

## GRNsight Client Side Testing Overview

Last Updated: 2018-04-25

Included in Testing Protocol	GRNsight Option	User Action	Result
NO	Load Graph	None	GRNsight should have no graph in the viewport
NO	Load Graph	Dropdown Menu: File -> Open	GRNsight should lay out a network graph from the Excel workbook if there are no errors in the file
NO	Load Graph	Dropdown Menu: File -> Import SIF	GRNsight should lay out a network graph from the SIF file if there are no errors in the file
NO	Load Graph	Dropdown Menu: File -> Import GraphML	GRNsight should lay out a network graph from the GraphML file if there are no errors in the file
NO	Load Graph	Dropdown Menu: Demo -> Demo #1	GRNsight should lay out an unweighted network graph from Demo #1
NO	Load Graph	Dropdown Menu: Demo -> Demo #2	GRNsight should lay out a weighted network graph from Demo #2
NO	Load Graph	Dropdown Menu: Demo -> Demo #3	GRNsight should lay out an unweighted network graph from Demo #3
NO	Load Graph	Dropdown Menu: Demo -> Demo #4	GRNsight should lay out a weighted network graph from Demo #4
NO	Dropdown Menu: File -> Reload	Select	The graph should center, zoom to 100%, and reapply the force graph parameters
NO	Dropdown Menu: File -> Export Data	Select "To Unweighted SIF"	GRNsight should export an unweighted SIF file from the graph currently loaded
NO	Dropdown Menu: File -> Export Data	Select "To Weighted SIF"	GRNsight should export a weighted SIF file from the graph currently loaded
NO	Dropdown Menu: File -> Export Data	Select "To Unweighted GraphML"	GRNsight should export an unweighted GraphML file from the graph currently loaded
NO	Dropdown Menu: File -> Export Data	Select "To Weighted GraphML"	GRNsight should export a weighted GraphML file from the graph currently loaded
NO	Dropdown Menu: File -> Print	Select	GRNsight should open the Print Dialogue Box
NO	Dropdown Menu: Help	Select "Getting Started"	GRNsight should open the GRNsight documentation page
NO	Dropdown Menu: Help	Select "GRNsight Wiki"	GRNsight should open the GRNsight wiki page
NO	Dropdown Menu: Help	Select "About GRNsight"	GRNsight should open the About GRNsight page
NO	Sidebar Menu: Force Graph Parameter Sliders	Keep at Default Values	The graph should be laid out according to the default values of the force graph parameter sliders
NO	Sidebar Menu: Force Graph Parameter Sliders	Decrease Link Distance	The graph's edges should visibly decrease in length if Lock Force Graph Parameters is unchecked
NO	Sidebar Menu: Force Graph Parameter Sliders	Increase Link Distance	The graph's edges should visibly increase in length if Lock Force Graph Parameters is unchecked
NO	Sidebar Menu: Force Graph Parameter Sliders	Increase Charge	The graph's nodes should visibly increase attraction to each other if Lock Force Graph Parameters is unchecked
NO	Sidebar Menu: Force Graph Parameter Sliders	Decrease Charge	The graph's nodes should visibly decrease attraction to each other if Lock Force Graph Parameters is unchecked
NO	Sidebar Menu: Lock Force Graph Parameters Checkbox	Check	The Force Graph Parameter sliders should be disabled.
NO	Sidebar Menu: Lock Force Graph Parameters Checkbox	Uncheck	The Force Graph Parameter sliders should be enabled.
NO	Sidebar Menu: Reset Force Graph Parameters Button	Click	The Force Graph Parameter sliders should revert to the default values, if Lock Force Graph Parameters is unchecked.
NO	Sidebar Menu: Undo Reset Button	Click	The Force Graph Parameter sliders should return to the values they had before the Undo Reset button (or menu item) was selected, if the Undo Reset button is enabled.
NO	Sidebar Menu: Restrict Graph to Viewport Checkbox	Check	The graph bounding box should always be contained within the viewport.
NO	Sidebar Menu: Restrict Graph to Viewport Checkbox	Uncheck	The graph bounding box should be allowed to extend past the viewport
NO	Sidebar Menu: Viewport Size	Keep as Detected	Upon loading or reloading the GRNsight webpage, the viewport size should be automatically detected and set to small, medium, or large, based on the size of the browser window.
NO	Sidebar Menu: Viewport Size	Select "Small"	The viewport size should be set to small
NO	Sidebar Menu: Viewport Size	Select "Medium"	The viewport size should be set to medium
NO	Sidebar Menu: Viewport Size	Select "Large"	The viewport size should be set to large
NO	Sidebar Menu: Viewport Size	Select "Fit to Window"	The viewport size should automatically be set to the size of the browser window
NO	Dropdown Menu: Edge	Select "Format edges based on optimized weight parameters"	GRNsight should format edges based on optimized weight parameters
NO	Dropdown Menu: Edge	Select "Default to black edges with regular arrowheads"	GRNsight should default to black edges with regular arrowheads
NO	Sidebar Menu: Hide/Show Edge Weights	Select "Show With Mouse Over"	A single edge weight should display when user mouses over a single edge.
NO	Sidebar Menu: Hide/Show Edge Weights	Select "Always Show Edge Weights"	All edge weights should always be visible.
NO	Sidebar Menu: Hide/Show Edge Weights	Select "Never Show Edge Weights"	No edge weights should be visible.
NO	Dropdown Menu: Edge -> Hide/Show Edge Weights	Check "Show With Mouse Over"	A single edge weight should display when user mouses over a single edge.
NO	Dropdown Menu: Edge ->	Check "Always Show Edge	All edge weights should always be visible.

