

Test Case Grid Manager

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	iii, 7-9	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: ac003
- 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 capabilities of the Grid Manager using the GFE application.

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.

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 Grid Manager will be displayed and the results outlined in section 4.0 are met. The GFE GUIs to be tested include:

- Grid Information

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4.0 TEST SCENARIO

Step	Action	Result	Pass/Fail
1.	Mouse Button (MB) 1 click on a 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. The grid is in edit mode as indicated by '(edit)'.	
2.	MB2 click on a different weather element in the Grid Manager, and a different time step.	The original weather element (from step #1, provided that there is a grid available) is displayed as a graphic (contours) and the new grid displayed as an image. The legend indicates both elements are visible. The element selected in step #2 is in edit mode as indicated by '(edit)'.	
3.	MB1 drag in the Grid Manager starting at the center and keep moving the mouse to the right edge of the window, then after a couple of seconds release the mouse button.	A selection time range is created, and the Grid Manager auto-scrolls.	
4.	MB1 drag in the Grid Manager starting at the center and keep moving the mouse to the left edge of the window, then after a couple of seconds release the mouse button.	A selection time range is created, and the Grid Manager auto-scrolls.	
5.	Scroll the time scale to a time so that the end of the selection time range is visible and there is a few inches of Grid Manager visible (in time) showing no selection time range.	Grid Manager is set up for the next step.	
6.	SHIFT MB1 click in the Grid Manager in an area that has no selection time range.	The selection time range expands to include the click point.	
7.	MB2 drag a grid in the Grid Manager to the right.	The valid time of the grid is expanded.	
8.	MB2 drag a grid in the Grid Manager to the left.	The valid time of the grid is expanded.	
9.	MB3 popup over a T grid and select 'Copy Grid'. Click and hold MB3 over an empty shadow block for 'T' and select 'Paste Grid'. MB1 click on the source grid and examine it. MB1 click on the destination grid and examine it.	Grid was copied and the data is identical.	

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Step	Action	Result	Pass/Fail
10.	MB3 popup over an existing Td grid and select 'Paste Grid'.	The destination grid is replaced with the grid copied from T and the data is identical to the source grid.	
11.	MB3 popup over an empty shadow block for Wind.	There is no 'Paste Grid' option.	
12.	MB3 popup over an empty shadow block for Wx.	There is no 'Paste Grid' option.	
13.	MB3 popup over an empty shadow block for Hazards.	There is no 'Paste Grid' option.	
14.	MB1 click on a T grid in the Grid Manager. MB1 click on the color bar to pick up a value. MB3 popup over a T grid and select 'Assign xxx', where 'xxx' is the pickup value.	The entire grid is assigned the pickup value. Note: You may need to MB1 click the grid to view it.	
15.	Over the same grid, MB3 popup and select 'Assign xxx', where 'xxx' is the default value.	The entire grid is assigned the default value.	
16.	Over the same grid in the Grid Manager, MB3 popup and select 'Delete Grid'.	The grid block is removed and the Spatial Editor display of that grid is cleared.	
17.	MB3 popup over any location in the Grid Manager and select 'Undo'.	The deleted grid reappears since the delete option was undone.	
18.	MB3 popup over any location in the Grid Manager and select 'Select All Times'.	The selection time range assigns all times (verify by scrolling the time scale) for the weather element where the MB3 click occurred.	
19.	With all times selected for the weather element in step #18, MB1 click on the selection box on another weather element in the Grid Manager.	All times are selected for both weather elements.	DR #1368
20.	MB1 click on the selection box for the same weather element.	That weather element is no longer selected and the selection time range is no longer shown for that weather element.	
21.	MB3 popup over a grid in the Grid Manager and select 'Display Info'.	The Grid Information dialog is presented.	
22.	Select each of the options on the Grid Information dialog and observe the contents. Then MB1 click 'Cancel' in the Grid Information dialog.	The grid information, history, state, etc. are returned. The Grid Information dialog closes.	

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Step	Action	Result	Pass/Fail
23.	MB3 popup anywhere in the Grid Manager and select 'Deselect All'.	The selection time range disappears from the time scale and Grid Manager. No Grid Manager panes have the selection box selected.	DR #1368
24.	Scroll the Grid Manager vertically.	The Grid Manager scrolls vertically through the list of weather elements.	
25.	MB1 click on the time scale.	The Spatial Editor time is changed and if the yellow time intersects an editable weather element, then that grid is displayed in the Spatial Editor.	DR #1369
	End of test.		

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5.0 REQUIREMENTS VERIFICATION TRACEABILITY MATRIX (RVTM)

Number	Description	Test Step(s)
SYSR2056	The AWIPS system shall implement the GFE Grid Manager.	ALL
SYSR2057	The AWIPS system shall implement the GFE Primary Widget.	ALL
SYSR2059	The AWIPS system shall implement the GFE Time range Dialog.	3-4
SYSR2060	The AWIPS system shall implement the GFE Copy Dialog.	9
SYSR2061	The AWIPS system shall implement the GFE Paste Dialog.	9, 10
SYSR2112	The AWIPS GFESuite shall implement the Grid Manager.	ALL

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