**Graph Marker**

**Test Cases and Procedures**

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# Test Cases

**Create**

**Test Case 1**

**Test Case ID –** RBC.graph.marker.1

**Test Item –** The *marker create* command of the *graph* BLT component.

**Input Specification –** The name of the marker and its type

**Output Specification –** The marker element should now exist for the graph

**Special Procedural Requirements –** None

**Inter-case Dependencies –** RBC.graph.create.1

**Destroy**

**Test Case 2**

**Test Case ID –** RBC.graph.marker.2

**Test Item –** The *marker destroy* command of the *graph* BLT component.

**Input Specification –** The name of the marker

**Output Specification –** The marker element should be removed from the graph

**Special Procedural Requirements –** None

**Inter-case Dependencies –** RBC.graph.marker.2

**Exists**

**Test Case 3**

**Test Case ID –** RBC.graph.marker.3

**Test Item –** The *marker exists* command of the *graph* BLT component.

**Input Specification –** The name of the marker

**Output Specification –** The state of existence of the marker

**Special Procedural Requirements –** None

**Inter-case Dependencies –** RBC.graph.marker.1

**Type**

**Test Case 4**

**Test Case ID –** RBC.graph.marker.4

**Test Item –** The *marker type* command of the *graph* BLT component.

**Input Specification –** The name of the marker

**Output Specification –** The type of the marker

**Special Procedural Requirements –** None

**Inter-case Dependencies –** RBC.graph.marker.4

**Names**

**Test Case 5**

**Test Case ID –** RBC.graph.marker.5

**Test Item –** The *marker names* command of the *graph* BLT component.

**Input Specification –** A pattern for matching marker names

**Output Specification –** The matching marker names

**Special Procedural Requirements –** None

**Inter-case Dependencies –** RBC.graph.marker.5

**Configure**

**Test Case 6**

**Test Case ID –** RBC.graph.marker.6

**Test Item –** The *marker configure* command of the *graph* BLT component.

**Input Specification –** A configuration option value pair

**Output Specification –** An updated marker based on configuration

**Special Procedural Requirements –** None

**Inter-case Dependencies –** RBC.graph.marker.6

**Test Case 7**

**Test Case ID –** RBC.graph.marker.7

**Test Item –** The *marker configure* command for text markers of the *graph* BLT component.

**Input Specification –** A configuration option value pair

**Output Specification –** An updated text marker based on configuration

**Special Procedural Requirements –** None

**Inter-case Dependencies –** None

**Test Case 8**

**Test Case ID –** RBC.graph.marker.8

**Test Item –** The *marker configure* command for line markers of the *graph* BLT component.

**Input Specification –** A configuration option value pair

**Output Specification –** An updated line marker based on configuration

**Special Procedural Requirements –** None

**Inter-case Dependencies –** None

**Test Case 9**

**Test Case ID –** RBC.graph.marker.9

**Test Item –** The *marker configure* command for bitmap markers of the *graph* BLT component.

**Input Specification –** A configuration option value pair

**Output Specification –** An updated bitmap marker based on configuration

**Special Procedural Requirements –** The greenback.xbm file needs to be in the executing directory

**Inter-case Dependencies –** None

**Test Case 10**

**Test Case ID –** RBC.graph.marker.10

**Test Item –** The *marker configure* command for image markers of the *graph* BLT component.

**Input Specification –** A configuration option value pair

**Output Specification –** An updated image marker based on configuration

**Special Procedural Requirements –** None

**Inter-case Dependencies –** None

**Test Case 11**

**Test Case ID –** RBC.graph.marker.11

**Test Item –** The *marker configure* command for polygon markers of the *graph* BLT component.

**Input Specification –** A configuration option value pair

**Output Specification –** An updated polygon marker based on configuration

**Special Procedural Requirements –** None

**Inter-case Dependencies –** None

**Test Case 12**

**Test Case ID –** RBC.graph.marker.12

**Test Item –** The *marker configure* command for window markers of the *graph* BLT component.

**Input Specification –** A configuration option value pair

**Output Specification –** An updated window marker based on configuration

**Special Procedural Requirements –** None

**Inter-case Dependencies –** None

**Bind**

**Test Case 13**

**Test Case ID –** RBC.graph.marker.13

**Test Item –** The *marker bind* command of the *graph* BLT component.

