Contents

Other Programs in ABC FlowCharter 4.0

ABC DataAnalyzer is one of the programs in the ABC FlowCharter package.

Click a button to go to the help system for the program you want to learn about.

ABC FlowCharter 4.0 is the latest version of the popular charting program. It provides the tools you need for Total Process Management and for all your other charting needs.

ABC DataAnalyzer 1.1 give you the tools to draw data-driven charts, including histograms, run charts, Pareto charts, control charts (including P charts, PN charts, C charts, U charts, Moving Range, and X Avg, R charts), scatter charts, and pie charts.

ABC SnapGraphics 2.0 is the quick tool for creating graphics for all your business needs.

ABC Viewer 1.0 is the latest program in the ABC family. It lets anyone view and work with the charts created using ABC FlowCharter.

ABC OLE Automation is an advanced feature of ABC FlowCharter 4.0 that requires Visual Basic, knowledge of programming in Visual Basic or C++, and knowledge of ABC FlowCharter. You can control ABC FlowCharter and ABC Viewer using OLE Automation.

If you have the CD ROM version of ABC FlowCharter 4.0, you will find copies of Designer and Picture Publisher included on it. These special versions have the full functions of the retail versions. After you have used them for 30 days, however, they will stop working. Contact Micrografx or your dealer to purchase retail versions. See the Read Me for more information.

Related Topics

Contents

Speed Keys

Files

New chart	**Ctrl+N**
Open file	**Ctrl+O**
Save file	**Ctrl+S**
Print current page	**Ctrl+P**
Exit program	**Alt+F4**

Editing

Undo/redo change	**Ctrl+Z** (or **Alt+Bksp**)
Cut	**Ctrl+X** (or **Shift+Del**)
Copy	**Ctrl+C** (or **Ctrl+Ins**)
Paste	**Ctrl+V** (or **Shift+Ins**)
Duplicate	**Shift+**drag
Clear	**Delete**
Select all	**Ctrl+A**
To back	**Ctrl+K**
To front	**Ctrl+F**
Group	**F7**
Ungroup	**Shift+F7**
Rotate	**F8**

Viewing

View/Hide Worksheet	**Ctrl+W**
Zoom in	**F2**
View actual size	**F3**
View full page	**F4**
View used pages	**F5**

On-Line Help

Context-sensitive help topic	**F1**

Use the additional shortcut keys listed next to the menu commands and in the hint line.

Change Menu Commands

Click a command below to learn more about it.

Align	Lets you align objects, charts, and text blocks to each other and to the page.
Arrange	Lets you group and ungroup objects.
Duplicate	Lets you duplicate an object on the page.
Order	Lets you change the display order of objects.
Rotate	Lets you rotate objects.
Share Range	Lets you give two Pareto charts the same vertical scale.

Align Command

The Align command lets you align objects, charts, and text blocks to each other and to the page.

When you align objects relative to each other, ABC DataAnalyzer uses the bounding box that surrounds all selected objects as the basis for alignment. For example, if you select three objects and align them left, they move horizontally to the left edge of the surrounding bounding box.

Related Topics

- Align dialog box
- Aligning objects
- Change menu

Align Dialog Box

The Align dialog box lets you align objects, charts, and text blocks to each other and to the page.

Horizontal Area
You can align selected objects to the left, center, or right of the bounding box that surrounds all the objects. Click the option for the alignment you want.

Vertical Area
You can align selected objects to the top, middle, or bottom of the bounding box that surrounds all the objects. Click the option for the alignment you want.

Page/Ruler Area
You can align selected objects in relation to the page. Choose Page Middle to center the objects vertically on the page. Choose Page Center to center the objects horizontally on the page. Choose Middle/Center to center the objects both vertically and horizontally. Choose Ruler to align selected objects to the ruler divisions.

Align To Chart Frame Option
When you have selected both a chart and other objects, you can align the other objects in relation to the frame of the chart. Select the Horizontal and Vertical alignment you want and select Align To Chart Frame.

Related Topics

Align command
Aligning objects

Aligning Objects

To align objects:

1. Select the objects you want to align.
2. Open the Change menu and choose Align. The Align dialog box opens.
3. Choose the Align options you want to use.
4. Click OK. The symbols redraw accordingly.

Related Topics

Align command
Align dialog box
Aligning text

Arrange Command

The Arrange command opens a submenu containing the following commands. Click one of the commands below to learn more about it.

Group	Groups multiple objects so they act as one object.
Ungroup	Ungroups a group of multiple objects.

Related Topics

Change menu

Group Command

The Group command lets you group multiple objects so they act as one object. Grouping makes it easier to select and manipulate several objects at once.

In many ways, grouped objects are similar to individual objects. For example, changing line and fill styles affects the whole group, and moving a group is like moving one object. You can also rotate groups.

Related Topics

Grouping objects
Arrange command

Grouping Objects

To group objects:

1. Select the objects you want to group.
2. Open the Change menu and choose Arrange. A submenu opens.
3. Choose Group. All the selected items are grouped.

Related Topics

Group command
Ungrouping objects

Ungroup Command

The Ungroup command lets you remove the grouping of objects you have previously grouped so you can work with the objects individually.

Related Topics

- Ungrouping objects
- Arrange command

Ungrouping Objects

To ungroup objects:

1. Select a grouped object.
2. Open the Change menu and choose Arrange. A submenu opens.
3. Choose Ungroup. All the selected objects are ungrouped.

Related Topics

Grouping objects
Ungroup command

Duplicate Command

The Duplicate command lets you duplicate selected objects, as well as objects you paste into ABC DataAnalyzer.

Related Topics

- Duplicating objects
- Change menu

Duplicating Objects

To duplicate objects:

1. Select the objects you want to duplicate.
2. Open the Change menu and choose Duplicate. The mouse pointer shows a double rectangle.
3. Drag any object to duplicate it.

You also can duplicate an object using the **Shift** key. First, select the object in the chart. Next, point to the object, press **Shift**, and press the left mouse button. The pointer shows a double rectangle. Drag the pointer to create the duplicate object.

Related Topics

Copying objects
Duplicate command

Order Command

The Order command opens a submenu containing the following commands. Click one of the commands below to learn more about it.

Move to Back	Moves the selected object or objects behind all other objects.
Move to Front	Moves the selected object or objects in front of all other objects.

Related Topics

Change menu

Move to Back Command

The Move to Back command moves the selected object or objects behind all other objects.

Related Topics

Changing the stacking order of objects
Order command

Move to Front Command

The Move to Front command moves the selected object or objects in front of all other objects.

Related Topics

Changing the stacking order of objects
Order command

Changing the Stacking Order of Objects

If you create a series of objects on top of each other, the first object you create appears on the bottom of the stack and the last object appears on top.

At times, you may want to change the display order of these objects. For example, you may want to display a line behind a text block so the text can be read. You also may want to display a large, filled rectangle behind a chart to frame it.

To bring an object to the front:

1. Select the object you want to bring to the front.
2. Open the Change menu and choose Arrange. A submenu opens.
3. Choose Move to Front. The selected object appears in front of all overlapping objects.

You can select an object beneath other objects by clicking repeatedly. The selection rotates among all the objects beneath the mouse pointer.

To send an object to the back:

1. Select the object you want to send to the back.
2. Open the Change menu and choose Arrange. A submenu opens.
3. Choose Move to Back. The selected object appears behind all overlapping objects.

Related Topics

Move to Back command
Move to Front command

Rotate Command

The Rotate command lets you rotate selected objects (except charts) in 15-degree increments.

Related Topics

- Rotating objects
- Change menu

Rotating Objects

When you choose the Rotate command, a pivot point appears in the center of the selected object and the mouse pointer changes to a rotation arrow.

To rotate the object, drag around the outside of the object. If you want to rotate around a different position on the page, drag the pivot point to that position, then rotate the object.

Objects rotate in 15-degree increments. Press and hold **Ctrl** to rotate in 90-degree increments.

Press and hold the right mouse button to move the symbol and the pivot point while you rotate.

Related Topics

Rotate command

Share Range Command

The Share Range command lets you give two Pareto charts the same vertical scale.

Related Topics

- Sharing axis ranges
- Pareto charts
- Change menu

Sharing Axis Ranges

You can create two Pareto charts and then give them the same scales, making it easier to compare their data.

To create comparative Pareto charts:

1. Create two Pareto charts, each using its own set of data. The charts should both be visible on the page. Use the View tool in the toolbox, if necessary.
2. Select both of the charts.
3. Open the Change menu and choose the Share Range command. The scales for the two charts are adjusted to be the same.

Related Topics

Share Range command
Pareto charts

File Menu Commands

Click a command below to learn more about it.

New	Closes the current file and opens a new, blank window.
Open	Opens a previously saved file.
Save	Saves the file on which you are working, using the current filename.
Save As	Lets you make a copy of the file under a new name or directory.
Page Layout	Lets you choose options that affect the orientation and dimensions of the pages in a chart.
Print	Lets you print the current page or all pages in the file.
Printer Setup	Lets you choose a printer and printer options.
Preferences	Lets you choose options that customize the program to suit your needs.
Exit	Closes the current file and the program.

New Command

Use the New command to create a new graph file. When you choose this command, the file opens as a blank page and remains empty until you create a chart, draw, or enter text on the page.

Related Topics

- Creating a new data file
- Creating a new graph file
- File menu

Creating a New Graph File

To create a new graph file:

1. If the Worksheet is open, click the Worksheet tool  in the toolbox to close the Worksheet.
2. Open the File menu and choose New. A new, blank file opens. If the file you are currently working with has changed and you did not save it before choosing the New command, you are prompted to save the file.

Related Topics

New command
Creating a new data file
Understanding ABC DataAnalyzer files

Understanding ABC DataAnalyzer Files

ABC DataAnalyzer works with two types of files: graph files and data files. Every graph file has an associated data file.

Graph files contain information about objects on the page, such as charts, text, and symbols. Graph files also contain formatting information such as colors and fonts. Everything that you see on a page and can print is contained in the graph file.

Data files store all data information in the worksheet. You can use the same data file in several graph files to express the information in different ways. Data files are similar to spreadsheet files.

You can open and save files in different formats. The following table describes each file type.

GRF	Graph file -- Contains all page information, including a reference to a data file. Used by ABC DataAnalyzer, Micrografx WinChart, and Micrografx Charisma 2.1.
DAT	Data file -- Contains all data in the Worksheet. Used by ABC DataAnalyzer, Micrografx WinChart, and Micrografx Charisma 2.1.
DIF	Contains all data in the Worksheet. Used by VisiCalc.
DRW	Micrografx drawing file -- Contains all page information in a drawing format. Charts are treated as a group of symbols and all ties to the data are lost, but their appearance remains the same. Used by Micrografx Charisma 2.x, Designer prior to version 4.0, and Windows Draw 3.0.
SPC	Contains all data in the Worksheet, with a space separating each column and a carriage return separating each row. Space Delimited ASCII file.
SLK	Contains all data in the worksheet. Used by Excel and Multiplan.
WK1, WKS	Contains all data in the worksheet. Used by Lotus 1-2-3.
XLS	Contains all data in the worksheet. Used by Excel.

You can open and save GRF and DRW files in the main window of ABC DataAnalyzer. You can open and save DAT, DIF, SPC, SLK, WK1, WKS, and XLS files in the Worksheet.

Related Topics

Creating a new data file
Creating a new graph file
Opening a data file
Opening a graph file
Saving a data file
Saving a graph file

Open Command

ABC DataAnalyzer works with two types of files: graph files and data files.

Use the Open command in the File menu to open graph files when the Worksheet is closed. When the Worksheet is open, use the Open Data command in the File menu to open data files.

Related Topics

- Open File dialog box
- Procedure information
- Understanding ABC DataAnalyzer Files
- File menu

Open File Dialog Box

The Open File dialog box lets you open a graph file or data file.

Open File text box
Type the name of the file you want to open in the Open File text box.

Files list box
The Files list box displays the filenames in the current directory. Click a filename in the list box to display it in the Open File text box.

In the Files list box, type the first letter of a filename to move the cursor to the files beginning with that letter.

If the file is not listed in the current directory, double click the drive and directory where the file is located. If you will open files from this directory often, select Save to save this location as the default.

File Type list box
The File Type list box contains the file formats that ABC DataAnalyzer supports (GRF, DAT, DRW, WKS, SPC, DIF, XLS, WK1, and SLK). Click the down arrow to the right of the list box to display the file formats, then choose the one you want.

Related Topics

Open command
Opening a data file
Opening a graph file

Opening a Graph File

To open a graph file:

1. If the Worksheet is open, click the Worksheet tool  in the toolbox to close the Worksheet.
2. Open the File menu and choose Open. If the file you are currently working with has changed and you did not save it before choosing the Open command, you are prompted to save the file. ABC DataAnalyzer displays the Open File dialog box.
3. Choose the type of file you want to open in the File Type list box.
4. If the file is not listed in the current directory, double click the drive and directory where the file is located. If you will open files from this directory often, select Save to save this location as the default.
5. Choose the file you want to open, or type the filename in the text box.
6. Click OK. The dialog box closes and the file opens.

Related Topics

Open File dialog box
Open command
Opening a data file
Understanding ABC DataAnalyzer Files

Save Command

Use the Save command to store a chart in a file on disk.

The first time you save a new file, you name the file that contains it and choose where you want to store the file. Afterwards, each time you choose the Save command, your changes are saved in that file.

Related Topics

- Save File dialog box
- Saving a graph file
- Understanding ABC DataAnalyzer Files
- File menu

Save File Dialog Box

The Save File dialog box lets you save graph files or data files.

Save File As text box
Type the name of the file you want to save in the File Name text box.

Files list box
The Files list box displays the filenames in the current directory. Click a filename in the list box to display it in the Save File As text box.

In the Files list box, type the first letter of a filename to move the cursor to the files beginning with that letter.

File Type list box
The File Type list box contains the file formats that ABC DataAnalyzer supports (GRF, DAT, DRW, WKS, SPC, DIF, XLS, WK1, and SLK). Click the down arrow to the right of the list box to display the file formats, then choose the one you want.

Related Topics

- Save command
- Save Data command
- Saving a copy
- Saving a data file
- Saving a graph file

Saving a Graph File

To save a graph file:

1. If the Worksheet is open, click the Worksheet tool  in the toolbox to close the Worksheet.
2. Open the File menu and choose Save. If you are saving a file for the first time, the Save File dialog box opens. If you already saved the file, your changes are saved in the file you named earlier.
3. Choose a file type for the file you are saving, if you want to save the file in a different format. The default type is chart (.GRF).
4. Double click the drive and directory where you want to store the file. As you choose drives and directories, the location where the file will be stored is displayed above the list box.
5. Type the filename you want.
6. Click OK. The chart is saved in a file.

If you entered an existing filename when naming the chart, a message appears asking if you want to replace the existing file.

Related Topics

Save File dialog box
Save command
Saving a data file
Understanding ABC DataAnalyzer Files

Save As Command

Use the Save As command to rename a chart, so that you have the original chart and a new version. This option is useful for making a copy of a file without using the Windows Copy command. The graph file and data file are automatically saved with the new name.

Related Topics

- Save File dialog box
- Saving a copy
- File menu

Saving a Copy

To save a copy of a file:

1. Open the File menu and choose Save As. The Save File dialog box opens.
2. Type a filename for the copy. You should use a different name to distinguish between the copy and the original.
3. Choose the drive and directory in which you want to store the copy. The copy is stored in the current directory if you do not make a choice.
4. Click OK. A copy of the graph file and data file are stored with the new filename.