NO	Hide/Show Edge Weights Dropdown Menu: Edge -> Hide/Show Edge Weights	Weights" Check "Never Show Edge Weights"	No edge weights should be visible.
NO	Sidebar Menu: Edge Weight Normalization Factor	Enter a Number in the Box and Click "Set Factor" button	The graph should reload with the new normalization factor applied to its edge weight thicknesses
NO	Dropdown Menu: Edge -> Edge Weight Normalization Factor	Enter a Number in the Box and Press Enter	The graph should reload with the new normalization factor applied to its edge weight thicknesses
NO	Sidebar Menu: Reset Factor Button	Click	The graph should reset to its default normalization factor and reload the graph
NO	Dropdown Menu: Edge -> Reset Edge Weight Normalization	Click	The graph should reset to its default normalization factor and reload the graph
NO	Sidebar Menu: Gray Threshold Slider	Change the Grey Threshold Value	The graph should reload, with edges that fall below the threshold value colored gray
NO	Dropdown Menu: Edge -> Gray Threshold Input Box	Change the Grey Threshold Value and Press Enter	The graph should reload, with edges that fall below the threshold value colored gray
NO	Sidebar Menu: Show Grey Edges as Dashed Checkbox	Uncheck	The graph should show gray lines as solid lines
NO	Sidebar Menu: Show Grey Edges as Dashed Checkbox	Check	The graph should show gray lines as dashed lines
NO	Dropdown Menu: Edge -> Show Grey Edges as Dashed	Uncheck	The graph should show gray lines as solid lines
NO	Dropdown Menu: Edge -> Show Grey Edges as Dashed	Check	The graph should show gray lines as dashed lines
NO	Viewport Menu: D-Pad Control	Click Right Arrow	The graph should shift to the left, if "Restrict Graph to Viewport" is Unchecked.
NO	Viewport Menu: D-Pad Control	Click Left Arrow	The graph should shift to the right, if "Restrict Graph to Viewport" is Unchecked.
NO	Viewport Menu: D-Pad Control	Click Up Arrow	The graph should shift down, if "Restrict Graph to Viewport" is Unchecked.
NO	Viewport Menu: D-Pad Control	Click Down Arrow	The graph should shift up, if "Restrict Graph to Viewport" is Unchecked.
NO	Viewport Menu: D-Pad Control	Click Center Button	The graph should move to the center of the bounding box (note that it is not the same thing as the viewport, if "Restrict Graph to Viewport" is Unchecked.
NO	Viewport Menu: Zoom Slider	Increase Zoom Level	The graph should zoom in (get larger)
NO	Viewport Menu: Zoom Slider	Decrease Zoom Level	The graph should zoom out (get smaller)
NO	Sidebar Menu: Top Dataset	Keep Default Selection	The top half of each node should be colored using data from the first expression dataset detected in the input workbook, if expression data sheets are present in input workbook
NO	Sidebar Menu: Top Dataset	Select Top Dataset from Dropdown List	The top half of each node should be colored using data from the selected dataset, if expression data sheets are present in input workbook
NO	Dropdown Menu: Node -> Select Top Dataset	Keep Default Selection	The top half of each node should be colored using data from the first expression dataset detected in the input workbook, if expression data sheets are present in input workbook
NO	Dropdown Menu: Node -> Select Top Dataset	Check New Top Dataset from Dropdown List	The top half of each node should be colored using data from the selected dataset, if expression data sheets are present in input workbook
NO	Sidebar Menu: Bottom Dataset	Keep Default Selection	The bottom half of each node should be colored using data from the same dataset as the top dataset, if expression data sheets are present in input workbook
NO	Sidebar Menu: Bottom Dataset	Select Bottom Dataset from Dropdown List	The bottom half of each node should be colored using data from the selected dataset, if expression data sheets are present in input workbook
NO	Dropdown Menu: Node -> Select Bottom Dataset	Keep Default Selection	The bottom half of each node should be colored using data from the same dataset as the top dataset, if expression data sheets are present in input workbook
NO	Dropdown Menu: Node -> Select Bottom Dataset	Check New Bottom Dataset from Dropdown List	The bottom half of each node should be colored using data from the selected dataset, if expression data sheets are present in input workbook
NO	Sidebar Menu: Log Fold Change Max Value	Keep Default Value	The node coloring visualization's color intensity should default to having a Log Fold Change Max Value of 3, if expression data sheets are present in input workbook
NO	Sidebar Menu: Log Fold Change Max Value	Increase Log Fold Change Max Value	The node coloring visualization's color intensity should decrease, if expression data sheets are present in input workbook
NO	Sidebar Menu: Log Fold Change Max Value	Decrease Log Fold Change Max Value	The node coloring visualization's color intensity should increase, if expression data sheets are present in input workbook
NO	Dropdown Menu: Node -> Log Fold Change Max Value	Keep Default Value	The node coloring visualization's color intensity should default to having a Log Fold Change Max Value of 3, if expression data sheets are present in input workbook
NO	Dropdown Menu: Node -> Log Fold Change Max Value	Increase Log Fold Change Max Value	The node coloring visualization's color intensity should decrease, if expression data sheets are present in input workbook
NO	Dropdown Menu: Node -> Log Fold Change Max Value	Decrease Log Fold Change Max Value	The node coloring visualization's color intensity should increase, if expression data sheets are present in input workbook
YES	Sidebar Menu: Average Replicates Values (Top Dataset)	Check	GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
YES	Sidebar Menu: Average Replicates Values (Top Dataset)	Uncheck	GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
YES	Dropdown Menu: Node -> Average Replicates Values (Top Dataset)	Check	GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
YES	Dropdown Menu: Node -> Average Replicates Values (Top Dataset)	Uncheck	GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
YES	Sidebar Menu: Average Replicates Values (Bottom Dataset)	Check	GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
YES	Sidebar Menu: Average Replicates Values (Bottom Dataset)	Uncheck	GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook

