# StreetGraphics Help Index

#### Commands

<u>File Menu</u> <u>Edit Menu</u> <u>Manipulation Menu</u> <u>Bitmap Menu</u> <u>Page Menu</u> <u>Tool Menu</u> <u>View Menu</u> <u>? Menu (Help)</u>

## File menu commands

The File menu offers the following commands:

New	Creates a new document.
Open	Opens an existing document.
Close	Closes an opened document.
<u>Save</u>	Saves an opened document using the same file name.
Save As	Saves an opened document to a specified file name.
<u>Server</u>	Starts a TCP/IP network connection as a server
<b>Connection</b>	
<u>Client</u>	Starts a TCP/IP network connection as a client
<u>Connection</u>	
<u>Print</u>	Prints a document.
Print	Displays the document on the screen as it would appear printed.
Preview	
Print Setup	Selects a printer and printer connection.
Send	Sends the active document through electronic mail.
Exit	Exits StreetGraphics.

## Edit menu commands

The Edit menu offers the following commands:

- <u>Undo</u> Reverse previous editing operation.
- Reverse previous undo operation
- <u>Cut</u> Deletes data from the document and moves it to the clipboard.
- <u>Copy</u> Copies data from the document to the clipboard.
- Paste Pastes data from the clipboard into the document.

## View menu commands

The View menu offers the following commands:

Shows or hides the status bar.
Shows or hides the File toolbar
Shows or hides the Drawing toolbar
Shows or hides the Edit toolbar
Shows or hides the Position toolbar
Shows or hides the Page toolbar
Shows or hides the Drawing Tool Settings toolbar
Shows or hides the Drawing Tool Preview toolbar

## Help menu commands

The Help menu offers the following commands, which provide you assistance with this application:

<u>Help</u> Offers you an index to topics on which you can get help.

TopicsAboutDisplays the version number of this application.

## New command (File menu)

Use this command to create a new document in StreetGraphics.

You can open an existing document with the <u>Open command</u>.



## **Open command (File menu)**

Use this command to open an existing document in a new window. You can open multiple documents at once. Use the Window menu to switch among the multiple open documents. See <u>Window 1, 2, ... command</u>.

You can create new documents with the <u>New command</u>.



## File Open dialog box

The following options allow you to specify which file to open:

## **File Name**

Type or select the filename you want to open. This box lists files with the extension you select in the List Files of Type box.

## List Files of Type

Select the type of file you want to open:

\*.sgr: Street Graphics Document

#### Drives

Select the drive in which StreetGraphics stores the file that you want to open.

#### Directories

Select the directory in which StreetGraphics stores the file that you want to open.

#### Network...

Choose this button to connect to a network location, assigning it a new drive letter.

#### Close command (File menu)

Use this command to close all windows containing the active document. StreetGraphics suggests that you save changes to your document before you close it. If you close a document without saving, you lose all changes made since the last time you saved it. Before closing an untitled document, StreetGraphics displays the <u>Save As dialog box</u> and suggests that you name and save the document.

You can also close a document by using the Close icon on the document's window, as shown below:



#### Save command (File menu)

Use this command to save the active document to its current name and directory. When you save a document for the first time, StreetGraphics displays the <u>Save As dialog box</u> so you can name your document. If you want to change the name and directory of an existing document before you save it, choose the <u>Save As command</u>.



## Save As command (File menu)

Use this command to save and name the active document. StreetGraphics displays the <u>Save As dialog box</u> so you can name your document.

To save a document with its existing name and directory, use the <u>Save command</u>.

## Send command (File menu)

Use this command to send the active document through electronic mail. This command presents a mail window with the active document attached to it. You may then fill out the To: field, Subject: field, etc., and add text to the body of the message if you wish. When you are finished you may click the "Send" button to send the message.

## File Save As dialog box

The following options allow you to specify the name and location of the file you're about to save:

#### File Name

Type a new filename to save a document with a different name. A filename can contain up to eight characters and an extension of up to three characters. StreetGraphics adds the extension you specify in the Save File As Type box.

#### Drives

Select the drive in which you want to store the document.

#### Directories

Select the directory in which you want to store the document.

#### Network...

Choose this button to connect to a network location, assigning it a new drive letter.

## 1, 2, 3, 4 command (File menu)

Use the numbers and filenames listed at the bottom of the File menu to open the last four documents you closed. Choose the number that corresponds with the document you want to open.

## Exit command (File menu)

Use this command to end your StreetGraphics session. You can also use the Close command on the application Control menu. StreetGraphics prompts you to save documents with unsaved changes.

## Shortcuts

Mouse: Double-click the application's Control menu button.



Keys: ALT+F4

## Undo/Can't Undo command (Edit menu)

Use this command to reverse the last editing action, if possible. The name of the command changes, depending on what the last action was. The Undo command changes to Can't Undo on the menu if you cannot reverse your last action.

То	olbar:	<b>*</b>	
Keys:	CTRL-	-Z or	
	ALT-BA	ACKSPACE	

## Redo command (Edit menu)

Redo an undone command.

## Cut command (Edit menu)

Use this command to remove the currently selected data from the document and put it on the clipboard. This command is unavailable if there is no data currently selected.

Cutting data to the clipboard replaces the contents previously stored there.



## Copy command (Edit menu)

Use this command to copy selected data onto the clipboard. This command is unavailable if there is no data currently selected.

Copying data to the clipboard replaces the contents previously stored there.



## Paste command (Edit menu)

Use this command to insert a copy of the clipboard contents at the insertion point. This command is unavailable if the clipboard is empty.



## **Toolbar command (View menu)**

Use this command to display and hide the Toolbar, which includes buttons for some of the most common commands in StreetGraphics, such as File Open. A check mark appears next to the menu item when the Toolbar is displayed.

See <u>Toolbar</u> for help on using the toolbar.

#### Toolbar



The toolbar is displayed across the top of the application window, below the menu bar. The toolbar provides quick mouse access to many tools used in StreetGraphics,

To hide or display the Toolbar, choose Toolbar from the View menu (ALT, V, T).

Click	То
	Open a new document.
<b>F</b>	

Open an existing document. StreetGraphics displays the Open dialog box, in which you can locate and open the desired file.



Save the active document or template with its current name. If you have not named the document, StreetGraphics displays the Save As dialog box.



Print the active document.

Remove selected data from the document and stores it on the clipboard.



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Copy the selection to the clipboard.



Insert the contents of the clipboard at the insertion point.

## Status Bar command (View menu)

Use this command to display and hide the Status Bar, which describes the action to be executed by the selected menu item or depressed toolbar button, and keyboard latch state. A check mark appears next to the menu item when the Status Bar is displayed.

See <u>Status Bar</u> for help on using the status bar.

#### **Status Bar**

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The status bar is displayed at the bottom of the StreetGraphics window. To display or hide the status bar, use the Status Bar command in the View menu.

The left area of the status bar describes actions of menu items as you use the arrow keys to navigate through menus. This area similarly shows messages that describe the actions of toolbar buttons as you depress them, before releasing them. If after viewing the description of the toolbar button command you wish not to execute the command, then release the mouse button while the pointer is off the toolbar button.

The right areas of the status bar indicate which of the following keys are latched down:

Indicator CAP	<b>Description</b> The Caps Lock key is latched down.
NUM	The Num Lock key is latched down.
SCRL	The Scroll Lock key is latched down.

## Index command (Help menu)

Use this command to display the opening screen of Help. From the opening screen, you can jump to step-by-step instructions for using StreetGraphics and various types of reference information.

Once you open Help, you can click the Contents button whenever you want to return to the opening screen.

# Using Help command (Help menu)

Use this command for instructions about using Help.

## About command (Help menu)

Use this command to display the copyright notice and version number of your copy of StreetGraphics.

# Context Help command

Use the Context Help command to obtain help on some portion of StreetGraphics. When you choose the Toolbar's Context Help button, the mouse pointer will change to an arrow and question mark. Then click somewhere in the StreetGraphics window, such as another Toolbar button. The Help topic will be shown for the item you clicked.

#### Shortcut

Keys: SHIFT+F1

## **Title Bar**

The title bar is located along the top of a window. It contains the name of the application and document.