Related Topics

Save File dialog box
Save As command
Saving a graph file

Page Layout Command

Use the Page Layout command to set the size of the page, the size of the page margins (borders), and the orientation of the page (portrait or landscape). The default page size is determined by the selected printer.

Related Topics

- Page Layout dialog box
- Setting up the page
- File menu

Page Layout Dialog Box

The Page Layout dialog box lets you set the size, margins, and the orientation of the page.

Paper Size option
You should choose the paper size on which you plan to print. ABC DataAnalyzer provides many popular paper sizes, including A (8 1/2" x 11"), B (11" x 17"), and C sheet (17" x 22"). The default page size is 8 1/2" x 11" with 0.75" margins on the left and right of the page and 0.50" margins on the top and bottom of the page.

Choose Print Area to use the settings defined for the current printer. (You select the current printer using the Printer Setup command.) The printer settings include paper size, margins, and page orientation.

ABC DataAnalyzer displays page breaks on the screen based on the paper size and margins you choose.

Click the size you want in the Page Size area, or select the Width and Height text boxes and type the page dimensions you want.

Margins option
ABC DataAnalyzer uses the margins you specify to define the print area on each page and to determine the page breaks. For example, if you choose an A (8 1/2" x 11") page size and specify a 0.5" margin on all sides, the print area is 7 1/2" x 10".

Select each of the Margins text boxes individually and type the margin you want.

Page Orientation option
You can choose either Portrait (tall) or Landscape (wide) for your page orientation.

Related Topics

Page Layout command
Setting up the page

Setting Up the Page

To define the page layout:

1. Open the File menu and choose Page Layout. The Page Layout dialog box opens.
2. Choose the page layout options you want.
3. Click OK. ABC DataAnalyzer applies your page layout choices.

Related Topics

Page Layout command
Page Layout dialog box

Print Command

The Print command opens a submenu containing the following commands. Click one of the commands to learn more about it.

Page	Prints the current page.
All Pages	Prints all pages.

Related Topics

Printing
File menu

Page Command

Use the Page command to print the current page.

Related Topics

- All Pages command
- Printing
- Print command

All Pages Command

Use the All Pages command to print all the pages in the file that have charts, text, or drawings on any portion of them.

Related Topics

- Page command
- Printing
- Print command

Printing

To print a file:

1. If the Worksheet is open, click the Worksheet tool  in the toolbox to close the Worksheet.
2. Open the File menu and choose Print. A submenu opens.
3. Choose Page to print the current page.
   or
   Choose All Pages to print the entire file.

Note: If the current printer is connected to a file, a dialog box opens. Type the filename you want and click OK. The print information is saved in a file in the current directory.

Related Topics

All Pages command
Page command

Printer Setup Command

Use the Printer Setup command to choose the current printer and printer options. If you are connected to a network, you can choose to print to any of the printers available to you.

If you do not change the current printer, ABC DataAnalyzer uses the default printer as the current printer. The default printer is the printer selected in the Windows Control Panel. See your Windows documentation for information on changing the default printer.

Related Topics

- Printing
- Select Printer dialog box
- Selecting a printer
- File menu

Select Printer Dialog Box

The Select Printer dialog box lets you choose the current printer and printer options.

Printer area
The Printer area lists the currently installed Windows printer drivers. Click the name of the printer you want to be the currently active printer. Printer drivers can be added or deleted through the Windows Control Panel. Any installed printer driver can be activated and used by ABC DataAnalyzer.

Options button
Click the OK button to open the dialog box for the selected printer. Choose printer options (page size, orientation, and so forth) and click OK.

Related Topics

Printer Setup command
Selecting a printer

Selecting a Printer

To change the current printer and printer setup:

1. If the Worksheet is open, click the Worksheet tool  in the toolbox to close the Worksheet.
2. Open the File menu and choose Printer Setup. The Select Printer dialog box opens.
3. Click the printer you want.
4. Click OK. The dialog box for the selected printer opens.
5. Choose the options you want and click OK to save the changes in the dialog box. The dialog box closes.

For more information about printer options, see your Windows and printer documentation.

Related Topics

Printer Setup command
Printing
Select Printer dialog box

Preferences Command

Use the Preferences command to set ruler and grid options. You can choose whether to display the rulers, show the current mouse position on the rulers, choose the ruler increment, and snap to the ruler increments. You can also set the units of measure (inches or centimeters). You also use this dialog box to display a grid on the page and set the grid increments. After you set the options, you can save the options so that the next time you open ABC DataAnalyzer, the same preferences are used.

Related Topics

- Preferences dialog box
- Setting preferences
- File menu

Preferences Dialog Box

The Preferences dialog box lets you set ruler and grid options.

Rulers
ABC DataAnalyzer lets you display a horizontal and vertical ruler along the top and left sides of the working area. You can use the rulers to accurately position objects on a page and evaluate page and object sizes. Type the number of increments you want to show in the rulers, or click the up and down arrows to increase or decrease the numbers.

Show Position
Select Show Position if you want the current mouse position displayed in the rulers. Deselect the option to remove the marker that moves with the mouse.

Show Rulers
Select this option to show horizontal and vertical rulers. Deselect the option to remove the rulers.

Snap to Rulers
You can use ruler snap to snap, or attract, objects to ruler divisions. Snapping is useful when drawing, resizing, and moving objects to align objects on the page. Select this option to have objects you draw, text, and charts snap to the ruler divisions. Deselect the option to allow finer movements. You can also turn snap on and off using the Snap button at the bottom right of the window.

Grid
ABC DataAnalyzer lets you display a grid on the background of the page. You can use the grid to help you visually align objects on a page. Type the number of dots you want horizontally and vertically for each ruler label, or click the up and down arrows to increase or decrease the numbers.

Show Grid
Select this option to display a grid on the background of the page. Deselect the option to remove the grid. You can also turn the grid on and off using the Grid button in the lower right corner of the window.

Centimeters and Inches
Click the Inches option to measure using inches. Click the Centimeters option to measure using centimeters.

If you want to save your preferences, select Save to save them so they are used the next time you run ABC DataAnalyzer.

Related Topics
Preferences command
Setting preferences

Setting Preferences

To set preferences for ABC DataAnalyzer:

1. If the Worksheet is open, click the Worksheet tool  in the toolbox to close the Worksheet.
2. Open the File menu and choose Preferences. The Preferences dialog box opens.
3. Select the preferences you want.
4. Select Save to save your preferences as the default if you want them to be in effect the next time you run ABC DataAnalyzer.
5. Click OK. The preferences you set take effect.

Related Topics

Preferences command
Preferences dialog box

Exit Command

The Exit command closes ABC DataAnalyzer. Use this command when you finish working with the program, or when you want to free memory to work in another program.

Related Topics

Closing ABC DataAnalyzer
File menu

Closing ABC DataAnalyzer

To close ABC DataAnalyzer:

- Open the File menu and choose Exit, or press **Alt+F4**.

If the file you are working with has changed, and you did not save it before closing ABC DataAnalyzer, you are prompted to save the current file.

Related Topics

Exit command

Edit Menu Commands

Click a command below to learn more about it.

Undo/Redo	Lets you undo and redo changes.
Cut	Cuts the selected objects to the Clipboard.
Copy	Copies the selected objects to the Clipboard.
Paste	Pastes cut or copied objects into your file.
Clear	Deletes selected objects.
Remove Item	Removes the selected chart element from a chart.
Select All	Select all objects in a file.

Undo/Redo Command

The Undo command reverses the last change you made to a chart; the Redo command restores the change. If a change cannot be reversed, the command is gray.

Related Topics

- Reversing a change
- Edit menu

Reversing a Change

To reverse (undo) a change:

- Open the Edit menu and choose Undo, or press **Ctrl+Z**.

Related Topics

Undo/Redo command

Cut Command

The Cut command removes the selected objects and places them on the Clipboard.

Related Topics

- Cutting objects
- Edit menu

Cutting Objects

To cut objects:

1. Select the objects you want to cut.
2. Open the Edit menu and choose Cut, or press **Ctrl+X**. The selected objects are removed from the file and placed in the Clipboard.

Related Topics

Cut command
Deleting objects
Pasting objects
Removing items from a chart

Copy Command

The Copy command copies the selected objects and places the copy on the Clipboard.

Related Topics

Copying objects
Edit menu

Copying Objects

To copy objects:

1. Select the objects you want to copy.
2. Open the Edit menu and choose Copy, or press **Ctrl+C**. The selected objects are copied to the Clipboard.

Related Topics

Copy command
Pasting objects

Paste Command

The Paste command places a copy of the contents of the Clipboard onto the page.

Related Topics

- Pasting objects
- Edit menu

Pasting Objects

To paste objects:

1. Open the Edit menu and choose Paste, or press **Ctrl+V**. The mouse pointer changes to cross-hairs.
2. Drag the mouse to place the objects in the Clipboard onto the page.

Note: These objects remain in the Clipboard for pasting until you cut or copy new objects to the Clipboard or exit Windows.

Related Topics

Copying objects
Cutting objects
Paste command

Adding Pictures in ABC DataAnalyzer

You can use the Paste command to paste pictures into a file. After you paste a picture into ABC DataAnalyzer, you can resize it and position it anywhere on any page.

To add a picture to a chart:

1. Select the picture you want in another program.
2. Copy the picture to the Clipboard.
3. Open the file in ABC DataAnalyzer into which you want to paste the picture.
4. Open the Edit menu and choose Paste. The mouse pointer changes to cross-hairs.
5. Drag the mouse to place the picture in the Clipboard onto the page. The picture in the Clipboard appears in the chart.

Related Topics

Paste command

Clear Command

The Clear command deletes the selected objects from a file.

Note: Objects are deleted permanently when you choose the Clear command. They are not placed on the Clipboard.

Related Topics

Deleting objects
Edit menu

Deleting Objects

To delete objects:

1. Select the objects you want to delete.
2. Open the Edit menu and choose Clear, or press **Delete**. The selected objects are removed from the page.

Note: Objects are deleted permanently when you choose the Clear command. They are not placed on the Clipboard.

Related Topics

Clear command
Cutting objects
Removing items from a chart

Remove Item Command

The Remove Item command removes the selected chart element, such as grid lines or axis labels, from a data chart. The element is not placed in the Clipboard.

Related Topics

- Removing items from a chart
- Edit menu

Removing Items from a Chart

To remove items from a chart:

1. Select the chart you want to change.
2. Select the item you want to delete from the chart.
3. Open the Edit menu and choose Remove Item. The selected item is removed from the chart.

Related Topics

Cutting objects
Deleting objects
Remove Item command

Select All Command

The Select All command selects all objects in the file, including charts, objects you have drawn, and text.

Related Topics

Selecting objects
Edit menu

Using On-line Help

On-line help messages provide detailed information about commands, dialog boxes, buttons, and tools; techniques for editing charts; and additional concepts specific to ABC DataAnalyzer and the Windows environment.

Accessing On-line Help
You can access help one of two ways. The first way involves pressing **F1** to access context-sensitive help. When you press **F1**, you receive a help message specific to the command, dialog box, button, or tool you choose or open.

The second way involves using the Help menu. The Help menu provides commands for using ABC DataAnalyzer efficiently. The commands give you access to the complete help system.

How Help Messages are Organized
Finding information in the ABC DataAnalyzer help system is easy; it is much like using a road map. It provides landmarks (related topics) and pointers (jump terms) to easily get you where you want to go.

Help messages are organized hierarchically. Topics are "linked" to subtopics by jump terms.

All ABC DataAnalyzer commands contain a Related Topics section that points you to additional information related to the following: topic information, dialog box information, and procedure information.

Command Messages
Command messages define and describe commands in ABC DataAnalyzer.

Dialog Box Messages
Dialog Box messages list and explain the areas of a dialog box.

Procedure Messages
Procedure messages contain step-by-step instructions for performing tasks.

Jump Terms
Some help messages contain underlined words and phrases called "jump" terms. A jump term takes you to a related message for that term. Jump terms let you move throughout the help system without returning to the Help menu.

Glossary Terms
Words underlined with a dashed line have definitions attached to them. To view a definition for a word, point to the word and click the left mouse button. After reading the definition, click the mouse button to close the definition.

Printing Help
You can print a help message using the Print Topic command in the File menu of the Help window.

Closing Help
You can close help and return to the chart window in one of three ways.

- Double click the Control menu box in the Help window.
- Choose the Exit command in the File menu of the Help window.
- Choose the Close command in the Control menu of the Help window, or press **Alt+F4**.

ABC DataAnalyzer Help
Written and produced by Susie Lightfoot and Robert Whitsitt.

Related Topics
Bubble Help command

About ABC DataAnalyzer command

Bubble Help command

Use the Bubble Help in the Help menu to turn bubble help on or off.

When bubble help is turned on, you can point to a tool or button in the window, hold the mouse still for a short period of time, and receive a short message explaining the tool or button.

Related Topics

Using bubble help

Using Bubble Help

To use bubble help:

1. Open the Help menu. If a check mark does not appear beside the Bubble Help command, choose the Bubble Help command. This enables bubble help.
2. Point to a tool or button in the window, and hold the mouse still for a short period of time. A short message (bubble) appears, explaining the tool or button.

To turn off bubble help:

1. Open the Help menu. A check mark appears beside the Bubble Help command.
2. Choose Bubble Help. The next time you open the Help menu, a check mark will not appear beside the Bubble Help command.

Related Topics

Bubble Help command
Using on-line help

About ABC DataAnalyzer Command

The About ABC DataAnalyzer command opens a dialog box with the program version number and copyright date. In addition, it contains icons that you click for information about other Micrografx products and services, including technical support.

Related Topics

- About ABC DataAnalyzer dialog box
- Calling technical support
- Finding your version number

About ABC DataAnalyzer Dialog Box

The top portion of the About ABC DataAnalyzer dialog box contains the program version number and copyright date for your copy of the program.

Click the telephone icon for information about how to contact Micrografx Technical Support. Click the other icons for information about additional Micrografx products.

Related Topics

- About ABC DataAnalyzer command
- Calling technical support
- Finding your version number

Calling Technical Support

See the About ABC DataAnalyzer dialog box and click the telephone icon in the dialog box for information on contacting Micrografx by telephone, through CompuServe, and at their BBS. Before calling, have access to your computer and know the contents of your basic system configuration.

Related Topics

About ABC DataAnalyzer command
About ABC DataAnalyzer dialog box
Finding your version number

Finding Your Version Number

You need your version number when you contact Micrografx Technical Support.

To find your version number:

- Open the Help menu and choose About ABC DataAnalyzer. The About dialog box opens containing your version number.

Related Topics

About ABC DataAnalyzer command
About ABC DataAnalyzer dialog box

Learning Windows Basics

Click a topic below to learn more about it.

Choosing Menus and Commands

Commands in ABC DataAnalyzer are organized in menus on the menu bar.

An inactive command appears gray in the menu. You may have to select something in the window before the command is active. For example, you have to select an object before you can choose the Cut command in the Edit menu.

To open a menu with the mouse:

- Move the pointer to the menu title and click the left mouse button. The menu remains open until you choose a command or click the mouse button again.