**Input Specification –** A marker or arbitrary tag name, an action sequence, and a command

**Output Specification –** *marker bind* should return the bound actions and commands

**Special Procedural Requirements –** None

**Inter-case Dependencies -** RBC.graph.marker.create.1

# Automated Tests

**Bind**

***Test Case 13***

**Test Procedure – Bind Create**

**Purpose –** Ensure that bindings can be created for a marker

**Special Requirements –** None

**TclTest –** RBC.graph.marker.bind.1.1

**Test Procedure – Bind Query for Sequence and Marker**

**Purpose –** Ensure that bindings can be queried for a sequence and marker

**Special Requirements –** None

**TclTest –** RBC.graph.marker.bind.1.2

**Test Procedure – Bind Command Append**

**Purpose –** Ensure that bindings can be appended for a sequence and marker

**Special Requirements –** None

**TclTest –** RBC.graph.marker.bind.1.3

**Test Procedure – Bind Command Overwrite**

**Purpose –** Ensure that bindings are overwritten for a sequence and marker

**Special Requirements –** None

**TclTest –** RBC.graph.marker.bind.1.4

**Test Procedure – Bind Query for Element**

**Purpose –** Ensure that bound sequences can be queried for just a marker

**Special Requirements –** None

**TclTest –** RBC.graph.marker.bind.1.5

**Create**

**Test Procedure – Graph Marker Exists**

**Purpose –** Ensure creating a marker actually creates the marker on the graph.

**Special Requirements –** None

**TclTest –** RBC.graph.marker.1.1

**Destroy**

**Test Procedure – Deletes a Single Marker**

**Purpose –** Ensure the marker delete command works correctly when given a single existing marker name

**Special Requirements –** None

**TclTest –** RBC.graph.marker.2.1

**Test Procedure – Deletes multiple markers**

**Purpose –** Ensure the marker delete command works correctly when given multiple existing marker name

**Special Requirements –** None

**TclTest –** RBC.graph.marker.2.2

**Exists**

**Test Procedure – Non-existant marker**

**Purpose –** Ensure that a marker that doesn't exist is recognized by exists

**Special Requirements –** None

**TclTest –** RBC.graph.marker.3.1

**Test Procedure – Existant marker**

**Purpose –** Ensure that a marker that an existing marker is recognized by exists

**Special Requirements –** None

**TclTest –** RBC.graph.marker.3.2

**Type**

**Test Procedure – Type of a Text Marker**

**Purpose –** Ensure a text marker is of the correct type (TextMarker).

**Special Requirements –** None

**TclTest –** RBC.graph.marker.4.1

**Test Procedure – Type of a Line Marker**

**Purpose –** Ensure a line marker is of the correct type (LineMarker).

**Special Requirements –** None

**TclTest –** RBC.graph.marker.4.2

**Test Procedure – Type of a Bitmap Marker**

**Purpose –** Ensure a bitmap marker is of the correct type (BitmapMarker).

**Special Requirements –** None

**TclTest –** RBC.graph.marker.4.3

**Test Procedure – Type of a Image Marker**

**Purpose –** Ensure a image marker is of the correct type (ImageMarker).

**Special Requirements –** None

**TclTest –** RBC.graph.marker.4.4

**Test Procedure – Type of a Polygon Marker**

**Purpose –** Ensure a polygon marker is of the correct type (PolygonMarker).

**Special Requirements –** None

**TclTest –** RBC.graph.marker.4.5

**Test Procedure – Type of a Window Marker**

**Purpose –** Ensure a window marker is of the correct type (WindowMarker).

**Special Requirements –** None

**TclTest –** RBC.graph.marker.4.6

**Names**

**Test Procedure – Marker Names: No Pattern**

**Purpose –** Ensure the marker names command works correctly when no pattern is given.

**Special Requirements –** None

**TclTest –** RBC.graph.marker.5.1

**Test Procedure – Marker Names: Exact Pattern**

**Purpose –** Ensure the marker names command works correctly when an exact pattern is given.

**Special Requirements –** None

**TclTest –** RBC.graph.marker.5.2

**Test Procedure – Marker Names: Wildcard Pattern**

**Purpose –** Ensure the marker names command works correctly when a wildcard pattern is given.

**Special Requirements –** None

**TclTest –** RBC.graph.marker.5.3

**Test Procedure – Marker Names: Incorrect Pattern**

**Purpose –** Ensure the marker names command works correctly when an incorrect pattern is given.

**Special Requirements –** None

**TclTest –** RBC.graph.marker.5.4

**Configure**

***Test Case 6***

**Test Procedure – Configure Coords**

**Purpose –** Ensure configuring coords changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.6.1

**Test Procedure – Configure Element**

**Purpose –** Ensure configuring element changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.6.2

**Test Procedure – Configure Hide**

**Purpose –** Ensure configuring hide changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.6.3

**Test Procedure – Configure Under**

**Purpose –** Ensure configuring under changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.6.4

**Test Procedure – Configure XOffset**

**Purpose –** Ensure configuring xoffset changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.6.5

**Test Procedure – Configure YOffset**

**Purpose –** Ensure configuring yoffset changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.6.6

**Test Procedure – Configure Mapx**

**Purpose –** Ensure configuring mapx changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.6.7

**Test Procedure – Configure Mapy**

**Purpose –** Ensure configuring mapy changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.6.8

***Test Case 7***

**Test Procedure – Configure Anchor**

**Purpose –** Ensure configuring anchor changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.7.1

**Test Procedure – Configure