To move the window, drag the title bar. Note: You can also move dialog boxes by dragging their title bars.

A title bar may contain the following elements:Application Control-menu button

- Document Control-menu button
- Maximize button .
- Minimize button .
- Name of the application .
- Name of the document
- Restore button .

## Scroll bars

Displayed at the right and bottom edges of the document window. The scroll boxes inside the scroll bars indicate your vertical and horizontal location in the document. You can use the mouse to scroll to other parts of the document.

## Size command (System menu)

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

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After the pointer changes to the four-headed arrow:

- 1. Press one of the DIRECTION keys (left, right, up, or down arrow key) to move the pointer to the border you want to move.
- 2. Press a DIRECTION key to move the border.
- 3. Press ENTER when the window is the size you want.

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

## Shortcut

Mouse: Drag the size bars at the corners or edges of the window.

## Move command (Control menu)

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

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

## Shortcut

Keys: CTRL+F7

# Minimize command (application Control menu)

Use this command to reduce the StreetGraphics window to an icon.

## Shortcut

Mouse: Click the minimize icon 🔽 on the title bar. Keys: ALT+F9

## Maximize command (System menu)

Use this command to enlarge the active window to fill the available space.

#### Shortcut

Mouse: Click the maximize icon on the title bar; or double-click the title bar. Keys: CTRL+F10 enlarges a document window.

## Next Window command (document Control menu)

Use this command to switch to the next open document window. StreetGraphics determines which window is next according to the order in which you opened the windows.

#### Shortcut

Keys: CTRL+F6

## Previous Window command (document Control menu)

Use this command to switch to the previous open document window. StreetGraphics determines which window is previous according to the order in which you opened the windows.

#### Shortcut

Keys: SHIFT+CTRL+F6
#### Close command (Control menus)

Use this command to close the active window or dialog box.

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



Note: If you have multiple windows open for a single document, the Close command on the document Control menu closes only one window at a time. You can close all windows at once with the Close command on the File menu.

#### Shortcuts

Keys: CTRL+F4 closes a document window ALT+F4 closes the window or dialog box

#### **Restore command (Control menu)**

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

#### Switch to command (application Control menu)

Use this command to display a list of all open applications. Use this "Task List" to switch to or close an application on the list.

#### Shortcut

Keys: CTRL+ESC

#### **Dialog Box Options**

When you choose the Switch To command, you will be presented with a dialog box with the following options:

#### Task List

Select the application you want to switch to or close.

#### Switch To

Makes the selected application active.

#### **End Task**

Closes the selected application.

#### Cancel

Closes the Task List box.

#### Cascade

Arranges open applications so they overlap and you can see each title bar. This option does not affect applications reduced to icons.

#### Tile

Arranges open applications into windows that do not overlap. This option does not affect applications reduced to icons.

#### Arrange Icons

Arranges the icons of all minimized applications across the bottom of the screen.

### Choose Color dialog box

Selects a color.

### Modifying the Document

Use the available tools to modify the document.

#### No Help Available

No help is available for this area of the window.

#### No Help Available

No help is available for this message box.

### Update command (File menu)

Update the document of the calling application.

### Save Copy As... command (File menu)

Save the current document in a file.

### Embedded Object Resize Bar

Resize the embedded object.

#### Print command (File menu)

Use this command to print a document. This command presents a <u>Print dialog box</u>, where you may specify the range of pages to be printed, the number of copies, the destination printer, and other printer setup options.

Тос	olbar:	9
Keys:	CTRL	+P

#### Print dialog box

The following options allow you to specify how the document should be printed:

#### Printer

This is the active printer and printer connection. Choose the Setup option to change the printer and printer connection.

#### Setup

Displays a <u>Print Setup dialog box</u>, so you can select a printer and printer connection.

#### **Print Range**

Specify the pages you want to print:

**All** Prints the entire document.

**Selectio** Prints the currently selected text.

**Pages** Prints the range of pages you specify in the From and To boxes.

#### Copies

Specify the number of copies you want to print for the above page range.

#### **Collate Copies**

Prints copies in page number order, instead of separated multiple copies of each page.

#### **Print Quality**

Select the quality of the printing. Generally, lower quality printing takes less time to produce.

#### Print Progress Dialog

The Printing dialog box is shown during the time that StreetGraphics is sending output to the printer. The page number indicates the progress of the printing.

To abort printing, choose Cancel.

#### **Print Preview command (File menu)**

Use this command to display the active document as it would appear when printed. When you choose this command, the main window will be replaced with a print preview window in which one or two pages will be displayed in their printed format. The <u>print preview toolbar</u> offers you options to view either one or two pages at a time; move back and forth through the document; zoom in and out of pages; and initiate a print job.

#### **Print Preview toolbar**

The print preview toolbar offers you the following options:

#### Print

Bring up the print dialog box, to start a print job.

#### Next Page

Preview the next printed page.

#### Prev Page

Preview the previous printed page.

#### One Page / Two Page

Preview one or two printed pages at a time.

#### Zoom In

Take a closer look at the printed page.

#### Zoom Out

Take a larger look at the printed page.

#### Close

Return from print preview to the editing window.

#### Print Setup command (File menu)

Use this command to select a printer and a printer connection. This command presents a <u>Print Setup dialog box</u>, where you specify the printer and its connection.

#### Print Setup dialog box

The following options allow you to select the destination printer and its connection.

#### Printer

Select the printer you want to use. Choose the Default Printer; or choose the Specific Printer option and select one of the current installed printers shown in the box. You install printers and configure ports using the Windows Control Panel.

#### Orientation

Choose Portrait or Landscape.

#### Paper Size

Select the size of paper that the document is to be printed on.

#### **Paper Source**

Some printers offer multiple trays for different paper sources. Specify the tray here.

#### Options

Displays a dialog box where you can make additional choices about printing, specific to the type of printer you have selected.

#### Network...

Choose this button to connect to a network location, assigning it a new drive letter.

# **Basic principles**

Purpose of StreetGraphics

<u>The typical StreetGraphics user</u> <u>Variable width lines</u>

Line rendering

Custom brushes

Color Blends

<u>Transparency</u>

Effects

<u>Bitmaps</u>

Bitmap processing

Network drawing

# **Purpose of StreetGraphics**

Drawing programs available today can be classified in two categories, the "paint" category and the "draw" category.

**Painting programs are appreciated for their capability of producing rich images**: the user can work with various brushes and apply image processing filters to bitmaps. But even if they are the best tools available to get high quality pictures, painting programs present many important drawbacks. First, they force the user to work at a predetermined resolution (the resolution is chosen when the image is created), second, they offer weak tools (or no tools at all) to create and modify geometric shapes: with a paint program, modification means erasing a portion of an image, repainting it, and then patching around it to hide side effects of the manipulation.

**Drawing programs are a lot more flexible**. Anything that you draw can be modified at any time during the creation process. The resolution of an image created with a "draw" is independent of the image, so pictures can be edited on screen or printed at different resolutions. The major problem with "draw" programs is that they only allow to create flat and very precise images. For many people, who need rich images, this problem is important enough to make them use painting programs for many tasks that would be a lot easier with a draw. Artists will struggle with inappropriate tools to get the graphical result they are looking for.

**StreetGraphics tries to close the gap between Draws and Paints**. Like with a draw, all graphic objects are vectorial and can be modified at any time. Like a paint, StreetGraphic has its own rendering system, allowing to create rich images with transparency, bitmaps, text, soft edged shadows, variable width lines, color blends, ect... But everything is resolution indepedent, and the display resolution or the output resolution can be changed at any time for greater flexibility and ease of use.

StreetGraphics can be used very effectively as a standalone program, but is also an indispensable complementary tool for any existing graphic toolkit.

# The typical StreetGraphics user

StreetGraphics can be useful to artists willing to produce printed or electronic documents with a rich rendering. For instance, it can be used to design logos or background tiles for web pages, or to produce printed images with transparent bitmaps, freehand drawing, geometric shapes, and text. With its network teamwork feature, StreetGraphics can also be seen as an interesting experimentation tool.