	Dataset)		
YES	Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset)	Check	GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
YES	Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset)	Uncheck	GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
YES	Sidebar Menu: Node Coloring Toggle Button	Click	Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
YES	Dropdown Menu: Node -> Disable Node Coloring	Check	Node coloring should become disabled, and Node Coloring Toggle Button text in sidebar menu should read 'Enable Node Coloring', if expression data sheets are present in input workbook
YES	Dropdown Menu: Node -> Disable Node Coloring	Uncheck	Node coloring should become enabled, and Node Coloring Toggle Button text in sidebar menu should read 'Disable Node Coloring', if expression data sheets are present in input workbook
YES	Grid Layout	NULL	The graph should default to force graph layout
YES	Grid Layout	Click Grid Layout Button	The graph should change to grid layout
YES	Grid Layout	Click Force Graph Layout Button	The graph should change back to force graph layout
NO	Dropdown Menu - View: Viewport Size	NULL	The viewport should be medium size
NO	Dropdown Menu - View: Viewport Size	Click Small	The viewport should be set to small viewport size
NO	Dropdown Menu - View: Viewport Size	Click Medium	The viewport should be set to medium viewport size
NO	Dropdown Menu - View: Viewport Size	Click Large	The viewport should be set to large viewport size
NO	Dropdown Menu - View: Viewport Size	Click Fit To Window	The viewport should be set to size that fit to window
NO	Dropdown Menu - View: Restrict Graph to Viewport	NULL	The viewport should not restrict graph to viewport
NO	Dropdown Menu - View: Restrict Graph to Viewport	Click	The viewport should restrict graph to viewport
NO	Dropdown Menu - View: Zoom	Input Value	The viewport should zoom according to the value
NO	Dropdown Menu - Layout: Graph Options	NULL	The graph should be in force graph layout by default
NO	Dropdown Menu - Layout: Graph Options	Grid Layout	The graph should apply grid layout
NO	Dropdown Menu - Layout: Graph Options	Force Graph	The graph should apply force graph layout
NO	Dropdown Menu - Layout: Lock Force Graph Parameters	Check "Lock Force Graph Parameters"	The Force Graph Parameter sliders should be disabled.
NO	Dropdown Menu - Layout: Lock Force Graph Parameters	Uncheck "Lock Force Graph Parameters"	The Force Graph Parameter sliders should be enabled.
NO	Dropdown Menu - Layout: Reset Force Graph Parameters	Select "Reset Force Graph Parameters"	The Reset Force Graph Parameters should revert to the default values, if Lock Force Graph Parameters is unchecked
NO	Dropdown Menu - Layout: Undo Reset	Click "Undo Reset"	The Undo Reset should return to the values they had before the Undo Reset button (or menu item) was selected, if the Undo Reset button is enabled.
NO	Dropdown Menu - Layout: Link Distance	Input Value	The Link Distance should change the link distance value for the slider accordingly and apply it to the force simulation of the graph
NO	Dropdown Menu - Layout: Charge	Input Value	The Charge should change the charge value for the slider accordingly and apply it to the force simulation of the graph