To choose a command with the mouse:

1. Open the menu.
2. Point to a command and click the left mouse button.

To open a menu with the keyboard:

1. Press and hold **Alt**.
2. Press the **Spacebar**. The Control menu of the main ABC DataAnalyzer window opens.
3. Release **Alt**. The menu remains open on the screen.
4. Press **Right Arrow**. The Control menu of the chart window opens.
5. Press **Right Arrow** again. The File menu on the menu bar opens. (The **Left Arrow** key displays menus to the left.)
6. Press **Esc** to close the menu without choosing a command.

Shortcut: Press **Alt** and the underlined letter of the menu title to open a menu. For example, **Alt+F** opens the File menu.

To choose a command with the keyboard:

1. Open the menu.
2. Press the **Down Arrow** to highlight the command you want.
3. Press **Enter**.

Shortcut: Press **Alt** and the underlined letter of the menu, followed by the underlined letter of the command, to execute the command. For example, press **Alt+F** and then **N** to execute the New command in the File menu.

Choosing Options in a Dialog Box

Options in a dialog box have square check boxes or round option buttons. In a group of options with square check boxes, you can select several options at the same time. In a group of options with round option buttons, you can select only one option at a time.

To choose an option with the mouse:

- Point to the option you want and click the left mouse button. Click again to deselect the option.

To choose an option with the keyboard:

1. Press **Tab** to move to the option area you want. Press **Shift+Tab** to move in the reverse direction in the dialog box.
2. Press the **Arrow** keys to move among options within the area.
3. Press the **Spacebar** to select an option.

Maximizing and Restoring a Window

You can enlarge a window to cover the entire screen.

To maximize a window with the mouse:

- Click the Maximize box (containing the up arrow) in the upper-right corner of the window. The window fills the entire screen.

To restore a window to its previous size with the mouse:

- Click the Restore box (containing both up and down arrows).

To maximize a window with the keyboard:

1. Press **Alt+Spacebar** to open the Control menu.
2. Press **X** for the Maximize command. The window fills the entire screen.

To restore a window to its previous size with the keyboard:

- Press **Alt+Spacebar** and then **R** to choose the Restore command. The window returns to its previous size.

Minimizing and Restoring a Window

When you minimize a window, it becomes an icon. The icon then appears at the bottom of the screen. You can remove ABC DataAnalyzer from the screen, but keep it in memory, by minimizing its window. When you want to work in ABC DataAnalyzer again, you can bring it back on screen by restoring the window.

When you minimize a window, another window becomes active.

To minimize a window with the mouse:

- Click the Minimize box (containing the down arrow) in the upper-right corner of the window.

To restore a window with the mouse:

- Double click the icon. The icon expands into a window.

To minimize a window with the keyboard:

- Press **Alt+Spacebar** and then **N** to choose the Minimize command.

To restore a window with the keyboard:

1. Press and hold **Alt**.
2. Press **Tab** repeatedly until the icon of the program you want to restore is chosen.
3. Release **Alt**. The icon expands into a window.

Moving in a Dialog Box

To move to an area in a dialog box with the mouse, you simply point and click.

To move to an area in a dialog box with the keyboard, press **Tab** to move the cursor through the options and **Shift+Tab** to move in the reverse direction.

Some areas have descriptive names with an underlined letter. You can press **Alt** and the underlined letter to move to that area.

Moving Windows and Icons

Several windows can be displayed at the same time. You can rearrange them by moving one window at a time anywhere on the screen.

The window with the highlighted title bar is the active window. To make another window the active window with the mouse, click anywhere in that window. With the keyboard, press **Alt+Tab** to toggle among the windows and icons. An icon's title bar (below the icon) is highlighted when the icon is active.

To move a window with the mouse:

1. Point to the title bar and press and hold the left mouse button. The window's border changes color.
2. Drag the outline of the window to another location.
3. Release the mouse button.

To move a window with the keyboard:

1. Press **Alt+Spacebar** and then **M** to choose the Move command in the Control menu. A four-headed arrow appears on the title bar.
2. Press the **Arrow** keys to move an outline of the window to a new location.
3. Press **Enter**.

To move an icon with the mouse:

1. Point to the icon and press and hold the left mouse button.
2. Drag the icon to another location.
3. Release the mouse button.

To move an icon with the keyboard:

1. Press **Alt+Esc** to highlight the icon.
2. Press **Alt+Spacebar** to open the Control menu.
3. Press **M** to choose the Move command. A four-headed arrow appears on the icon.
4. Press the **Arrow** keys to move the icon.
5. Press **Enter**.

Resizing Windows

You can make the ABC DataAnalyzer window larger or smaller, resizing it in any direction. With the mouse, you can resize horizontally and vertically at the same time from a window's corner.

To resize the window with the mouse:

1. Point to a border or corner and press and hold the left mouse button. The pointer changes to a double-headed arrow.
2. Drag the border or corner until the new border indicates the desired size.
3. Release the mouse button.

To resize the window with the keyboard:

1. Press **Alt+Spacebar** and then **S** to choose the Size command. A four-headed arrow appears in the center of the window.
2. Press an **Arrow** key to move the four-headed arrow to the border you want to move. To move to a corner, press the two **Arrow** keys that point to that corner.
3. Press the **Arrow** keys repeatedly to change the window to the desired size.
4. Press **Enter**. The active window changes to the new size.

Switch To Command (Control Menu)

Use the Switch To command to open the Task List, which lets you switch among currently open applications and rearrange their windows and icons on your screen.

Related Topics

Dialog Box information
Procedure information

Task List Dialog Box

The Task List dialog box opens when you choose the Switch To command in the Control menu.

Task List
The Task List displays the open (running) applications. Highlight the application you want to switch to or close.

Switch To button
Click the Switch To button to switch to the highlighted application and make it active.

End Task button
Click the End Task button to close the highlighted application.

Cascade button
Click the Cascade button to cascade the applications in the Task List. The windows overlap so that each title bar is visible.

Tile button
Click the Tile button to tile the applications in the Task List. The windows are stacked in smaller sizes to fit on the screen.

Arrange Icons button
Click the Arrange Icons button to align the application icons at the bottom of the screen.

Related Topics
- Command information
- Procedure information

Switching Among Application Windows

To switch among application windows:

1. Open the Control menu and choose Switch To, or press **Ctrl+Esc**. The Task List opens.
2. Double click the name of the application you want or select the application name and click Switch To.

Related Topics

Command information
Dialog Box information

Close Command (Control Menu)

Use the Close command to close the active window or dialog box. The Close command in the main Control menu closes ABC DataAnalyzer. The Close command in the Control menu of the Worksheet closes only the Worksheet.

Double clicking a Control menu box  is the same as choosing the Close command.

Related Topics

Procedure information
Exit command

Closing a Window

To close the ABC DataAnalyzer window and exit the program:

- Open the Control menu in the ABC DataAnalyzer window and choose Close, or press **Alt+F4**.

To close the active dialog box:

- Open the Control menu in the dialog box and choose Close, or press **Alt+F4**.

Restore Command (Control Menu)

Use the Restore command to return the active window to its size and position before you chose the Maximize or Minimize command.

Clicking in the upper-right corner of a maximized window is the same as choosing the Restore command.

Double click the title bar to restore the window quickly.

Related Topics

Maximizing and restoring a window
Minimizing and restoring a window

Move Command (Control Menu)

Use the Move command to display a four-headed arrow so that you can move the active window or dialog box with the arrow keys.

Note: This command is unavailable if you maximize the window.

Related Topics

Procedure information

Size Command (Control Menu)

Use the Size command to display a four-headed arrow so that you can size the active window with the arrow keys.

Note: This command is unavailable if you maximize the window.

Related Topics

Procedure information

Minimize Command (Control Menu)

Use the Minimize command to reduce the ABC DataAnalyzer window to an icon.

Clicking  in the upper-right corner of the window is the same as choosing the Minimize command.

Related Topics

Procedure information
Moving windows and icons

Maximize Command (Control Menu)

Use the Maximize command to enlarge the active window to fill the available space. For example, the Worksheet window expands to fill the ABC DataAnalyzer window. The ABC DataAnalyzer window expands to fill the entire screen.

Clicking in the upper-right corner of the window is the same as choosing the Maximize command.

Double click the title bar to maximize the window quickly.

Related Topics

Procedure information

Chart Formulas

This topic provides the formulas used to calculate control line values in all DataAnalyzer control charts. The formulas are the standard Shewhart formulas.

Moving Range Chart Formulas

$\bar{X}$ = Avg. of all individual data values

$\bar{R}$ = Avg of all moving range values

X Chart Values

Central Control Line (CL) = $\bar{X}$

Upper Control Line (UCL) = $\bar{X}$ + 2.66

$\bar{R}$

Lower Control Line (LCL) = $\bar{X}$ - 2.66

$\bar{R}$

±2

σ Control Line = CL

± 2/3 * (UCL - CL)

±1

σ Control Line = CL

± 1/3 * (UCL - CL)

Moving Range Chart Values

Central Control Line (CL) = $\bar{R}$

Upper Control Line (UCL) = 3.267

Lower Control Line (LCL) = 0

X-Avg, R Chart Formulas

= Avg. of all data values in a subgroup

R = Range of a subgroup (Max value in subgroup - Min value in subgroup)

$\bar{\bar{X}}$ = Avg. of all

Values

= Avg. of all R Values

X-Avg Chart Values

Central Control Line (CL) = $\bar{\bar{X}}$

Upper Control Line (UCL) = $\bar{\bar{X}}$ + A

Lower Control Line (LCL) = $\bar{\bar{X}}$ - A

2

Control Line = CL

2/3 * (UCL - CL)

1

Control Line = CL

1/3 * (UCL - CL)

R Chart Values

Central Control Line (CL) =

Upper Control Line (UCL) = D_4

Lower Control Line (LCL) = D_3

p Chart Formulas

n = number inspected in a subgroup

p = number of rejects in a subgroup / number inspected in the subgroup

$\bar{p}$ = total number of rejects / total number inspected

Central Control Line (CL) = $\bar{p}$

Upper Control Line (UCL) = $\bar{p} + 3\sqrt{\bar{p}(1-\bar{p})}/\sqrt{n}$

Lower Control Line (LCL) = $\bar{p} - 3\sqrt{\bar{p}(1-\bar{p})}/\sqrt{n}$

pn Chart Formulas

n = the number inspected in a subgroup

p = number of rejects in a subgroup / number inspected in the subgroup

= total number of rejects / total number inspected

Central Control Line (CL) = n

Upper Control Line (UCL) = $n + 3\sqrt{\bar{p}n(1-\bar{p})}$

Lower Control Line (LCL) = $n - 3\sqrt{\bar{p}n(1-\bar{p})}$

c Chart Formulas

$\bar{c}$ = total defects in all subgroups / number of subgroups

Central Control Line (CL) = $\bar{c}$

Upper Control Line (UCL) = $\bar{c} + 3\sqrt{\bar{c}}$

Lower Control Line (LCL) = $\bar{c} - 3\sqrt{\bar{c}}$

u Chart Formulas

$\bar{u}$ = total defects in all subgroups / total units inspected

Central Control Line (CL) = $\bar{u}$

Upper Control Line (UCL) = $\bar{u} + 3\frac{\sqrt{\bar{u}}}{\sqrt{n}}$

Lower Control Line (LCL) = $\bar{u}$ - 3 $\frac{\sqrt{\bar{u}}}{\sqrt{n}}$

Related Topics

Chart tool

Working with Objects

Click one of the following topics to learn more about it.

Selecting Objects

ABC DataAnalyzer provides several ways for you to select objects on a page.

You can select an object by clicking the object when the mouse pointer is an arrow. Click the Object Selector tool in the toolbox to get the object selector.

Click the right mouse button to switch to the Object Selector tool from any other pointer. This feature lets you select, move, and resize objects without clicking the Object Selector tool in the toolbox. Click the right mouse button again to return to the original pointer.

To select	Do this
A single object	Using the arrow pointer, click the object.
A group of objects	Using the arrow pointer, press **Shift** and click each object. Or, drag the mouse completely around the objects you want to select.
All objects	Open the Edit menu and choose Select All or press **Ctrl+A**.
A chart	Using the arrow pointer, click the chart you want to select.
An element within a chart	Using the arrow pointer, click an element within a chart, such as a chart series or grid lines.

When an object is selected, eight solid boxes, called handles, appear around the object. When more than one object is selected, the handles appear around the set of objects. Use the handles to move and resize the object.

To deselect one of a group of selected objects, press **Shift** and click on the selected object

When an item within a chart is selected, hollow boxes appear around the item.

Related Topics

Working with objects

Using the Scroll Keys

You can use the **Page Up** and **Page Down** keys to scroll up and down one screen, respectively.

To scroll up or down one screen:

- Press the **Page Up** or **Page Down** key, depending upon the direction you want to scroll.

Related Topics

Working with objects

Moving Objects

ABC DataAnalyzer lets you move one object or multiple objects at the same time. Point inside a selected object and drag the mouse to move the object.

To move one or more objects:

1. Select one or more objects. Handles appear around the selected objects.
2. Point inside the selected objects and drag the mouse to move the objects. Release the mouse button when you are finished.

Press and hold **Ctrl** while you move an object to constrain to horizontal and vertical movements.

Related Topics

Resizing objects and text blocks
Working with objects

Resizing Objects and Text Blocks

ABC DataAnalyzer lets you resize objects, including text blocks.

Eight handles appear around selected objects. Use the corner handles to change the objects width and height proportionally; use the middle handles to stretch either the width or height, depending upon the handle you choose.

To resize an object:

1. Select one or more objects. Handles appear around the selected objects.
2. Point to a handle and drag the mouse until the object is the size you want. Drag toward the center to shrink the object; drag away from the center to enlarge it. Release the mouse button when you are finished.

Press and hold **Ctrl** while you resize objects to constrain the objects to their original proportions.

Related Topics

Moving objects
Working with objects

Using OLE (Object Linking and Embedding)

You can use Object Linking and Embedding (OLE 1.0) to link or embed ABC DataAnalyzer objects into other applications.

A linked object contains a graphic representation of the object and information that identifies the original file and the server application (ABC DataAnalyzer). The actual object information is located in the original file.

For example, you can link an ABC DataAnalyzer object with a Microsoft Word document. Although the object appears in the Word document, the object information is in ABC DataAnalyzer.

An embedded object contains a graphic representation of the object and all of the information needed to recreate the original object. An embedded object is located in the client application (the application into which you pasted the ABC DataAnalyzer object).

Glossary

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Copy
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D

Deselect
Dialog box
Double click
Drag

Auto scroll

The ability of the window to scroll automatically when you drag the pointer beyond the borders of the ABC DataAnalyzer window.

Cancel

A command button used to close a dialog box without making changes to the chart. The **Esc** key also closes the dialog box.

Check box

A small, square box that can be toggled on or off using the mouse. Check boxes usually are used when you can select or deselect only one option.

Clear

To delete selected objects from a chart using the Clear command in the Edit menu. When you use the Clear command, ABC DataAnalyzer does not place a copy of the objects in the Clipboard.

Click

To quickly press and release the left mouse button.

Clipboard

A temporary storage area for objects that are cut or copied from ABC DataAnalyzer or another Windows program.

Command

A word or phrase found in a menu that opens a dialog box or carries out an action.

Control menu

A menu common to all windows. You use the Control menu to move, resize, minimize, maximize, or close an ABC DataAnalyzer window.

