Clicking on the **Search** button will display the available allowable values already in WebSIM for this data element. Click **Save** to store this translation with your configuration.

Home Stations Results Import Configuration Advanced Site Help Logout

WebSIM - v2.0.1 - STORET Import Module

Translations for Station ID [Page Help](#)

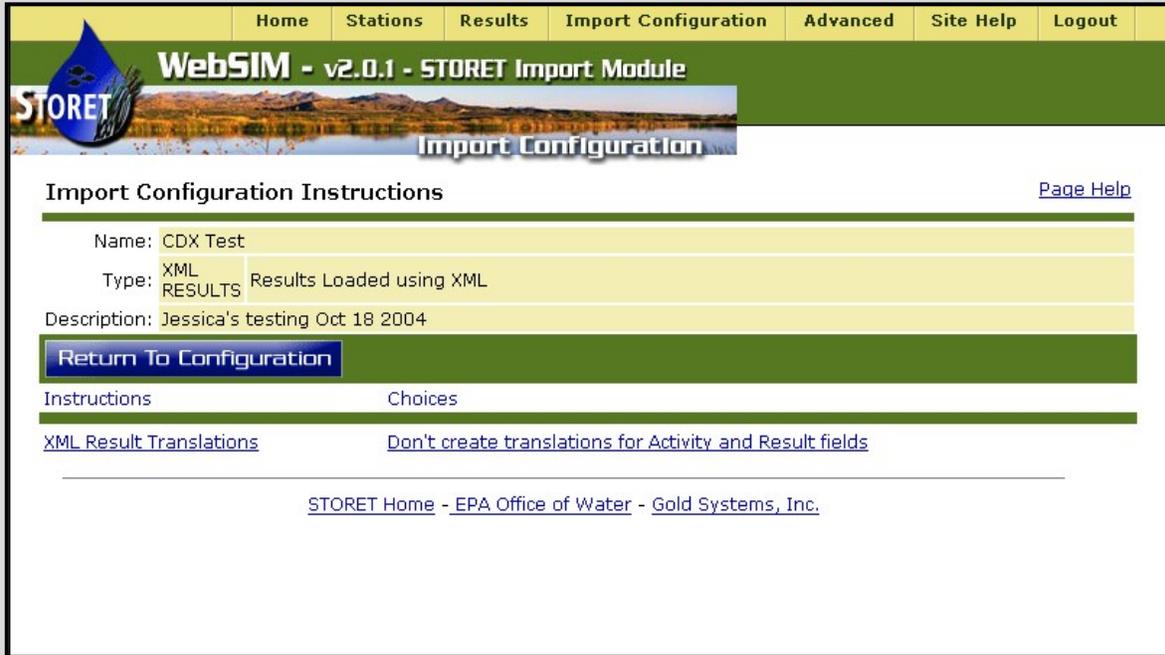
Code:

Translate to: **Search**

Save **Cancel**

[STORET Home](#) - [EPA Office of Water](#) - [Gold Systems, Inc.](#)

15. Click **Return to Previous** and then click the **Set Instructions** button on the right of the Import Configuration area of the screen menu.



Instructions are typically used to identify data elements that may require translations and to autogenerate ID numbers for data elements such as Trip IDs and Station Visit Numbers. You can use this menu to review translations and establish general import instructions. To change an instruction, click the name of the instruction.

16. Click the **Home** button at the top of the screen to return to the main WebSIM page.

Summary

The purpose of an import configuration is to set up a pattern to translate your data file into STORET using SIM. SIM import configurations can help you set up the order of fields, format data, and perform simple data translations. Ideally, you will set up a few configurations that you will use each time future data are imported to STORET.

In Lesson I, Defining an Import Configuration, you learned how to

- Define a new import configuration
- Save a new import configuration
- Use translations to change values while a file is being imported
- Review general import configuration instructions.

