Official version history and changelog information for Grapher 16.

Grapher 16.7.451 (5 December 2020)

Improvements:

Projects saved in v17+ with the objects will open in v16.7

Grapher 16.6.478 (11 November 2020)

Fixes:

- Criteria filter was filtering out the selected column criteria instead of keeping only the selected column criteria
- Crashed when opening a file with a class scatter plot
- Crashed when adding a Math Plot to a line plot with no data points
- Crashed when adding a Vector plot an existing graph

Grapher 16.5.474 (4 November 2020)

New features and Improvements:

• NULL criteria is now treated as blanks when Missing Data is being shown as Discontinuous. This will effect the way an existing plot looks.

- Ternary graph was drawn upside down after resizing
- 3D Pie/Doughnut plot had color bleed
- 3D Pie/Doughnut was missing the bottom line of the plot
- Polar function plot: discontinuous data is honored in the line plot. This will effect the way existing projects look when opened in the current version.
- Automatic backup was failing when saving worksheets
- Crash when opening an empty file
- Internal Error occurred when importing GPX files
- Internal error occurred while changing label column for bubble plots
- Labels on a scaled 2D plot with an offset can be rotated
- Crashed when saving GRF file
- Torus was missing a slice when the start angle was set to specific degrees

- Crashed when changing the opacity (or toggling on/off) of objects, including line plots
- Crash when saving a file with bar charts
- Crash after undoing paste
- Saving GRF file corrupts the file and appears to save GRF as an image
- Opening GPJ saved to OneDrive corrupted the file
- Print: Fit to Page was not printing whole project as expected
 In automation, using Worksheet Range Parent created an error
- When using a line plot, the symbol table legend changed state of existing legends
- Automation: AutoAxis.Max did not update right away when changing value in a worksheet
- Histogram: "Exponential PDF Fit" Scale Value could not be changed
- Error bars: Vertical error bar connection fill disappeared when Custom negative applied
- Error bars: Connect error bars by sorted order not drawing/worksheet order. This will effect the way an existing project looks when opened in the latest version.
- Adding a contour grid map to 3d bar/floating bar chart resulted in an invisible graph
- Symbol rotation behavior now matches Grapher 12 and previous per requests
- Changing the orientation for group in a 3DXYZ Bar Chart caused huge aliased bars
- Rotating a legend did not locate the legend in the expected location
- Defaults were not overwriting Options when it should be
- Rose axis labels in wrong position after rotating using the Free Rotate tool.
- Rotating cone shaped bars in a bar chart resulted in errors.
- The spread across plot option was not clipping the fill to the Bar Style shape correctly

Grapher 16.4.432 (3 September 2020)

New features and Improvements:

- Major grid lines now draw on top of background line (this may affect the appearance of existing files)
- The top level object is now selected when multiple objects are overlaid (prior versions the bottom object would be selected)

- Discontinuous data setting was not being honored
- Linear fit was not going through data with non-zero frequency if the first row did not have data
- Fit curves were not correct for grid or function maps
- Linked axis length was not updating after the master axis was resized using the object handles

- Grapher became unresponsive when moving legend to another Grapher object
- Setting the Ruler or 3D Text to bold was also setting the font to italics
- Radial axes and plot line were drawn incorrectly according to angle axis settings
- The default Backup file path has been updated and will save GBK files
- Undo was not undoing the move of a Polar Wind Chart Legend
- Objects within selected items could not be accessed via automation
- XZ Contour Data and XZ Contour Grid Map contour line properties were not being applied
- Making changes in the Options dialog was causing changes to a file to not be saved
- Crash when editing in the Text Editor
- Crash when changing line style for a Line/Symbol plot
- Crash when editing Magnifier settings
- Crash when deleting a Bar chart in a Bar Chart group

Grapher 16.3.410 (5 August 2020)

New features and Improvements:

WinWrap has been updated to version 10.41+

- Double clicking on a BAS was opening Scripter without loading the BAS
- The metafile horizontal transform was not honored when exporting to PDF (Vector)
- Crash after deleting a legendC
- Crash after converting to a 3D graph and adding/deleting a legend
- Crash when smoothing a line
- Data was not being added via automation with a Template
- When using File | Print the tile option was only printing the first page
- Internal Error when turning on visibility for line/scatter plot
- Crash after saving a file and then reloading data
- Internal Error cancelling export
- Crash after adding Y axis
- Internal Error when pasting
- Clipping was causing some valid data to be hidden when using Discontinuous data
- Standard deviation and standard error are different for edges and whiskers in the Box Plot
- Crash when closing Grapher after saving
- Undo does not undo moving a text box
- Crash when selecting text and polylines

- Crash after copying/pasting graphs
- Undo after moving detached legend was restoring only part of the legend to the previous location
- Grapher was not prompting to save changes on closing after detaching a legend
- Legend font reset to default when previous version format was opened
- Crash when updating property for Data Limits tab
- Adding duplicate axis changed tick labels and title position for original axis and new axis
- Crash when open GPJ file
- Crash after shutdown
- Corrected behavior in labels of a Floating Bar Chart
- Internal Error creating ternary plot from Open Excel
- Crash changing Y axis title position then undoing
- Some format properties were hidden when changing any plot label format property
- Crash copy/pasting plot in group then updating Y variable
- Crash when deleting
- The Math Plot plot equation was changing after closing and reopening dialog when plots have
- same names
- The Radar Plot legend was not displaying symbols when Symbol Size is set to Plot Size

Grapher 16.2.354 (9 May 2020)

New features and Improvements:

Save preview image as default is now Bitmap

- Changing the length position of axis tick marks was not automatically moving the title
- The default properties for the X and Y axis were not saving
- The minimum and maximum labels of a Box Plot were only displaying with outliers
- Metafile was not visible after opening a saved file
- Graphs with horizontal histogram fits changed the X Axis to Y Axis when opening a project or creating a new project
- When moving a label the arrow keys were moving the cursor instead of the label
- Saved GRF or GPJ was blank after saving to a network drive
- Grapher was hanging after a worksheet for linked text was changed
- Internal error occurred when creating a ternary plot from Grapher's worksheet
- Crash when copying format of a contour data map
- Crash when opening Grapher 4 files
- Crash when opening GRF/GPJ with a histogram and fit curve
- Crash when pasting special to Bitmap

- Crash when saving to network drive
- Crash when deleting fit curve
- Crash when copying a graph containing a legend
- Crash when undoing delete of meta file

Grapher 16.1.335 (11 April 2020)

New features and Improvements:

- Support Code is displayed in license dialog and About dialog.
- Legend: Class scatter plot added to regular legend now displays the line properties.

Fixes:

- Grid lines shared with other plots were not saved to GPJ file
- Legend disappeared after converting between 2d/3d and using Undo
- Custom fill patterns were not displayed if the fill pattern was originally set in Grapher 14
 or earlier
- Linked text date/time was using US date/time instead of computer date/time
- Selection box was too wide for Box-Whisker Plots
- The Data Import Options dialog no longer appears for every TXT worksheet imported into a GRF file
- Axis labels: when axis labels wrap, the wrapped text is now left-aligned
- Axis labels: rounding error for axis label at '0' value
- Color Scale: scale was not displayed after opening file with color scale property enabled
- Vector plot: missing color scaling options in the Property Manager
- Automation: WhiskerLowerPercentile was not working
- Automation: Quit after Close caused crash on files with Grid Maps
- Options: It was not possible to remove the "Project Folder"
- Crash when when doing action between double clicking text
- Crash when importing XLSX with missing sheet
- Crash when changing Worksheet for line plot
- Crash when cancelling an export
- Crash when clicking and dragging radius axis for rose plot in the Object Manager
- Crash when saving a grid saved to Samples via sample script

Grapher 16.0.314 (10 March 2020)