# Variable width lines

With StreetGraphics, any line can have a tapered shape. Width control is done from a selection of shapes, joins, and closing butts.

# Line rendering

All filling options available for closed shapes (colors, bitmaps, tiles, color blends, ect...) can also be applied to lines, giving the user more artistic freedom.

# **Custom brushes**

There are two different options to render lines with StreetGraphics. With the first option, a line is rendered like an ordinary closed shape (all filling options available for a closed shape are also available for shape outlines and for open lines). With the second option, a line is rendered with a custom brush. **This rendering technique uses a shape (the brush) which is moved along the path of the line to create an artistic effect**. Combining brushes with transparency can produce impressive effects. Brushes can also be used in the calligraphic mode. In this mode, the brush is stretched along the path of the line.

# **Color Blends**

A color blend specifies the blending of two colors (or two bitmaps) in an object to be rendered. **Three geometric blendings can be used**: linear, elliptic, diamond. **It is also possible to use a bitmap as a blend**, in which case darker shades will be mapped to the primary color, and lighter shades to the secondary color. There are two different ways to use a bitmap to blend colors. In the first, the bitmap is used as a standalone image. In the second, the bitmap is tiled to produce a pattern.

# Transparency

Transparency is an omnipresent concept in StreetGraphics. **Bitmaps and colors can be seen as "color sources" and each color source has its own transparency level**. The higher the transparency level, the more the background color will show through the object. When a blending is specified to mix two different colors, each color can have its own transparency level. **A blend of two colors with a different transparency level will give an object of variable opacity**.

# Effects

The result of applying a color to an object placed over a given background, is determined by the selected color (which can also be a bitmap), by the transparency level of the color, and by the selected effect. **The effect will determine how the color will be applied to the background**. Available effects are :

Assign :	uses the color in a traditional fashion
Filter :	limits the RGB intensities of the background to the selected color
Reverse :	reverses the background
Lighten :	lightens the background
Darken :	darkens the background
Contrast + :	increases the contrast
Contrast - :	decreases the contrast

## **Bitmaps**

Bitmaps are not considered by StreetGraphics as a special type of graphical object, but like a particular type of color source, so any object that can be rendered with an ordinary color can also be rendered with a bitmap. Any bitmap can be used as a standalone image, or as a tile to produce tiled patterns.

There are two different ways to integrate a bitmap to a document. The first way is to import an image from a file. At the present **two file formats are supported, BMP and JPG**. The second way is to **generate a bitmap from a portion of the current vectorial drawing**. Someone can ask wy such a thing needs to be done, since the image is already available in vectorial form in the same document. In practice, this operation is very useful because it allows to generate different effects like soft edged shadows, bitmap blends, textures. These effects are achieved through the use of bitmap processing operations.

# **Bitmap processing**

Various bitmap processing operations are available (smoothing, thresholding, reversing, noise adding), and can be applied to any bitmap. Bitmap processing can be used to create soft edged objects or shadows (basically, the technique consists in creating a mask from an object, in smoothing the mask, and in using it as a color blend with a totally transparent secondary color).

# **Network drawing**

StreetGraphics allows many users to work on a same document at the same time through a TCP/IP network connection. One participant must establish a server connection. The others can then establish client connections and start working on the same project. A fast network (LAN) is needed for this operation to perfrom well.

### нож То

How to display a bitmap How to cut out a bitmap How to display a soft edged bitmap How to display a soft edged shadow How to create and use a brush How to select an object through a transparent object How to copy attributes from an object to another object How to use plugin filters

# How to display a bitmap

### 1. Using the Bitmap menu

The easiest way to display a bitmap (that has been imported or generated), is to call the "Bitmap->Display..." function. This function will display the bitmap in a rectangle. The proportions of the rectangle will respect the proportions of the bitmap.

### 2. Using the Wizard menu

The "Wizard->Display a bitmap in an object" function will let you select a bitmap and display it in the currently selected objects. The selection rectangle will determine the position of the bitmap.

### 3. Using the Drawing Tool Settings toolbar

Here we give a procedure that can be followed to display a bitmap using the "Drawing Tool Settings" toolbar. This procedure is not a "magic trick" of any kind. When you deal with bitmaps, remember that for StreetGraphics, a bitmap is a "color source" (a source of colors that can be used to render an object). The only difference between a bitmap and a flat color, is that the bitmap has a position (if the position of the bitmap and the position of the shape do not match the bitmap is not visible or only partially visible). So displaying a bitmap "manually" consists in three steps: a) selecting a bitmap color source, b) applying it to the shape, c) reposition the bitmap if necessary (using the "Bitmap->Fit" menu command).

#### 1. Import the bitmap by calling the Bitmap->Import command

Calling Bitmap->Import will display the importation dialog. At this time, an existing bitmap file must be selected. BMP and JPG formats are supported. (It is also possible to generate a bitmap from selected strokes with the Bitmap->Generate Bitmap command)

#### 2. Draw a rectangle or any other closed shape

The bitmap can be used to fill a rectangle or any other shape. Here the rectangle can be created with the Rectangle tool. The color "Type" (in the Fill pane of the Drawing Tool Settings toolbar) should be "Color" when the bitmap is first created (it will be changed to Bitmap later in the process).

#### 3. Select the Fill pane

The Fill pane of the Drawing Tool Settings toolbar is selected by activating its tab.

#### 4. Color->Type->Image Bitmap

As stated before, the current Color->Type should be "Color" and the rectangle should be rendered in plain color. Now it is time to choose "Image Bitmap". A selection button, labeld "Select..." should appear on the right side of the combo box (NOTE: if this button is grayed, make sure that at the top of the pane the "24 bits" radio button is checked). The "Auto Move" checkbox can be checked to ensure that the image will move with the rectangle. Bitmap transparency can be set with the transparency slider.

#### 5. Click the Select button to choose the bitmap

The <u>Bitmap Selection Dialog</u> will be displayed. The imported bitmap (ref. step 1) can

be selected.

6. Click the "<Apply Fill" (apply) button at the bottom of the Fill pane The "<Apply Fill" button applies the attributes (bitmap, transparency, ...) to the object. The "<<Apply All" button which applies both line and fill attributes can also be used.

#### **REMARK:**

If after assigning a bitmap to a shape the shape becomes black (the bitmap can't be seen), the shape and the image may be misaligned. To "fit the bitmap to the shape", execute the Bitmap->Fit command or the Bitmap->Fit (line) command. Make sure that the Page->Real menu option is checked.

### How to cut out a bitmap

Extracting a non rectangular portion of a bitmap is a frequently used operation when working on images. This operation can be realized easily with StreetGraphics. To be able to cut out a bitmap, you should know how to successfully display it. The procedure is described in <u>How to display a bitmap</u>.

#### 1. Display a bitmap in a rectangle

First, we want to display the image on screen. To know how this can be done, consult <u>How to display a bitmap</u>. The Auto Move check box should be checked for the rectangle (in the Drawing Tool settings toolbar). Checking this check box will ensure that the resulting cutout is moveable and sizeable

#### 2. Clear the selection (by clicking on the background)

The next step consists in using the curve editing tool. To prevent this tool from starting in the curve editing mode, we clear the selection by clicking on the background.

#### 3. Select the Curve Drawing tool

The tool can be selected from the Tool->Selection menu command or from the Drawing toolbar. It can be useful to select a pen width of 0 before starting to use the tool.

#### 4. Trace the selected outline (the outline should be closed)

The outline is traced with the curve drawing tool. The curve is closed by clicking the triangle manipulator under the first point.

# 5. Make sure that "Auto Move" is checked in the fill pane, and click on "<Apply Fill"

If the Auto Move checkbox of the fill pane is not checked, check it. Then click on the "<Apply Fill" button of the fill pane with the mouse. The cutout is now ready to be moved and handled independently (activate the Selection tool to do so).

6. Activate the selection tool (the arrow) and move the cutout

#### **REMARKS:**

1. If after assigning a bitmap to a shape the shape becomes black (the bitmap can't be seen), the shape and the image may be misaligned. To "fit the bitmap to the shape", execute the Bitmap->Fit command or the Bitmap->Fit (line) command. Make sure that the Page->Real menu option is checked.