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Lesson II. Using SIM to Migrate Data to STORET

This lesson describes how to

- Import a file into SIM so that it can be validated against the STORET requirements
- Migrate data that pass validation into STORET.

1. Use the toolbar to select **New Import** under “Stations.”
2. You must first select an existing import configuration. (Lesson I shows you how to create a new import configuration). Click the drop-down box next to “Configuration” to see a list of import configurations that have been created in SIM. You can review the configuration details by clicking the **Edit Existing Configuration** button. In addition, you can create a new configuration by selecting **Define New Configuration**.

Select **DEMOTEST--WEBSIM Example - Ocean Station.txt** from the drop-down box beside “Configuration.”

3. Then, select an appropriate text file name from the drop-down list beside “Text File Name.”

Select **WEBSIM Example – Ocean Station.txt**.

Click the **Import File to SIM** button. If you are importing an XML file, be sure to choose an XML import configuration.

Home Stations Results Import Configuration Advanced Site Help Logout

WebSIM - v2.0.1 - STORET Import Module

Stations

Import Stations [Page Help](#)

Configuration: DEMOTEST--WebSIM Example - Ocean Station.txt

Text File Name: WebSIM Example - Ocean Station.txt

Define New Configuration

Edit Existing Configuration

Import File To SIM

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SIM checks the file for errors that would prevent the data from being loaded to STORET. From the Import Status menu, you can

- Review the number of records that that SIM imported, the number of those records that had errors, and the number of those records that are ready to be migrated to STORET
- Migrate records to STORET
- Delete an import from SIM. All data remain in SIM until the import is deleted. *Note: You should delete your imports once you are satisfied that your data have been accurately migrated to STORET.*

4. Click **Migrate Records to STORET** and migrate the data you imported to STORET.

The screenshot shows the 'Import Status' page in the WebSIM interface. At the top, there is a navigation bar with links for Home, Stations, Results, Import Configuration, Advanced, Site Help, and Logout. Below the navigation bar is a header for 'WebSIM - v2.0.1 - STORET Import Module' with a 'Stations' link. The main content area is titled 'Import Status' and includes a 'Page Help' link. A green bar indicates 'Import 107855 Completed Successfully'. Below this, a table lists import details:

Org ID:	DEMOTEST
Import Configuration:	WebSIM Example - Ocean Station
Import File:	WebSIM Example - Ocean Station.txt
Date Imported:	10/22/04
Imported Lines Processed:	1
Lines with Errors:	0
Stations Ready for Migration:	1

Below the table are three buttons: 'Migrate Records to STORET', 'Delete Import from SIM', and 'Return To Previous'. At the bottom of the page, there is a footer with links: 'STORET Home - EPA Office of Water - Gold Systems, Inc.'

*Note: If your import is not successful using this example, it may be because others have already used the Ocean Station example for DEMOTEST and forgot to delete the import. Click the **View Import Errors** link. A table of import errors will appear. Clicking the **Status** button for each row will allow you to delete that import. After no imports remain, you can return to the Import Stations dialog by using the sidebar to navigate to “New Import” under “Stations” and begin the import again.*

Summary

In Lesson II, using SIM to Migrate Data to STORET, you learned how to

- Import files to SIM using a predefined import configuration and text file
- Migrate data into STORET.

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Lesson III. Advanced Functions

This lesson explains how to

- Reorder field positions in an import configuration
- View the status of import files brought into SIM but not migrated or deleted
- Remove (undo) a migration of data from STORET
- Generate an error report to print or save
- Delete an import from SIM
- View data that have been imported to SIM
- Test and improve system performance.

Reorder field positions in an import configuration

1. From the toolbar, click **Edit Existing** under “Import Configuration.” Locate the WebSIM Example – Ocean Station configuration and click the **Edit** button on that row. You may need to click **Next** several times to locate the configuration. You can also sort the configuration list by clicking on any of the column headers – **Configuration Name**, **Organization ID**, or **Import Type**, which may help you locate the desired configuration more quickly.