## GRNsight Function Availability Table

GRNsight Function	No Graph Loaded	Weighted Graph Loaded	Unweighted Graph Loaded
Load Graph - None	YES	YES	YES
Load Graph - Dropdown Menu: File -> Open	YES	YES	YES
Load Graph - Dropdown Menu: File -> Import SIF	YES	YES	YES
Load Graph - Dropdown Menu: File -> Import GraphML	YES	YES	YES
Load Graph - Dropdown Menu: Demo -> Demo #1	YES	YES	YES
Load Graph - Dropdown Menu: Demo -> Demo #2	YES	YES	YES
Load Graph - Dropdown Menu: Demo -> Demo #3	YES	YES	YES
Load Graph - Dropdown Menu: Demo -> Demo #4	YES	YES	YES
Dropdown Menu: File -> Reload - Select	NO	YES	YES
Dropdown Menu: File -> Export Data - Select "To Unweighted SIF"	NO	YES	YES
Dropdown Menu: File -> Export Data - Select "To Weighted SIF"	NO	YES	YES
Dropdown Menu: File -> Export Data - Select "To Unweighted GraphML"	NO	YES	YES
Dropdown Menu: File -> Export Data - Select "To Weighted GraphML"	NO	YES	YES
Dropdown Menu: File -> Print - Select	NO	YES	YES
Dropdown Menu: Help - Select "Getting Started"	YES	YES	YES
Dropdown Menu: Help - Select "GRNsight Wiki"	YES	YES	YES
Dropdown Menu: Help - Select "About GRNsight"	YES	YES	YES
Sidebar Menu: Force Graph Parameter Sliders - Keep at Default Values	YES	YES	YES
Sidebar Menu: Force Graph Parameter Sliders - Decrease Link Distance	YES	YES	YES
Sidebar Menu: Force Graph Parameter Sliders - Increase Link Distance	YES	YES	YES
Sidebar Menu: Force Graph Parameter Sliders - Increase Charge	YES	YES	YES
Sidebar Menu: Force Graph Parameter Sliders - Decrease Charge	YES	YES	YES

Sidebar Menu: Lock Force Graph Parameters Checkbox - Check	YES	YES	YES
Sidebar Menu: Lock Force Graph Parameters Checkbox - Uncheck	YES	YES	YES
Sidebar Menu: Reset Force Graph Parameters Button - Click	YES	YES	YES
Sidebar Menu: Undo Reset Button - Click	YES	YES	YES
Sidebar Menu: Restrict Graph to Viewport Checkbox - Check	YES	YES	YES
Sidebar Menu: Restrict Graph to Viewport Checkbox - Uncheck	YES	YES	YES
Sidebar Menu: Viewport Size - Keep as Detected	YES	YES	YES
Sidebar Menu: Viewport Size - Select "Small"	YES	YES	YES
Sidebar Menu: Viewport Size - Select "Medium"	YES	YES	YES
Sidebar Menu: Viewport Size - Select "Large"	YES	YES	YES
Sidebar Menu: Viewport Size - Select "Fit to Window"	YES	YES	YES
Dropdown Menu: Edge - Select "Format edges based on optimized weight parameters"	YES	YES	YES
Dropdown Menu: Edge - Select "Default to black edges with regular arrowheads"	YES	YES	YES
Sidebar Menu: Hide/Show Edge Weights - Select "Show With Mouse Over"	NO	YES	NO
Sidebar Menu: Hide/Show Edge Weights - Select "Always Show Edge Weights"	NO	YES	NO
Sidebar Menu: Hide/Show Edge Weights - Select "Never Show Edge Weights"	NO	YES	NO
Dropdown Menu: Edge -> Hide/Show Edge Weights - Check "Show With Mouse Over"	NO	YES	NO
Dropdown Menu: Edge -> Hide/Show Edge Weights - Check "Always Show Edge Weights"	NO	YES	NO
Dropdown Menu: Edge -> Hide/Show Edge Weights - Check "Never Show Edge Weights"	NO	YES	NO
Sidebar Menu: Edge Weight Normalization Factor - Enter a Number in the Box and Click "Set Factor" button	NO	YES	NO
Dropdown Menu: Edge -> Edge Weight Normalization Factor - Enter a Number in the Box and Press Enter	NO	YES	NO
Sidebar Menu: Reset Factor Button - Click	NO	YES	NO
Dropdown Menu: Edge -> Reset Edge Weight Normalization - Click	NO	YES	NO
Sidebar Menu: Gray Threshold Slider - Change the Grey Threshold Value	NO	YES	NO
Dropdown Menu: Edge -> Gray Threshold Input Box - Change the Grey Threshold Value and Press Enter	NO	YES	NO
Sidebar Menu: Show Grey Edges as Dashed Checkbox - Uncheck	NO	YES	NO
Sidebar Menu: Show Grey Edges as Dashed Checkbox - Check	NO	YES	NO
Dropdown Menu: Edge -> Show Grey Edges as Dashed - Uncheck	NO	YES	NO
Dropdown Menu: Edge -> Show Grey Edges as Dashed - Check	NO	YES	NO
Viewport Menu: D-Pad Control - Click Right Arrow	NO	YES	YES
Viewport Menu: D-Pad Control - Click Left Arrow	NO	YES	YES
Viewport Menu: D-Pad Control - Click Up Arrow	NO	YES	YES
Viewport Menu: D-Pad Control - Click Down Arrow	NO	YES	YES
Viewport Menu: D-Pad Control - Click Center Button	NO	YES	YES
Viewport Menu: Zoom Slider - Increase Zoom Level	NO	YES	YES
Viewport Menu: Zoom Slider - Decrease Zoom Level	NO	YES	YES
Sidebar Menu: Top Dataset - Keep Default Selection	NO	YES	YES
Sidebar Menu: Top Dataset - Select Top Dataset from Dropdown List	NO	YES	YES
Dropdown Menu: Node -> Select Top Dataset - Keep Default Selection	NO	YES	YES
Dropdown Menu: Node -> Select Top Dataset - Check New Top Dataset from Dropdown List	NO	YES	YES
Sidebar Menu: Bottom Dataset - Keep Default Selection	NO	YES	YES
Sidebar Menu: Bottom Dataset - Select Bottom Dataset from Dropdown List	NO	YES	YES
Dropdown Menu: Node -> Select Bottom Dataset - Keep Default Selection	NO	YES	YES
Dropdown Menu: Node -> Select Bottom Dataset - Check New Bottom Dataset from Dropdown List	NO	YES	YES
Sidebar Menu: Log Fold Change Max Value - Keep Default Value	NO	YES	YES
Sidebar Menu: Log Fold Change Max Value - Increase Log Fold Change Max Value	NO	YES	YES
Sidebar Menu: Log Fold Change Max Value - Decrease Log Fold Change Max Value	NO	YES	YES
Dropdown Menu: Node -> Log Fold Change Max Value - Keep Default Value	NO	YES	YES
Dropdown Menu: Node -> Log Fold Change Max Value - Increase Log Fold Change Max Value	NO	YES	YES
Dropdown Menu: Node -> Log Fold Change Max Value - Decrease Log Fold Change Max Value	NO	YES	YES
Sidebar Menu: Average Replicates Values (Top Dataset) - Check	NO	YES	YES
Sidebar Menu: Average Replicates Values (Top Dataset) - Uncheck	NO	YES	YES
Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Check	NO	YES	YES
Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Uncheck	NO	YES	YES
Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check	NO	YES	YES
Sidebar Menu: Average Replicates Values (Bottom Dataset) - Uncheck	NO	YES	YES
Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check	NO	YES	YES
Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Uncheck	NO	YES	YES
Sidebar Menu: Node Coloring Toggle Button - Click	NO	YES	YES
Dropdown Menu: Node -> Disable Node Coloring - Check	NO	YES	YES
Dropdown Menu: Node -> Disable Node Coloring - Uncheck	NO	YES	YES
Grid Layout - NULL	YES	YES	YES
Grid Layout - Click Grid Layout Button	YES	YES	YES
Grid Layout - Click Force Graph Layout Button	YES	YES	YES
Dropdown Menu - View: Viewport Size - NULL	YES	YES	YES
Dropdown Menu - View: Viewport Size - Click Small	YES	YES	YES
Dropdown Menu - View: Viewport Size - Click Medium	YES	YES	YES
Dropdown Menu - View: Viewport Size - Click Large	YES	YES	YES
Dropdown Menu - View: Viewport Size - Click Fit To Window	YES	YES	YES
Dropdown Menu - View: Restrict Graph to Viewport - NULL	YES	YES	YES
Dropdown Menu - View: Restrict Graph to Viewport - Click	YES	YES	YES
Dropdown Menu - View: Zoom - Input Value	NO	YES	YES

