Date	August 2001			
Authors	Randal Taira, Mitch Pelton, Gene Whelan			
Title of Effort	FRAMES 1.3 System Enhancements Test Plan			
Task Title	System Enhancements			
Task #	1			
Item #	1			
Revision #	0			
Client	Engineer Research and Development Center (Waterways Experiment Station)			
Project SA #	42339			
Related PNNL Documents				

Contents

1.0 FRAMES 1.3 System Enhancements Test Plan	1	Ĺ
1.1 Test Case FSE01	1	Ĺ
1.1.1 Description and Rationale for Test Case		ĺ
1.1.2 Testing Procedure and Data	2	<u>)</u>
1.1.3 Expected Results		
1.1.4 Test Results and Conclusion	2	<u>)</u>
1.2 Test Case FSE02		3
1.2.1 Description and Rationale for Test Case		3
1.2.2 Testing Procedure and Data		3
1.2.3 Expected Results		3
1.2.4 Test Results and Conclusion		3
1.3 Test Case FSE03		3
1.3.1 Description and Rationale for Test Case		3
1.4 Test Case FSE04		
1.4.1 Description and Rationale for Test Case		3
1.4.2 Testing Procedure and Data		3
1.4.3 Expected Results	6	5
1.4.4 Test Results and Conclusion	6	j

1.0 FRAMES 1.3 System Enhancements Test Plan

The following test cases were designed to test and ensure that the FRAMES 1.3 System Enhancements Task meets all of its requirements. Table 1 shows the requirements specified for this task. Table 2 lists the test cases along with the requirements addressed by each test.

Table 1. Fundamental Requirements for Testing the FRAMES 1.3 System Enhancements

Requiremen t Number	Requirement
1	Allow for storing and accessing files in directories other than the main FRAMES directory
2	Allow the user to launch a particular FRAMES case (i.e., a Global Input Data (GID)) file from a command line
3	Utilize a final set of real-world icons
4	Summarize and archive in a file the names and version of models, databases, and viewers implemented as part of a Conceptual Site Model (CSM)

Table 2. Relationship Between the System Enhancements Requirements and Test Cases

		Test Case by Number				
		01	02	03	04	
Requirements	1	X				
	2		X			
	3			X		
R e	4				X	

1.1 Test Case FSE01

1.1.1 Description and Rationale for Test Case

This test case will be used to evaluate the capability to store and access files in directories other than the main FRAMES directory. A Global Input Data (GID) file will be created in a subfolder under the main FRAMES folder. The capability of FRAMES to access files in the folder and save files to the folder will be checked.

1.1.2 Testing Procedure and Data

- 1. Create a folder under the main FRAMES folder named "FSE01."
- 2. A GID file titled "FSE01.GID" is included in this test package. You will need to change the file path names in the file so that they match the file path for the FRAMES directory on your computer. The file path on your computer should be C:frames or something similar. Open the GID file in a text editor. Do a find and replace to change the file paths in the file. Search for "D:" and replace with "C:" or whatever the path name is on your computer. Save the file as a text format after the changes have been made. Note that the data contained in the file will not be described here. The data can be viewed through the FRAMES User Interface (FUI) when the case is brought up.
- 3. Copy the GID file into the subfolder you just created named "FSE01."
- 4. Start up FRAMES.
- 5. Click on the "file" and select "Open."
- 6. Find the folder named "FSE01" and click on it.
- 7. Select the file "FSE01.GID" and click the "Open" button. The case should come up in the working area screen on the FUI. Two icons should appear on the screen: a source term icon and a contaminants icon. The two icons should be connected by a line with an arrow pointing from the contaminants icon to the source term icon.
- 8. Right click on the source term icon and select "User Input."
- 9. Take a look through the input data if you would like and then use the "File" menu to save and exit.
- 10. The light on the source term icon should turn to yellow.
- 11. Right click on the source term icon and select "Run Model." The model should run and the light on the source term icon should turn green. This indicates a successful run.
- 12. Close down FRAMES by using the "File" menu. Select "Exit." You will be prompted to save the changes. Select "Yes."
- 13. Check to see if the results files from the run were stored in the subfolder.
- 14. Open up Windows Explorer and find the subfolder "FSE01" under the FRAMES directory.
- 15. Open the folder and check to see if there is a file in it entitled "FSE01.wff." This is the water concentration result file from the run that was just performed. The presence of this file indicates that the system is able to write files to a separate subdirectory.

1.1.3 Expected Results

It is expected that the user will be able to open up the "FSE01.GID" file even though it is in another folder and that the system will run normally. It is also expected that the results from the run performed will be written to the subfolder "FSE01" that is created.

1.1.4 Test Results and Conclusion

FRAMES was able to open up the "FSE01.GID" file even though it is in another folder and the system ran normally. The results from the run performed were written to the subfolder "FSE01" that was created. This requirement has been met by the system.