The screenshot shows the WebSIM - v2.0.1 - STORET Import Module interface. The navigation bar includes Home, Stations, Results, Import Configuration, Advanced, Site Help, and Logout. The main content area displays a table of Import Configurations with columns for Configuration Name, Organization ID, Import Type, and an Edit button for each row. The table lists various configurations, including 'WEBSIM EXAMPLE - OCEAN STATION'.

Configuration Name	Organization ID	Import Type	
WEBSIM EXAMPLE - ESTUARY STATION	DEMOTEST	WEB STATIONS	Edit
WEBSIM EXAMPLE - GREAT LAKE STATION	DEMOTEST	WEB STATIONS	Edit
WEBSIM EXAMPLE - OCEAN STATION	DEMOTEST	WEB STATIONS	Edit
WEBSIM EXAMPLE - OTHER STATIONS	DEMOTEST	WEB STATIONS	Edit
WEBSIM EXAMPLE - RESULTS WITH CHAR NAMES	DEMOTEST	WEB RESULTS	Edit
WEBSIM EXAMPLE - RESULTS WITH FIELD MSR/OBS	DEMOTEST	WEB RESULTS	Edit
WEBSIM EXAMPLE - RESULTS WITH GRPS AND ROWS	DEMOTEST	WEB RESULTS	Edit
WEBSIM EXAMPLE - XML RESULTS	DEMOTEST	XML RESULTS	Edit
WISCONSIN_STATIONS-XML_TESTING	DEMOTEST	STATIONS	Edit
X	DEMOTEST	BIOLOGICAL	Edit

At the bottom of the table, there are 'Top' and 'Back' buttons. The footer of the page reads 'STORET Home - EPA Office of Water - Gold Systems, Inc.'

Lesson III. Advanced Functions

You can use the Import Configuration menu to reorder field or column positions.

- Suppose “Station Description” needs to be in the second position instead of the third. Change the position number from 3 to a number between 1 and 2 (such as 1.5) and click **Save Configuration** to reorder the columns.

Import Configuration [Page Help](#)

Name:

Type:

Description:

Org ID: Delimiter:

Column	Pos	Incl	Default	Max	Format	Option	Format	Translation
Station ID	<input type="text" value="1"/>	<input checked="" type="checkbox"/>	<input type="text"/>	15	Freetext			<input type="button" value="Translation"/>
Station Name	<input type="text" value="2"/>	<input checked="" type="checkbox"/>	<input type="text"/>	60	Freetext			<input type="button" value="Translation"/>
Station Description	<input type="text" value="1.5"/>	<input checked="" type="checkbox"/>	<input type="text"/>	4000	Freetext			<input type="button" value="Translation"/>
Primary Type	<input type="text" value="4"/>	<input checked="" type="checkbox"/>	<input type="text"/>	30	STORET Table			<input type="button" value="Translation"/>
Secondary Type	<input type="text" value="5"/>	<input checked="" type="checkbox"/>	<input type="text"/>	30	STORET Table			<input type="button" value="Translation"/>
Latitude	<input type="text" value="6"/>	<input checked="" type="checkbox"/>	<input type="text"/>	14	Defined Format	<input type="text" value="DD-MM-SS.SSSS"/>		<input type="button" value="Translation"/>
Latitude Direction	<input type="text" value="7"/>	<input checked="" type="checkbox"/>	<input type="text"/>	1	Allowable Values			<input type="button" value="Translation"/>
Longitude	<input type="text" value="8"/>	<input checked="" type="checkbox"/>	<input type="text"/>	15	Defined Format	<input type="text" value="DDD-MM-SS.SSSS"/>		<input type="button" value="Translation"/>

View the status of an import in SIM that was not migrated or deleted

In some cases, you may have imported files to SIM but did not migrate the data to STORET. This may have occurred because you had to stop your session or wanted to review a file. This section helps you review previous imports to determine their status. It is important to remember to delete imports after migration.