Dropdown Menu - Layout: Graph Options - NULL	NO	YES	YES
Dropdown Menu - Layout: Graph Options - Grid Layout	NO	YES	YES
Dropdown Menu - Layout: Graph Options - Force Graph	NO	YES	YES
Dropdown Menu - Layout: Lock Force Graph Parameters - Check "Lock Force Graph Parameters"	NO	YES	YES
Dropdown Menu - Layout: Lock Force Graph Parameters - Uncheck "Lock Force Graph Parameters"	NO	YES	YES
Dropdown Menu - Layout: Reset Force Graph Parameters - Select "Reset Force Graph Parameters"	YES	YES	YES
Dropdown Menu - Layout: Undo Reset - Click "Undo Reset"	YES	YES	YES
Dropdown Menu - Layout: Link Distance - Input Value	YES	YES	YES
Dropdown Menu - Layout: Charge - Input Value	YES	YES	YES

## Client Side Tests

### Test 1

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Check
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check

Results:

- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become disabled, and Node Coloring Toggle Button text in sidebar menu should read 'Enable Node Coloring', if expression data sheets are present in input workbook

### Test 2

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Check
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check

Results:

- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become disabled, and Node Coloring Toggle Button text in sidebar menu should read 'Enable Node Coloring', if expression data sheets are present in input workbook

### Test 3

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Uncheck
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check

Results:

- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become disabled, and Node Coloring Toggle Button text in sidebar menu should read 'Enable Node Coloring', if expression data sheets are present in input workbook

### Test 4

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Uncheck
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check

















- Results:

- ## Test 34

- Sidebar Menu: Average Replicates Values (Top Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Check
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check
- Grid Layout - Click Grid Layout Button

## Test 35

- Sidebar Menu: Average Replicates Values (Top Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Uncheck
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check
- Grid Layout - Click Grid Layout Button