Control menu box

The box, located in the upper-left corner of the window, that you click to open the Control menu or double click to close the window.

Control Panel

A Windows accessory for installing printers and fonts, setting up printers and ports, and choosing program options.

Copy

To place a copy of selected objects in the Clipboard using the Copy command in the Edit menu.

Cut

To remove selected objects from a chart and place a copy of them in the Clipboard using the Cut command in the Edit menu.

Deselect

To move the pointer away from an object and click the left mouse button. The handles on the object disappear, and commands, tools, and buttons no longer affect the object.

Dialog box

A window that opens when the program needs information from you before it can carry out an action.

Double click

To press and release the left mouse button twice rapidly without moving the mouse.

Drag

To point to an object with the mouse, press and hold the left mouse button, and move the mouse so that the object moves with the pointer across the screen.

Extension

The period and one to three characters at the end of a filename that identify the kind of information in the file. For example, the extension for ABC DataAnalyzer graph files is .GRF, and the extension for ABC DataAnalyzer data files is .DAT.

Font

A set of characters, including letters and numbers, that is all one size and style.

Handles

Square boxes that appear on the corners and sides of an object when the object is selected. You use the handles to resize the object.

Hint line

A one-line message at the bottom of the ABC DataAnalyzer window that gives you information about the tool or button beneath the arrow pointer or the highlighted command.

Icon

A small graphic symbol that represents a program or a file. For example, the ABC DataAnalyzer window can be minimized to appear as an icon.

Maximize and minimize boxes

The boxes, located in the upper-right corner of the screen, that you use to resize the window. Click the up arrow in the maximize box to enlarge the window. Click the down arrow in the minimize box to reduce the window to an icon. The frame around the window also is used to resize the window.

Menu

A list of commands organized under a name in the menu bar near the top of the ABC DataAnalyzer window. To open a menu, you click the menu name or press **Alt** and the letter underlined in the menu name.

Menu bar

The bar, located under the title bar of the ABC DataAnalyzer window, that contains the names of menus in the program.

Mouse

A manual device that you move across a flat surface to move the pointer on your screen. A mouse can have two or more buttons, which you press to carry out various actions.

Page orientation

The position of the page on the screen. Portrait (vertical) orientation displays a page taller than it is wide. Landscape (horizontal) orientation displays a page wider than it is tall.

Page size

The dimensions of a page on the screen.

Paper size

The physical size of the paper in a printing device.

Paste

To place a copy of the objects in the Clipboard into the active chart window using the Paste command in the Edit menu.

Pixel

An individual dot on the screen or printed page. Pixels combine to form an image.

Point (noun)

A type measure equal to about 1/72 of an inch.

Point (verb)

To move the mouse until the pointer on the screen rests on the object you want.

Pointer

A graphic symbol on the screen that follows the movement of the mouse. The pointer is usually an arrow, but can change shape depending on the command or button you choose.

Press

To hold down the mouse button momentarily.

Print area

The area, as defined either by page size definitions or a printer, that can be printed.

Resize

To change the size of an object. Dragging a handle into an object makes it smaller; dragging a handle away from an object makes it larger.

Ribbon

The area across the top of the window that displays buttons associated with tools in the toolbox.

Scroll

To move through the chart window to see portions of the chart that cannot fit on the screen.

Scroll arrows

The arrows at the right side and bottom of the ABC DataAnalyzer window. Click a scroll arrow to scroll by a small amount vertically or horizontally across the chart. Press and hold the arrow to continue scrolling.

Scroll bars

The bars at the right side and bottom of the ABC DataAnalyzer window. Each scroll bar contains a scroll box and two scroll arrows. Click a scroll bar to move by one screen vertically or horizontally across the chart.

Scroll boxes

The small boxes at the right side and bottom of the ABC DataAnalyzer window. Scroll boxes show the position of the information in the window relative to the entire file. Drag a scroll box to move vertically or horizontally across the chart.

Select

To choose an object in the window by clicking it with the mouse. Handles appear on the object to indicate it is selected. After an object is selected, it can be edited using commands, tools, and buttons.

Text cursor

A blinking vertical bar that indicates where to begin entering or editing text.

Text style

An attribute applied to text, such as bold, italic, underline, and strike-out.

Title bar

The bar across the top of a window that contains the window's name. The title bar also contains the window's Control menu box and minimize and maximize boxes.

Toggle

To alternately change from one state to another, such as on and off.

Toolbox

The vertical bar at the left side of the ABC DataAnalyzer window. The toolbox contains tools with which to select and format objects, view the Worksheet, create charts, draw objects, enter and format text, and change the view.

Text block

Text that is independent of a chart. Text blocks are created using the Text tool in the toolbox.

Proportional

Having the same or a constant ratio. When you resize an object proportionally, the object's height and width maintain a constant ratio relative to each other.

Typeface

A set of characters, including letters and numbers, with the same design and weight.

Messages and Solutions

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A

(Filename) is not a valid ABC DataAnalyzer file.
(Filename) is not a valid filename.
(Filename) is read-only.
(Filename) not found.
An older Micrografx application is running. Close it and run ABC DataAnalyzer again.
Are you sure you want to delete this file?

C

Cannot paste. Number of characters must be less than 10,000.
Charts cannot be rotated.

D

Delete is not available in multiple areas.

E

Error writing (filename)--file not saved.

I

Insert is not available in multiple areas.
Invalid constant.
Invalid version--file may not be loaded correctly.

L

Leave data in clipboard?

N

Not a valid page size.
Not a valid point size.
Not enough disk space to spool file.
Not enough disk space--unable to save.
Not enough memory to (all messages).

P

Page is larger than printable area. Set page size to printable area?
Page margins fall outside printable area. Move page within printable area?

R

Replace existing (filename)?

S

Save changes to (filename)?

T

There are no items to be printed.

U

Unable to find (filename).
Unable to insert data into Worksheet.
Unable to load (filename) completely.
Unable to open (filename).
Unable to paste data.
Unable to paste image.
Unable to print--please check printer.
Unable to print--please select printer.
Unable to render (format) clipboard format.

(Filename) is not a valid ABC DataAnalyzer file.

The file is not an ABC DataAnalyzer file and cannot be opened.

Open a different file with a GRF, DAT, DRW, WKS, SPC, DIF, XLS, WK1, or SLK extension.

(Filename) is not a valid filename.

The filename contains more than eight characters, or contains characters that are not allowed.

Type a different filename.

(Filename) is read-only

You are trying to save a file that is read-only. (You opened a file that is on a shared drive, and the file is in use by someone else.)

Type a different file name to save the file. The original file will not be erased.

(Filename) not found.

The file indicated is not in the current directory or on the diskette in the current disk drive, or the subdirectory does not exist.

Change directories to the directory containing the desired file, or reenter the complete pathname.

An older Micrografx application is running. Close it and run ABC DataAnalyzer again.

You are running another Micrografx application shipped with an older version of a required file.

Update the other Micrografx application, or close it and run ABC DataAnalyzer again.

Are you sure you want to delete this file?

You are trying to delete a file.

Click Yes to delete the file or click No to return to ABC DataAnalyzer.

Delete is not available in multiple areas.

More than one range is selected in the Worksheet.

Select only one range to delete.

Error writing (filename)--file not saved.

The file is not saved on the disk.

Type a new pathname to save the file on a different drive.

Insert is not available in multiple areas.

More than one range is selected in the Worksheet.

To insert a column or row, select only one range.

Invalid constant.

You typed a nonnumeric value into the Constant area of the Math dialog box.

Type a numeric value.

Invalid version--file may not be loaded correctly.

The file was saved in a previous version of the program.

Create a new file.

Leave data in clipboard?

You are closing ABC DataAnalyzer, and the Clipboard contains an object you cut or copied.

Click Yes to leave the data in the Clipboard to be available for other applications, or Click No to close ABC DataAnalyzer and empty the Clipboard.

Not a valid page size.

You have typed a page size that cannot be set.

Type different page dimensions.

Not a valid point size.

You have typed a point size that cannot be set.

Type a number from 1 and 144.

Not enough disk space to spool file.

There is not enough room on the disk to print the chart.

Delete some files to make room, or insert another formatted disk and try again.

Not enough disk space--unable to save.

There is not enough room on the disk to save the chart.

Delete some files to make room, or insert another formatted disk and try again.

Not enough memory to (all messages).

There is not enough system memory to run ABC DataAnalyzer or to complete the current operation.

Remove memory-resident programs from memory. Either close other open applications or add additional memory to your computer. Emptying the contents of the Clipboard can also free memory.

Page is larger than printable area. Set page size to printable area?

You have chosen a page size or page orientation that is different from the printer page size or orientation.

Choose a different page size or page orientation.

Page margins fall outside printable area. Move page within printable area?

The drawing margins overlap the margins required by the printer.

Click Yes for ABC DataAnalyzer to center the chart on the printer page. Click No to truncate the drawing and print what fits on the printer page. Click Cancel to return to the chart.

Related Topics

Setting up the page

Replace existing (filename)?

A file already exists with the name you have typed.

Click Yes to replace the existing file. Click No to avoid replacing the existing file, and then choose the Save As command and type a different name.

Save changes to (filename)?

Changes have been made to the chart and have not been saved.

Click Yes to save the changes. Click No to waive saving the changes. Click Cancel to return to the chart without saving.

There are no items to be printed.

You have opened a new file and nothing has been created yet, or you have opened an existing file that is empty.

Create a chart or draw a symbol, or open an existing file that is not empty, and try again.

Unable to find (filename).

The file indicated is not in the current directory or on the diskette in the current disk drive, or the subdirectory does not exist.

Change directories to the directory containing the desired file, or reenter the complete pathname.

Unable to insert data into Worksheet.

The range of data values copied to the Clipboard exceeds the maximum number of rows or columns in the Worksheet, which is 16,384 rows and 256 columns.

Break the data into two or more data parts, insert each part, and save it as a separate DAT file.

Unable to load (filename) completely.

The chart you indicated does exist but cannot be completely loaded.

The diskette may be damaged, or there may be a damaged sector on the hard disk. Run the DOS CHKDSK command. Use a backup of the file you want to open.

Unable to open (filename).

When you save a file, or perform any similar operation, a temporary file is created. The program is looking for a directory called TEMP or TMP in which to store data temporarily, and none exists.

Add the following entries to AUTOEXEC.BAT file to provide for both TEMP and TMP directories.
For example,
Set TEMP=C:\TEMP
Set TEMP=C:\TMP

Then, be sure that you create these directories in the path you specified.

Unable to paste data.

There is not enough memory to complete the current operation.

Remove memory-resident programs from memory. Either close other open applications or add additional memory to your computer. Emptying the contents of the Clipboard can also free memory.

Unable to paste image.

There is not enough memory to complete the current operation.

Remove memory-resident programs from memory. Either close other open applications or add additional memory to your computer. Emptying the contents of the Clipboard can also free memory.

Unable to print--please check printer.

The printer is not available for printing.

Check the printer to ensure that it is on-line, has paper installed, and is properly set up for printing. Make sure that the printer driver is in the current directory or in a directory on the path.

Unable to print--please select printer.

You have not selected a printer.

Select a printer with the Printer Setup command in the File menu.

Unable to render (format) clipboard format.

There has been an error transferring the object, or the driver is not working properly.

Contact Micrografx Technical Support.

Charts cannot be rotated.

You have tried to rotate a chart.

Charts cannot be rotated in ABC DataAnalyzer.

Cannot paste. Number of characters must be less than 10,000.

You are trying to paste a block of text that is too large.

Click OK. Delete some text and try again, or copy and paste the text in several smaller blocks.

Text Tool

The Text tool lets you enter and edit text both as text blocks and in charts. When you click the Text tool, the cursor changes to a text cursor and the ribbon changes to contain options specific to formatting text.

Related Topics

- Working with text
- Text ribbon

Working with Text

Click a topic below to learn more about working with text.

Text Ribbon

When you select the Text tool, the ribbon displays a set of buttons specific to this tool. The Text tool buttons are described below.

Font Box
The Font box displays the name of the current font or the font of the text that contains the text cursor.

Size Box
The Size box shows the current point size or the point size of the text that contains the text cursor.

Style Buttons
Use the Style buttons to choose text styles. The available text styles are bold, italic, underline, and strikeout.

Text Colors
The text colors can be applied to text.

Alignment Grid
Use the Alignment Grid in the Text ribbon to align text. The Alignment Grid contains nine squares. The three squares on the left all align text to the left of the text block. The three squares on the right all align text to the right of the text block. The three squares down the middle align the text in the center of the text block.

Related Topics

- Aligning text
- Choosing a font
- Choosing text size
- Choosing text styles
- Coloring text
- Working with text

Choosing a Font

To choose a font for text:

1. Click the Text tool in the toolbox.
2. Select the text you want to change.
3. Choose a font in the Font list box in the ribbon.

Related Topics

Text ribbon
Working with text

Choosing Text Size

To choose a size for text:

1. Click the Text tool in the toolbox.
2. Select the text you want to change.
3. Choose a size in the Size list box in the ribbon.

Related Topics

Text ribbon
Working with text

Choosing Text Styles

To choose a style for text:

1. Click the Text tool in the toolbox.
2. Select the text you want to change.
3. Click the style button you want in the ribbon. (When the button is depressed, the style is selected.)

Bold

Italic

Underline

Strike through

Related Topics

Text ribbon
Working with text

Coloring Text

To choose a color for text:

1. Click the Text tool in the toolbox.
2. Select the text you want to change.
3. Click the color in the ribbon you want to use for the text.

Related Topics

Text ribbon
Working with text

Aligning Text

Text blocks containing two or more lines can be aligned to the left, center, or right. A chart title can be aligned to the left, center, or right of the chart.

To align text:

1. Select the text block you want to align.
2. Click the Text tool in the toolbox.
3. Click a square on the left, center, or right of the Alignment Grid in the ribbon.

Related Topics

Text ribbon
Working with text

Creating Text Blocks

You can create blocks of text and place them anywhere on the page. Like objects, you can move and resize text blocks.

To create a text block:

1. Click the Text tool in the toolbox.
2. Point to where you want the text block to appear. Point outside existing objects and text blocks to create a new text block.
3. Click the left mouse button. The blinking text cursor appears in the chart.
4. Type the text you want in the text block. Press **Enter** to start a new line.
5. Press **Esc** when you finish or click outside the text to start a new text block.

Related Topics

Changing margins and paragraph indents
Editing block text
Selecting text
Working with text

Selecting Text

ABC DataAnalyzer lets you select the objects in a chart that contain text, or the specific characters and words you want. Click a topic below to learn more.

Selecting all text in a text block
Selecting characters and words
Selecting chart text

Selecting All Text in a Text Block

To select all the text in a text block:

1. Click the Object Selector tool  in the toolbox.
2. Click the text block you want. Press **Shift** and click to select more than one text block.

Related Topics

Selecting characters and words
Selecting chart text

Selecting Characters and Words

To select characters or words in a text block:

1. Click the Text tool in the toolbox.
2. Click inside a text block at the beginning of the text you want to select.
3. Press and hold the left mouse button, and drag across the text you want.
   or
   Press and hold the **Shift** key, and press the **Arrow** keys to select the text.

Related Topics

Selecting all text in a text block
Selecting chart text

Selecting Chart Text

To select text in a chart:

1. Click the Object Selector tool  in the toolbox.
2. Click the text item within a chart that you want to select. Four hollow boxes appear around the item. If the text item is an axis label or data label, all labels of the same type are selected.

