

Draw

Draw is a graphical applet that is called on by the main Ability applications - Write, Spreadsheet and Database - whenever they need to use vector drawing tools.

Draw can be used on its own to create and save graphical designs such as letterheads, logos, and emblems. These can be reused later by Write or Spreadsheet.

With Draw you can create lines, shapes and text boxes, and insert pictures from other applications.

See:

[Starting Draw](#)

[Parts of the Draw window](#)

[Creating a drawing](#)

Starting Draw

To start Draw, follow these steps:

1. Click the **Start** button on the Windows Taskbar
2. Select **Programs**
3. Select **Ability Office**
4. Select **Ability Draw**

Draw will open with a new document, ready for adding graphics.

Parts of the Draw window

The Draw window consists of standard toolbars (for operations such as opening files and cutting shapes), a set of rulers, and the draw document itself. You can have many draw documents open at once.

There are three toolbars that are specific to Draw: the draw toolbar, the color toolbar and the align toolbar.

These toolbars will also appear in other Ability applications that use Draw (for example, in Database when designing a form, or in Write or Spreadsheet when a drawing is inserted).

To help work with draw objects, the Draw window also has rulers and gridlines.

See:

[Tools bar](#) - used to add [draw objects](#) shapes to your document.

[Color toolbar](#) - sets foreground and background colors for draw objects.

[Align toolbar](#) - aligns and centers selected draw objects.

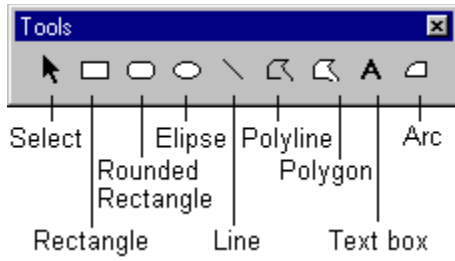
See also:

[Rulers and gridlines](#)

[A Grid](#)

The tools bar

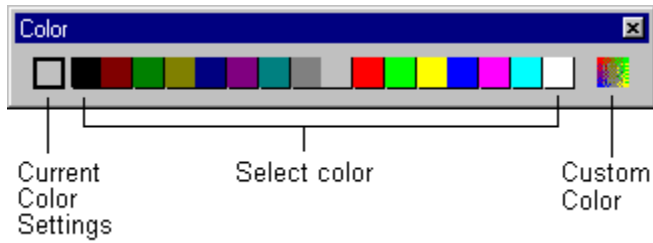
The tools bar is a set of drawing tools which provide the main method of adding any element to your document.



For more details, see [Adding a shape](#).

The color toolbar

The color toolbar is a palette of colors.



You use the color bar to choose the colors you want to use when drawing with a tool or changing the color settings of an existing draw object.

- Click on a color to set the back-color (the color of the insides of a shape).
- Right-click on a color to set the fore-color (the color of the lines in a shape).
- Click on the Custom color button to define your own mix of colors.

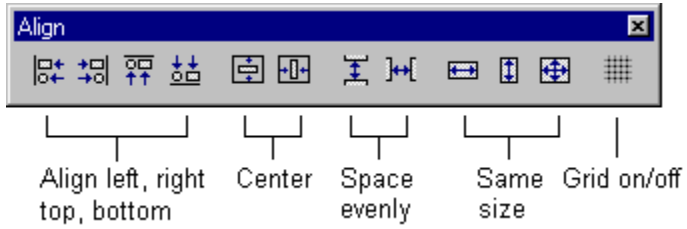
For more details, see [Setting the color of draw objects](#).

See also:

[Draw object](#)

The align toolbar

The **Align** toolbar allows you to align, size and center multiple draw objects.



For more details, see the following sections:

[Working with groups of objects](#)

[Spacing objects](#)

[Aligning objects](#)

[Resizing objects together](#)

The rulers and gridlines

Across the top and down the left of the document window are the *rulers*.

As you move the mouse pointer across the screen, you will see the *gridlines* - markers on the rulers - moving as well. These indicate your exact position.

You can choose not to display the rulers - select the **Ruler** command from the **View** menu.

