Test Case GFE Publish (pu 001-003)

for the

AWIPS

Contract

DG133W-05-CQ-1067

Prepared for:

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Revision History

Revision	Date	Affected Pages	Explanation of Change
1.0	11 July 2008	ALL	Initial Draft
2.0	8 August 2008	6-9, 13	Redlines per PDT
3.0	4 September 2008	ALL	Redlines per DT

Table of Contents

1.0 SCOPE

See Software Test Plan.

2.0 APPLICABLE DOCUMENTS

2.1 Source Documents

- None

2.2 Reference Documents

- Legacy NWS GFE Acceptance Test Case ID Numbers: pu001 – pu003.
- Legacy NWS GFE Test Cases for Test Areas AC – VP.
- Section 3.1.3 of the AWIPS D-2D User's Manual Build 8.1.
- Software Test Plan for the Advanced Weather Information Processing System Project, Contract #DG133W-05-CQ-1067, August 2008.
- The Silver Spring NWS AWIPS 1 test bed application.
- Release OB8.1 and OB8.2 of the Weather Event Simulator (WES).
- Rational RequisitePro.

3.0 TEST CASE DESCRIPTION

This test case verifies that the Publish NWS test cases.

3.1 Assumptions, Constraints and Preconditions

- Several weather elements are loaded
- There are multiple grids available for the weather elements (at minimum T, Td, Wind, Wx, and Hazards weather elements)
- TO9 software has been installed successfully
- CAVE, EDEX and pgAdmin III are running
- Data has been ingested
- Actions, Results, and Requirements highlighted in yellow indicate requirements and/or capabilities to be included in the scope of future task orders. They are included here for purposes of continuity and traceability with the original AWIPS I test case documents.

3.2 Recommended Hardware

See Software Test Plan.

3.3 Test Inputs

Section 4.0 below contains the test procedures for this test case. Sections 2.2 – 2.9 of the Software Test Plan contain general test inputs applicable to all TO9 test cases.

3.4 Test Outputs

The results outlined in section 4.0 are met.

3.4.1 GFE GUIs Tested

- TBD

4.0 TEST SCENARIO

Step #	Action	Result	Pass/Fail
pu001 – Publish to Official			
One WE for one time period, no ISC grids sent:			
1.	From the CAVE window, Mouse Button (MB) 1 click the 'Open Perspective' icon and select 'GFE' from the dropdown menu.	The GFE perspective displays in CAVE.	
2.	Create a new gfe configuration file from the GFE -> Define Config and ifpIMAGE files, which brings up the Define Config dialog. MB3 popup on the dialog and pick 'New'. Enter pu001 into the listbox. Make the contents of the file the following, and then save the file: **from gfeConfig import *** **ISC_Sites = ['XXX']** **SendISCGridsWhenPublish = 0**	The Define Config dialog appears. The Python editor window is displayed. The file is saved.	
3.	Restart the GFE with the pu001 configuration file.	GFE is restarted.	
4.	Ensure there are some grids available in the Grid Manager (GM) for the Fcst database for various weather elements. If not, create several grids for various weather elements and times by MB1 clicking 'Grids' -> 'Create Grids From Scratch…' and using the associated dialog. Save any created data with the  toolbar button.	Grids are present or created. The grids are saved.	
5.	Bring up the Weather Element Browser by clicking 'Weather Element' -> 'Weather Element Browser...'. Add the 'Official' database to the list of databases by MB1 clicking 'Source' and selecting 'Official'. MB1 click 'Load and Dismiss'. This will allow you to see the changes you make to the Official database by using the GM.	The Weather Element Browser opens. The Official products are added to the GM and the product legend.	

Step #	Action	Result	Pass/Fail
6.	Select 'Products' -> 'Publish to Official' to bring up the Publish to Official dialog. In the Publish to Official dialog, select one weather element from the Weather Elements listbox and one time period from the Time Period listbox. Be sure that the chosen element and the chosen time period contain some grids. Do not select the Send Intersite Grids checkbox. MB1 click 'Publish'.	The official database should only have been updated with the above selections with no intersite grids sent. This can be verified by looking at the left status bar message(s) that appears on the GFE which will indicate the Publish operation was successful. There should not be a status bar message on the right status bar for sending of ISC data. Grids appear in the GM for the official database, verification the grids were published.	
No WEs for one time period, no ISC grids sent:			
7.	From the Publish to Official dialog, select no weather elements from the Weather Elements listbox and one time period from the Time Period listbox. Do not select the Send Intersite Grids checkbox. MB1 click 'Publish'.	No publishing should occur. A 'PUBLISH: Nothing to publish.' message appears in the left status bar. There should not be any ISC data queued messages in the right status bar.	
One WE for one time period, but no grids available, no ISC grids sent:			
8.	Delete the grids that were just published in step #6 from the Fcst database. Save any data you have created with the  toolbar button.	The published grids are deleted. The most recently created data is saved.	
9.	Select 'Products' -> 'Publish to Official' to bring up the Publish to Official dialog. In the Publish to Official dialog, select the same weather element as step #6 and the same time period as in step #6. Be sure that there are NO grids for the chosen weather element in the chosen time period. Do not select the Send Intersite Grids checkbox. MB1 click 'Publish'.	The Publish to Official dialog opens. The official database should only have been updated with the above selections with no Intersite grids sent. This can be verified by looking at the left status bar message(s) on the GFE which indicates the Publish operation was successful. There should not be a status bar message on the right status bar for sending of ISC data. The previously published grids (from step #6) in the Official database should have been removed, since there were no grids in the source time range.	