1. The SIM main screen is always accessible by clicking **Home** on the toolbar. From this page, you can access two import categories: Stations and Results. To review the status of the import that was performed in Lesson II, click **Import Log** under “Stations” on the toolbar menu.

The screenshot shows the WebSIM - STORET Import Module interface. At the top is a navigation menu with links: Home, Stations, Results, Import Configuration, Advanced, Site Help, and Logout. Below the menu is a banner for the 'Fast Track Import Process' with a 'New Import' dropdown menu containing 'Import Log' and 'View'. The main content area is titled 'Getting Started: Complete the steps listed below for the Fast Track Import Process. Help is given on the link to the right of every step.' It contains three numbered steps:

- 1 Step One:** Select the Import Configuration - Select this option to select from a list of existing Import Configurations regardless of import type. Current Status: No Configuration Selected. [Step 1 Help](#)
- 2 Step Two:** Select the File to be Imported - Select this option to select a file uploaded to the organization specific FTP Site. Current Status: No Import File Selected. [Step 2 Help](#)
- 3 Step Three:** Import Step - Select this option to initiate the import process. [Step 3 Help](#)

On the right side, there is a 'Take a Tour!' button with an information icon and the text: 'Click here to find out how to use the Fast Track Import Process'. Below that is a 'Quick Links' section with the following links: [Stations Import Log](#), [Imported Stations](#), [Results Import Log](#), [Imported Results](#), and [Migration Log](#). At the bottom of the page, there is a footer: [STORET Home](#) - [EPA Office of Water](#) - [Gold Systems, Inc.](#)

2. Click **Status** at the end of the row that represents the relevant import. You will return to the Import Status window that you saw in step 4 of Lesson II.

The screenshot displays the 'Import Status' page within the 'WebSIM - v2.0.1 - STORET Import Module'. The page features a navigation menu at the top with links for Home, Stations, Results, Import Configuration, Advanced, Site Help, and Logout. Below the navigation is a header with the STORET logo and the text 'WebSIM - v2.0.1 - STORET Import Module'. The main content area shows the title 'Import Status' and a link for 'Page Help'. A green bar indicates 'Import 107855 Completed Successfully'. Below this, a table lists import details:

Org ID:	DEMOTEST
Import Configuration:	WebSIM Example - Ocean Station
Import File:	WebSIM Example - Ocean Station.txt
Date Imported:	10/22/04
Imported Lines Processed:	1
Lines with Errors:	0
Stations Ready for Migration:	1

Below the table are three buttons: 'Migrate Records to STORET', 'Delete Import from SIM', and 'Return To Previous'. At the bottom of the page, there is a footer with the text: 'STORET Home - EPA Office of Water - Gold Systems, Inc.'

Remove a migration of data from STORET

If you migrate a file to STORET and later determine you do not want it in STORET, you can remove that data from STORET. By clearing a migration, you essentially delete the data from STORET.

1. On the toolbar, click **Migration Log** under “Advanced.”
2. Locate the record of stations data you just migrated in Lesson II. It should show the date that you migrated the data. Click the **Clear Migration from STORET** button next to this record.

The screenshot shows the 'Advanced' section of the WebSIM interface. At the top, there is a navigation menu with 'Home', 'Stations', 'Results', 'Import Configuration', 'Advanced', 'Site Help', and 'Logout'. Below the menu is a banner for 'WebSIM - v2.0.1 - STORET Import Module' with a 'STORET' logo and a 'Water' icon. The main content area is titled 'Migration Log' and includes a 'Page Help' link. A table lists migration records with columns for Type, Migrated On, Import ID, and Org ID. Each record has 'Detail' and 'Clear Migration from STORET' buttons. The footer contains the text 'STORET Home - EPA Office of Water - Gold Systems, Inc.'.