2. The default position of a bitmap (relative to the shape) that is assigned to a shape, is computed from the bounding box of the shape and from the width of the outline around the shape. If the width is important, the bitmap will look cropped. To solve this problem, reduce the width of the outline, then call the Bitmap->Fit function. You can also place the bitmap manually by calling the Bitmap->Place Manually function.
### How to display a soft edged bitmap

### 1. Using the wizard menu

The "Wizard->Create a soft edge shadow or mask" menu function helps you creating a soft edge bitmap in one single operation. First select a single object (in which the bitmap is currently displayed), then call the function.

### 2. Using the Drawing Tool Settings toolbar

Sometimes it is useful to create an image which borders melt gradually in the background. This operation can be executed in a few steps with StreetGraphics. The general approach consists in creating a mask from the selected shape (the shape in which the bitmap is displayed), smoothing the mask, then use the smoothed mask as an Image Bitmap blend, with a fully transparent secondary color.

1. Select the object which borders should be softened This can be done with the Selection tool.

### 2. Create a mask from this object

Execute the Bitmap->Generate Bitmap menu operation. The <u>Generate Bitmap Dialog</u> will be displayed. A width should be selected for the generated mask. It's not necessary for the width to be high to get good results (a value of 100 or 150 is generally enough because the bitmap will be interpolated). The "Selection Mask" radio button should be checked (this option produces a black and white mask for the selected objects). Any description can be written in the description field, fox example, "mask #1".

### 3. Process the mask

Execute the Bitmap->Bitmap Processing operation from the menu. The <u>Bitmap</u> <u>Processing dialog</u> will be displayed. The "mask #1" mask can be selected from the Bitmap combo box. The mask will be displayed in the preview window. The mask can be smoothed by selecting Smooth from the Processing list box, then by pressing Apply. Applying the Threshold operation the same way can help getting a cleaner smoothed mask.

#### 4. Use the mask as a blend

In the Fill pane of the Drawing Tool Settings toolbar, select "Image Bitmap" in the combo box labeled "Type:". Click on the "Select..." button, the Bitmap Selection dialog will be displayed. Select "mask #1" in the Selection listbox, and check the Interpolate checkbox (this will enable bitmap interpolation). Back in the Drawing Tool Settings toolbar, check the "Auto move" checkbox.

## 5. Select a totally transparent color as secondary color, and press "<Apply Fill"

Before the new fill attributes can be applied to the shape, a totally transparent secondary color (Transp: 255) should be selected. Then apply the attributes using the "<Apply Fill" button.

### 6. How to increase the smoothing

The smoothing can be increased by processing again the "mask #1" bitmap with the Bitmap->Bitmap Processing command.

### How to create a soft edged shadow

### 1. Using the wizard menu

The "Wizard->Create a soft edge shadow or mask" menu function helps you creating a soft edge shadow in one single operation. First select the object, then call the function. Once the shadow is created, you can change its color with the "Drawing Tool Settings toolbar" (changing the primary color in the fill pane will change the color of the shadow). You can also reposition it with the mouse and put it under the original object by calling the "Manipulation->Order->To Bottom" function.

#### **REMARK:**

The shadow is a rectangle which uses a bitmap to blend two colors. The primary color is the color of the shadow, and the secondary color is a fully transparent color.

### 2. Using the Drawing Tool Settings toolbar

The same method used to create a soft edged bitmap can be followed to create a soft edged shadow. A plain color will be used instead of a bitmap as the color of the resulting shape. The procedure is explained in <u>How to display a soft edged bitmap</u>.

REMARK (to read after following the steps described in How to display a soft edged bitmap): To improve the quality of the result, a plain rectangle can be used to display the generated mask. The mask will be used as a blend, the primary color will be the color of the shadow, and the secondary color will be a fully transparent color.

### How to create a brush

A brush allows to draw lines with a richer rendering than standard lines. A brush can be created from any closed curve by calling Manipulation->Add Brush, and then selected from the Line pane of the Drawing Tool Settings toolbar. The following example shows how to create a brush from an ellipse.

#### 1. Create an ellipse

Activate the Ellipse Drawing tool and create the ellipse using the mouse.

#### 2. Activate the Selection tool

Activate the Selection tool and make sure the ellipse is selected.

#### 3. Convert the ellipse to a curve

Execute the Manipulation->Create a curve function.

#### 4. Create the brush

Make sure the curve is selected. Execute the Manipulation->Add Brush command from the menu.

#### 5. Configure the brush

The brush should now be available from the Brush combo box of the Line pane of the Drawing Tool Settings toolbar. To use it, select it and check the Brush check box. The Density determines how close each repetition of the brush will be to each other (a value of 60 can be tried). The transparency can be set to a very high value (ex: 220) to get a nice result.

#### 6. Use the brush

Select the freehand drawing tool and try the brush.

### How to select an object through a tranparent object

When working with tranparent objects, it is not always easy to know which object is in front and which is behind. In this situation, the standard selection mechanism which selects the highest object accessible under the mouse, is not always practical.

To solve this problem, tranparency selection can be activated, with the Page->Selection->Transparency menu command.The option will become checked in the menu. From that moment, it will be possible to select object through objects by transparency.

REMARK : Roughly, transparency selection selects the smallest object around the mouse position.

### How to copy attributes from an object to another object

There is no menu command to copy attributes from an object to another. This operation can be executed easily by unchecking the Auto checkbox of the Drawing Tool Settings toolbar in the Line pane or in the Fill pane.

- 1. Select the source object
- 2. Uncheck the Auto checkbox in the Line pane or the Fill pane Doing this disables the update of the pane when new object are selected.
- 3. Select the target object The pane is not updated with the attributes of the target object.

4. Apply the attributes clicking on "<Apply Fill" or "<<Apply All" in the Drawing Tool Settings toolbar

5. Re check the Auto checkbox

### How to use plugin filters

StreetGraphics accepts **standard Plugin Filters (.8BF)**. The plugins must be compiled in **32 bits** (16 bits plugins will not work), and use the most recent resource format (**PiPL**).

StreetGraphics will search for plugins in the directory specified by the Plugins variable of the Path section of the Street.Ini file. The default path is the plugin path of the installation directory.

Plugins can be started from the Bitmap Processing dialog. Plugins that are not compatible with StreetGraphics will not be shown. Some of the visible plugins may not work properly (StreetGraphics implements most but not all of the standard server functions).

# How to order the commercial version and how to get more information about the product

Strengths of the commercial version

How to get more information about StreetGraphics

How to order by credit card

How to order by check or postal order

License Agreement and Warranty

### Strengths of the commercial version

Registering the product will give you access to the commercial (REGISTERED) version of StreetGraphics. The commercial version is similar to the base version and adds the following features:

- Registered version of the program

- CD with samples and manual (in electronic form) that explains advanced techniques with step by step procedures.

### How to get more information about StreetGraphics

To get more information about StreetGraphics, you can:

- Consult the following Web page: http://www.odyssee.net/~hugow/
- Write by e-mail at the following address (\*): hugow@odyssee.net
- Write by snail mail at the following address:

Orbis Tertius Informatique inc. Succ. Mt-Royal C.P. 263 H3P 3C5 Canada

(\*) Correspondence in french or english. All your comments and suggestions about the software are welcome. Frequently asked questions (and answers) will be added to our web page.

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2. **Credit card ordering available in english only** (PsL, an american company, handles credit card orders).

3. **Information about the product can NOT be obtained from the credit card ordering company**, for the simple reason that this company does not have the information. To get more information, consult the <u>how to get more information about StreetGraphics</u> topic.

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Closes the server connection

### **Freehand Drawing tool**

**The Freehand Drawing** tool can be selected from the *Tool->Freehand Drawing* menu command, or from the Drawing toolbar (the Freehand Drawing tool is represented by a pencil). The Freehand Drawing tool allows to :

- Draw curves with the mouse

When the freehand drawing tool is selected, a new tool is added to the toolbar. This tool allows to set the freehand options through the <u>freehand settings dialog</u>.

### Draw curves with the mouse

To draw a curve, click and hold the mouse button, drag the mouse, release the mouse button. A closed curve will be filled. A curve which starts at the end of the currently selected curve will be appended to it. Every stroke is automatically converted to a Bézier curve.