Note: You cannot select a chart and format all the text in it. You must select and change each type of text within the chart and format them separately.

Related Topics

Selecting all text in a text block
Selecting characters and words

Editing Block Text

To edit block text:

1. Click the Text tool in the toolbox.
2. Click to place the text cursor within the text block where you want to edit.
3. Type the text you want to insert text.
   or
   Open the Edit menu and choose Paste to paste text from the Clipboard.
   or
   Press **Backspace** to delete text to the left of the text cursor or press **Delete** to delete text to the right of the cursor.
4. Press **Esc** or choose another tool to leave text mode.

Related Topics

Using the text editor
Working with text

Editing Chart Text

Chart text is text that is attached to a chart. Most chart text can be edited. Chart titles can be edited on the chart. Labels are edited in the Worksheet. Data values appearing in a table and labels that represent the axis scale are generated automatically and cannot be edited.

To edit axis labels, labels in a table, and the legend:

1. Select the chart you want to change.
2. Click the Worksheet tool in the toolbox.
3. Edit the data labels as necessary.
4. Select the labels and data.
5. Click Draw Chart, then choose the chart type. The chart dialog box opens.
6. Select the chart options you want and click Replace. The chart is redrawn with the new labels.

To edit a chart title:

1. Click the Text tool in the toolbox.
2. Click in the chart title you want to change. A text cursor appears in the title.
3. Make changes as necessary.
4. Press **Esc** or choose another tool to leave text mode.

Related Topics

Using the text editor
Working with text

Using the Text Editor

ABC DataAnalyzer offers a text editor for entering and editing rotated text and text that is too small to read. All the text entry and editing features available on the page are available in the text editor. The text editor shows the actual fonts.

To enter or edit text in the text editor:

1. Click the Text tool in the toolbox.
2. Press and hold **Shift** and click the text you want to edit.
3. Edit the text as necessary. Press **Up Arrow, Down Arrow, Page Up,** or **Page Down** to scroll vertically within the text editor.
4. Press **Esc** to close the text editor.

Note: If the point size is too small to be read on the screen or is rotated, text entry is automatically in the text editor, even if you do not press **Shift**.

You can expand the text editor from the bottom border by dragging the border with the mouse. The next time you enter or edit text, the editor appears in the size you specified.

Related Topics

Editing block text
Editing chart text
Selecting text

Changing Margins and Paragraph Indents

When you enter or edit block text, ABC DataAnalyzer displays margin settings in the ruler (if the rulers are active). The left marker in the ruler represents the left margin of the text; the right marker represents the right margin. The indent marker represents the point to which the first line of a paragraph is indented.

◣ Indent marker

◤ Left margin

◥ Right margin

Drag the left and right markers to set the margins of a paragraph. Drag the indent marker to set indentation for the first line of the paragraph. If the text does not fit within the selected margins, the text automatically wraps to the next line.

Related Topics

Editing block text
Selecting text

Object Selector Tool

Use the Object Selector tool to choose attributes for objects, such as colors and patterns. When you select the Object Selector tool, the ribbon changes to reflect the available styling options.

Related Topics

Object Selector ribbon

Object Selector Ribbon

When the Object Selector tool is selected, the ribbon displays a set of buttons specific to this tool. The ribbon buttons are described below.

Apply Buttons
An Apply button appears beside the Border Style, Fill Pattern, and Line Start buttons. Select one of the Apply buttons in the ribbon to apply color to the border, fill, or line. When you click a color in the ribbon, the current border, fill, or line is colored accordingly.

Border Style Button
The Border Style button lets you choose the border style (dashed line, solid line, etc.) you want. When you click the Border Style button, the Border Style menu opens. Use this menu to choose a border style option.

Border Width Box
The Border Width box shows the current width value for borders. The Width arrows let you increase or decrease the width of borders.

Fill Pattern Button
The Fill Pattern button lets you fill selected shapes with a solid color or a pattern. When you click the Fill Pattern button, the Fill Pattern menu opens. Use this menu to choose a fill pattern option.

Line Start button
The Line Start button lets you assign an end style to the starting point of lines. When you click the Line Start button, the Line Start menu opens. The menu contains the end style options for the starting points of lines.

Line Style button
The Line Style button lets you choose from several line styles, such as solid and dotted. When you click the Line Style button, the Line Style menu opens. The menu contains the line style options for lines.

Line End button
The Line End button lets you assign an end style to the ending point of lines. When you click the Line End button, the Line End menu opens. The menu contains the end style options for the ending points of lines.

Object Colors
The Object Colors in the ribbon can be applied to borders, fill patterns, and lines. The color you choose is applied to the option beside the selected Apply button.

Related Topics

Choosing the border and fill color
Choosing the border style
Choosing the border width
Choosing the fill pattern
Choosing the line color
Choosing the line style
Choosing line end symbols
Choosing the line width

Object Selector tool

Choosing the Border and Fill Color

To choose the border or fill color:

1. Select the object you want to color.
2. Click the Object Selector tool in the toolbox.
3. Click the Apply button beside the Border Style or Fill Pattern button .
4. Click the color you want in the ribbon. The selected color is checked in the ribbon and applied to the border or fill, depending upon the Apply button you selected.

Related Topics

Choosing the border style
Choosing the border width
Choosing the fill pattern
Object Selector ribbon

Choosing the Border Style

ABC DataAnalyzer lets you choose different styles for borders. A border is the surrounding line around an object. ABC DataAnalyzer provides many useful border styles, including solid and dashed lines.

To choose a border style:

1. Select the object you want to change.
2. Click the Object Selector tool in the toolbox.
3. Click the Border Style button in the ribbon. The Border Style menu opens.
4. Click the border style you want. The style is applied to the selected object.

Related Topics

Choosing the border and fill color
Choosing the border width
Object Selector ribbon

Choosing the Border Width

To choose the border width:

1. Select the object you want to change.
2. Click the Object Selector tool in the toolbox.

3. Click the up arrow in the Border Width box (beside the Border Style button) to increase the width; click the down arrow to decrease the width. Five represents the maximum width.

Related Topics

Choosing the border and fill color
Choosing the border style
Object Selector ribbon

Choosing the Fill Pattern

To choose a fill pattern:

1. Select the object you want to change.
2. Click the Object Selector tool in the toolbox.
3. Click the Fill Pattern button in the ribbon. The Fill Pattern menu opens.
4. Click the fill pattern you want. The pattern is applied to the selected object.

Related Topics

Choosing the border and fill color
Choosing the fill pattern
Object Selector ribbon

Choosing the Line Color

ABC DataAnalyzer lets you choose different colors for lines. The color is applied to the line, the line's start symbol, and the line's end symbol.

To choose line color:

1. Select the line you want to color.
2. Click the Object Selector tool in the toolbox.
3. Select the Apply button beside the Line Start button .
4. Click the color you want in the ribbon.

Related Topics

Choosing the line style
Choosing line end symbols
Choosing the line width
Object Selector ribbon

Choosing the Line Style

To choose a line style:

1. Select the line you want to change.
2. Click the Object Selector tool in the toolbox.
3. Click the Line Style button in the ribbon. The Line Style menu opens.
4. Click the line style you want.

Related Topics

Choosing the line color
Choosing line end symbols
Choosing the line width
Object Selector ribbon

Choosing Line End Symbols

ABC DataAnalyzer lets you add end styles at the beginning and end of lines. You can use a different end style on each end of a line.

To choose line end styles:

1. Select the line you want to change.
2. Click the Object Selector tool in the toolbox.
3. Click the Line Start or Line End button . A menu opens.
4. Click the line end styles you want.

Related Topics

Choosing the line color
Choosing the line style
Choosing the line width
Object Selector ribbon

Choosing the Line Width

To choose line width:

1. Select the line you want to change.
2. Click the Object Selector tool in the toolbox.

3. Click the up arrow in the Line Width box (beside the Line End button) to increase the width; click the down arrow to decrease the width. Five represents the maximum width.

Related Topics

Choosing the line color
Choosing the line style
Choosing line end symbols
Object Selector ribbon

File Menu Commands (Worksheet)

Click a command below to learn more about it.

New	Clears the Worksheet and creates a new data file.
Open Data	Opens a previously saved data file.
Save Data	Saves the current Worksheet as a data file.

New Command (Worksheet)

Use the New command to create a new data file, and clear the current Worksheet.

Related Topics

Creating a new data file
File menu (Worksheet)

Creating a New Data File

To create a new data file:

- Open the File menu and choose New. If you made changes to the Worksheet without saving them, you are prompted to save the changes.

Related Topics

New command
Creating a new graph file
Understanding ABC DataAnalyzer Files
Worksheet Contents

Open Data Command (Worksheet)

ABC DataAnalyzer works with two types of files: graph files and data files.

Use the Open Data command in the File menu to open data files when the Worksheet is open. The entire Worksheet is replaced with the file. When the Worksheet is closed, use the Open command in the File menu to open graph files.

Related Topics

- Open File dialog box
- Merging data files
- Opening a data file
- Understanding ABC DataAnalyzer Files
- File menu (Worksheet)

Opening a Data File

To open a data file:

1. Open the File menu and choose Open Data. If the Worksheet has changed and you did not save the current data file, you are prompted to save the changes. The Open File dialog box opens.
2. Choose the type of data file you want to open in the File Type list box.
3. If the data file is not listed in the current directory, double click the drive and directory where the file is located. If you will be opening or merging data files from this directory often, select Save to save this location as the default.
4. Choose the file you want to open, or type the filename in the box.
5. Click OK. The dialog box closes and the file opens.

Related Topics

Open File dialog box
Open Data command
Merging data files
Opening a graph file
Understanding ABC DataAnalyzer Files
Worksheet Contents

Merging Data Files

Rather than replacing the entire Worksheet with another file, you can merge data from another file into the current Worksheet. The original data in the Worksheet is not affected.

To merge data from another file:

1. Click the cell where you want the merged data to start. The data will be copied below and to the right of the cell.
2. Open the File menu and choose Open Data. If the Worksheet has changed and you did not save the current data file, you are prompted to save the changes. The Open File dialog box opens.
3. Choose the type of data file you want to open in the File Type list box.
4. If the data file is not listed in the current directory, double click the drive and directory where the file is located. If you will be opening or merging data files from this directory often, select Save to save this location as the default.
5. Choose the file you want to merge, or type the filename in the box.
6. Click Merge. The dialog box closes and the data is copied into Worksheet, starting at the active cell.

Related Topics

Open File dialog box
Open Data command
Opening a data file
Worksheet Contents

Save Data Command (Worksheet)

Use the Save Data command to save the current Worksheet as a data file. The Worksheet is saved automatically when you choose the Save command in the File menu when the Worksheet is closed.

Related Topics

- Save File dialog box
- Saving a data file
- Understanding ABC DataAnalyzer Files
- File menu (Worksheet)

Saving a Data File

You can save data files at any time while using the Worksheet.

To save a data file:

1. With the Worksheet open, choose Save Data in the File menu. The Save File dialog box opens.
2. Choose a file type for the data file, if you want to save the data in a different format. The default type is data (DAT).
3. Double click the drive and directory where you want to store the file. As you choose drives and directories, the location where the file will be stored is displayed above the list box.
4. Type the filename you want.
5. Click OK. The Worksheet is saved in a data file. If you entered an existing filename, you are prompted to replace the existing file.

Related Topics

Save File dialog box
Save Data command
Saving a graph file
Understanding ABC DataAnalyzer Files
Worksheet Contents

Edit Menu Commands (Worksheet)

Click a command below to learn more about it.

Undo/Redo	Lets you undo and redo changes made to the Worksheet.
Cut	Cuts the information in the selected cells to the Clipboard.
Copy	Copies the information in selected cells to the Clipboard.
Paste	Pastes cut or copied information into the Worksheet.
Clear	Removes data from selected cells.
Delete	Deletes rows or columns from the Worksheet.
Insert	Inserts blank rows or columns into the Worksheet.

Undo/Redo Command (Worksheet)

The Undo command reverses the last change you made to the Worksheet; the Redo command restores the change. If a change cannot be reversed, the command is gray.

Related Topics

Reversing a change in the Worksheet

Reversing a Change in the Worksheet

To reverse (undo) a change:

- Open the Edit menu and choose Undo, or press **Ctrl+Z**.

Related Topics

Undo/Redo command

Cut Command (Worksheet)

The Cut command removes the information in the selected cells and places it in the Clipboard.

Related Topics

Cutting data

Cutting Data

Use the Edit menu Cut and Paste commands to move data cells from one location to another in the Worksheet. The cells in the original location are left empty.

To move data:

1. Select the data cells you want to move.
2. Open the Edit menu and choose Cut.
3. Select the cells where you want to paste the data you just cut.
   or
   Select only the first cell in the range where you want to paste. The first cell is the upper left cell in the range.
4. Open the Edit menu and choose Paste. The cut cells are pasted in the new location.

Related Topics

Clearing data
Cut command
Deleting rows and columns
Pasting data

Copy Command (Worksheet)

The Copy command copies the information in the selected cells and places it in the Clipboard. The copied cells are left unchanged.

Related Topics

Copying data

Copying Data

To copy data:

1. Select the data cells you want to copy.
2. Open the Edit menu and choose Copy. The selected cells remain highlighted.
3. Select the cells where you want to paste the data you just copied.
   or
   Select only the first cell in the range where you want to paste. The first cell is the upper left cell in the range.
4. Open the Edit menu and choose Paste. The data cells are copied to the new location.

Related Topics

Copy command
Pasting data

Paste Command (Worksheet)

The Paste command places the contents of the Clipboard in the Worksheet starting at the current cell.

Related Topics

Pasting data

Pasting Data

To paste into the Worksheet:

- Open the Edit menu and choose Paste, or press **Ctrl+V**. The information in the Clipboard appears in the Worksheet starting at the current cell.

Related Topics

Copying data
Cutting data
Paste command

Clear Command (Worksheet)

The Clear command removes the contents of selected cells without removing the cells or affecting other cells in the Worksheet.

Note: The information is deleted permanently when you choose the Clear command. It is not placed on the Clipboard.

Related Topics

Clearing data

Clearing Data

To delete data:

1. Select the cells you want to clear.
2. Open the Edit menu and choose Clear.
   or
   Press the **Del** key.
   Entries are removed from the selected cells.

Note: The information is deleted permanently when you choose the Clear command or press the **Del** key. It is not placed on the Clipboard.

Related Topics

Clear command
Cutting data
Deleting rows and columns

Delete Command (Worksheet)

The Delete command lets you remove rows, columns, or cells from the Worksheet.

Related Topics

- Delete dialog box
- Deleting cells from the Worksheet
- Deleting rows and columns

Delete Dialog Box

The Delete dialog box lets you choose remove cells from the Worksheet.

Select Rows to delete the selected cells and shift cells in the current row to the left to take their place.

Select Columns to delete the selected cells and shift the cells in the current column upward to take their place.

Related Topics

Delete command
Deleting cells from the Worksheet

Deleting Rows and Columns

To delete rows or columns from the Worksheet:

1. Select the rows or columns you want to delete.
2. Open the Edit menu and choose Delete. If you deleted columns, the columns to the right shift left. If you deleted rows, the rows below shift upward.