Type	Migrated On	Import ID	Org ID		
P	09/15/04	Projects: 107366	DEMOTEST	Detail	Clear Migration from STORET
P	09/30/04	Projects: 107722	DEMOTEST	Detail	Clear Migration from STORET
WS	10/01/04	Stations 107737	DEMOTEST	Detail	Clear Migration from STORET
P	10/12/04	Projects: 107813	DEMOTEST	Detail	Clear Migration from STORET
WS	10/27/04	Stations 107873	DEMOTEST	Detail	Clear Migration from STORET

Note: SIM cannot undo a migration once the import has been deleted from SIM.

Generate an error report file to print or save

If your file is imported to SIM with errors, it is important to fix the errors and reimport the file to SIM. Reviewing an error report will help you determine which fields need to be fixed and why.

1. Click **New Import** under “Stations” on the toolbar menu.

Home Stations Results Import Configuration Advanced Site Help Logout

WebSIM - v2.0.1 - STORET Import Module

Stations

Import Stations [Page Help](#)

Configuration:

Text File Name:

[Define New Configuration](#)

[Edit Existing Configuration](#)

Import File To SIM

[STORET Home - EPA Office of Water - Gold Systems, Inc.](#)

2. In order to generate an import with errors, import the same file that you imported in Lesson I.

Select **DEMOTEST--WEBSIM Example - Ocean Station.txt**.

Select **WEBSIM Example OceanStation.txt**.

Click **Import File to SIM**.

The screenshot displays the 'Import Status' page in the STORET WebSIM v2.0.1 Import Module. The page title is 'WebSIM - v2.0.1 - STORET Import Module' and the sub-header is 'Stations'. The main content area shows the status of 'Import 107856 Completed With Errors'. Below this, a table lists the import details:

Org ID:	DEMOTEST
Import Configuration:	WebSIM Example - Ocean Station
Import File:	WebSIM Example - Ocean Station.txt
Date Imported:	10/22/04
Imported Lines Processed:	1
Lines with Errors:	1
Stations Ready for Migration:	0

Below the table are four action buttons: 'View Import Errors', 'Delete Import from SIM', 'Export Records with Errors', and 'Return To Previous'. A 'Page Help' link is located in the top right corner of the content area. The footer of the page reads 'STORET Home - EPA Office of Water - Gold Systems, Inc.'

Note: If there are any errors in your file, you cannot migrate any records to STORET. In addition, if you import a file with errors to SIM, make sure to delete the import file from SIM before you import a new file. If you do not delete the import file with errors, SIM will automatically delete it when you import a new file.

3. Click **View Import Errors**.
4. A report of errors that occurred during import is displayed.

The screenshot displays the 'WebSIM - v2.0.1 - STORET Import Module' interface. At the top, a navigation menu includes 'Home', 'Stations', 'Results', 'Import Configuration', 'Advanced', 'Site Help', and 'Logout'. Below the menu is a header banner with the STORET logo and the text 'WebSIM - v2.0.1 - STORET Import Module'. The main content area is titled 'Import Errors' and includes a 'Page Help' link. The report details the following information:

- Import ID: 107874
- Date Imported: 10/27/04
- Import File: WebSIM Example - Ocean Station.txt
- Imported By: WEBUSER

A 'Suppress Warnings' button is located to the right of the 'Imported By' field. The 'Description' section provides the following details:

- Start at 11:13
- Line 1: Station CBC-052 already exists in STORET.
- Line 1: Station Name is longer than 60 characters and will be truncated.
- 1 lines processed /0 stations loaded
- Finished at 11:13

A 'Return To Previous' button is located at the bottom of the report area. At the very bottom of the page, there is a footer link: 'STORET Home - EPA Office of Water - Gold Systems, Inc.'

The error message shows you that the station already exists in SIM, since you imported this same file for Lesson 1. In cases where many records are imported, the error messages may be so numerous, that it is preferable to export the error log and read it in a word processing program.