When drawing, the following keys allow to control the behavior of the tool:

CTRL: a) The stroke will not be appended to the currently selected curve. b) The drawn line will not be automatically closed and filled.

SHIFT: The stroke is converted to a single segment Bézier curve.

### **Selection Tool**

The **selection tool** can be selected from the *Tool->Selection* menu command, or from the Drawing toolbar (the selection tool is represented by an arrow). The selection tool allows to :

- Select one or more objects
- Move the selection
- Drag and drop the selection
- Size, shear and rotate the selection
- Activate selection related commands in the menus

### Select one or more objects

- To clear the selection, click on the background

- To select an object, click on it

- To add an object to the current selection, click on it while holding the SHIFT key

- To select one or more objects with a selection box, click on the background at the top left corner of the objects, drag to the bottom right corner of the objects (the selection box will be visible during this operation), then release the mouse button.

- To select an object under a transparent object, activate transparency selection (Page-

*>Selection->Transparency*), then select the object.

### Move the selection

- Click on the selection (hold the mouse button down), drag it, drop it.

When dragging (AFTER clicking on the selection), the following keys allow to control how the objects are moved:

CTRL: The object moves only horizontally or vertically. SHIFT: Grid and guideline snapping is disabled while the key is pressed.

### Drag and drop (OLE) the selection

- To drag and drop the selection, press and hold the CTRL key, click on the selection, drag it, drop it. The selection will be duplicated.

### Size, shear and rotate the selection

- To size the selection use the square manipulators of the selection box. (REMARK: When a corner manipulator is used, CTRL maintains the proportions of the selected object)

- To shear the selection, use the oblique square manipulators of the selection box.

- To rotate the selection, use the circular manipulators of the selection box. Change the rotation center by dragging the X manipulator (by default, the X manipulator or rotation center is positioned at the center of the selection).

While dragging the manipulators, hold the following keys to modify the action :

SHIFT: Centers the transformation (the scaling is mirrored on both sides of the selection)

### Activate selection related commands in the menus

You will notice that many menu commands become active only in selection mode. These commands operate on selected objects and can only be launched from the selection mode.

#### Example:

*Manipulation->Order->Step Up*, is active only when the selection tool is selected.

Allows to zoom in with the mouse. Zooming in will enlarge a portion of the drawing.

Allows to zoom out. Zooming out will restore the previous zoom level.

Zoom to show all objects.

### **Curve Drawing Tool**

**The Curve Drawing tool** can be selected from the *Tool->Curve Drawing* menu command, or from the Drawing toolbar (the Curve Drawing tool is represented by a curve segment). The Curve Drawing tool allows to :

- Draw curves
- Edit curves
- Edit curves created with the Freehand Drawing tool

When the curve drawing tool is selected, **curve editing tools will be added to the toolbar**. These tools allow to perform editing operations on the selected curve.

### **Draw curves**

Position the first point by clicking the mouse. Position the next points. At any time any point can be selected and edited using the control points. To close the curve click on the triangle at the start of the curve. To end the curve without closing it, click on the square at the end of the curve. You can pierce holes into a closed curve by : ( a. closing the curve ) b. starting to add additional points to the curve.

While dragging control points, the SHIFT key will smooth the current curve section, and CTRL will make it symmetrical.

Curve editing tools can be used to :

- force a discontinuity on a point
- force smoothness on a point
- force symmetry on a point
- force a curve segment to be straight
- force a curve segment to be curved
- remove the selected point (points can only be removed one at a time)
- add a point on the curve with the mouse
- break the line under the selected point
- join two ending points

### **Edit curves**

Once a curve is created, it can always be re-edited. Edition and creation are done the same way, with the same tool. To edit an existing curve, select it with the selection tool (the arrow), then activate the curve editing tool and edit the curve.

### Edit curves created with the Freehand Drawing tool

Curved lines created with the Freehand Drawing tool (the pencil), can always be edited with the Curve Drawing tool. To do this, select the curve, then activate the curve drawing tool.

### **Text Drawing Tool**

**The Text Drawing** tool can be selected from the *Tool->Text* menu command, or from the Drawing toolbar (the Text Drawing tool is represented by an A letter). This tool allows to :

- Create a text
- Change character spacing
- Position characters
- Edit a text
- Modify an existing text

When the text drawing tool is selected, text editing tools are added to the toolbar. These tools can be used to edit the selected text and to change the font of one or more characters.

### **Create a text**

Select a position with the mouse, and click the left mouse button. The <u>Text Editing dialog</u> will be displayed. In this dialog, you can type your text, select the font, style, size, and alignment.

When the text is created, it is diplayed with two control points : the square control point (used to deselect the text), and the circle control point.

### Change character spacing

The round control point can be dragged to change inter-character spacing.

### **Position characters**

Whenever the two control points are displayed (the square and the circle), characters can be individually selected. To select an individual character, click on it. To select two characters, hold SHIFT and click on a second character.

When one or more characters are selected, it becomes possible to scale/rotate/shear/move them (with the control points of the selection box), and to select a new font for them (with the font selection tool of the toolbar).

### Edit a text

Whenever the two control points are displayed (the square and the circle), the text can be edited. To edit the text, click on the text editing button.

### Modify an existing text

To edit an existing text, select it with the selection tool, then activate the text editing tool.

Displays the page settings dialog. Allows to select the format of the edited page.

Selects the Wire Frame rendering mode. The document is rendered with black lines (one pixel wide) on a white background.

Selects the Vectorial rendering mode. The document is rendered using GDI functions only. Transparency and bitmaps are not displayed. Selects the Real rendering mode. Bitmaps and transparency are supported.

Displays the <u>Options dialog box</u>. The dialog box allows to configure the display (to improve speed or quality of the display). Printing options can also be set from the Options dialog box.

Sizes the display so the whole page is visible.

Starts a server connection. To start a drawing session on a TCP/IP network, one participant must start a connexion as a server, and the others join the session as clients.

Starts a client connection. To start a drawing session on a TCP/IP network, one participant must start a connexion as a server, and the others join the session as clients. It makes sense to start a client connection only if you know the IP address (and service #, usually 20000), of a computer currently runnging StreetGraphics in server mode.

Exits and asks the user to save modified documents.

Groups the selected objects. When objects are grouped, they can be manipulated as one single object (any sizing, moving, ..., of the group will be applied to all the grouped objects).

Combines the selected curve into one curve. The resulting object is not a group but a complex curve (that can be edited with the curve drawing tool).

Breaks a group. All its components will become individually manipulable.

Increases the display order of selected objects. The higher the display order of an object, the higher the number of other objects it will hide.
Decreases the display order of selected objects. The higher the display order of an object, the higher the number of other objects it will hide.

Puts selected object at the top of the list so that they will hide everything else.

Puts selected object at the bottom of the list so that they will be hidden by everything else.

Aligns selected objects on their right. The object at the back of the selection will not be moved. Other selected objects will be moved to ensure they are all aligned to its right.

Aligns selected objects on their left. The object at the back of the selection will not be moved. Other selected objects will be moved to ensure they are all aligned to its left.

Aligns selected objects on their horizontal center. The object at the back of the selection will not be moved. Other selected objects will be moved to ensure they are all aligned to its horizontal center. Aligns selected objects on their vertical center. The object at the back of the selection will not be moved. Other selected objects will be moved to ensure they are all aligned to its vertical center. Aligns selected objects on their top. The object at the back of the selection will not be moved. Other selected objects will be moved to ensure they are all aligned to its top.

Aligns selected objects on their bottom. The object at the back of the selection will not be moved. Other selected objects will be moved to ensure they are all aligned to its bottom.

Tiles selected objects horizontally.

Tiles selected objects vertically.

Tiles selected objects in an ascending diagonal.

Tiles selected objects in an descending diagonal.

Displays or hides the grid.

Enables or disables the grid.

Configures the grid.

Enables or disables guidelines.

Reverses the order of selected objects. The higher the display order of an object, the higher the number of other objects it will hide.

Displays or hides guidelines.

Places an horizontal guideline.