## Test 36

- Sidebar Menu: Average Replicates Values (Top Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Uncheck
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check
- Grid Layout - Click Grid Layout Button

- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become disabled, and Node Coloring Toggle Button text in sidebar menu should read 'Enable Node Coloring', if expression data sheets are present in input workbook
- The graph should change to grid layout

### Test 37

#### Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Check
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check
- Grid Layout - Click Grid Layout Button

#### Results:

- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become disabled, and Node Coloring Toggle Button text in sidebar menu should read 'Enable Node Coloring', if expression data sheets are present in input workbook
- The graph should change to grid layout

### Test 38

#### Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Check
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check
- Grid Layout - Click Grid Layout Button

#### Results:

- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become disabled, and Node Coloring Toggle Button text in sidebar menu should read 'Enable Node Coloring', if expression data sheets are present in input workbook
- The graph should change to grid layout

### Test 39

#### Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Uncheck
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check
- Grid Layout - Click Grid Layout Button

#### Results:

- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become disabled, and Node Coloring Toggle Button text in sidebar menu should read 'Enable Node Coloring', if expression data sheets are present in input workbook
- The graph should change to grid layout

### Test 40

#### Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Uncheck
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check
- Grid Layout - Click Grid Layout Button

#### Results:

- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook

- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become disabled, and Node Coloring Toggle Button text in sidebar menu should read 'Enable Node Coloring', if expression data sheets are present in input workbook
- The graph should change to grid layout

#### Test 41

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Check
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Uncheck
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check
- Grid Layout - Click Grid Layout Button

Results:

- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become disabled, and Node Coloring Toggle Button text in sidebar menu should read 'Enable Node Coloring', if expression data sheets are present in input workbook
- The graph should change to grid layout

#### Test 42

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Check
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Uncheck
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check
- Grid Layout - Click Grid Layout Button

Results:

- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become disabled, and Node Coloring Toggle Button text in sidebar menu should read 'Enable Node Coloring', if expression data sheets are present in input workbook
- The graph should change to grid layout

#### Test 43

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Uncheck
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Uncheck
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check
- Grid Layout - Click Grid Layout Button

Results:

- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become disabled, and Node Coloring Toggle Button text in sidebar menu should read 'Enable Node Coloring', if expression data sheets are present in input workbook
- The graph should change to grid layout

#### Test 44

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Uncheck
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Uncheck
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check
- Grid Layout - Click Grid Layout Button

Results:

- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become disabled, and Node Coloring Toggle Button text in sidebar menu should read 'Enable Node Coloring', if expression data sheets are present in input workbook
- The graph should change to grid layout

## Test 45

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Check
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Uncheck
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check
- Grid Layout - Click Grid Layout Button

Results:

- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become disabled, and Node Coloring Toggle Button text in sidebar menu should read 'Enable Node Coloring', if expression data sheets are present in input workbook
- The graph should change to grid layout

## Test 46

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Check
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Uncheck
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check
- Grid Layout - Click Grid Layout Button

Results:

- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become disabled, and Node Coloring Toggle Button text in sidebar menu should read 'Enable Node Coloring', if expression data sheets are present in input workbook
- The graph should change to grid layout

## Test 47

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Uncheck
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Uncheck
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check
- Grid Layout - Click Grid Layout Button

Results:

- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become disabled, and Node Coloring Toggle Button text in sidebar menu should read 'Enable Node Coloring', if expression data sheets are present in input workbook
- The graph should change to grid layout

## Test 48

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Uncheck



- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Uncheck
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check
- Grid Layout - Click Grid Layout Button

Results:

- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become disabled, and Node Coloring Toggle Button text in sidebar menu should read 'Enable Node Coloring', if expression data sheets are present in input workbook
- The graph should change to grid layout

## Test 49

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Check
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Uncheck
- Grid Layout - Click Grid Layout Button

Results:

- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become enabled, and Node Coloring Toggle Button text in sidebar menu should read 'Disable Node Coloring', if expression data sheets are present in input workbook
- The graph should change to grid layout

## Test 50

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Check
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Uncheck
- Grid Layout - Click Grid Layout Button

Results:

- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become enabled, and Node Coloring Toggle Button text in sidebar menu should read 'Disable Node Coloring', if expression data sheets are present in input workbook
- The graph should change to grid layout

## Test 51

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Uncheck
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Uncheck
- Grid Layout - Click Grid Layout Button

Results:

- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become enabled, and Node Coloring Toggle Button text in sidebar menu should read 'Disable Node Coloring', if expression data sheets are present in input workbook
- The graph should change to grid layout

## Test 52

### Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Uncheck
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Uncheck
- Grid Layout - Click Grid Layout Button

### Results:

- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become enabled, and Node Coloring Toggle Button text in sidebar menu should read 'Disable Node Coloring', if expression data sheets are present in input workbook
- The graph should change to grid layout

## Test 53

### Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Check
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Uncheck
- Grid Layout - Click Grid Layout Button