- What's New in Grapher
- Crashes
 - Crash when cancelling loading worksheets for GRF

- Crash when using Open Excel to import an XLSX file with a missing sheet
- Crash when accessing contour map Levels defaults
- Crash when undoing while a script was running, then closing Grapher
- Crash when canceling an export
- Crash when changing Worksheet for a line plot to a file opened with the Open Excel command
- Crash when copy/pasting in data
- Automation: Crash editing text properties of a legend
- Automation: Crash quitting after closing a file containing a grid map
- Internal Error when selecting a plot pasted into a group
- Internal Error when opening the Text Editor
- Grapher closes when a polar wind plot is deleted

Axes:

- Rounding errors around "0" for a descending axis
- Changing X axis position moved the entire plot
- Turning off axes titles in the last Graph Wizard dialog didn't remove axes titles from the graph
- Incorrect Y axis limits when adding error bars to a horizontal category bar charts
- Displaying Radius Axis labels for a wind chart as percentages did not affect the minor tick labels
- Implemented smarter tick spacing for date/time axes to minimize risk of overlapping labels
- Implemented smarter axis limits when changing a plot's axis from one axis to another that is a duplicate of the first

Plot-specific

- Pie charts:
 - Background fill properties were not displaying in the Property Manager at times
 - Added Redo support for fill for Pie/Doughnut Plot
- Bubble plots:
 - XYZ Bubble Plot: Properties were not updated automatically when the fill method was changed
 - Creating multiple plots from the worksheet didn't work for 2D and XYZ bubble plots
- Function plots:
 - Changed initial First/Last value to be the axis limits
 - Clipping: Plot was not clipped to Y min/max consistently
- Math plots: Plots are now drawn independently of the sort order of the X variable data
- Stiff plots: Vertical alignment was not working properly for labels
- Line plots: Adding end styles to a line plot and then smoothing the plot line added end styles all along the line
- Bar charts: Changing a shared property of bar charts changed the Z column
- Legends:

- Opening the Select Plots dialog caused fonts to change
- Line/fill properties were not applied for wind chart legends

Fit curves:

- Inserted statistics did not update correctly when fit type was changed
- Lognormal fit curves did not appear inside of the confidence interval
- Custom fit equations disappeared from the Property Manager when the equation was changed

Worksheet:

- Clicking to a Plot document from the Worksheet window turned on the Property Manager
- Sort did not work as expected on some computers

Labels:

- Source text alignment was lost when using labels from a worksheet
- Move Labels: Pressing TAB did not work to select the next label

Text:

- Text Editor: New template was inserted with too much space
- Improved speed when opening a file containing polar plots
- Moving rotated text with arrow keys didn't always work as expected
- EMF Export or copy/paste: Rotated text appeared bolded
- MathType 6.0 Equation object didn't appear in the Object Manager initially

• Grid divisions:

- Grid Divisions did not appropriately divide grid by centimeters
- Zooming removed some grid dots

Automation:

- Box plot last row didn't update initially
- Error raised in Scripter identified wrong parameter as cause of error
- Run Script: When script got to break point, new scripts could not be run with this command
- AngleWidth did not give the correct value without UI interaction
- LastTickValue did not return the correct value until changes were made to the axis
- Fill PatternName was not returned correctly
- Deleting a legend through automation did not work the same as through the UI
- Script Recorder: Editing properties of individual entries in a class legend via the Text Editor didn't record anything
- UI warning propagated through Automation as a status bar warning with no ability to dismiss
- Sheet name was not recorded when new plot data was selected for the first time
- Defaults/Options/Settings:
 - Cleaned up settings/defaults file duplication

Other:

- Digitize Fixed: Cursor jumped off of the line
- Implemented smarter initial x/y columns when creating a plot (no text columns)

•	Adding new plots to a row-data plot stopped incrementing the rows when the column
	count was reached

• <u>Grapher13VersionHistory.pdf</u>