Step #	Action	Result	Pass/Fail
One WE for all time periods, no ISC grids sent:			
10.	Select 'Products' -> 'Publish to Official' to bring up the Publish to Official dialog. In the Publish to Official dialog, select a weather element that has many grids, select 'All Grids'. Do not select the Send Intersite Grids checkbox. MB1 click 'Publish'.	The official database should only have been updated with the above selections with no intersite grids sent. This can be verified by looking at the left status bar message(s) that appears on the GFE which indicates the Publish operation was successful. There should not be a status bar message on the right status bar for sending of ISC data.	
11.	Examine the GM inventory for the weather element for the Fcst and Official databases.	They should be identical.	
All WE for all time periods, no ISC grids sent:			
12.	In the Publish to Official dialog, using <CONTROL> MB1, select all weather elements with grids in the GM (one-by-one) in the Weather Elements listbox. Select 'All Grids' in the Time Period section. Do not select the Send Intersite Grids checkbox. MB1 click 'Publish'.	The official database should only have been updated with the above selections with no intersite grids sent. This can be verified by looking at the left status bar message(s) that appears on the GFE which indicates the Publish operation was successful. There should not be a status bar message on the right status bar for sending of ISC data.	
13.	Examine the GM inventory for the Fcst and Official databases.	They should be identical.	
One WE for all time periods, ISC grids sent:			
14.	Select 'Products' -> 'Publish to Official' menu item to bring up the Publish to Official dialog. In the Publish to Official dialog, select one weather element in the Weather Elements listbox, select 'All Times'. Select the Send Intersite Grids checkbox. MB1 click 'Publish'.	The official database should only have been updated with the above selections and intersite grids should be sent. This can be verified by looking at the left status bar message(s) that appears on the GFE which indicates the Publish operation was successful. There should be a status bar message on the right status bar for the receipt of the ISC data that was sent. There also is a second message on the left status bar sending of ISC data. (Use the recall  button on the Status Bar to see all of the messages.)	
15.	Delete the pu001 configuration file.		

Step #	Action	Result	Pass/Fail
pu002 – Send Intersite Grids dialog			
One WE, one Time, one Site:			
16.	Bring up the Define Config dialog and create a new gfe configuration file by MB1 clicking 'GFE' -> 'Define Config and ifpIMAGE files'. MB3 popup on the dialog and select 'New'. Enter pu002 into the listbox. In the Python editor window, make the contents of the file the following, and then save the file: **from gfeConfig import *** **ISC_Sites = ['XXX', 'YYY', 'ZZZ']**	The Define Config dialog opens. The Python editor window is displayed. The modifications are made and saved.	
17.	Restart the GFE with the pu002 configuration file.	GFE is restarted.	
18.	Ensure there are some grids available in the GM for the Fcst database for various elements. If not, create several grids for various weather elements and times by MB1 clicking 'Grids' -> 'Create Grids From Scratch…' and using the associated dialog. Save any created data with the  toolbar button.	Grids are present or created. The grids are saved.	
19.	Select 'Consistency' -> 'Send Intersite Grids' to bring up the Send Intersite Grids dialog. In the Send Intersite Grids dialog, select one weather element from the Weather Elements listbox, one time period, and one site from the listboxes. Be sure that the chosen element and the chosen time period contain some grids. MB1 click 'SendISCGrids'.	The left status bar indicates that the send request has been queued to the one site. The right status bar indicates the weather elements, time periods, and the received site (yourself) as the data comes back in through the system.	