Background**

**Purpose –** Ensure configuring background changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.7.2

**Test Procedure – Configure Font**

**Purpose –** Ensure configuring font changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.7.3

**Test Procedure – Configure Fill**

**Purpose –** Ensure configuring fill changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.7.4

**Test Procedure – Configure Foreground**

**Purpose –** Ensure configuring foreground changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.7.5

**Test Procedure – Configure Justify**

**Purpose –** Ensure configuring justify changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.7.6

**Test Procedure – Configure Outline**

**Purpose –** Ensure configuring outline changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.7.7

**Test Procedure – Configure Padx**

**Purpose –** Ensure configuring padx changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.7.8

**Test Procedure – Configure Pady**

**Purpose –** Ensure configuring pady changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.7.9

**Test Procedure – Configure Rotate**

**Purpose –** Ensure configuring rotate changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.7.10

**Test Procedure – Configure Text**

**Purpose –** Ensure configuring text changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.7.11

***Test Case 8***

**Test Procedure – Configure Dashes**

**Purpose –** Ensure configuring dashes changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.8.1

**Test Procedure – Configure Fill**

**Purpose –** Ensure configuring fill changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.8.2

**Test Procedure – Configure Linewidth**

**Purpose –** Ensure configuring linewidth changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.8.3

**Test Procedure – Configure Outline**

**Purpose –** Ensure configuring outline changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.8.4

**Test Procedure – Configure Xor**

**Purpose –** Ensure configuring xor changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.8.5

***Test Case 9***

**Test Procedure – Configure Background**

**Purpose –** Ensure configuring background changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.9.1

**Test Procedure – Configure Bitmap**

**Purpose –** Ensure configuring bitmap changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.9.2

**Test Procedure – Configure Fill**

**Purpose –** Ensure configuring fill changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.9.3

**Test Procedure – Configure Foreground**

**Purpose –** Ensure configuring foreground changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.9.4

**Test Procedure – Configure Outline**

**Purpose –** Ensure configuring outline changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.9.5

**Test Procedure – Configure Rotate**

**Purpose –** Ensure configuring rotate changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.9.6

***Test Case 10***

**Test Procedure – Configure Anchor**

**Purpose –** Ensure configuring Anchor changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.10.1

**Test Procedure – Configure Image**

**Purpose –** Ensure configuring image changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.10.2

***Test Case 11***

**Test Procedure – Configure Dashes**

**Purpose –** Ensure configuring dashes changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.11.1

**Test Procedure – Configure Fill**

**Purpose –** Ensure configuring fill changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.11.2

**Test Procedure – Configure Linewidth**

**Purpose –** Ensure configuring linewidth changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.11.3

**Test Procedure – Configure Outline**

**Purpose –** Ensure configuring outline changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.11.4

**Test Procedure – Configure Stipple**

**Purpose –** Ensure configuring stipple changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.11.5

***Test Case 12***

**Test Procedure – Configure Anchor**

**Purpose –** Ensure configuring anchor changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.12.1

**Test Procedure – Configure Height**

**Purpose –** Ensure configuring height changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.12.2

**Test Procedure – Configure Width**

**Purpose –** Ensure configuring width changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.12.3

**Test Procedure – Configure Window**

**Purpose –** Ensure configuring window changes the corresponding option value pair

**Special Requirements –** None

**TclTest –** RBC.graph.marker.12.4

# Manual Tests

**Test Case 1**

**Test Procedure – Graph Text Marker Appears**

**Purpose –** Ensure creating a text marker actually creates the marker on the graph.

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.1.2.Setup” Tcl command
* Pre-Condition – There is a blank graph on the Tk window
* Body
  1. Run “graph.marker::RBC.graph.marker.1.2.Body” Tcl command
* Post-Condition - A text marker appears on the screen
* Cleanup - Run “graph.marker::RBC.graph.marker.1.2.Cleanup” command