### Results:

- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become enabled, and Node Coloring Toggle Button text in sidebar menu should read 'Disable Node Coloring', if expression data sheets are present in input workbook
- The graph should change to grid layout

## Test 54

### Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Check
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Uncheck
- Grid Layout - Click Grid Layout Button

### Results:

- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become enabled, and Node Coloring Toggle Button text in sidebar menu should read 'Disable Node Coloring', if expression data sheets are present in input workbook
- The graph should change to grid layout

## Test 55

### Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Uncheck
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Uncheck
- Grid Layout - Click Grid Layout Button

### Results:

- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook

- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become enabled, and Node Coloring Toggle Button text in sidebar menu should read 'Disable Node Coloring', if expression data sheets are present in input workbook
- The graph should change to grid layout

## Test 56

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Uncheck
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Uncheck
- Grid Layout - Click Grid Layout Button

Results:

- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become enabled, and Node Coloring Toggle Button text in sidebar menu should read 'Disable Node Coloring', if expression data sheets are present in input workbook
- The graph should change to grid layout

## Test 57

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Check
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Uncheck
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Uncheck
- Grid Layout - Click Grid Layout Button

Results:

- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become enabled, and Node Coloring Toggle Button text in sidebar menu should read 'Disable Node Coloring', if expression data sheets are present in input workbook
- The graph should change to grid layout

## Test 58

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Check
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Uncheck
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Uncheck
- Grid Layout - Click Grid Layout Button

Results:

- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become enabled, and Node Coloring Toggle Button text in sidebar menu should read 'Disable Node Coloring', if expression data sheets are present in input workbook
- The graph should change to grid layout

## Test 59

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Uncheck
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Uncheck
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Uncheck
- Grid Layout - Click Grid Layout Button

Results:

- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become enabled, and Node Coloring Toggle Button text in sidebar menu should read 'Disable Node Coloring', if expression data sheets are present in input workbook
- The graph should change to grid layout

## Test 60

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Uncheck
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Uncheck
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Uncheck
- Grid Layout - Click Grid Layout Button

Results:

- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become enabled, and Node Coloring Toggle Button text in sidebar menu should read 'Disable Node Coloring', if expression data sheets are present in input workbook
- The graph should change to grid layout

## Test 61

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Check
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Uncheck
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Uncheck
- Grid Layout - Click Grid Layout Button

Results:

- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become enabled, and Node Coloring Toggle Button text in sidebar menu should read 'Disable Node Coloring', if expression data sheets are present in input workbook
- The graph should change to grid layout

## Test 62

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Check
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Uncheck
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Uncheck
- Grid Layout - Click Grid Layout Button

Results:

- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become enabled, and Node Coloring Toggle Button text in sidebar menu should read 'Disable Node Coloring', if expression data sheets are present in input workbook
- The graph should change to grid layout

## Test 63

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Uncheck

- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Uncheck
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Uncheck
- Grid Layout - Click Grid Layout Button

Results:

- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become enabled, and Node Coloring Toggle Button text in sidebar menu should read 'Disable Node Coloring', if expression data sheets are present in input workbook
- The graph should change to grid layout

## Test 64

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Uncheck
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Uncheck
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Uncheck
- Grid Layout - Click Grid Layout Button

Results:

- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become enabled, and Node Coloring Toggle Button text in sidebar menu should read 'Disable Node Coloring', if expression data sheets are present in input workbook
- The graph should change to grid layout

## Test 65

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Check
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check
- Grid Layout - Click Force Graph Layout Button

Results:

- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become disabled, and Node Coloring Toggle Button text in sidebar menu should read 'Enable Node Coloring', if expression data sheets are present in input workbook
- The graph should change back to force graph layout

## Test 66

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Check
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check
- Grid Layout - Click Force Graph Layout Button

Results:

- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become disabled, and Node Coloring Toggle Button text in sidebar menu should read 'Enable Node Coloring', if expression data sheets are present in input workbook
- The graph should change back to force graph layout

## Test 67

### Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Uncheck
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check
- Grid Layout - Click Force Graph Layout Button

### Results:

- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become disabled, and Node Coloring Toggle Button text in sidebar menu should read 'Enable Node Coloring', if expression data sheets are present in input workbook
- The graph should change back to force graph layout

## Test 68

### Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Uncheck
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check
- Grid Layout - Click Force Graph Layout Button

### Results:

- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become disabled, and Node Coloring Toggle Button text in sidebar menu should read 'Enable Node Coloring', if expression data sheets are present in input workbook
- The graph should change back to force graph layout

## Test 69

### Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Check
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check
- Grid Layout - Click Force Graph Layout Button

### Results:

- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become disabled, and Node Coloring Toggle Button text in sidebar menu should read 'Enable Node Coloring', if expression data sheets are present in input workbook
- The graph should change back to force graph layout

## Test 70

### Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Check
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check
- Grid Layout - Click Force Graph Layout Button

### Results:

- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook

- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become disabled, and Node Coloring Toggle Button text in sidebar menu should read 'Enable Node Coloring', if expression data sheets are present in input workbook
- The graph should change back to force graph layout

## Test 71

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Uncheck
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check
- Grid Layout - Click Force Graph Layout Button