Step #	Action	Result	Pass/Fail
20.	Examine the ifpServer log files for a message that looks similar to: 17:38:29.601 SendISCMgr.C 147 EVENT: Starting isc for [T_SFC:BOU_GRID__Fcst_00000000_0000] (May 16 03 01:00:00 GMT, May 16 03 14:00:00 GMT) [XXX] #G=1 Verify that the data was processed in the ifpServer.	Verified.	
No WEs, one time, all sites:			
21.	Select 'Consistency' -> 'Send Intersite Grids' to bring up the Send Intersite Grids dialog. In the Send Intersite Grids dialog, select no weather elements from the Weather Elements listbox, one time period, and all sites from the listboxes. MB1 click 'SendISCGrids'.	The left status bar indicates that the send request has been queued to the one site. The right status bar indicates the weather elements, time periods, and the received site (yourself) as the data comes back in through the system.	
22.	Examine the ifpServer log files to ensure a message like below did not appear (remember you will still see the one from the previous run in step #17 in the logfile -- check the date time stamps!) 17:38:29.601 SendISCMgr.C 147 EVENT: Starting isc for [T_SFC:BOU_GRID__Fcst_00000000_0000] (May 16 03 01:00:00 GMT, May 16 03 14:00:00 GMT) [XXX] #G=1 Verify that the data was processed in the ifpServer.	Verified.	
One WEs, no grids for the time period, one site:			
23.	Delete the grids for the weather element you previously selected in step #17 from the Fcst database. Save any data you have created with the  toolbar button.	The grids are deleted. The grids are saved.	

Step #	Action	Result	Pass/Fail
24.	Select 'Consistency' -> 'Send Intersite Grids' to bring up the Send Intersite Grids dialog. In the Send Intersite Grids dialog, select the same weather element from the Weather Elements listbox, and same time period as in step #17, and one site from the listboxes. Be sure that the chosen element and the chosen time period contain some grids. MB1 click 'SendISCGrids'.	The left status bar indicates that the send request has been queued to the one site. The right status bar indicates the weather elements, time periods, and the received site (yourself) as the data comes back in through the system.	
25.	Examine the ifpServer log files for a message that looks similar to: 18:46:55.635 SendISCMgr.C 147 EVENT: Starting isc for [T_SFC:BOU_GRID__Fcst_00000000_0000] (May 16 03 17:00:00 GMT, May 17 03 04:00:00 GMT) [XXX] #G=0 Verify that the data was processed in the ifpServer.	Verified.	
All WEs, all times, all sites:			
26.	Select 'Consistency' -> 'Send Intersite Grids' to bring up the Send Intersite Grids dialog. In the Send Intersite Grids dialog, select all weather elements from the Weather Elements listbox, 'All Grids' for the time period, and all sites from the listboxes. MB1 click 'SendISCGrids'.	The left status bar indicates that the send request has been queued to the all of the sites. The right status bar indicates the weather elements, time periods, and the received site (yourself) as the data comes back in through the system	
27.	Examine the ifpServer log files for a Starting isc message, which should indicate many weather elements, all sites, and the valid time range from 1970 through 2037 (approximately).	Verified.	
28.	Delete the pu002 configuration file.		
pu003 – Send Intersite Grids and Publish dialog - Set Selected, Groups, Set All, Clear All			
Send Intersite Grids Dialog			
29.	MB1 click on a T grid in the GM.	The temperature grid displays in the SE.	
30.	Select 'Consistency' -> 'Send Intersite Grids' to bring up the Send Intersite Grids dialog. Select 'Set All' in the dialog.	All weather elements are selected, all sites are selected, and the 'All Grids' are selected.	

Step #	Action	Result	Pass/Fail
31.	Select ‘Clear All’.	No weather elements are selected, ‘All Grids’ is selected, and no sites are selected.	
32.	Select ‘Set Selected’.	Only those weather elements that are selected in the GM are selected in the dialog. ‘Selected Time’ is selected. No sites are selected.	
33.	Pull down the ‘Groups’ menu and select an entry.	Only those weather elements that are part of the selected weather element group is highlighted on the dialog. No changes to the time periods or sites.	
34.	Dismiss the dialog.	The dialog is dismissed.	
Publish Dialog			
35.	MB1 click on a T grid in the GM.	The temperature grid displays in the SE.	
36.	Select ‘Products’ -> ‘Publish to Official’ menu item to bring up the Publish to Official dialog. Select ‘Set All’ in the dialog.	All weather elements are selected and the ‘All Grids’ option is selected.	
37.	Select ‘Clear All’.	No weather elements are selected but the ‘All Grids’ selection is selected.	
38.	Select ‘Set Selected’.	Only those weather elements that are selected in the GM, are selected in the dialog. ‘Selected Time’ is selected.	DR #1370
39.	Pull down the ‘Groups’ menu and select an entry.	Only those weather elements that are part of the selected weather element group are highlighted on the dialog. No changes are made to the selected time period.	DR #1370
40.	Dismiss the dialog.	The dialog is dismissed.	
	End of test.		

5.0 REQUIREMENTS VERIFICATION TRACEABILITY MATRIX (RVTM)

Number	Description	Test Step(s)
SYSR2548	The AWIPS GFESuite shall implement Publish to Official.	1-15
SYSR2549	The AWIPS GFESuite shall implement Send Intersite Grids dialog.	16-28
SYSR2550	The AWIPS GFESuite shall implement Send Intersite Grids and Publish dialog - Set Selected, Groups, Set All, Clear All.	29-40