Places a vertical guideline.

Displays or hides the Drawing Tool Settings toolbar. This toolbar allows to select rendering attributes of objects beeing drawn.

Forces the curve to be discontinuous at a given point.

Forces the curve to be smooth at a given point.

Forces the curve to be symmetrical at a given point.

Sets a straight segment between two points.

Sets a curved segment between two points.

Deletes the selected point from the curve.

Allows to add a point on the curve with the mouse.

Opens the curve at the selected point.

Ties the two selected points and closes the curve between them.

Displays or hides the Edit toolbar.

Enables or disables edge selection. When edge selection is enabled, objects can only be selected by their edges.

Enables or disables transparency selection. When transparency selection is enabled, objects can be selected through other objects "hiding" them. This selection mode can be useful when a lot of transparent objects are displayed, and the display order is not evident.

Imports a bitmap. The imported bitmap is not displayed on screen, but is available as a filling color.

Creates a brush. The brush becomes available to render lines. Brushes can only be created from closed Bézier curves.
Deletes a bitmap or a brush. The deleted bitmap or brush will no longer be available to render objects.

Displays or hides the Drawing Tool Preview toolbar. This toolbar shows how the currently selected rendering attributes will look once assigned to an object.

Displays a bitmap in a rectangle (the rectangle will be automatically created)

Displays a bitmap in the currently selected object. The selection rectangle will determine the position of the bitmap.

Creates a bitmap from the currently selected objects. The bitmap is then used as color source for the currently selected objects. (using the "Bitmap->Bitmap Processing..." function will then let you alter the rendering of the objects and create interesting effects).

Creates a soft edge shadow from the selected objects. The shadow is a rectangle which uses a bitmap to blend two colors. The primary color is the color of the shadow, the secondary color is fully transparent. Deletes the selected objects.

Pastes an image as a bitmap

Selects a normal line

Selects an air brush line.

Selects a calligraphic line

Selects a local blend. A local blend is applied to all repetitions of the brush in an airbrush line

Sets the line behind fill option. When the line is rendered behind the fill it can be partially hidden.

Applies the current options to the selected line

Automatically updates the toolbar when a new object is selected.

# **Rectangle Drawing Tool**

The **Rectangle Drawing tool** can be selected from the *Tool->Rectangle* menu command, or from the Drawing toolbar (the Rectangle Drawing tool is represented by a rectangle). This tool allows to :

- Draw rectangles

### **Draw rectangles**

To draw a rectangle, click the mouse at the top left corner of the rectangle. While holding the mouse button, drag to the bottom right corner, then release the button. The rectangle will be created.

When drawing the rectangle, the following keys can be used :

CTRL: To force the rectangle to be square SHIFT: To force the rectangle to be centered

**REMARK:** 

A rectangle is a Bézier curve. To edit a rectangle with the Curve Drawing tool, select the rectangle, then activate the Curve Drawing tool.

# **Ellipse Drawing tool**

The **Ellipse Drawing tool** can be selected from the *Tool->Ellipse* menu command, or from the Drawing toolbar (the Ellipse Drawing tool is represented by an ellipse). This tool allows to :

- Draw an ellipse
- Edit an ellipse
- Modify an ellipse

When the ellipse drawing tool is selected, ellipse editing tools are added to the toolbar.

## Draw an ellipse

To draw an ellipse, click the mouse at the top left corner of the ellipse. While holding the mouse button, drag to the bottom right corner, then release the button. The ellipse will be created.

When drawing the ellipse, the following keys can be used :

CTRL: To force the bounding rectangle to be square SHIFT: To force the bounding rectangle to be centered

## Edit an ellipse

Once an ellipse is created, the ellipse editing mode is activated. The small control points can be used to open the ellipse (i.e. to create a pie). The large control points allow to change the horizontal and vertical dimensions of the ellipse.

Two other tools are available (these tools are added to the toolbar when the ellipse tool is selected). The first one transforms a filled ellipse to an outlined ellipse (an ellipse that can be outlined but not filled). The second one swaps the two angles of the ellipse.

The square control point deselects the current ellipse. To draw another ellipse, click on the square control point.

### Modify an ellipse

To modify an ellipse, select it, then activate the Ellipse Drawing tool.

#### **REMARK:**

An ellipse is not a Bézier curve. To edit an ellipse with the Curve Drawing tool, it must be converted to a curve with the *Manipulation->Create a Curve* command. This command is only available when the Selection tool is active.

Displays the <u>text editing dialog</u>.

Displays the font selection dialog.

Toggles the display mode of an ellipse from filled to outlined.

Swaps the angles of an ellipse.

Displays or hides the ruler.

Converts a text or an ellipse to a curve.

Convert a complex Bézier curve to multiple simple Bézier curves.

Displays the <u>bitmap generation dialog</u>. This dialog allows to create a bitmap from selected objects.

Displays the <u>bitmap processing dialog</u>. This dialog allows to apply various image processing operations to a bitmap.

Fits the primary color bitmap to the size of the selected object.

When a bitmap is selected as "color source" for a given object but is not visible inside the object (the object is black), it is possible that the object and the bitmap are misaligned. **This command will reposition the bitmap to make it visible**.

Fits the secondary color bitmap to the size of the selected object.

When a bitmap is selected as "color source" for a given object but is not visible inside the object (the object is black), it is possible that the object and the bitmap are misaligned. **This command will reposition the bitmap to make it visible**. The bitmap will placed to fit the bounding rectangle of the selected object.

Fits the blend bitmap to the size of the selected object.

When a bitmap is selected as "color source" for a given object but is not visible inside the object (the object is black), it is possible that the object and the bitmap are misaligned. **This command will reposition the bitmap to make it visible**. The bitmap will placed to fit the bounding rectangle of the selected object.

Sets the proportions of the object from the proportions of the bitmap selected as primary color.

Sets the proportions of the object from the proportions of the bitmap selected as secondary color.

Sets the proportions of the object from the proportions of the bitmap selected as blend.

Allows to place manually (with the mouse) the bitmap selected as primary color. When a tiled bitmap

Allows to place manually (with the mouse) the bitmap selected as secondary color.

Allows to place manually (with the mouse) the bitmap selected as blend.

Fits the primary color bitmap (line rendering) to the size of the selected object.

When a bitmap is selected as "color source" for a given object but is not visible inside the object (the object is black), it is possible that the object and the bitmap are misaligned. **This command will reposition the bitmap to make it visible**.
Fits the secondary color bitmap (line rendering) to the size of the selected object.

When a bitmap is selected as "color source" for a given object but is not visible inside the object (the object is black), it is possible that the object and the bitmap are misaligned. **This command will reposition the bitmap to make it visible**.

Fits the blend bitmap (line rendering) to the size of the selected object.

When a bitmap is selected as "color source" for a given object but is not visible inside the object (the object is black), it is possible that the object and the bitmap are misaligned. **This command will reposition the bitmap to make it visible**.

Sets the proportions of the object from the proportions of the bitmap selected as primary color (line rendering).

Sets the proportions of the object from the proportions of the bitmap selected as secondary color (line rendering).

Sets the proportions of the object from the proportions of the bitmap selected as blend (line rendering).

Allows to place manually (with the mouse) the bitmap selected as primary color (line rendering).

Allows to place manually (with the mouse) the bitmap selected as secondary color (line rendering).

Allows to place manually (with the mouse) the bitmap selected as blend (line rendering).

Displays the <u>bitmap exportation dialog</u>.

Displays the <u>rotation dialog</u>.

Displays the <u>scaling dialog</u>.

Displays or hides the Drawing toolbar.

Displays or hides the Position toolbar.

Displays or hides the Page toolbar.

Updates the display.

Displays the importation dialog (for .sgr files).

Shows the number of selected objects.

Calls the Background Removal Wizard

# "About" dialog

Gives information about StreetGraphics.

### "Options" dialog

Sets display options. Display options control rendering speed, rendering precision, and a few other settings involved in printing and copying data to the clipboard.