See also:


[The grid](#)

The grid

When snap control is turned on, any objects you create, resize or move will jump or 'snap' to align themselves with the grid divisions. This is usually the best way of working with Draw, as it is easy to create and align objects manually.

To control the grid, select **Grid Setup** from the **Tools** menu and then:

- In the **Horizontal** box, type the number of horizontal grid points you want per unit of measurement.
- In the **Vertical** box, type the number of vertical grid lines you want per unit of measurement.
- Use the **Always Snap To Grid** checkbox to turn snap on and off.

When grid snap is on, it may be useful to view the grid points. Select the **Grid** button  or select **Grid** from the **View** menu. Note that Draw may only display every other grid point (or every third or fourth), if the number of grid points per unit of measurement is too high to display on screen without crowding. In this case, movement will still obey the underlying grid settings.


If you've drawn and positioned an object when grid snap is turned off, you can align it to the grid by selecting it, right-clicking and selecting **Align to Grid** (or use **Align to Grid** from the **Format** menu).

See also:

[Rulers and gridlines](#)

Creating a drawing

When you start **Draw**, you are automatically given a new document.

Click on the **New** button  on the toolbar to create a new drawing. Alternatively, select the **New** command from the **File** menu.

Now use the draw tools bar to add draw objects (lines, shapes and text) to the drawing.

The following sections show you how to add draw objects, and also how to move, size and format them.

See:

[Adding a shape](#)

[Drawing a text box](#)

[Inserting a picture](#)

For details of how to move, size and format draw objects, see also:

[Selecting, moving and resizing draw objects](#)

[Formatting a shape](#)

Adding a shape

Shapes can be added to your draw document by using the tools bar. The following sections show you how to add lines, polylines, squares, rectangles, ellipses, circles, arcs and polygons to your drawing.

See:

[Tools bar](#) for information on the draw tools bar.

The sections on lines are:

[Drawing a line](#)

[Drawing a polyline](#)

The sections on solid shapes are:

[Drawing a square or rectangle](#)


[Drawing an ellipse or circle](#)

[Drawing an arc](#)

[Drawing a polygon](#)

Drawing a line

To draw a line:

1. Select the **Line** button .
2. Press the mouse button (without releasing it) to start the line, drag the mouse, and release the button to complete it.

See also:

[Formatting a shape](#)


[Selecting, moving and resizing draw objects](#)

For details on other shapes, see [Adding a shape](#).

Drawing a polyline

A polyline is two or more lines joined together. You could make the letter "W" using the polyline tool.

To create a polyline:

1. Select the **Polyline** button .
2. Click at the start of the line, move the mouse, and click again when you wish to start a new segment of the line. Continue moving the mouse and clicking to draw connected lines.
3. Double-click with the mouse to finish the polyline.

You can also use the polyline tool to draw a freehand line, by dragging the mouse but without depressing the mouse button.

Note: Unlike the Polygon Tool, double-clicking on the end point does not close the shape, unless you manually join the start and end points. You cannot fill a closed polyline with a color.

See also:


[Formatting a shape](#)


[Selecting, moving and resizing draw objects](#)

For details on other shapes, see [Adding a shape](#).

Drawing a square or rectangle

To draw a square or rectangle:

1. Select the **Rectangle** button .
2. Press the mouse button to start the rectangle, drag the mouse, and release the button to complete it.

Use the Rounded Rectangle button  instead to draw a square or rectangle with rounded corners.

See also:


[Formatting a shape](#)

[Selecting, moving and resizing draw objects](#)

For details on other shapes, see [Adding a shape](#).

Drawing an ellipse or circle

To draw an ellipse or circle:

1. Select the **Ellipse** button .
2. Press the mouse button to start the ellipse, drag the mouse, and release the button to complete it.

See also:


[Formatting a shape](#)

[Selecting, moving and resizing draw objects](#)

For details on other shapes, see [Adding a shape](#).

Drawing a polygon

To draw a polygon (a many-sided shape):

1. Select the **Polygon** button .
2. Click to start the polygon, move the pointer and click again to finish the first edge.
3. Repeat step 2 to create as many edges as you want.
4. Double-click to complete the shape - Draw automatically joins the first and last points with a straight line.