5. Click Return to Previous to return to the Import Status window.
6. The default text file name in WebSIM for exporting errors is unmigrec.txt. You can rename this by clicking in the Export File text box and typing in a different name. For this lesson, just leave the default file name, unmigrec.txt. Click on **Export Records with Errors**.



7. Click on **Return to Import Status**. You will notice that the status window shows that no lines were imported. This is because SIM has exported the line with errors to the unmigrec.txt file.



Delete an Import from SIM

It is important to delete SIM imports once you have finished migrating data into STORET or have fixed import errors and wish to re-import a file already in SIM. If you import a file that is already in SIM, you will receive error messages, as occurred in the previous exercise. If the file in SIM already contains errors and you re-import the file, the new import will overwrite the old one.

1. In the Import Status window, click on Delete Import from SIM to remove the file you just imported in the previous exercise.
2. Click Continue with Delete when WebSIM asks if you are sure you want to delete this file.
3. After completing the deletion, WebSIM will take you to the Import Log window. You should see a record of the stations you migrated for Lesson 2. It should have the date that you imported the data for the Import Date. Click on **Status**.
4. In the Import Status window click on Delete Import from SIM and Continue with Delete in the window that follows.

View data that have been imported to SIM

1. To view data that are in SIM, choose “View” under the Stations and Results menus. Click **View** under “Stations” from the toolbar.

The screenshot shows the WebSIM - v2.0.1 - STORET Import Module interface. At the top, there is a navigation menu with links for Home, Stations, Results, Import Configuration, Advanced, Site Help, and Logout. Below the menu is a header area with the STORET logo and the text "WebSIM - v2.0.1 - STORET Import Module". A "Stations" button is visible in the header. The main content area is titled "Station List" and includes a "Page Help" link. Below this is a table with the following columns: Station ID, Station Name, Primary Type, Status, and Detail buttons. The table contains 11 rows of data. At the bottom of the table, there are buttons for "Top", "Back", and "Search". Below the table, there is a footer link: "STORET Home - EPA Office of Water - Gold Systems, Inc."

Station ID	Station Name	Primary Type	Status	
31555	"North Harris Beach State Park, South of Parking Lot"	Ocean	E	Detail
31556	"North Harris Beach, S. of Harris Creek "	Ocean	E	Detail
31557	"North Harris Beach, 200 ft. North of Harris Creek "	Ocean	E	Detail
31558	"North Harris Beach, 300 ft. South of North site "	Ocean	E	Detail
31559	Harris Creek	Ocean	E	Detail
31560	Beaver Creek	Ocean	E	Detail
31561	Minor Creek	Ocean	E	Detail
31562	"Bastendorf Beach, South of Minor Creek"	Ocean	E	Detail
CBC-052	"The Station is located mid-channel in Smith Island Inlet, b	Ocean	A	Detail
CBC-052	"The Station is located mid-channel in Smith Island Inlet, b	Ocean	N	Detail

2. Click **Detail** after any individual record to recall and view the data.

The screenshot displays the 'Station Detail' page for station CBC-052. The interface includes a navigation menu at the top with options: Home, Stations, Results, Import Configuration, Advanced, Site Help, and Logout. The main header shows 'WebSIM - v2.0.1 - STORET Import Module' and 'Stations'. The 'Station Detail' section includes a 'Page Help' link and the following information:

Station ID:	CBC-052	Import Status:	A
Primary Type:	Ocean	Secondary Type:	None
Station Name:	"The Station is located mid-channel in Smith Island Inlet, b		
Station Desc:	Smith Island Inlet		

The 'Location' section provides the following details:

State:				VIRGINIA				County:		NORTHAMPTON		
Latitude:	Deg	Min	Sec	Dec. Deg	Dec. Min	Dir	Geopos Method:	013				
	37	6	15	37.1041666	6.25	N	Geopos Datum:	WGS84				
Longitude:	75	56	2	-75.933888	56.0333	W	Scale:	scale				
Elevation:				5				Elevation Method:	013			
Elevation Units:				ft				Elevation Datum:	NAVD88			

At the bottom of the location section, there are four buttons: 'View Warnings', 'Estuary', 'Great Lakes', and 'Ocean'. The footer contains the text: 'STORET Home - EPA Office of Water - Gold Systems, Inc.'