### **Display (real)**

Coarse:	Selects a fast but coarse display resolution in real display mode.
Normal:	Selects normal display resolution in real display mode.
Fine:	Selects fine but slow display resolution in real display mode.
Display bitmaps:	Enables bitmap display in real mode.
Interpolate bitmaps:	Enables bitmap interpolation in real mode.
Use blends:	Enables blending in real mode.
Diamlay (adi)	

#### Display (gdi)

Emulate real blends for lines:<br/>mode.Enables the emulation of blends for lines in GDI preview<br/>mode.Emulate real blends for shapes:<br/>preview mode.Enables the emulation of blends for shapes in GDI<br/>preview mode.

### Clipboard

GDI Objects Only: Only GDI rendered objects should be copied on the clipboard metafile.

#### Grid

Number per cm in X:	Number of grid graduations per cm horizontally.
Number per cm in Y:	Number of grid graduations per cm vertically.
Show Grid:	Displays or hides the grid
Use Grid:	Enables or disables the grid

#### Print

- Pixels / page in X: Number of pixels to use horizontally to print real objects. This value sets the precision and the speed of printing. A value of 2000 gives a fine output on a standard laser printer. A value of 1000 is enough for a fast and reasonably good printing.
- Interpolate all bitmaps: Forces the interpolation of all bitmaps during printing. Bitmap interpolation reduces the pixel jaggies of enlarged bitmaps (the output is smoothed between pixels).

# **Client Connection dialog**

Starts a TCP/IP client connection.

Client Name:	Any name can be typed here. This name will indentify you to other users.
Server IP Addres:	IP address of the computer connected as a server.
Server Port:	Socket number used by the server.

### Server Connection dialog

Starts a server TCP/IP connection.

- Server Name: Any name can be typed here. This name will indentify you to other users.
- Max. Number of Clients: Maximum number of clients (including the server) that will be allowed to join the session.
- Accept clients manually: When selected, a message box will be displayed each time a new client tries to join the session. The message box can be used to accept or refuse the client.
- Server Port: Socket number used for the connection. This number should be known by any user trying to join the session.

## Chat pane

Allows to chat with other participants during a network session.

Send:	Sends the current message
Message edit box:	Usable to edit the current message
To : (all) :	Selects all participants as destination for the message.
Destination listbox:	Selection of destinations
Received : (erase) :	Erases currently displayed messages

## Drawing Tool Settings toolbar (pane selection toolbar)

Allows to select the active pane: line, fill, preset, or chat.

### Line Style Toolbar

The line style toolbar allows to select the attributes of lines. In versions previous versions of Street (<1.06), line attributes could be changed with the tool settings pane. Now the tool settings pane is reserved to color attributes while line attributes are controlled by the line style toolbar.

### Line type selection

The first three buttons allow to select the line type. Three types are available: straight, air, and calligraphic.

#### Preset

The preset combo box allows to select predefined line attributes.

#### Line Width

W1:	Selects first width.
W2 :	Selects second width. This width is used when a tapered line shape is selected.
Taper selection:	Selects the shape of the line.
Join:	Selects the type of join between ligne segments.
Butt:	Determines how open ended lines are rendered.
Brush	
Brush (checkbox):	Enables brush rendering
Brush combo box:	Allows to make a selection from available brushes
Density:	Controls the repetition frequency of the brush pattern
Local Blend:	Enables the application of the blend to each repetition of the brush pattern.

### Line and Fill Tool Settings Panes

Sets the line and fill attributes. The "Presets..." button allows to select from predefined attributes.

**Presets:** This combo box allows to select predefined color attributes.

### **Rendering Type**

Invisible :	the object is not rendered.
GDI :	the object is always rendered in vectorial mode (useful for text)
24 Bits :	the object is rendered in real mode (transparency and bitmaps are only supported in this mode)

#### Blend

Selects the type of blending (the blending is the way that the primary color and the secondary color are used when an object is rendered).

None:	The primary color is used as a flat color. The effect is visble in vectorial preview, or in real rendering. It can be applied to 24 Bits objects and to GDI objects.
Line:	A linear variation from the primary color to the secondary color is used. The angle can be selected. The effect is visible in vectorial preview or in real rendering. It can be applied to 24 Bits objects and to GDI objects.
Ellipse :	An elliptic variation from the primary color to the secondary color is used. The center of the ellipse can be spcified using the %X an %Y values (50,50 is the center of the ellipse). The effect is visible in vectorial preview or in real rendering. It can be applied to 24 Bits objects and to GDI objects.
Tiled Bitmap:	Uses the intensity of a bitmap's pixels to blend the two colors (black means 100% primary color, white means 100% secondary color). The bitmap is tiled and cannot be rotated or sheared. The effect is only visible in real rendering. It can only be applied to 24 Bits objects.
Image Bitmap :	Uses the intensity of a bitmap's pixels to blend the two colors (black means 100% primary color, white means 100% secondary color). The bitmap is used as single image, and can be rotated and sheared. The effect is only visible in real rendering. It can only be applied to 24 Bits objects.

### Color

Primary and Secondary: The two colors used by the blend (when blending mode is none, only the primary color is important).

Transp. :	Selects the transparency: 0 means full opacity, 255 means full transparency.
Effect:	Selects the way that the selected color is combined with the background. Assign applies the color directly, Reverse reverses the background, Filter limits the background to the color, Lighten lightens the background, Darken darkens the background, Contrast + increases contrast, Contrast - decreases contrast
Туре :	Selects the color source. Color specifies a plain color. Tiled bitmap specifies a bitmap that should be tiled. Image Bitmap sepcifies a bitmap that should not be tiled.
Sélect :	Displays the <u>bitmap selection dialog</u> .
Auto Move:	Forces the bitmap to move when the object is moved.
Apply Buttons	
< <apply all:<="" td=""><td>Applies both line and fill settings at the same time.</td></apply>	Applies both line and fill settings at the same time.
< Apply Line:	Applies only the attributes of the current pane.
< Apply Fill:	Applies only the attributes of the current pane.
Auto:	Enables automatic updating of the current pane's content when a new object is selected.
To Line or To Fill:	Copies filling attributes to line attributes, or line attributes to fill attributes.

# **Bitmap Selection dialog**

Selects a bitmap to be used as a blend or a color source.

Preview:	Displays the selected bitmap. Allows to crop (select the region of interest) with the mouse.
Sélection :	Allows to select a bitmap.
Left:	Left limit of the selected region
Тор:	Top limit of the selected region
Right:	Right limit of the selected region
Bottom:	Bottom limit of the selected region
Interpolate:	Enables bitmap interpolation. An interpolated bitmap looks smooth and continuous even when it is enlarged, because values are computed between the pixels.

## **Delete Bitmap or Brush dialog**

Allows to delete a bitmap or a brush from the document's resources list.

Preview:Displays the selected resourceDelete:Shows the list of available resources.

### **Drawing Tool Preview toolbar**

This toolbar shows how the currently selected attributes will be rendered.

- Shape: Shows the shape of the line
- Line: Shows the color of the line in the real rendering mode. On the left, the color is applied on a white background. On the right it is applied on a black background. Bitmaps are not represented.
- Fill color: Shows the fill color in the real rendering mode. On the left, the color is applied on a white background. On the right it is applied on a black background. Bitmaps are not represented.

## Edit Text dialog

Allows to edit a text.

Edit box:	Allows to edit the text
Fonts:	Allows to select a font
Style:	Allows to select the style of the font
Size:	Allows to select the size of the font
Preview:	Shows the currently selected font
Alignment :	Sets the alignment (the alignment is only visible in the document)

## Generate Bitmap dialog

Allows to generate a bitmap from selected objects.

Width:	Width of the bitmap in pixels
Auto Height:	Enables automatic height
Height:	Height in pixels
Selection:	Creates a bitmap from selected objects. The objects are rendered on a white background.
Selection rectangle:	Creates a bitmap from the bounding rectangle of the selection.
Selection mask:	Creates a bitmap from selected objects. The objects are rendered in black on a white background. Groups cannot be used to generate masks.
Description:	Description of the bitmap. Allows to identify the bitmap in listboxes whenever a bitmap should be selected.

# **Bitmap Processing dialog**

Applies image processing operators to bitmaps.