Related Topics

Cutting data
Clearing data
Delete command
Deleting cells from the Worksheet

Deleting Cells from the Worksheet

To delete cells from the Worksheet:

1. Select one or more cells to delete.
2. Open the Edit menu and choose Delete. The Delete dialog box opens.
3. Select Rows to shift data on the current row to the left.
   or
   Select Columns to shift data in the current column upward.
4. Click OK.

Related Topics

Cutting data
Clearing data
Delete command
Delete dialog box
Deleting rows and columns

Insert Command (Worksheet)

The Insert command lets you insert rows, columns, or cells into the Worksheet.

Related Topics

- Insert dialog box
- Inserting rows and columns
- Inserting cells in the Worksheet

Insert Dialog Box

The Insert dialog box lets you insert blank cells into the Worksheet.

Select Rows to insert new cells in the current row, to the left of the selected cells.

Select Columns to insert new cells in the current column, above the selected cells.

Related Topics

Insert command
Inserting cells in the Worksheet

Inserting Rows and Columns

To insert a new row or column:

1. Select the row below or the column to the right of where you want to insert the new row or column.
2. Open the Edit menu and choose Insert.

Related Topics

Insert command
Inserting cells in the Worksheet

Inserting Cells in the Worksheet

To insert cells in the Worksheet:

1. Select a cell below or to the right of where you want to insert.
2. Open the Edit menu and choose Insert. The Insert dialog box opens.
3. Select Rows to insert new cells in the current row, to the left of the selected cells.
   or
   Select Columns to insert new cells in the current column, above the selected cells.

Related Topics

Insert command
Insert dialog box
Inserting rows and columns

Data Menu Commands (Worksheet)

Click a command below to learn more about it.

Sort	Sorts data in the Worksheet in ascending or descending order.
Math	Performs simple arithmetic functions on selected cells by adding, subtracting, multiplying, or dividing each cell in the range by a constant value

Sort Command (Worksheet)

The Sort command in the Data menu lets you sort data cells in the Worksheet horizontally or vertically and in ascending or descending order.

Related Topics

- Data-Sort dialog box
- Sorting data in the Worksheet
- Data menu (Worksheet)

Data-Sort Dialog Box

The Data-Sort dialog box lets you sort data cells in the Worksheet horizontally or vertically and in ascending or descending order.

Sort
Select Horizontally to sort the selected cells from left to right or select Vertically to sort the selected cells from top to bottom.

Order
Select Ascending to sort the selected cells from lowest to highest, or in ascending alphabetical order (A to Z). Select Descending to sort the selected cells from highest to lowest, or in descending alphabetical order (Z to A).

Related Topics

Sort command
Sorting data in the Worksheet

Sorting Data in the Worksheet

To sort data cells:

1. Select the cells you want to sort.
2. Open the Data menu and choose Sort. The Data-Sort dialog box opens.
3. Select Horizontally or Vertically, to sort in columns or rows, respectively.
4. Select Ascending or Descending to determine the order of the sort.
5. Click OK. The selected cells are sorted.

Related Topics

Sort command
Data-Sort dialog box

Math Command

The Math command in the Data menu lets you perform simple arithmetic functions on selected cells by adding, subtracting, multiplying, or dividing each cell by a constant value. The data in each cell is replaced by the resulting value.

Related Topics

Data-Math dialog box
Adding, subtracting, multiplying, and dividing
Data menu (Worksheet)

Data-Math Dialog Box

The Data-Math dialog box lets you perform simple arithmetic functions on selected cells by adding, subtracting, multiplying, or dividing each cell by a constant value.

Function
Choose the type of math function you want to perform. Addition adds the constant to the value in each selected cell. Subtraction subtracts the constant from the value in each selected cell. Multiplication multiplies the constant times the value in each selected cell. Division divides the value in each selected cell by the constant.

Constant
Enter the constant you want to use.

Related Topics

Math command
Adding, subtracting, multiplying, and dividing

Adding, Subtracting, Multiplying, and Dividing

To perform simple arithmetic on a range of cells:

1. Select a range of cells in the Worksheet.
2. Open the Data menu and choose Math. The Data-Math dialog box opens.
3. Choose the type of math function you want to perform.
4. Enter a constant value you want to use in the math.
5. Click OK. The cells are changed accordingly.

Related Topics

Data-Math dialog box
Math command

View Tool

The View tool provides four ways for you to view your work. When you click the View tool, a row of buttons appears to the right. Click an icon below to read more information about the button.

Click the Actual Size button to view objects at their actual size.

Click the Current Page button to view the entire page on which you are working.

Click the Used Pages button to see all the pages that contain objects.

Click the Zoom button to magnify an area.

Actual Size Button

This button allows you to see objects at their actual sizes. It is useful for selecting specific objects and precisely positioning objects and lines. If an object is selected when you click this button, ABC DataAnalyzer displays the page at its actual size with the selected object centered in the window.

Note: If you do not select any objects, clicking the Actual Size button matches the upper-left corner of the page with the window's upper-left corner.

The keyboard shortcut for the Actual Size button is **F3.**

Related Topics

Changing your view
View tool

Current Page Button

This button lets you see the entire page on which you are working. It is useful for selecting a group of objects, determining the page layout, and roughly placing and moving objects.

The keyboard shortcut for the Current Page button is **F4.**

Related Topics

- Changing your view
- View tool

Used Pages Button

This button allows you to see all the pages that contain objects. It is useful for getting an overall view of your chart, selecting and moving many objects at a time, and quickly making large-scale changes.

The keyboard shortcut for the Used Pages button is **F5.**

Related Topics

Changing your view
View tool

Zoom Button

This button lets you see and edit objects in finer detail. After you click the Zoom button, you define the zoom area by dragging the pointer around the area or objects you want to magnify.

The keyboard shortcut for the Zoom button is **F2.**

Related Topics

Changing your view
View tool

Changing Your View

To change your view of a chart:

1. Select the object you want centered in the window, if you are changing to the actual-size view.
2. Click the View tool in the toolbox.
3. Click the view button you want.

   Actual Size

   Current Page

   Used Pages

   Zoom

4. If you clicked the Zoom button, drag the pointer around the area you want to magnify. ABC DataAnalyzer displays the chosen view.

Related Topics

Actual Size button
Current Page button
Used Pages button
Viewing with the Keyboard
Zoom button

Viewing with the Keyboard

You can use the following keys to move across the window and change your view.

Key	Action
Up Arrow	Move up
Down Arrow	Move down
Left Arrow	Move left
Right Arrow	Move right
Page Up	Move up one screen
Page Down	Move down one screen
Shift+Page Up	Move diagonally up and to the right
Shift+Page Down	Move diagonally down and to the right
Shift+Home	Move diagonally up and to the left
Shift+End	Move diagonally down and to the left
Home	Move to the upper left corner of the window
End	Move to the lower left corner of the window
F2	Zoom in on a specific area
F3	View objects at actual size
F4	View the current page
F5	View all used pages

Related Topics

Changing your view

Draw Tool

The Draw tool provides basic drawing tools you can use to enhance your charts. When you click the Draw tool, a row of buttons appears to the right. Click an icon below to read more information about the button.

Click the Rectangle button to draw rectangles and squares.

Click the Rounded Rectangle button to draw rounded rectangles and squares.

Click the Ellipse button to draw circles and ellipses.

Click the Line button to draw lines and polygons.

Rectangle Button

Use the Rectangle button to draw rectangles and squares.

Related Topics

Drawing rectangles and ellipses
Draw tool

Rounded Rectangle Button

Use the Rounded Rectangle button to draw rounded rectangles and rounded squares.

Related Topics

Drawing rectangles and ellipses
Draw tool

Ellipse Button

Use the Ellipse button to draw ellipses and circles.

Related Topics

Drawing rectangles and ellipses
Draw tool

Drawing Rectangles and Ellipses

ABC DataAnalyzer provides a Rectangle tool, a Rounded Rectangle tool, and an Ellipse tool that you can use to frame charts, or draw rectangles, squares, ellipses, and circles anywhere on the page.

Although rectangle refers to both squares and rectangles, square means only perfectly square shapes. An ellipse is an elongated circle, or oval. The term ellipse refers to both ellipses and circles, but circle describes only perfect circular shapes.

To draw a rectangle or ellipse:

1. Click the Draw tool in the toolbox, then click the drawing button you want.
2. Point to where you want to begin drawing.
3. Drag the mouse to draw the shape. The shape appears, changing size and proportion as you drag.

   or

   Press and hold **Ctrl** and drag the mouse to draw a square, rounded square, or circle. An outline of the shape appears, changing size as you drag.
4. Release the mouse button (and then **Ctrl**) when the shape appears as you want it.

A border style and a fill style are added when you release the mouse button.

Related Topics

Rectangle button
Rounded Rectangle button
Ellipse button

Line Button

Use the Line button to draw lines and polygons.

Related Topics

- Drawing Lines
- Drawing Polygons
- Draw tool

Drawing Lines

ABC DataAnalyzer provides a line tool you can use to accentuate your charts. For example, you can highlight results in a chart by adding lines that point to specific data in charts.

ABC DataAnalyzer provides several types of lines you can use. Straight lines are the most basic. Freehand lines mimic the movement of your mouse as you draw, letting you create virtually any shape. Jointed lines are a series of straight or freehand line segments that are connected to each other. Only the first and last segments of a jointed line show line ends.

Lines use the style and color that you select in the ribbon. You can choose unique line ends for the start and end of the line.

To draw a line:

1. Click the Draw tool in the toolbox, then click the Line button .
2. Point to where you want to begin drawing a line.
3. Drag the mouse in any direction to draw the line.
4. Click the mouse once quickly to complete the line. The line style is applied to the line when you click the left mouse button.

Press **Ctrl** while drawing a line to snap to 45-degree angle increments.

To draw a freehand line:

1. Click the Draw tool in the toolbox, then click the Line button.
2. Point to where you want to begin drawing a line.
3. Press and hold **Shift,** and drag the mouse to draw the line. As you move the mouse, the freehand line appears on the screen. Release **Shift** and the left mouse button when finished.
4. Click the mouse once quickly to complete the line. The line style is applied to the line when you click the left mouse button.

To draw a jointed line:

1. Click the Draw tool in the toolbox, then click the Line button.
2. Drag to draw the first line segment. Release the mouse button.
3. Press and hold the left mouse button to draw the next segment. Before releasing the left mouse button, you can move the mouse to change the position of the line.
4. Repeat step 3 for each additional line segment.
5. Click the mouse once quickly to complete the line. The line style is applied to the line when you click the left mouse button.

You can combine straight lines and freehand lines in a jointed line. Press and hold **Shift** during step 3 above to draw a freehand line segment.

Related Topics

Drawing Polygons
Line button

Drawing Polygons

You draw a polygon by drawing a jointed line and connecting the first and last segments. You can fill a polygon with a solid color or any fill pattern.

To draw a polygon:

1. Click the Draw tool in the toolbox, then click the Line button .
2. Drag to draw the first line segment. Release the mouse button.
3. Press and hold the left mouse button to draw the next segment. Before releasing the left mouse button, you can move the mouse to change the position of the line.
4. Repeat step 3 for each additional line segment. Draw the last segment so that it connects to the first point on the line.
5. Click the mouse once quickly to complete the polygon. The line style is applied to the line when you click the left mouse button.

Related Topics

Drawing Lines
Line button

Chart Tool

The Chart tool lets you create and modify charts, based on the data selected in the Worksheet. When you click the Chart tool, a row of buttons appears to the right. Click an icon below to read more information about the button.

 Creates or modifies a histogram chart.

 Creates or modifies a run chart.

 Creates or modifies a Pareto chart.

 Creates or modifies a control chart, including P charts, PN charts, C charts, U charts, Moving Range, and X Avg, R charts.

 Creates or modifies a scatter chart.

 Creates or modifies a pie chart.

Related Topics

Chart formulas

Histogram Chart Button

The Histogram Chart button creates a new histogram or modifies an existing histogram, based on the data selected in the Worksheet. When you click this button, the Histogram Chart dialog box opens. Use this dialog box to choose options for the chart.

A histogram is a visual representation of the spread of data. You use histograms to show how frequently something occurs. The information is shown as columns proportional in height to the frequency of occurrence of the subgroup represented. Subgroup intervals are equal in size, so the columns are of equal width. The relative heights of the columns indicate the proportion of data points in each subgroup.

Related Topics

- Creating a histogram chart
- Histogram Chart dialog box
- Chart tool

Histogram Chart Dialog Box

The Histogram Chart dialog box lets you choose options for creating or modifying a histogram chart.

Number of Columns List Box
The Number of Columns list box sets the number of columns for a histogram. You use this list box to choose how finely you want to divide the representation of the data in the histogram. Most histograms reflect the data best with six to twelve columns.

3D Option
Select 3D to add depth perspective, or a third dimension, to your chart.

Legend Option
The Legend option is not available for histograms, and is grayed in this dialog box.

Table Option
Select Table to add a table of information to your chart. The table displays the measurements of defect counts along with their subgroup number.

Save Settings Option
Select Save Settings to save your option choices for the next time you create or modify a histogram chart. The next time this dialog box displays, the same settings are selected automatically.

Labels From 1st Column Option
Select Labels From 1st Column to use the data in the first column as labels instead of numeric data. Selecting this option is especially important when you have numeric labels, such as years.

Replace Button
Click Replace to replace the selected chart with one using the currently selected options.

New Button
Click New to create a new chart using the selected options.

Cancel Button
Click Cancel to close the dialog box without making changes to the file.

Related Topics

Creating a histogram chart
Histogram Chart button

Creating a Histogram Chart

To create a histogram chart:

1. Click the Worksheet tool in the toolbox to open the Worksheet, if necessary.
2. Open the File menu and choose Open Data to open a data file.
   or
   Click the Quick Entry button and click the type of chart you are creating. Appropriate labels for that chart are placed at the top of the worksheet. You can edit the labels across the top of each column, if you wish. Enter data in the columns starting at row 1.
3. Select the data needed for the chart, including the labels.
4. Click Draw Chart. A menu of chart types opens.
5. Click the Histogram button. The Histogram Chart dialog box opens.
6. Select the options you want.
7. Click New to create the chart. The chart appears.
8. Click the Text tool in the toolbox, and then click the word Title to edit the title of the chart.

Related Topics

Histogram Chart button
Histogram Chart dialog box
Modifying chart options

Run Chart Button

The Run Chart button creates a new run chart or modifies an existing run chart, based on the data selected in the Worksheet. When you click this button, the Run Chart dialog box opens. Use this dialog box to choose options for the chart.

The run chart, also called a time line chart or trend chart, displays changes over a period of time. A typical use is the number of items produced each day.

The left axis displays a quantity, such as percentages, frequencies, quantity, or dollar value. The horizontal axis is divided into time intervals such as days of the week, months, or more unique periods such as first job, second job, and so on.

Related Topics

- Creating a run chart
- Run Chart dialog box
- Chart tool

Run Chart Dialog Box

The Run Chart dialog box lets you choose options for creating or modifying a run chart.

3D Option
Select 3D to add depth perspective, or a third dimension, to your chart.

Legend Option
Select Legend to add a legend to your chart. ABC DataAnalyzer uses the first row of highlighted data in the Worksheet to create the legend entries.

Table Option
Select Table to add a table of information to your chart. The table displays the values for each point on the run line.

Save Settings Option
Select Save Settings to save your option choices for the next time you create or modify a run chart. The next time this dialog box displays, the same settings are selected automatically.