**Test Procedure – Graph Line Marker Appears**

**Purpose –** Ensure creating a line marker actually creates the marker on the graph.

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.1.3.Setup” Tcl command
* Pre-Condition – There is a blank graph on the Tk window
* Body

1. Run “graph.marker::RBC.graph.marker.1.3.Body” Tcl command

* Post-Condition - A line marker appears on the screen from the middle to upper right corner
* Cleanup - Run “graph.marker::RBC.graph.marker.1.3.Cleanup” command

**Test Procedure – Graph Bitmap Marker Appears**

**Purpose –** Ensure creating a bitmap marker actually creates the marker on the graph.

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.1.4.Setup” Tcl command
* Pre-Condition – There is a blank graph on the Tk window
* Body

1. Run “graph.marker::RBC.graph.marker.1.4.Body” Tcl command

* Post-Condition - A bitmap image appears on the screen
* Cleanup - Run “graph.marker::RBC.graph.marker.1.4.Cleanup” command

**Test Procedure – Graph Image Marker Appears**

**Purpose –** Ensure creating a image marker actually creates the marker on the graph.

**Special Requirements –** The greenback.xbm file is in the interpreter directory

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.1.5.Setup” Tcl command
* Pre-Condition – There is a blank graph on the Tk window
* Body

1. Run “graph.marker::RBC.graph.marker.1.5.Body” Tcl command

* Post-Condition – An image appears on the screen
* Cleanup - Run “graph.marker::RBC.graph.marker.1.5.Cleanup” command

**Test Procedure – Graph Polygon Marker Appears**

**Purpose –** Ensure creating a polygon marker actually creates the marker on the graph.

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.1.6.Setup” Tcl command
* Pre-Condition – There is a blank graph on the Tk window
* Body

1. Run “graph.marker::RBC.graph.marker.1.6.Body” Tcl command

* Post-Condition - A triangle in the upper right appears on the screen
* Cleanup - Run “graph.marker::RBC.graph.marker.1.6.Cleanup” command

**Test Procedure – Graph Window Marker Appears**

**Purpose –** Ensure creating a window marker actually creates the marker on the graph.

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.1.7.Setup” Tcl command
* Pre-Condition – There is a blank graph on the Tk window
* Body

1. Run “graph.marker::RBC.graph.marker.1.7.Body” Tcl command

* Post-Condition – A button appears on the bottom of the graph
* Cleanup - Run “graph.marker::RBC.graph.marker.1.7.Cleanup” command

**Test Case 2 (Destroy)**

**Test Procedure – Delete Single Marker Removes from Graph**

**Purpose –** Ensure deleting a text marker actually removes the marker on the graph.

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.2.3.Setup” Tcl command
* Pre-Condition – There is a text marker on the graph
* Body

1. Run “graph.marker::RBC.graph.marker.2.3.Body” Tcl command

* Post-Condition – The text marker is gone and a blank graph is showing
* Cleanup - Run “graph.marker::RBC.graph.marker.2.3.Cleanup” command

**Test Procedure – Delete Multiple Marker Removes from Graph**

**Purpose –** Ensure deleting multiple markers actually remove them from the graph.

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.2.4.Setup” Tcl command
* Pre-Condition – There is a text marker on the graph
* Body

1. Run “graph.marker::RBC.graph.marker.2.4.Body” Tcl command

* Post-Condition – The text marker is gone and a blank graph is showing
* Cleanup - Run “graph.marker::RBC.graph.marker.2.4.Cleanup” command

**Test Case 6 (Configure)**

**Test Procedure – Displaying Configure Coords**

**Purpose –** Ensure coords changes position on screen.

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.6.9.Setup” Tcl command
* Pre-Condition – There is a text marker in the center of the screen
* Body

1. Run “graph.marker::RBC.graph.marker.6.9.Body” Tcl command

* Post-Condition – The text marker is lower than the it was previously

Cleanup - Run “graph.marker::RBC.graph.marker.6.9.Cleanup” command

**Test Procedure – Displaying Configure Element**

**Purpose –** Ensure element links to the marker.

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.6.10.Setup” Tcl command
* Pre-Condition – There is a text marker on the graph
* Body

1. Run “graph.marker::RBC.graph.marker.6.10.Body” Tcl command

* Post-Condition – The text marker is gone and a blank graph is showing

Cleanup - Run “graph.marker::RBC.graph.marker.6.10.Cleanup” command

**Test Procedure – Displaying Configure Hide**

**Purpose –** Ensure hide removes the marker from view.

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.6.11.Setup” Tcl command
* Pre-Condition – There is a text marker on the graph
* Body