You can also use the polygon tool to draw a freehand shape, by dragging the mouse but without depressing the mouse button.

See also:


[Formatting a shape](#)

[Selecting, moving and resizing draw objects](#)

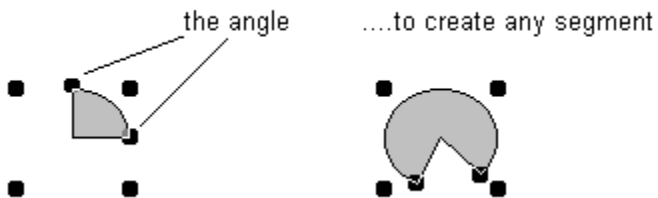
For details on other shapes, see [Adding a shape](#).

Drawing an arc

To draw an arc, that is, a segment of a circle:

1. Select the **Arc** button .
2. Press the mouse button (without releasing it) to start the arc, drag the mouse, and release the button to complete it. The direction in which you drag determines which quadrant you draw.
3. Use the handles midway along each edge of the arc to adjust the angle:

Drag these points to change



See also:

[Formatting a shape](#)


[Selecting, moving and resizing draw objects](#)

For details on other shapes, see [Adding a shape](#).

Drawing a text box

To put text into a drawing, you need to add a text box. A text box can contain a word, a line or several paragraphs.

To add a text box:

1. Click on the **Text box** button  in the toolbar.
2. Press the mouse button (without releasing it) to start the text box, drag the mouse to the end point, and release the button. Alternatively, just click on the page - a default-sized text box will be added.
3. Type the text you require, and then press **enter** to finish.

The text will wrap to fit the width and depth of the text box you draw – you can fit more text into the box by increasing its size (see [Resizing a draw object](#)).

You can put several paragraphs in a single text box – type the first line or paragraph and then press **ctrl+enter** to start a new line. This works in the same way as the **enter** key does in Write.

If you want the text to appear without any background or border, set these styles to **None** (see [Line and fill styles](#)).

See also:

[Setting the text alignment](#)

[Formatting a shape](#)


[Selecting, moving and resizing draw objects](#)

For details on other shapes, see [Adding a shape](#).

Inserting pictures

To insert a picture into a drawing:

1. Select **Picture** from the **Insert** menu. The “Open” dialog box is displayed. Select the picture file you wish to use, and click on the **OK** button.
2. Position the picture by clicking on the page where you would like it to appear.

You can also use the clipboard to paste pictures into a drawing. For example, press **ALT-Print Screen** to get a snapshot of any window, and then select the **Paste** button  to insert it into Draw.

See also:

[Selecting, moving and resizing draw objects](#)

Selecting, moving and resizing draw objects

The following sections show you how to select single and multiple draw objects, and also how to move and resize them.

See:

[Selecting a single object](#)

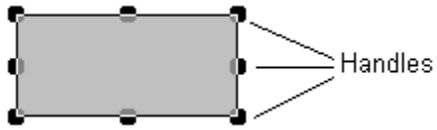
[Selecting multiple objects](#)

[Moving a draw object](#)

[Resizing a draw object](#)

Selecting a single object

To select a single object, click on the **Select** button  and then click on the object. Black “handles” will appear to indicate that the object has been selected:



See also:

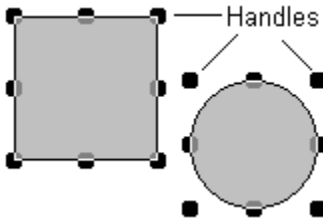
[Selecting multiple objects](#)

Selecting multiple objects

Click on the **Select** button  and then do one of the following:

- Click outside the objects in question, and drag a selection box around them all. When the box is surrounding the shapes you require, release the mouse button. All the objects within the selection will now display their handles.
- Click on the first object and then click on subsequent objects with the Shift key held down.
- Choose the **Select All** command from the **Edit** menu to select every object in the drawing.