Labels From 1st Column Option
The Labels From 1st Column option uses the data in the first column as labels instead of numeric data. Selecting this option is especially important when you have numeric labels, such as years.

Replace Button
Click Replace to replace the selected chart with one using the currently selected options.

New Button
Click New to create a new chart using the selected options.

Cancel Button
Click Cancel to close the dialog box without making changes to the file.

Related Topics

Creating a run chart
Run Chart button

Creating a Run Chart

To create a run chart:

1. Click the Worksheet tool in the toolbox to open the Worksheet, if necessary.
2. Open the File menu and choose Open Data to open a data file.
   or
   Click the Quick Entry button and click the type of chart you are creating. Appropriate labels for that chart are placed at the top of the worksheet. You can edit the labels across the top of each column, if you wish. Enter data in the columns starting at row 1.
3. Select the data needed for the chart, including the labels.
4. Click Draw Chart. A menu of chart types opens.
5. Click the Run button. The Run Chart dialog box opens.
6. Select the options you want.
7. Click New to create the chart. The chart appears.
8. Click the Text tool in the toolbox, and then click the word Title to edit the title of the chart.

Related Topics

Modifying chart options
Run Chart button
Run Chart dialog box

Pareto Chart Button

The Pareto Chart button creates a new Pareto chart or modifies an existing Pareto chart, based on the data selected in the Worksheet. When you click this button, the Pareto Chart dialog box opens. Use this dialog box to choose options for the chart.

The Pareto chart is a simple and effective method to focus on what to do first, keep track of what to do next, identify what will yield the most benefit for the least effort, and continuously focus on improvement.

A Pareto chart combines a column chart and a line chart. The columns represent the number of defects or frequency of problems in each category. The line represents the cumulative percent contribution of each of the defects.

Related Topics

- Creating a Pareto chart
- Pareto Chart dialog box
- Chart tool

Pareto Chart Dialog Box

The Pareto Chart dialog box lets you choose options for creating or modifying a Pareto chart.

3D Option
Select 3D to add depth perspective, or a third dimension, to your chart.

Legend Option
The Legend option is not available for Pareto charts, and is grayed in this dialog box.

Table Option
Select Table to add a table of information to your chart. The table displays the number of defects.

Save Settings Option
Select Save Settings to save your option choices for the next time you create or modify a Pareto chart. The next time this dialog box displays, the same settings are selected.

Labels From 1st Column Option
The Labels From 1st Column option uses the data in the first column as labels instead of numeric data. Selecting this option is especially important when you have numeric labels, such as years.

Replace Button
Click Replace to replace the selected chart with one using the currently selected options.

New Button
Click New to create a new chart using the selected options.

Cancel Button
Click Cancel to close the dialog box without making changes to the file.

Related Topics

Creating a Pareto chart
Pareto Chart button

Creating a Pareto Chart

To create a Pareto chart:

1. Click the Worksheet tool in the toolbox to open the Worksheet, if necessary.
2. Open the File menu and choose Open Data to open a data file.
   or
   Click the Quick Entry button and click the type of chart you are creating. Appropriate labels for that chart are placed at the top of the worksheet. You can edit the labels across the top of each column, if you wish. Enter data in the columns starting at row 1.
3. Select the data needed for the chart, including the labels.
4. Click Draw Chart. A menu of chart types opens.
5. Click the Pareto button. The Pareto Chart dialog box opens.
6. Select the options you want.
7. Click New to create the chart. The chart appears.
8. Click the Text tool in the toolbox, and then click the word Title to edit the title of the chart.

Related Topics

Modifying chart options
Pareto Chart dialog box
Pareto Chart button
Sharing Axis Ranges

Control Chart Button

The Control Chart button creates a new control chart or modifies an existing control chart, based on the data selected in the Worksheet. When you click this button, the Control Chart dialog box opens. Use this dialog box to choose options for the chart.

You use a control chart to monitor the performance of a process that has frequent outputs. The chart provides a pictorial representation of an ongoing process and shows when the results of a process are outside the limits of the process.

The control chart lets you distinguish between measurements that are predictably within the inherent capability of the process (common causes of variation) and measurements that are unpredictable and produced by special causes.

The data suitable for control charts consists of several subgroups, each with several measurements within it. The measurements within a subgroup are all taken at the same time, or as part of the same batch. The one exception to this rule is the data required for a Moving Range chart, which contains only one data value within each subgroup.

All the control charts show data and an upper line representing the upper control limit (UCL), a central line (CL), and a lower line representing the lower control limit (LCL) of the data. ABC DataAnalyzer sets the UCL to +3 standard deviations and the LCL to -3 standard deviations, based on a normal distribution.

For X Avg, R charts and MR charts, you can use the Control Chart dialog box to choose to show 1 and 2 control lines in addition to the standard 3 control lines.

Related Topics

- Control Chart dialog box
- Control limits and specification limits
- Creating a control chart
- C charts
- P charts
- PN charts
- U charts
- X Avg, R charts
- MR charts
- Chart tool

Control Limits and Specification Limits

It is important to differentiate between control limits, which control charts show, and specification limits. Control limits are a function of the process. Specification limits are created by customer needs and expectations. In other words, process control limits do not depend on the specification limits set by a product or process design.

For example, a customer may require that a part be milled to within a thousandth of an inch. Suppose, under perfect conditions, that the machine that does the milling can meet that tolerance 10% of the time, meaning you have to scrap 90% of the parts. That is not a control limit: it is a cost of doing business.

If the machine creates the part within tolerance more or less than 10% of the time, however, there is a control problem that can be addressed with control charts.

Related Topics

Control Chart button

X Avg, R Charts

The X Avg, R chart is the most common type of control chart. The name is often written R, pronounced X bar R. The X average chart plots the mean (average) values in the process. The R chart plots the range of the values in a particular subgroup. ABC DataAnalyzer supports up to 25 data values in each subgroup.

X Avg, R charts are variable charts. Variable data indicates how much or to what extent something is happening. Examples of variable information are

- Number of shipments leaving the warehouse per hour
- pH of a chemical mixture
- Environmental conditions

Related Topics

Control Chart dialog box
Creating a control chart

P Charts

P charts show the fraction of the data that is defective. You use a P chart when the subgroups are of different sizes.

When you select the P chart in the Control Chart dialog box, the More button becomes available. You can click it to choose whether the upper control limit (UCL) and lower control limit (LCL) are calculated using the sample size for each subgroup, or are calculated using the mean of the sample sizes. If you use the sample size for each subgroup, the UCL and LCL may have a stair-step appearance.

P charts are attribute charts. Attribute charts are used to display and analyze data characterized as

- Good or bad
- Yes or no
- Pass or fail

Related Topics

Control Chart dialog box
Creating a control chart

PN Charts

PN charts show the fraction of the data that is defective. You use a PN chart when the subgroups are the same sizes.

PN charts are attribute charts. Attribute charts are used to display and analyze data characterized as

- Good or bad
- Yes or no
- Pass or fail

Related Topics

Control Chart dialog box
Creating a control chart

C Charts

C charts show the number of defects when the material being tested has a constant number of items that could fail. An example of data appropriate for a C chart is the number of faulty chips in a computer motherboard.

C charts are attribute charts. Attribute charts are used to display and analyze data characterized as

- Good or bad
- Yes or no
- Pass or fail

Related Topics

Control Chart dialog box
Creating a control chart

U Charts

U charts show the number of defects when the material being tested is not a constant area or width. An example of data appropriate for a U chart is the number of tufts in a swatch of cloth.

When you select U chart in the Control Chart dialog box, the More button becomes available. You can click it to choose whether the upper control limit (UCL) and lower control limit (LCL) are calculated using the sample size for each subgroup, or are calculated using the mean of the sample sizes. If you use the sample size for each subgroup, the UCL and LCL may have a stair-step appearance.

U charts are attribute charts. Attribute charts are used to display and analyze data characterized as

- Good or bad
- Yes or no
- Pass or fail

Related Topics

Control Chart dialog box
Creating a control chart

Moving Range (MR) Charts

The Moving Range (or MR) chart is a variation of the X Avg, R Chart. You use it to represent data consisting of a single data value per subgroup. The Moving Range chart is also referred to as an XR chart or individuals chart. Like the X Avg, R chart, the Moving Range chart consists of two graphs, the X chart and the R chart. The X chart plots the individual data values for each subgroup. The R chart plots the "moving range," which is the absolute difference between successive data values in each subgroup. Since data ranges are calculated from successive data values, this is called a "moving range."

Related Topics

Control Chart dialog box
Creating a control chart

Control Chart Dialog Box

The Control Chart dialog box lets you choose options for creating or modifying a P chart, PN chart, C chart, U chart, Moving Range, or X Avg, R chart.

Control Chart Options
The control chart options let you select the type of control chart you want to create or modify (P, PN, U, C, Moving Range, and X Avg, R).

3D Option
Select 3D to add depth perspective, or a third dimension, to your chart.

Legend Option
The Legend option is not available for control charts, and is grayed in this dialog box.

Table Option
Select Table to add a table of information to your chart. The table displayed depends on the type of chart, as shown below.

Chart Type	Table Data
X Avg., R	Subgroup number, mean measurement, and range of measurement
P	Subgroup number, subgroup size, and percent of defects
PN	Subgroup number, subgroup size, and number of defects
U	Sample number, count of defects, and dimension
C	Sample number and count of defects
Moving Range	Subgroup number, measurement, and moving range

Save Settings Option
Select Save Settings to save your option choices for the next time you create or modify a control chart. The next time this dialog box displays, the same settings are selected automatically.

Labels From 1st Column Option
The Labels From 1st Column option uses the data in the first column as labels instead of numeric data. Selecting this option is especially important when you have numeric labels, such as years.

Replace Button
Click Replace to replace the selected chart with one using the currently selected options.

New Button
Click New to create a new chart using the selected options.

Cancel Button
Click Cancel to close the dialog box without making changes to the file.

More Button
The More button is available when a P chart, U chart, X Avg, R chart, or MR chart is selected. When you click More, the More dialog box opens. For P charts and U charts, use this dialog box to choose whether the upper control limit (UCL) and lower control limit (LCL) are calculated using the sample size for each subgroup, or are calculated using the mean of the sample sizes. For X Avg, R charts and MR charts, use this dialog box to choose whether to show 1 and 2 control lines in addition to the standard

3

control lines.

Related Topics

Control Chart button

Creating a control chart

More Dialog Box

For P and U Charts
This area lets you choose for P and U charts whether the upper control limit (UCL) and lower control limit (LCL) are calculated using the sample size for each subgroup, or are calculated using the mean of the sample sizes. If you use the sample size for each subgroup, the UCL and LCL may have a stair-step appearance.

For X Avg R and MR Charts
This area lets you choose for X Avg R and Moving Range charts whether you want to draw control lines at the 1, -1, 2 and -2 sigma values as well as at the 3 and -3 sigma values.

Related Topics

Control Chart dialog box

Creating a Control Chart

To create a control chart:

1. Click the Worksheet tool in the toolbox to open the Worksheet, if necessary.
2. Open the File menu and choose Open Data to open a data file.
   or
   Click the Quick Entry button and click the type of chart you are creating. Appropriate labels for that chart are placed at the top of the worksheet. You can edit the labels across the top of each column, if you wish. Enter data in the columns starting at row 1.
3. Select the data needed for the chart, including the labels.
4. Click Draw Chart. A menu of chart types opens.
5. Click the P Chart, PN Chart, U Chart, C Chart, MR Chart, or X Avg, R button. The Control Chart dialog box opens.
6. Select the options you want.
7. Click New to create the chart. The chart appears.
8. Click the Text tool in the toolbox, and then click the word Title to edit the title of the chart.

Related Topics

Control Chart button
Control Chart dialog box
Modifying chart options
C charts
P charts
PN charts
U charts
X, Avg R charts
MR charts

Scatter Chart Button

The Scatter Chart button creates a new scatter chart or modifies an existing scatter chart, based on the data selected in the Worksheet. When you click this button, the Scatter Chart dialog box opens. Use this dialog box to choose options for the chart.

Scatter charts let you examine two factors at one time and determine the relationship that may exist between them. The scatter chart shows plotted points against two measures, one displayed on the vertical (y) axis, the other on the horizontal (x) axis.

The dependent variable is the one you can affect, such as call duration or amount of chemical. The independent variable is the other variable that depends on the first. The independent variable is assigned to the vertical (y) axis and the dependent variable to the horizontal (x) axis.

In a positive correlation between the independent and dependent variables (they both increase or both decrease), the chart points spread from the bottom left of the chart to the top right of the chart.

In a negative correlation between the independent and dependent variables (one increases as the other decreases), the chart points spread from the top left of the chart toward the bottom right of the chart.

If there is no correlation or weak correlation between the data sets, the points appear at random in the chart.

Related Topics

- Creating a scatter chart
- Scatter Chart dialog box
- Chart tool

Scatter Chart Dialog Box

The Scatter Chart dialog box lets you choose options for creating or modifying a scatter chart.

3D Option
Select 3D to add depth perspective, or a third dimension, to your chart.

Legend Option
Select Legend to add a legend to your chart. ABC DataAnalyzer uses the first row of highlighted data in the Worksheet to create the legend entries.

Table Option
Select Table to add a table of information to your chart. The table displays the dependent and independent variables below the chart, along with the labels.

Save Settings Option
Select Save Settings to save your option choices for the next time you create or modify a scatter chart. The next time this dialog box displays, the same settings are selected automatically.

Labels From 1st Column Option
The Labels From 1st Column option uses the data in the first column as labels instead of numeric data. Selecting this option is especially important when you have numeric labels, such as years.

Replace Button
Click Replace to replace the selected chart with one using the currently selected options.

New Button
Click New to create a new chart using the selected options.

Cancel Button
Click Cancel to close the dialog box without making changes to the file.

Related Topics
Creating a scatter chart
Scatter Chart button

Creating a Scatter Chart

To create a scatter chart:

1. Click the Worksheet tool in the toolbox to open the Worksheet, if necessary.
2. Open the File menu and choose Open Data to open a data file.
   or
   Click the Quick Entry button and click the type of chart you are creating. Appropriate labels for that chart are placed at the top of the worksheet. You can edit the labels across the top of each column, if you wish. Enter data in the columns starting at row 1.
3. Select the data needed for the chart, including the labels.
4. Click Draw Chart. A menu of chart types opens.
5. Click the Scatter button. The Scatter Chart dialog box opens.
6. Select the options you want.
7. Click New to create the chart. The chart appears.
8. Click the Text tool in the toolbox, and then click the word Title to edit the title of the chart.

Related Topics

Modifying chart options
Scatter Chart button
Scatter Chart dialog box

Pie Chart Button

The Pie Chart button creates a new pie chart or modifies an existing pie chart, based on the data selected in the Worksheet. When you click this button, the Pie Chart dialog box opens. Use this dialog box to choose options for the chart.

A pie chart shows the relative proportion that each part contributes to the whole. A limitation of pie charts is that they cannot compare multiple data series.

Five or six pie segments on a pie chart is ideal; 12 should be the upper limit. For best readability, start with the largest segment. The other segments progress clockwise from large to small. If necessary, place a segment representing all other or miscellaneous after the smallest segment.

Related Topics

- Creating a Pie chart
- Pie Chart dialog box
- Chart tool

Pie Chart Dialog Box

The Pie Chart dialog box lets you choose options for creating or modifying a pie chart.