1. Run “graph.marker::RBC.graph.marker.6.11.Body” Tcl command

* Post-Condition – The text marker is gone and a blank graph is showing

Cleanup - Run “graph.marker::RBC.graph.marker.6.11.Cleanup” command

**Test Procedure – Displaying Configure Under**

**Purpose –** Ensure under draws the marker below data elements.

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.6.12.Setup” Tcl command
* Pre-Condition – The text marker is drawn above data elements.
* Body

1. Run “graph.marker::RBC.graph.marker.6.12.Body” Tcl command

* Post-Condition – The data elements are now drawn above the marker

Cleanup - Run “graph.marker::RBC.graph.marker.6.12.Cleanup” command

**Test Procedure – Displaying Configure XOffset**

**Purpose –** Ensure xoffset draws the marker at a horizontal offset

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.6.13.Setup” Tcl command
* Pre-Condition – There is a text marker in the center of the graph
* Body

1. Run “graph.marker::RBC.graph.marker.6.13.Body” Tcl command

* Post-Condition – The text marker is shifted horizontally to the right

Cleanup - Run “graph.marker::RBC.graph.marker.6.13.Cleanup” command

**Test Procedure – Displaying Configure YOffset**

**Purpose –** Ensure yoffset draws the marker at a vertical offset.

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.6.14.Setup” Tcl command
* Pre-Condition – There is a text marker in the center of the graph
* Body

1. Run “graph.marker::RBC.graph.marker.6.14.Body” Tcl command

* Post-Condition – The text marker is shifted down vertically

Cleanup - Run “graph.marker::RBC.graph.marker.6.14.Cleanup” command

***Test Case 7***

**Test Procedure – Displaying Configure Anchor**

**Purpose –** Ensure anchor changes on screen

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.7.12.Setup” Tcl command
* Pre-Condition – There is a text marker in the center of the graph
* Body

1. Run “graph.marker::RBC.graph.marker.7.12.Body” Tcl command

* Post-Condition – The text marker is shifted down vertically to its anchor

Cleanup - Run “graph.marker::RBC.graph.marker.7.12.Cleanup” command

**Test Procedure – Displaying Configure Background**

**Purpose –** Ensure background changes on screen

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.7.13.Setup” Tcl command
* Pre-Condition – There is a text marker with a blank background
* Body

1. Run “graph.marker::RBC.graph.marker.7.13.Body” Tcl command

* Post-Condition – The text marker has a red background

Cleanup - Run “graph.marker::RBC.graph.marker.7.13.Cleanup” command

**Test Procedure – Displaying Configure Font**

**Purpose –** Ensure font changes on screen

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.7.14.Setup” Tcl command
* Pre-Condition – There is a text marker has the default font
* Body

1. Run “graph.marker::RBC.graph.marker.7.14.Body” Tcl command

* Post-Condition – The text marker’s font has changed to be huge

Cleanup - Run “graph.marker::RBC.graph.marker.7.14.Cleanup” command

**Test Procedure – Displaying Configure Fill**

**Purpose –** Ensure fill changes on screen

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.7.15.Setup” Tcl command
* Pre-Condition – There is a text marker with a blank background
* Body

1. Run “graph.marker::RBC.graph.marker.7.15.Body” Tcl command

* Post-Condition – The text marker has a red background

Cleanup - Run “graph.marker::RBC.graph.marker.7.15.Cleanup” command

**Test Procedure – Displaying Configure Foreground**

**Purpose –** Ensure foreground changes on screen

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.7.16.Setup” Tcl command
* Pre-Condition – There is a text marker with a blank foreground
* Body

1. Run “graph.marker::RBC.graph.marker.7.16.Body” Tcl command

* Post-Condition – The text marker has a red foreground

Cleanup - Run “graph.marker::RBC.graph.marker.7.16.Cleanup” command

**Test Procedure – Displaying Configure Justify**

**Purpose –** Ensure justify changes on screen

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.7.17.Setup” Tcl command
* Pre-Condition – There is a text marker in the center of the graph
* Body

1. Run “graph.marker::RBC.graph.marker.7.17.Body” Tcl command

* Post-Condition – The text marker’s text now is left justified

Cleanup - Run “graph.marker::RBC.graph.marker.7.17.Cleanup” command

**Test Procedure – Displaying Configure Outline**

**Purpose –** Ensure outline changes on screen

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.7.18.Setup” Tcl command
* Pre-Condition – There is a text marker with a blank foreground
* Body

1. Run “graph.marker::RBC.graph.marker.7.18.Body” Tcl command

* Post-Condition – The text marker has a red foreground

Cleanup - Run “graph.marker::RBC.graph.marker.7.18.Cleanup” command

**Test Procedure – Displaying Configure Padx**

**Purpose –** Ensure padx changes on screen

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.7.19.Setup” Tcl command
* Pre-Condition – There is a text marker with an even horizontal padding
* Body

