What is 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.

On its own, Draw can be used to create and save graphical designs like 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 98
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 like 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:

Tools bar - used to add draw objects shapes to your document.

Color toolbar - set foreground and background colors for draw objects.

Align toolbar - aligns and centers selected draw objects.

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).
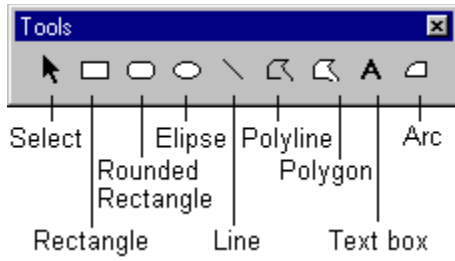
To help work with the draw objects, the Draw window also has:
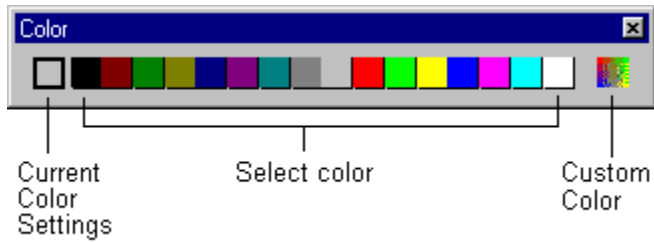
Rulers and gridlines

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.

The align toolbar

The align toolbar allows you to align, size and center multiple draw objects.
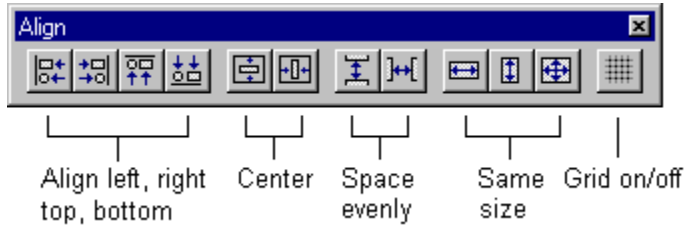
For more details, see:
Spacing objects
Aligning objects
Resizing objects together

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 fouth) 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 the **Align to Grid** form 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 tools bar to add lines, shapes and text (draw objects) to the drawing. See:

[Adding a shape](#)

[Drawing a text box](#)

[Inserting a picture](#)

Once you've added some draw objects, you'll need to be able to move, size and format them. See:

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

[Formatting a shape](#)

Adding a shape

Shapes can all be added using the [tools bar](#) .

Lines

      [Drawing a line](#)

      [Drawing a polyline](#)

Solid shapes

      [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 [icon].

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 connected 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 without depressing the mouse button.

Note: Unlike the Polygon Tool, double clicks 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 [image].

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 for 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 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
the angle   ....to create any segment
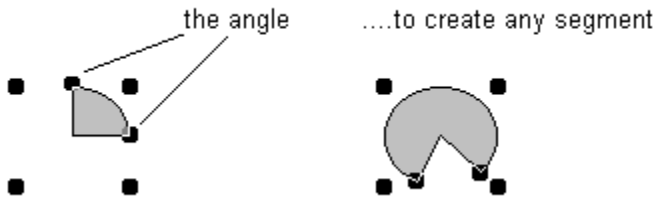
See also:

       [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 ![A] 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.

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 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

See:

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:
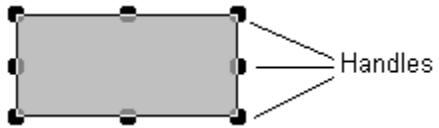
See also:

Selecting multiple objects

Click on the **Select** button ![select button] and 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:
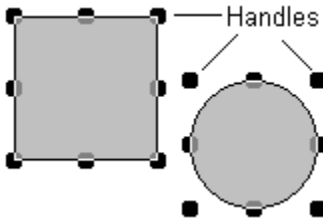
See also: selecting a single object

Moving a draw object

To move a draw object or objects:

1. Select the objects (see selecting multiple objects).

2. Drag it to a new location.

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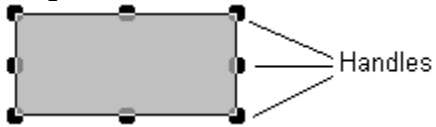
To force a rectangle into a square or an ellipse into a circle, select the object, right-click and select the **Set as Square** or **Set as Circle** command.

For sizing multiple objects, see sizing objects.

Formatting a shape

All draw objects have common properties that you can be changed:

Line and fill styles

Colors

In addition, text boxes have three other properties:

Text alignment

Text box border style

Fonts in text boxes

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 wide and solid color. You can change these styles for one or more objects and also 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.

For details on other shape formatting see: formatting a shape.

Setting the color of draw objects

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

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 setting the back-color as 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.

For details on other shape formatting see: formatting a shape.

Text box border style

Text boxes have an additional border property compared to other draw objects. To set the border property.

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 according to 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 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 above for Sunken.

*   **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 without entering any text.

See also:

Fonts in text boxes

Text alignment

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 font 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 **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

See:

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.

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).

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 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.

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 to be the same vertically.

Space Across. Adjust the space between all the selected objects to be the same horizontally.
Both of these commands are also available under **Space Evenly** in the **Format** menu.

Grouping draw objects

Once you have positioned several draw objects in the positions you want relative to each other, you can group them together so Draw treats them all like 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 availabel 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 or the **Tools** menus.

Draw object

Any drawing shape or line created from the tools bar - a line, rectangle, rounded rectangle, polyline, polygon, arc or text box.