3D Option
Select 3D to add depth perspective, or a third dimension, to your chart.

Legend Option
Select Legend to add a legend to your chart. ABC DataAnalyzer uses the first row of highlighted data in the Worksheet to create the legend entries.

Table Option
The Table option is not available for pie charts, and is grayed in this dialog box.

Save Settings Option
Select Save Settings to save your option choices for the next time you create or modify a pie chart. The next time this dialog box displays, the same settings are selected automatically.

Labels From 1st Column Option
The Labels From 1st Column option uses the data in the first column as labels instead of numeric data. Selecting this option is especially important when you have numeric labels, such as years.

Replace Button
Click Replace to replace the selected chart with one using the currently selected options.

New Button
Click New to create a new chart using the selected options.

Cancel Button
Click Cancel to close the dialog box without making changes to the file.

Related Topics

Creating a Pie chart
Pie Chart button

Creating a Pie Chart

To create a pie chart:

1. Click the Worksheet tool in the toolbox to open the Worksheet, if necessary.
2. Open the File menu and choose Open Data to open a data file.
   or
   Click the Quick Entry button and click the type of chart you are creating. Appropriate labels for that chart are placed at the top of the worksheet. You can edit the labels across the top of each column, if you wish. Enter data in the columns starting at row 1.
3. Select the data needed for the chart, including the labels.
4. Click Draw Chart. A menu of chart types opens.
5. Click the Pie button. The Pie Chart dialog box opens.
6. Select the options you want.
7. Click New to create the chart. The chart appears.
8. Click the Text tool in the toolbox, and then click the word Title to edit the title of the chart.

Related Topics

Exploding a pie chart
Modifying chart options
Pie Chart button
Pie Chart dialog box

Exploding a Pie Chart

To explode a slice from a pie chart:

1. Select the slice you want to explode.
2. Drag the slice away from the pie.

To explode an entire pie chart:

1. Select any slice in the pie.
2. Press and hold **Shift** while dragging the slice away from the pie. The entire pie chart separates.

Related Topics

Creating a pie chart

Modifying Chart Options

To change the chart options:

1. Double click the chart you want to change. A dialog box opens for the chart type you selected.
2. Select the options you want.
3. Click Replace to redraw the chart with the new options.

Related Topics

Control Chart dialog box
Histogram Chart dialog box
Pareto Chart dialog box
Pie Chart dialog box
Run Chart dialog box
Scatter Chart dialog box
Chart tool

Worksheet Tool

The Worksheet tool opens the Worksheet to let you enter, edit, or select data for a chart.

When creating or modifying a chart, you use a Worksheet to define the values for the chart. You can enter the values yourself, open a data file, or merge data from an existing data file. The Worksheet is a spreadsheet-like window used to define data for the current chart.

Related Topics

Displaying the Worksheet
Worksheet Contents

Displaying the Worksheet

To display the Worksheet:

- Click the Worksheet tool in the toolbox.
  or
- Press **Ctrl+W**.

Related Topics

Worksheet Contents
Worksheet tool

Worksheet Contents

Related Topics

Contents

The Worksheet Window

The Worksheet consists of rows and columns of data cells. These cells contain the data values and labels for a chart. You can enter data directly into these cells, open a data file, or merge data from another file.

The Data Editor displays the information in the current cell. (The cells row and column identifier appear to the left of the Data Editor.) If the cell is empty, the Data Editor is also empty. When you enter data into the current cell, the data value appears in both the Data Editor and the current cell.

The Worksheet window is a separate window from the ABC DataAnalyzer window. Both windows, however, share the same menu bar. When you open the Worksheet window, the menus for the Worksheet display in the menu bar; when you close the Worksheet, the menus change to reflect the available menus in the ABC DataAnalyzer window.

Related Topics

Displaying the Worksheet
Worksheet Contents

Moving Around the Worksheet

To move around the Worksheet with the mouse, simply point and click. You can click the scroll bars and scroll arrows to scroll the Worksheet window left and right, and up and down. This allows you to view the contents of cells in other columns and rows.

To move around the Worksheet with the keyboard, use the keys listed in the following table.

Press	To
Up Arrow, **Down Arrow**	Move to one cell up or down
Tab	Move to one cell to the right
Shift+Tab	Move to one cell to the left
Shift+Up Arrow **Shift+Down Arrow**	Move to and select one cell up or down
Page Up, Page Down	Move up or down one window

Related Topics

Worksheet Contents

Entering Data

You enter data into the Worksheet before a chart is created.

To enter data in the Worksheet:

1. Click the Worksheet tool in the toolbox to open the Worksheet.
2. Select a data cell.
3. Type the data for the cell.
4. Continue selecting cells and typing their values to complete the data needed for your chart.

You can enter up to 80 characters in each cell; however, the cell may not display all the characters. The Data Editor at the top of the Worksheet does display what is in the current cell. For numeric entries, ABC DataAnalyzer plots a chart based on the first 17 digits.

Related Topics

Using quick entry
Editing data
Selecting data

Using Quick Entry

ABC DataAnalyzer provides a Quick Entry button to help you understand where to place your data. The Quick Entry button labels the Worksheet for you, so you know where to enter data, and where to enter data labels.

When you click the Quick Entry button in the Worksheet, a menu of chart types appears below the button. Click one of the chart types to label the Worksheet.

Related Topics

- Entering data
- Selecting data

Editing Data

You enter data into the Worksheet before a chart is created. After you enter the chart data, you can easily come back and edit the Worksheet at any time.

To edit data within a cell:

1. Click the Worksheet tool in the toolbox to open the Worksheet.
2. Select a data cell.
3. Type a new value. Press **Enter** or move to another cell to commit the change.

or

Click inside the Data Editor. Use the **Left Arrow** and **Right Arrow** keys to move the cursor within the Data Editor. Press **Backspace** to delete characters to the left of the cursor. Type new characters to appear to the right of the cursor. When finished, press **Enter** to commit changes and move to another cell.

Note: You can edit data in only one cell at a time.

You can enter up to 80 characters in each cell; however, the cell may not display all the characters. The Data Editor at the top of the Worksheet does display what is in the current cell. For numeric entries, ABC DataAnalyzer plots a chart based on the first 17 digits.

Related Topics

Using quick entry
Entering data
Selecting data

Selecting Data

ABC DataAnalyzer creates charts based on the selected (highlighted) cells in the Worksheet.

To select a single cell:

- Point to the cell and press and hold the left mouse button until the cell is highlighted.

To select a range of cells:

1. Point to the cell at the beginning or the end of the range of cells.
2. Drag to the opposite corner of the range of cells. If the pointer meets the edge of the Worksheet, the Worksheet scrolls to let you continue highlighting.

To select a large range of cells:

1. Point to the first cell in the range you want to select.
2. Click the left mouse button quickly, to choose the cell but not to select it. A thick border appears around the cell, but the cell is not highlighted.
3. Press and hold **Shift** and click the last cell in the range.

To select a row or column:

1. Point to the number before the row or the letter above the column.
2. Click the left mouse button to highlight the entire row or column. Drag to highlight additional rows or columns.

To select the entire Worksheet:

- Click the button at the intersection of the row and column headings  .

You can select multiple ranges of cells in the Worksheet (a maximum of 10 ranges) to be plotted in a chart. This is useful when importing data (for example, from Lotus 1-2-3) with embedded spaces and labels because you can then avoid selecting these cells. The order in which multiple ranges are selected determines the order in which they are plotted, with the first range plotted first.

To select multiple ranges of cells:

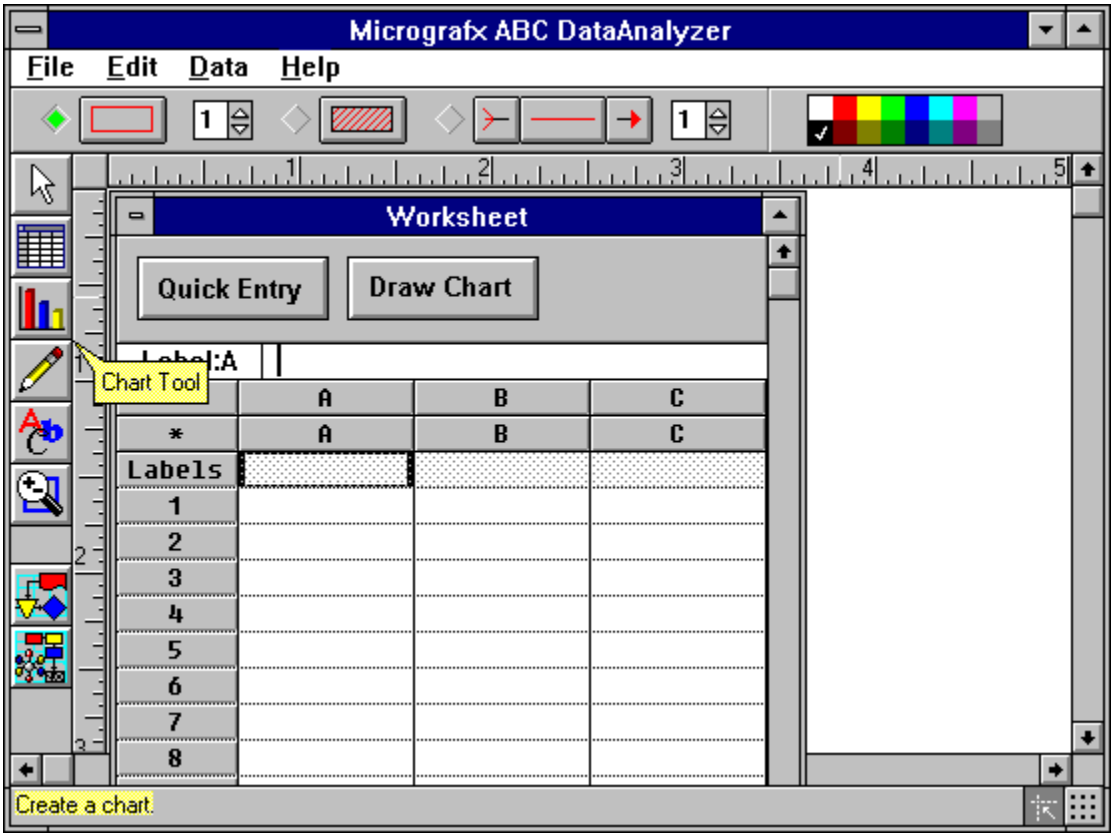
1. Select the first range of cells.
2. Press and hold **Ctrl**, and select the next range.
3. Repeat step 2 to highlight up to ten ranges.

Related Topics

Entering data
Editing data
Worksheet Contents

ABC DataAnalyzer Window

Click an area in the following window to read a description about the area.



Related Topics

- Menus
- Object Selector ribbon
- Text ribbon
- Toolbox and buttons

Menus

ABC DataAnalyzer has the following menus in its main window. Click an item below to learn more about the menu.

File menu
Edit menu
Change menu

The following menus display when the Worksheet is open. Click an item below to learn more about the menu.

File menu
Edit menu
Data menu

Toolbox and Buttons

The following tools appear in the toolbox on the left side of the ABC DataAnalyzer window. Click a tool below to learn more about it.

The Object Selector tool lets you select objects, and it displays a ribbon that gives you added control over colors, fill styles, and line styles.

The Worksheet tool displays the Worksheet associated with the current graph file. Use the Worksheet to enter data for statistical quality charts.

The Chart tool lets you create statistical quality charts based on the data selected in the Worksheet

The Draw tool lets you draw rectangles, rounded rectangles, ellipses, and lines.

The Text tool lets you enter and edit text, and it displays a ribbon that gives you added control over text formatting.

The View tool lets you change your view of the page.

The ABC FlowCharter tool switches you to the ABC FlowCharter program.

The ABC SnapGraphics tool switches you to the ABC SnapGraphics program.

The following buttons appear in the bottom right of the ABC DataAnalyzer window. Click a button below to learn more about it.

Select the Snap button to force objects to snap to ruler increments

Select the Grid button to display grid dots on the page.

ABC FlowCharter Tool

The ABC FlowCharter tool switches you to the ABC FlowCharter program. If ABC FlowCharter is not already open, the program opens automatically.

Related Topics

Switching to ABC FlowCharter
Toolbox and buttons

Switching to ABC FlowCharter

To switch to ABC FlowCharter:

- Click the ABC FlowCharter tool in the toolbox.

Related Topics

ABC FlowCharter tool

ABC SnapGraphics Tool

The ABC SnapGraphics tool switches you to the ABC SnapGraphics program. If ABC SnapGraphics is not already open, the program opens automatically.

Related Topics

Switching to ABC SnapGraphics
Toolbox and buttons

Switching to ABC SnapGraphics

To switch to ABC SnapGraphics:

- Click the ABC SnapGraphics tool in the toolbox.

Related Topics

ABC SnapGraphics tool

Snap Button

The Snap button turns ruler snap on and off. Select the Snap button to turn ruler snap on. Deselect the Snap button to turn ruler snap off. The button appears darker when it is selected.

Related Topics

Using ruler snap
Toolbox and buttons

Using Ruler Snap

You can use ruler snap to snap, or attract, objects to ruler divisions. Snapping is useful when drawing, resizing, and moving objects to align objects on the page.

To turn ruler snap on:

- Select the Snap button at the bottom right of the window.
  or
  Open the File menu and choose Preferences. Select Snap to Rulers in the Preferences dialog box. (Select Save to use ruler snap the next time you use ABC DataAnalyzer.) Click OK.

To turn ruler snap off:

- Deselect the Snap button at the bottom right of the window.
  or
  Open the File menu and choose Preferences. Deselect Snap to Rulers in the Preferences dialog box. (Select Save to avoid ruler snap the next time you use ABC DataAnalyzer.) Click OK.

Related Topics

Setting preferences
Snap button

Grid Button

The Grid button displays and hides a grid of dots on the page. Select the Gird button to display the grid. Deselect the Grid button to hide the grid. The button appears darker when it is selected.

Related Topics

Displaying a grid
Toolbox and buttons

Displaying a Grid

ABC DataAnalyzer lets you display a grid on the background of the page. You can use the grid to help you visually align objects on a page.

To display the grid:

- Select the Grid button at the bottom right of the window.
  or
  Open the File menu and choose Preferences. Select Show Grid in the Preferences dialog box. (Select Save to display the grid the next time you use ABC DataAnalyzer.) Click OK.

To hide the grid:

- Deselect the Grid button at the bottom right of the window.
  or
  Open the File menu and choose Preferences. Deselect Show Grid in the Preferences dialog box. (Select Save to hide the grid the next time you use ABC DataAnalyzer.) Click OK.

You can change the spacing of grid points using the Preferences dialog box.

Related Topics

Grid button
Setting preferences

Control menu box

Title bar

Minimize and Maximize boxes

Menu bar

Ribbon

Object Selector tool

Worksheet Control menu box

Worksheet tool

Chart tool

Draw tool

Bubble help

Text tool

View tool

Toolbox

ABC FlowCharter tool

ABC SnapGraphics tool

Worksheet

Ruler

Scroll box

Scroll bar

Scroll arrow

Snap button

Grid button

Hint line

BLANK

Subject Index

B

G

K

O

V

W

X

Z

A

B

C

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Using ABC DataAnalyzer

Click a topic below to learn more about it.

Working with Charts

Click a topic below to learn more about it.