When a group of objects has been selected, "handles" will appear on every selected object:



See also:

[Selecting a single object](#)

Moving a draw object

To move a draw object (or objects) do the following:

1. Select the object (or objects).
2. Drag it (or them) to a new location.

See:

[Draw object](#)

[Selecting multiple objects](#)

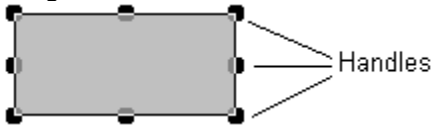
See also:

[Resizing a draw object](#)

Resizing a draw object

To resize a draw object:

1. Select the object (see [Selecting a single object](#)).
2. Drag a handle to a new location.



To force a rectangle into a square or an ellipse into a circle, select the object, right-click, and select the **Set as Square** or **Set as Circle** command.

For resizing multiple objects, see [Resizing objects together](#).

See:

[Draw object](#)

Formatting a shape

All draw objects have common properties that you can change:

Line and fill styles (see [Line and fill styles](#))

Colors (see [Setting the color of draw objects](#))

In addition, text boxes have three other properties:

Text alignment (see [Text alignment](#))

Text box border style (see [Text box border style](#))

Fonts in text boxes (see [Fonts in text boxes](#))

See also:

[Draw objects](#)

Line and fill styles

A draw object has a line-pattern and width, and, for solid objects, a fill-pattern. By default these are solid line, 1 point in width, and solid color, respectively. You can change these styles for one or more objects, as well as changing the default setting.

1. Select the object or objects (see [Selecting multiple objects](#) for more details).
2. Right-click and select **Properties**.
3. Select the **Style** tab.

As an alternative to steps 2 and 3, select the **Style** command from the **Format** menu.

Next, choose from the following:

- Select **Brush Style** to see the range of available fill patterns. This sets the pattern of the interior of the object. If you want a simple color (the default) select **Solid**. If you want the shape to be transparent, select **None**.
- Select **Pen Style** to see the range of available line styles. This sets the style for the outline of the shape. If you don't want an outline to appear around a shape, select **None**.

To change the default settings for new objects, make sure no objects are selected (to do this, click in a blank area of the drawing), right-click and select **Defaults** from the shortcut menu. Follow the instructions for pen and brush style as above.

See:

[Formatting a shape](#) for details on other shape formatting.

[Draw objects](#)

Setting the color of draw objects

Shapes - rectangles, ellipses, polygons and text boxes - have two color properties: fore-color and back-color. Fore-color is the color of the lines and back-color is the color of the inside area of the shape. Only lines have a fore-color.

To set these colors:

1. Select the object or objects (see [Selecting multiple objects](#) for more details).
2. Click on a color on the color toolbar to set the back-color (see [Color toolbar](#)).
3. Right-click on a color on the color toolbar to set the fore-color.

As an alternative to steps 2 and 3, select the **Color** command from the **Format** menu.

To change the default settings for new objects, make sure no objects are selected (to do this, click in a blank area of the drawing) and use the color toolbar to set the colors you want.

Note that setting the back-color to white is not the same as having a transparent object. To do this, set the fill style to None instead - see [Line and fill styles](#).

See:

[Formatting a shape](#) for details on other shape formatting.

[Draw objects](#)

Text box border style

Text boxes have a border property, in addition to the usual properties of draw objects.

To set the border property:

1. Select the object or objects (see [Selecting multiple objects](#) for more details).
2. Right-click and select **Properties**.
3. Select the **Border** tab.

As an alternative to steps 2 and 3, select the **Border** command from the **Format** menu.

Next, choose from the following:

- **None**. Turns off the border altogether.
- **Standard**. Plain border in accordance with the pen style (see [Line and fill styles](#)).
- **Sunken**. Creates a 3D sunken effect. To see this effect properly, you need to set the text box back-color (see [Setting the color of draw objects](#)) to be the same as the page background (and this should not be white).
- **Raised**. Creates a raised effect. To see this effect properly, apply the same conditions for Sunken, as above.
- **Shadowed**. Puts a dropped shadow around the text box.
- **Double**. Same as Standard but a double line box is drawn.

Note that you can create the effect of a rectangle having a border property, by adding a text box but without entering any text.

See also:

[Fonts in text boxes](#)

[Text alignment](#)

[Draw objects](#)

Fonts in text boxes

A text box can use any font and font style. Fonts cannot be mixed within a text box.

