

Test Case Spatial Editor/Color Bar

Popups/Status Bar

for the

AWIPS

Contract

DG133W-05-CQ-1067

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Revision History

Revision	Date	Affected Pages	Explanation of Change
1.0	27 June 2008	ALL	Initial Draft
2.0	8 August 2008	7, 8	Redlines per PDT
3.0	4 September 2008	ALL	Redlines per DT

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1.0 SCOPE

See Software Test Plan.

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2.0 APPLICABLE DOCUMENTS

2.1 Source Documents

- None

2.2 Reference Documents

- Legacy NWS GFE Acceptance Test Case ID Number: ac005
- 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

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3.0 TEST CASE DESCRIPTION

This test case exercises and demonstrates the interactivity of the Spatial Editor, Color Bar Popups, and the Status Bar.

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.
- The GFE Perspective is displayed.
- 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. Items highlighted in blue are capabilities added and/or Deficiency Reports (DRs) corrected since the Delivery Test.

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 Spatial Editor, Color Bar and Status Bar will be displayed and the results outlined in section 4.0 are met. The GFE GUIs to be tested include:

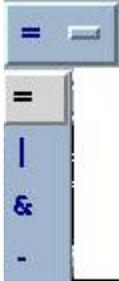
- Fuzz Value
- Set Color Table Range
- View Messages

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4.0 TEST SCENARIO

Step	Action	Result	Pass/Fail
Spatial Editor			
1.	Over the main area of the Spatial Editor, MB3 popup and select 'Legends' -> 'Show All Active Weather Element'. If the option is not available, then the legends are already in that mode.	At most there is just one legend displayed, which is for the currently active weather element. Note that there may not be any active element, and thus there might not be a legend.	
2.	MB1 click on a T grid in the Grid Manager.	The grid is displayed in the Spatial Editor as an image. The Spatial Editor legend indicates the entry that is active as a white legend.	
3.	Select the '=' mode on the Edit Area Mode  toolbar pull-down.	The '=' mode is selected.	
4.	MB3 popup over an area of the Spatial Editor and select 'Select Homogeneous Area'.	An edit area appears to indicate all points that are within a particular threshold from the MB3 point on the screen.	
5.	MB3 popup over the Spatial Editor and select 'Set Fuzz Value...'. From the Fuzz Value dialog, set the Fuzz Value to 20. Then MB1 click 'Dismiss'.	The new Fuzz Value is set. The Fuzz Value dialog closes.	
6.	Over the same location in step #3, MB3 popup and select 'Select Homogenous Area'.	The edit area is changed to indicate all contiguous points within the new threshold.	
7.	Over the selected area in the Spatial Editor, MB3 popup and select 'Deselect Contiguous Area'.	All points that are selected and contiguous with the MB3 popup location are deselected.	
Color Bar			
8.	MB3 popup over the Color Bar and select 'Set Fuzz Value...'. From the Fuzz Value dialog, set the Fuzz Value to 5. Then MB1 click 'Dismiss'.	The new Fuzz Value is set. The Fuzz Value dialog closes.	

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Step	Action	Result	Pass/Fail
9.	Over the same location in step #3, MB3 popup and select 'Select Homogenous Area'.	The edit area is changed to indicate all contiguous points within the new threshold.	
10.	Over the selected area in the Spatial Editor, MB3 popup and select 'Deselect Contiguous Area'.	All points that are selected and contiguous with the MB3 popup location are deselected.	
11.	MB3 popup on the color bar and select 'Fit To Data' -> 'All Grids'.	The color range is recalculated for the color spectrum as shown with different labels in the color bar. The image colors are changed accordingly.	
12.	MB3 popup on the color bar and select 'Fit To Data' -> 'Single Grid'.	The color range is recalculated for the color spectrum as shown with different labels in the color bar, and the image colors are changed accordingly.	
13.	MB3 popup on the color bar and select 'Set Range...'. Change the Minimum and Maximum sliders on the Set Color Table Range dialog. Then MB1 click 'OK'.	The color range is recalculated for the color spectrum as shown with different labels in the color bar, and the image colors are changed accordingly.	
14.	MB3 popup on the color bar and select 'Change Color Table To' -> <your choice>.	The scaling does not change (i.e., same range appears on the color bar), but the color enhancement and image change.	
15.	MB3 popup on the color bar and select 'Full Default Range'.	The scaling reverts back to the minimum/maximum possible values as defined in serverConfig/localConfig. The same color table is used, but due to the scaling changes, the image changes.	
Status Bar			
16.	Verify a status bar is present in the lower left corner of the CAVE display. Verify the green status box blinks when a new status message appears in the status message window. MB1 click the '^' button adjacent to the green status box and verify the View Messages window opens with status messages.	A status bar is present. Verified.	
17.	Open a terminal window and 'cd' to the	A green message appears in the left	

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Step	Action	Result	Pass/Fail
	GFESuite installation directory. Then 'cd' to the bin directory. Execute the command: sendGfeMessage -r -m "Hello"	status bar, and the status light is blinking.	
18.	Execute the command: sendGfeMessage -r -m "Goodbye" -c "SMARTINIT"	A green message appears in the right status bar, and its status light is blinking.	
19.	Execute the command: sendGfeMessage -s -m "Significant Message"	A yellow message appears in the left status bar, and its status light is blinking. A yellow banner message appears.	
20.	Acknowledge the "Significant Message".	The Significant Message dialog closes. The yellow status message in the status bar changes to gray.	
21.	Execute the command: sendGfeMessage -u -m "Urgent Message"	A red banner message appears, the status light is blinking red, and the message is repeated in the left status bar.	
22.	Acknowledge the Urgent Message.	The Urgent Message dialog closes. The red status message in the status bar changes to gray.	
23.	Execute the command: sendGfeMessage -a -m "Alert Message"	An orange message appears in the left status bar and its status light is blinking.	
24.	Using the '^' button in each of the status bars to view previous messages.	The View Messages dialog is displayed listing all of the messages received for that appropriate status bar. The original colors are present in the dialog (red for urgent, yellow for significant, green for regular, orange for alert).	
25.	Dismiss the dialog by MB1 clicking the 'Close' button.		
	End of test.		

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5.0 REQUIREMENTS VERIFICATION TRACEABILITY MATRIX (RVTM)

Number	Description	Test Step(s)
SYSR2114	The AWIPS GFESuite shall implement the Spatial Editor/Color Bar Popups/Status Bar.	ALL
SYSR2046	The AWIPS system shall implement the GFE Legend Pop Ups.	1-7

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