Results:

- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become disabled, and Node Coloring Toggle Button text in sidebar menu should read 'Enable Node Coloring', if expression data sheets are present in input workbook
- The graph should change back to force graph layout

## Test 72

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Uncheck
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check
- Grid Layout - Click Force Graph Layout Button

Results:

- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become disabled, and Node Coloring Toggle Button text in sidebar menu should read 'Enable Node Coloring', if expression data sheets are present in input workbook
- The graph should change back to force graph layout

## Test 73

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Check
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Uncheck
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check
- Grid Layout - Click Force Graph Layout Button

Results:

- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become disabled, and Node Coloring Toggle Button text in sidebar menu should read 'Enable Node Coloring', if expression data sheets are present in input workbook
- The graph should change back to force graph layout

## Test 74

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Check
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Uncheck
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check
- Grid Layout - Click Force Graph Layout Button





- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Uncheck
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check
- Grid Layout - Click Force Graph Layout Button

Results:

- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become disabled, and Node Coloring Toggle Button text in sidebar menu should read 'Enable Node Coloring', if expression data sheets are present in input workbook
- The graph should change back to force graph layout

## Test 79

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Uncheck
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Uncheck
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check
- Grid Layout - Click Force Graph Layout Button

Results:

- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become disabled, and Node Coloring Toggle Button text in sidebar menu should read 'Enable Node Coloring', if expression data sheets are present in input workbook
- The graph should change back to force graph layout

## Test 80

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Uncheck
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Uncheck
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Check
- Grid Layout - Click Force Graph Layout Button

Results:

- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become disabled, and Node Coloring Toggle Button text in sidebar menu should read 'Enable Node Coloring', if expression data sheets are present in input workbook
- The graph should change back to force graph layout

## Test 81

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Check
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Uncheck
- Grid Layout - Click Force Graph Layout Button

Results:

- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become enabled, and Node Coloring Toggle Button text in sidebar menu should read 'Disable Node Coloring', if expression data sheets are present in input workbook
- The graph should change back to force graph layout

## Test 82

### Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Check
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Uncheck
- Grid Layout - Click Force Graph Layout Button

### Results:

- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become enabled, and Node Coloring Toggle Button text in sidebar menu should read 'Disable Node Coloring', if expression data sheets are present in input workbook
- The graph should change back to force graph layout

## Test 83

### Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Uncheck
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Uncheck
- Grid Layout - Click Force Graph Layout Button

### Results:

- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become enabled, and Node Coloring Toggle Button text in sidebar menu should read 'Disable Node Coloring', if expression data sheets are present in input workbook
- The graph should change back to force graph layout

## Test 84

### Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Uncheck
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Uncheck
- Grid Layout - Click Force Graph Layout Button

### Results:

- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become enabled, and Node Coloring Toggle Button text in sidebar menu should read 'Disable Node Coloring', if expression data sheets are present in input workbook
- The graph should change back to force graph layout

## Test 85

### Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Check
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Uncheck
- Grid Layout - Click Force Graph Layout Button

### Results:

- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook

- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become enabled, and Node Coloring Toggle Button text in sidebar menu should read 'Disable Node Coloring', if expression data sheets are present in input workbook
- The graph should change back to force graph layout

### Test 86

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Check
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Uncheck
- Grid Layout - Click Force Graph Layout Button

Results:

- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become enabled, and Node Coloring Toggle Button text in sidebar menu should read 'Disable Node Coloring', if expression data sheets are present in input workbook
- The graph should change back to force graph layout

### Test 87

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Uncheck
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Uncheck
- Grid Layout - Click Force Graph Layout Button

Results:

- GRNsight should average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become enabled, and Node Coloring Toggle Button text in sidebar menu should read 'Disable Node Coloring', if expression data sheets are present in input workbook
- The graph should change back to force graph layout

### Test 88

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Uncheck
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Uncheck
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Check
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Uncheck
- Grid Layout - Click Force Graph Layout Button

Results:

- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for top dataset, if expression data sheets are present in input workbook
- GRNsight should not average replicate values for bottom dataset, if expression data sheets are present in input workbook
- GRNsight should average replicate values for bottom dataset, if expression data sheets are present in input workbook
- Node coloring should toggle between on and off, with default being on and button text should toggle between 'Enable Node Coloring' and 'Disable Node Coloring', if expression data sheets are present in input workbook
- Node coloring should become enabled, and Node Coloring Toggle Button text in sidebar menu should read 'Disable Node Coloring', if expression data sheets are present in input workbook
- The graph should change back to force graph layout

### Test 89

Instructions:

- Sidebar Menu: Average Replicates Values (Top Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Top Dataset) - Check
- Sidebar Menu: Average Replicates Values (Bottom Dataset) - Check
- Dropdown Menu: Node -> Average Replicates Values (Bottom Dataset) - Uncheck
- Sidebar Menu: Node Coloring Toggle Button - Click
- Dropdown Menu: Node -> Disable Node Coloring - Uncheck
- Grid Layout - Click Force Graph Layout Button