1. Run “graph.marker::RBC.graph.marker.7.19.Body” Tcl command

* Post-Condition – The text marker’s horizontal padding is increased and uneven

Cleanup - Run “graph.marker::RBC.graph.marker.7.19.Cleanup” command

**Test Procedure – Displaying Configure Pady**

**Purpose –** Ensure pady changes on screen

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.7.20.Setup” Tcl command
* Pre-Condition – There is a text marker with an even vertical padding
* Body

1. Run “graph.marker::RBC.graph.marker.7.20.Body” Tcl command

* Post-Condition – The text marker’s vertical padding is increased and uneven

Cleanup - Run “graph.marker::RBC.graph.marker.7.20.Cleanup” command

**Test Procedure – Displaying Configure Rotate**

**Purpose –** Ensure rotate changes on screen

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.7.21.Setup” Tcl command
* Pre-Condition – There is a text marker says ‘Marker 1’
* Body

1. Run “graph.marker::RBC.graph.marker.7.21.Body” Tcl command

* Post-Condition – The text marker says ‘Text’

Cleanup - Run “graph.marker::RBC.graph.marker.7.21.Cleanup” command

**Test Procedure – Displaying Configure Text**

**Purpose –** Ensure text changes on screen

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.7.22.Setup” Tcl command
* Pre-Condition – There is a text marker in the center of the graph
* Body

1. Run “graph.marker::RBC.graph.marker.7.22.Body” Tcl command

* Post-Condition – The text marker is shifted down vertically

Cleanup - Run “graph.marker::RBC.graph.marker.7.22.Cleanup” command

**Test Procedure – Displaying Configure Shadow**

**Purpose –** Ensure Shadow changes on screen

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.7.23.Setup” Tcl command
* Pre-Condition – There is a text marker in the center of the graph
* Body

1. Run “graph.marker::RBC.graph.marker.7.23.Body” Tcl command

* Post-Condition – The text marker has a red shadow behind it

Cleanup - Run “graph.marker::RBC.graph.marker.7.23.Cleanup” command

***Test Case 8***

**Test Procedure – Displaying Configure Dashes**

**Purpose –** Ensure dashes changes on screen

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.8.6.Setup” Tcl command
* Pre-Condition – There is a line marker in the center of the graph
* Body

1. Run “graph.marker::RBC.graph.marker.8.6.Body” Tcl command

* Post-Condition – The line marker changes to a dashed pattern

Cleanup - Run “graph.marker::RBC.graph.marker.8.6.Cleanup” command

**Test Procedure – Displaying Configure Fill (No effect)**

**Purpose –** Ensure fill changes on screen

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.8.7.Setup” Tcl command
* Pre-Condition – There is a line marker in the center of the graph
* Body

1. Run “graph.marker::RBC.graph.marker.8.7.Body” Tcl command

* Post-Condition – No effect

Cleanup - Run “graph.marker::RBC.graph.marker.8.7.Cleanup” command

**Test Procedure – Displaying Configure Linewidth**

**Purpose –** Ensure linewidth changes on screen

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.8.8.Setup” Tcl command
* Pre-Condition – There is a line marker in the center of the graph
* Body

1. Run “graph.marker::RBC.graph.marker.8.8.Body” Tcl command

* Post-Condition – The line marker changes to be thicker

Cleanup - Run “graph.marker::RBC.graph.marker.8.8.Cleanup” command

**Test Procedure – Displaying Configure Outline**

**Purpose –** Ensure outline changes on screen

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.8.9.Setup” Tcl command
* Pre-Condition – There is a line marker in the center of the graph
* Body

1. Run “graph.marker::RBC.graph.marker.8.9.Body” Tcl command

* Post-Condition – The line changes color to red

Cleanup - Run “graph.marker::RBC.graph.marker.8.9.Cleanup” command

**Test Procedure – Displaying Configure Outline**

**Purpose –** Ensure outline changes on screen

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.8.9.Setup” Tcl command
* Pre-Condition – There is a line marker in the center of the graph
* Body

1. Run “graph.marker::RBC.graph.marker.8.9.Body” Tcl command

* Post-Condition – The line changes color to red

Cleanup - Run “graph.marker::RBC.graph.marker.8.9.Cleanup” command

***Test Case 9***

**Test Procedure – Displaying Configure Background**

**Purpose –** Ensure background changes on screen

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.9.7.Setup” Tcl command
* Pre-Condition – A bitmap of a dollar bill is in the lower left of a graph
* Body