To set the text font within a text box:

1. Select the text box or boxes (see [Selecting multiple objects](#) for more details).
2. Right-click and select **Properties**.
3. Select the **Font** tab.

As an alternative to steps 2 and 3, select the **Font** command from the **Format** menu.

In the **Font** box, choose the font you require. Choose the style in the **Font Style** box and the size in the **Size** box. A preview of your choices is shown in the **Sample** box.

See also:

[Text alignment](#)

[Text box border style](#)

Text alignment

To set the alignment of text within a text box:

1. Select the text box or boxes (see [Selecting multiple objects](#) for more details).
2. Right-click and select **Properties**.
3. Select the **Align** tab.

As an alternative to steps 2 and 3, select the **Text Align** command from the **Format** menu.

Choose from:

- **Left**
- **Center**
- **Right**

See also:

[Fonts in text boxes](#)

[Text box border style](#)

Working with groups of objects

You can work with groups of objects to resize, align and space the objects together. In addition, you can form objects into groups and manage drawings that have overlapping objects. The following sections show you how to work with groups of objects.

See:

[Resizing objects together](#)

[Overlapping objects](#)

[Aligning objects](#)

[Spacing objects](#)

[Grouping draw objects](#)

Resizing objects together

To evenly size two or more objects, first select them (see [Selecting multiple objects](#)) and then use any of the following buttons:



Make Same Width. All the selected objects are adjusted to have the same width.



Make Same Height. All the selected objects are adjusted to have the same height.



Make Same Size. All the selected objects are adjusted to have the same height and width.

All these commands are also available under **Same Size** in the **Format** menu.

See also:

[Working with groups of objects](#)

Overlapping objects

Even the simplest drawing can contain overlapping objects, so you need control over the order in which objects appear in the drawing.

- To bring an object (or selection of objects) to the front of a drawing, right-click and select the **To Front** command (also available from the **Format** menu).
- To send an object (or selection of objects) to the back of a drawing, right-click and select the **To Back** command (also available from the **Format** menu).

See also:

[Working with groups of objects](#)

Aligning objects

To align two or more objects, first select them (see [Selecting multiple objects](#)) and then use any of the following buttons.



Align Left. Aligns the left edges of all selected objects to the left edge of the left-most selected object.



Align Right. Aligns the right edges of all selected objects to the right edge of the right-most selected object.



Align Top. Aligns the top edges of all selected objects to the top edge of the top-most selected object.



Align Bottom. Aligns the bottom edges of all selected objects to the bottom edge of the bottom-most selected object.



Center Vertical. Aligns vertically the center points of all selected objects, around the center point between the outer edges of the highest selected object and the lowest selected object.



Center Horizontal. Aligns horizontally the center points of all selected objects, with the center point between the outer edges of the left-most selected object and the right-most selected object.

All these commands are also available under **Align** in the **Format** menu.

See also:

[Working with groups of objects](#)

Spacing objects

To evenly space three or more objects, first select them (see [Selecting multiple objects](#)) and then use any of the following buttons.



Space Down. Adjust the space between all the selected objects, so that it is vertically the same.



Space Across. Adjust the space between all the selected objects, so that it is horizontally the same.

Both of these commands are also available under **Space Evenly** in the **Format** menu.

See also:

[Working with groups of objects](#)

Grouping draw objects

Once you have determined the relative positions of several draw objects, you can group them together so that Draw treats them as a single object. In this way, you can prevent accidental movement of one of the elements.

To group objects together:

1. Select all the objects (see [Selecting multiple objects](#)).
2. Right-click and select **Group** from the shortcut menu. The **Group** command is also available from the **Tools** menu.

When objects are grouped they can be moved and formatted as normal, but they cannot be resized.

To split a group back into its individual objects, first select the group and then select the **Ungroup** command from either the shortcut menu or the **Tools** menu.

See also:

[Working with groups of objects](#)

[Draw objects](#)

Draw object

A draw object is any drawing, shape or line created from the tools bar (see [The Tools bar](#)) - a line, rectangle, rounded rectangle, polyline, polygon, arc or text box. Creating, editing and manipulating draw objects will be your primary task in working with Draw.