Test and improve system performance

- To ensure that the system runs smoothly and will not produce chronic errors, you may want to load a small sample of your data first to test for problems. This may help you avoid errors in multiple records due to an incorrect date format (or other minor error).
- Warnings slow down the import. Warnings are not errors, but general comments from SIM on your import. If you limit the number of warnings that you receive during an import (e.g., latitude direction), then the overall speed of the import will improve. You can do this by clicking on **Suppress Warnings** in the Import Errors window.

Summary

In Lesson III, Advanced Functions, you learned how to

- Reorder field positions in an import configuration
- View the status of import files brought into SIM but not migrated or deleted
- Remove a migration from STORET
- Generate an error report to print or save
- Delete an import from SIM
- View data that have been imported into SIM
- Test and improve system performance.

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Lesson IV. Using the Fast Track Import Process

The Fast Track Import Process is an easy way to import your data to STORET if there is already an Import Configuration established. The Fast Track Import Process is available from the WebSIM home page.

Getting Started: Complete the steps listed below for the Fast Track Import Process. Help is given on the link to the right of every step.

- Step One:** [Step 1 Help](#)
Select the Import Configuration - Select this option to select from a list of existing Import Configurations regardless of import type.
Current Status: No Configuration Selected
- Step Two:** [Step 2 Help](#)
Select the File to be Imported - Select this option to select a file uploaded to the organization specific FTP Site.
Current Status: No Import File Selected
- Step Three:** [Step 3 Help](#)
Import Step - Select this option to initiate the import process.

Take a Tour! Click here to find out how to use the **Fast Track Import Process**

Quick Links:

- [Stations Import Log](#)
- [Imported Stations](#)
- [Results Import Log](#)
- [Imported Results](#)
- [Migration Log](#)

STORET Home - [EPA Office of Water](#) - [Gold Systems, Inc.](#)

To use the Fast Track Import Process, follow the steps listed under “Getting Started”.

1. When you click **Step One**, you will be able to select an existing Import Configuration from the drop-down list.

Fast Track Import Process [Page Help](#)

Configuration:

Select Configuration **Cancel**

2. After you choose the correct configuration, click the **Select Configuration** button.

After you complete each step, the current status will appear in green text below that step.

3. Click **Step Two**. From the drop-down list, choose the file you would like to import. You must have completed the third step of the eBeaches Monitoring Data Road Map (Upload your data to CDX) before your file will appear in this drop-down list.



The screenshot shows a web interface titled "Fast Track Import Process" with a "Page Help" link in the top right. Below the title is a form with an "Import File:" label and a blue drop-down menu. At the bottom of the form are two buttons: "Select Import File" and "Cancel".

4. Once you have chosen the correct file to import, click the **Select Import File** button. The green text below Step Two will indicate which file you chose. If this is not the correct file, you may repeat the previous step to select the correct file.
5. Click **Step Three**.

Here you may choose whether or not to create translations for your import file. Choosing **Create Translations for Station Fields** assists users in identifying errors for the import file. The translations are created for invalid values as the import processes. After the import is complete, you can check the translations page to see what import columns contained invalid values and then complete the translation by including a valid value to translate to.
6. Choose either **Create Translations for Station Fields** or **Don't Create Translations for Station Fields** and then click **Select Instruction**.
7. You will get a message summarizing the data elements you choose during the process. If they are correct, click the **Start Import** button and you will get a message saying "Your import is in progress. Please wait."