1. Run “graph.marker::RBC.graph.marker.9.7.Body” Tcl command

* Post-Condition – The back of the bitmap changes color to red

Cleanup - Run “graph.marker::RBC.graph.marker.9.7.Cleanup” command

**Test Procedure – Displaying Configure Bitmap**

**Purpose –** Ensure bitmap changes on screen

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.9.8.Setup” Tcl command
* Pre-Condition – A blank graph window appears
* Body

1. Run “graph.marker::RBC.graph.marker.9.8.Body” Tcl command

* Post-Condition – A bitmap of a dollar bill is in the lower left of a graph

Cleanup - Run “graph.marker::RBC.graph.marker.9.8.Cleanup” command

**Test Procedure – Displaying Configure Fill**

**Purpose –** Ensure fill changes on screen

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.9.9.Setup” Tcl command
* Pre-Condition – A bitmap of a dollar bill is in the lower left of a graph
* Body

1. Run “graph.marker::RBC.graph.marker.9.9.Body” Tcl command

* Post-Condition – The back of the bitmap changes color to red

Cleanup - Run “graph.marker::RBC.graph.marker.9.9.Cleanup” command

**Test Procedure – Displaying Configure Foreground**

**Purpose –** Ensure foreground changes on screen

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.9.10.Setup” Tcl command
* Pre-Condition – A bitmap of a dollar bill is in the lower left of a graph
* Body

1. Run “graph.marker::RBC.graph.marker.9.10.Body” Tcl command

* Post-Condition – The front writing of the bitmap changes color to red

Cleanup - Run “graph.marker::RBC.graph.marker.9.10.Cleanup” command

**Test Procedure – Displaying Configure Outline**

**Purpose –** Ensure outline changes on screen

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.9.11.Setup” Tcl command
* Pre-Condition – A bitmap of a dollar bill is in the lower left of a graph
* Body

1. Run “graph.marker::RBC.graph.marker.9.11.Body” Tcl command

* Post-Condition – The front writing of the bitmap changes color to red

Cleanup - Run “graph.marker::RBC.graph.marker.9.11.Cleanup” command

**Test Procedure – Displaying Configure Rotate**

**Purpose –** Ensure rotate changes on screen

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.9.12.Setup” Tcl command
* Pre-Condition – A bitmap of a dollar bill is in the lower left of a graph
* Body

1. Run “graph.marker::RBC.graph.marker.9.12.Body” Tcl command

* Post-Condition – The bitmap rotates so the right side is facing towards the top right

Cleanup - Run “graph.marker::RBC.graph.marker.9.12.Cleanup” command

**Test Procedure – Displaying Configure Anchor**

**Purpose –** Ensure anchor changes on screen

**Special Requirements –** none

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.9.13.Setup” Tcl command
* Pre-Condition – A bitmap of a dollar bill is in the lower left of a graph
* Body

1. Run “graph.marker::RBC.graph.marker.9.13.Body” Tcl command

* Post-Condition – The bitmap lowers from its previous position

Cleanup - Run “graph.marker::RBC.graph.marker.9.13.Cleanup” command

***Test Case 10***

**Test Procedure – Displaying Configure Anchor**

**Purpose –** Ensure anchor changes on screen

**Special Requirements –** buckskin.gif needs to be in executing directory

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.10.3.Setup” Tcl command
* Pre-Condition – An image of a texture is in the lower right of a graph
* Body

1. Run “graph.marker::RBC.graph.marker.10.3.Body” Tcl command

* Post-Condition – The image lowers from its previous position

Cleanup - Run “graph.marker::RBC.graph.marker.10.3.Cleanup” command

**Test Procedure – Displaying Configure Image**

**Purpose –** Ensure image changes on screen

**Special Requirements –** buckskin.gif and stopsign.gif need to be in the executing directory

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.10.4.Setup” Tcl command
* Pre-Condition – An image of a texture is in the lower right of a graph
* Body

1. Run “graph.marker::RBC.graph.marker.10.4.Body” Tcl command

* Post-Condition – The image changes to one of a stop sign

Cleanup - Run “graph.marker::RBC.graph.marker.10.4.Cleanup” command

***Test Case 11***

**Test Procedure – Displaying Configure Dashes**

**Purpose –** Ensure dashes changes on screen

**Special Requirements –** None

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.11.6.Setup” Tcl command
* Pre-Condition – A triangle is drawn across the upper left of a graph
* Body