1.2 Test Case FSE02

1.2.1 Description and Rationale for Test Case

This test case will be used to evaluate the capability of the system to allow the user to launch a particular FRAMES case (i.e., a Global Input Data [GID]) file from a command line. A command at a DOS prompt will be used to start up FRAMES and to open up a GID file. The GID file used will be the GID file from test case FSE01.

1.2.2 Testing Procedure and Data

- 1. Open up a DOS prompt.
- 2. You will be opening up the GID file from test case FSE01 so you will need to know the path name to the GID file.
- 3. At the DOS prompt, type in "C:\FRAMES\FUI.EXE C:\FRAMES\FSE01\FSE01.GID"
- 4. The FUI should come up, and the case from test case FSE01 should appear.
- 5. Use the "File" menu to exit the FUI.

1.2.3 Expected Results

It is expected that the user will be able to fire off FRAMES and open up to a GID file via a DOS command line.

1.2.4 Test Results and Conclusion

The system allowed the user to fire off FRAMES and open up to a GID file via a DOS command line. This requirement has been met by the system.

1.3 Test Case FSE03

1.3.1 Description and Rationale for Test Case

A visual check will be made to determine if the set of real-world icons is being used by the system. No actual testing will be performed.

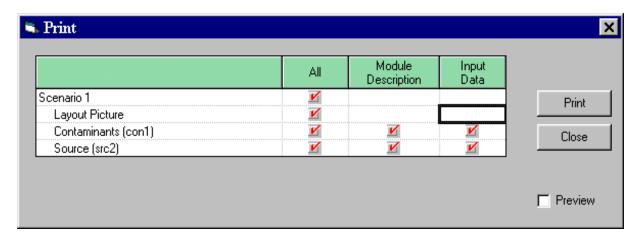
1.4 Test Case FSE04

1.4.1 Description and Rationale for Test Case

This test case will be used to evaluate the system's capability to summarize and archive in a file the names and version of models, databases, and viewers implemented as part of a Conceptual Site Model (CSM).

1.4.2 Testing Procedure and Data

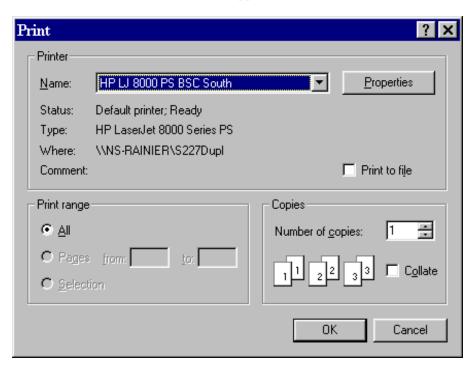
- 1. The GID file from test case FSE01 will be used in this test case. If test case FSE01 has not been run previously, then follow Steps 2 and 3 below to prepare the GID file. If the test case has been run already, then skip down to Step 4 below.
- 2. A GID file titled "FSE01.GID" is included in this test package. You will need to change the file path names in the file so that they match the file path for the FRAMES directory on your computer. The file path on your computer should be C:frames or something similar. Open the GID file in a text editor. Do a find and replace to change the file paths in the file. Search for "D:" and replace with "C:" or whatever the path name is on your computer. Save the file as a text format after the changes have been made. Note that the data contained in the file will not be described here. The data can be viewed through the FRAMES User Interface (FUI) when the case is brought up.
- 3. Copy the GID file into the subfolder you just created named "FSE01."
- 4. Start up FRAMES.
- 5. Click on the "file" and select "Open."
- 6. Find the folder named "FSE01" and click on it.
- 7. Select the file "FSE01.GID" and click the "Open" button. The case should come up in the working area screen on the FUI. Two icons should appear on the screen: a source term icon and a contaminants icon.



The two icons should be connected by a line with an arrow pointing from the contaminants icon to the source term icon.

8. Click on the "File" menu in the upper left of the screen and select the "Print" option. A print window should appear as follows:

9. Click on the "Print" button. A new screen will appear as follows:



10. Click on the check box entitled "print to file" that is located in the middle of the right side. Then click the "OK" box on the lower right. The following screen will appear:



- 11. In the "File name" box, type in "FSE04". Then hit the "Open" button.
- 12. Close down the "Print" window. This will print all of the summary information associated with the case

- to a file named "FSE04.rtf". The file will be located in th "FSE01" subfolder.
- 12. Close down FRAMES by using the "File" menu. Select "Exit". You will be prompted to save the changes. Select "Yes".
- 13. Check to see if the summary file "FSE04.rtf" was stored in the subfolder.
- 14. Open up Windows Explorer and find the subfolder "FSE01" under the FRAMES directory.
- 15. Open the folder and check to see if there is a file in it entitled "FSE04.rtf." Open up the file to check that the file contains a summary and archive of the names and version of models, databases, and viewers implemented as part of a Conceptual Site Model (CSM).

1.4.3 Expected Results

It is expected that FRAMES will allow the user to save to a file that contains a summary and archive of the names and version of models, databases, and viewers implemented as part of a Conceptual Site Model (CSM).

1.4.4 Test Results and Conclusion

FRAMES allowed the user to save the summary information to a file as expected. This requirement has been met by the system.