When your import is complete, you will be returned to the WebSIM home page.

This concludes the WebSIM User Guide and Reference Manual.

Appendix A.

Listing of Available STORET Data Elements for Each File Type

This appendix lists data elements that you can enter to describe stations, activities, and results. The tables indicate which elements are required and whether you can enter specific values for each element. These tables may be useful if you are importing flat files to SIM.

For XML import files, review the example schema on your MyCDX page to determine how to set up your XML schema. From the MyCDX page, click **eBEACHES: Monitoring**. Next, choose item 2, **Prepare your data**, to see the example.

Table A-1. Station Descriptions

Data Element	Required	Allowed Values
Station ID	Yes	
Station Name	Yes	
Primary Type	Yes	Yes
Secondary Type	Yes	Yes
Station Description		
Latitude	Yes	
Latitude Direction	Defaults to "N"	Yes
Longitude	Yes	
Longitude Direction	Defaults to "W"	Yes
Geopositioning Datum	Yes	Yes
Geopositioning Method	Yes	Yes
Scale	Conditional	
State	Yes	
County	Yes	
Elevation		
Elevation Units	Conditional	Yes
Elevation Method	Conditional	
Elevation Datum	Conditional	
Ocean Name	Conditional	Yes
Shore Relation	Conditional	Yes
Additional Ocean Name		
Primary Estuary	Conditional	
Secondary Estuary		
Other Estuary		
Great Lake	Conditional	Yes
Additional Great Lake Name		

Table A-2. Activities and Results

Data Element	Required	Allowed Values	Multiple Allowed
Trip ID	Yes	Must Exist in STORET	
Trip Start Date			
Trip Stop Date			
Trip Name			
Station ID	Yes	Must Exist in STORET	
Additional Location Information			
Station Visit Number	Yes		
Station Visit Arrival Date			
Visit Comments			
Project ID	Yes	Must Exist in STORET	Yes. Separate with “^”
Activity ID	Yes		
Medium	Yes	Yes	
Activity Type	Yes	Yes	
Activity Category	Conditional	Yes	
QC Indicator		Yes	
Sample Matrix		Yes	
Replicate Number	Conditional		
Activity Start Date	Yes		
Activity Start Time			
Activity Start Time Zone	Conditional	Yes	
Activity End Date			
Activity End Time			
Activity End Time Zone	Conditional	Yes	
Depth to Activity			
Depth to Activity Units	Conditional	Yes	
Relative Depth		Yes	
Depth Measured From			
Activity Comments			
Sample Collection Procedure ID	Conditional	Must Exist in STORET	
Gear ID	Conditional	Yes	
Gear Configuration ID		Must Exist in STORET	
Gear Deployment Comments			
Sample Preservation, Transport & Storage ID		Must Exist in STORET	
Sample Transport and Storage Comments			
Detection Condition		Yes	
Characteristic Group ID	Conditional	Must Exist in STORET	
Characteristic Row ID	Conditional	Must Exist in STORET	
Characteristic Name	Conditional	Yes	
Result Value	Conditional	Yes*	
Result Value Units	Conditional	Yes	
Result Status	Defaults to “F”	Yes	
Sample Fraction	Conditional	Yes	
Statistic Type		Yes	
Value Type	Defaults to “Actual”	Yes	
Duration Basis		Yes	
Temperature Basis		Yes	
Weight basis		Yes	
Result Comment			
Laboratory ID		Must Exist in STORET	
Field/Lab Procedure	Conditional	Must Exist in STORET	

Appendix A

Data Element	Required	Allowed Values	Multiple Allowed
Field/Lab Procedure Source	Conditional	Yes	
Laboratory Certified		Yes	
Laboratory Batch ID			
Analysis Date			
Analysis Time			
Analysis Time Zone	Conditional	Yes	
Detection Limit			
Detection Limit Unit	Conditional	Yes	
Detection Limit Comment			