1. Run “graph.marker::RBC.graph.marker.11.6.Body” Tcl command

* Post-Condition – The triangle lines have a dashed patterns

Cleanup - Run “graph.marker::RBC.graph.marker.11.6.Cleanup” command

**Test Procedure – Displaying Configure Fill**

**Purpose –** Ensure fill changes on screen

**Special Requirements –** None

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.11.7.Setup” Tcl command
* Pre-Condition – A triangle is drawn across the upper left of a graph
* Body

1. Run “graph.marker::RBC.graph.marker.11.7.Body” Tcl command

* Post-Condition – The triangle is filled with blue

Cleanup - Run “graph.marker::RBC.graph.marker.11.7.Cleanup” command

**Test Procedure – Displaying Configure Linewidth**

**Purpose –** Ensure linewdith changes on screen

**Special Requirements –** None

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.11.8.Setup” Tcl command
* Pre-Condition – A triangle is drawn across the upper left of a graph
* Body

1. Run “graph.marker::RBC.graph.marker.11.8.Body” Tcl command

* Post-Condition – The triangle lines increase in width

Cleanup - Run “graph.marker::RBC.graph.marker.11.8.Cleanup” command

**Test Procedure – Displaying Configure Outline**

**Purpose –** Ensure outline changes on screen

**Special Requirements –** None

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.11.9.Setup” Tcl command
* Pre-Condition – A triangle is drawn across the upper left of a graph
* Body

1. Run “graph.marker::RBC.graph.marker.11.9.Body” Tcl command

* Post-Condition – The triangle lines are changed to a green color

Cleanup - Run “graph.marker::RBC.graph.marker.11.9.Cleanup” command

**Test Procedure – Displaying Configure Stipple**

**Purpose –** Ensure stipple changes on screen

**Special Requirements –** greenback.xbm is in the executing directory

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.11.10.Setup” Tcl command
* Pre-Condition – A triangle is drawn across the upper left of a graph
* Body

1. Run “graph.marker::RBC.graph.marker.11.10.Body” Tcl command

* Post-Condition – The triangle has a fill of a dollar bill image.

Cleanup - Run “graph.marker::RBC.graph.marker.11.10.Cleanup” command

***Test Case 12***

**Test Procedure – Displaying Configure Anchor**

**Purpose –** Ensure anchor changes on screen

**Special Requirements –** None

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.12.5.Setup” Tcl command
* Pre-Condition – A button with Button text is in the lower right of the graph
* Body

1. Run “graph.marker::RBC.graph.marker.12.5.Body” Tcl command

* Post-Condition – The button is lowered from its previous position

Cleanup - Run “graph.marker::RBC.graph.marker.12.5.Cleanup” command

**Test Procedure – Displaying Configure Height**

**Purpose –** Ensure height changes on screen

**Special Requirements –** None

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.12.6.Setup” Tcl command
* Pre-Condition – A button with Button text is in the lower right of the graph
* Body

1. Run “graph.marker::RBC.graph.marker.12.6.Body” Tcl command

* Post-Condition – The button shrinks in height

Cleanup - Run “graph.marker::RBC.graph.marker.12.6.Cleanup” command

**Test Procedure – Displaying Configure Width**

**Purpose –** Ensure width changes on screen

**Special Requirements –** None

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.12.7.Setup” Tcl command
* Pre-Condition – A button with Button text is in the lower right of the graph
* Body

1. Run “graph.marker::RBC.graph.marker.12.7.Body” Tcl command

* Post-Condition – The button shrinks in width

Cleanup - Run “graph.marker::RBC.graph.marker.12.7.Cleanup” command

**Test Procedure – Displaying Configure Window**

**Purpose –** Ensure window changes on screen

**Special Requirements –** None

**Procedural Steps**

* Setup –Run the “graph.marker::RBC.graph.marker.12.8.Setup” Tcl command
* Pre-Condition – A button with Button text is in the lower right of the graph
* Body

1. Run “graph.marker::RBC.graph.marker.12.8.Body” Tcl command

* Post-Condition – The button changes to a new button with text “test”.

Cleanup - Run “graph.marker::RBC.graph.marker.12.8.Cleanup” command

**Bind**

***Test Case 13***

**Test Procedure – Bind actions execute**

**Purpose –** Ensure bind actions execute

**Special Requirements –** None

**Procedural Steps**

* Setup –Run the “graph.marker:: RBC.graph.marker.13.6.Setup” Tcl command
* Pre-Condition – A Text marker appears in the middle of a plot
* Body

1. Run “graph.marker::RBC.graph.marker.13.6.Body” Tcl command
2. Double click the text marker

* Post-Condition – The double click should output onto console the word “test”

Cleanup - Run “graph.marker::RBC.graph.marker.13.6.Cleanup” command