Bitmap:	Selects the bitmap to process
Processing:	Selects the type of processing
Apply:	Selects the appropriate image processing operator
Setup:	Configures the currently selected operator
Reset:	Clears all transformations on the currently selected bitmap

### Smooth setup dialog

Black:

Accessible from the <u>Bitmap Processing dialog</u>, this dialog allows to configure the bitmap smoothing operator. This operator can be used to blur a bitmap.

Intensity determines	the strength of the effect:
X:	Selects the horizontal smoothing intensity
Y:	Selects the vertical smoothing intensity
Channels determines	the channels which will be affected:
Red:	Enables processing in the red channel
Green:	Enables processing in the green channel
Blue:	Enables processing in the blue channel
Edges selects a way	of handling the borders of the image:
Connect:	Connect borders to the opposite borders
Spread:	Extends the color at the border
White:	Use white outside the borders

Use black outside the borders

### Threshold setup dialog

Accessible from the <u>Bitmap Processing dialog</u>, this dialog allows to configure the bitmap thresholding operator. This operator can be used to clip intensity outside a given range, and to spread the result over another range.

Keep determines the range of intensities to be kept.		
From:	Darkest intensity to be kept (min: 0)	
То:	Brightest intensity to be kept (max: 255)	
Spread determines the range of redistribution.		
From:	Darkest intensity of the resulting bitmap (min: 0)	
À :	Brightest intensity of the result (max: 255)	
Channels determines the channels which will be affected:		
Red:	Enables processing in the red channel	
Green:	Enables processing in the green channel	
Blue:	Enables processing in the blue channel	

### Intensity setup dialog

Accessible from the <u>Bitmap Processing dialog</u>, this dialog allows to configure the intensity of an effect.

Intensity: Sets the intensity level

Channels determines	the channels which will be affected:
Red:	Enables processing in the red channel
Green:	Enables processing in the green channel
Blue:	Enables processing in the blue channel
## **Bitmap Exportation dialog**

Allows to export the document, selected strokes, or a resource bitmap to a bitmap file. Supported formats are .bmp and .jpg. Format selection is determined by the extension of the selected output file.

Document : Sélection : Bitmap :	Allows the exportation of the document Allows the exportation of selected strokes Allows the exportation of a bitmap resource (which should be selected in the listbox)
Size determines the s Width: Auto Height: Height:	size in pixels of the output bitmap Width in pixels Enables automatic height computation Height in pixels
File: Select:	Filename of the bitmap file. The format is determined by the extension (use .bmp to generate a Windows BMP file, and .jpg to generate a JPEG file). Selects the output file with a file browser

# **Rotation dialog**

Allows to rotate selected objects.

Angle :	Rotation angle (degrees, + = counterclockwise)
Keep Original:	Allows to keep the original objects
Repeat:	Repeats the operation

# Scale dialog

Allows to scale selected objects.

Horizontal (%) :	Percentage in X	
Vertical (%) :	Percentage in Y	

Keep Original:	Allows to keep the original
Repeat:	Repeats the operation

#### **Freehand Settings Dialog**

The freehand settings dialog allows to **configure the freehand drawing tool**. The freehand drawing tool can be configured to control color attributes while drawing. The following basic modes are available on all computers

None	No control
Speed	Pointer speed controls the intensity of the effect
Random	A random value controls the intensity of the effect

The following modes are available on computers with **wintab32 compliant pressure sensitive tablets**:

Pressure	The intensity of the effect is controlled by pen pressure
Tilt	The intensity of the effect is controlled by pen tilt (angle of the pen
	from vertical)
Tilt angle	The intensity of the effect by tilt angle (i.e. North East South West)

#### Any of the following attributes can be controlled:

WidthThe width of the line is increased or decreased by the controlTransparencyThe transparency of the line is increased or decreased by the controlBrightnessThe control has an effect on the brightness and the darkness of the line

#### **Apply Image Processing To Selection Wizard**

This wizard lets you create a bitmap from selected objects, process, and display this bitmap in the objects in one single operation. This operation does not immediatly change the aspect of the selected object, but you will notice that they all use a bitmap (the same bitmap) as a color source.

Width	The Width of the bitmap (in pixels)
Auto Height	Force auto-height
Height	The height of the bitmap (in pixels)
Description	A name to give to the bitmap
Create From	
Selection	Create the bitmap from selected objects only
Selection Rectangle	Create the bitmap from all the objects in the selection rectangle
Selection Mask	Create a mask (black and white) from the selected objects
Use bitmap for	
Lines	Use the bitmap as color source or blend for the lines
Fill	Use the bitmap as color source or blend for the closed shapes
Assign bitmap to	
Blend	Use the bitmap to blend two colors
Primary color	Use the bitmap as a primary color
Secondary color	Use the bitmap as a secondary color
Processing	Apply image processing functions to the bitmap

# Create Soft Edge Shadow wizard

This wizard will create a soft edge shadow for the selected objects.

Create Mask

Width	The width of the mask (the mask is a bitmap that will be created by the wizard)
Auto Height	Forces automatic height computation
Height	The width of the mask
Description	A description of the mask
Bleed	A size (in 1/100 mm) that should be added to the selection rectangle to allow the smoothing to propagate
Auto Smooth	Forces automatic smoothing (extra smoothing can be added with the Bitmap->Image Processing menu command)

## **Display Bitmap wizard**

This wizard will display a bitmap in one ore more selected objects.

This dialog lets you select predefined rendering attributes like air brush or wood texture.

Use bitmap for	
Lines Fill	Use the bitmap as color source or blend for the lines Use the bitmap as color source or blend for the closed shapes
Assign bitmap to	
Blend Primary color Secondary color	Use the bitmap to blend two colors Use the bitmap as a primary color Use the bitmap as a secondary color
Use Bitmap As	
Tile	The bitmap will be tiled in the objects (X tiles horizontally and Y tiles vertically)
Image	The bitmap will be used as an image (not tiled)
Select Bitmap	Selects a bitmap from available bitmaps

#### Background Removal Wizard

This wizard lets you select a color from a bitmap and create a mask. The mask will be used to make the selected color transparent (the mask will automatically be selected as a bitmap blend with a fully transparent secondary color).

Use the mouse to pick a color in the original bitmap

The tolerance value lets you control how close a color has to be from the selected color to become transparent.

## **Manipulation Menu Commands**

The **Manipulation** menu proposes the following commands:

<u>Group</u>	Group selected objects
<u>Ungroup</u>	Ungroup the selected group
<u>Link</u> <u>Unlink</u> <u>Rotate</u> Scale Order	Link selected curves Unlink the selected complex curve Rotate selected objects Scale selected objects Submenu allowing to change the display order of selected objects
Align	Submenu allowing to change the alignment of selected objects
Tile Bézier Point	Submenu allowing to tile selected objects Submenu allowing to edit Bézier points
Text Ellipse	Submenu allowing to edit text Submenu allowing to edit an ellipse

#### **Bitmap Menu Commands**

The **Bitmap** menu proposes the following commands:

<u>Importe</u> Bitmap	Import a bitmap from a file
<u>Export</u> Bitmap	Export a bitmap or the document to a file
<u>Display</u> bitmap	Display a bitmap in a rectangle (the rectangle will be created automatically)
<u>Delete a</u> Bitmap or	Delete a bitmap or a brush
<u>a Brush</u> Generate	Generate a hitman from selected objects
Bitmap	
<u>Bitmap</u> Processing	Apply one or more bitmap processing operations to a bitmap
Fit	Sub menu allowing to fit a bitmap to an object (the bitmap will be placed in order to be visible inside the object)
Set Proportions	Sub menu allowing to set the proportions of an object to match the proportions of a bitmap
Place Manually	Sub menu allowing to place manually a bitmap
Fit (line)	Sub menu allowing to fit a bitmap to an object (the bitmap will be placed in order to be visible inside the object). Commands are applied to bitmaps used for line rendering.
Set	Sub menu allowing to set the proportions of an object to

Proportions	match the proportions of a bitmap. Commands are
(line)	applied to bitmaps used for line rendering.
Place	Sub menu allowing to place manually a bitmap.
Manually	Commands are applied to bitmaps used for line
(line)	rendering.

## **Wizard Menu Commands**

The **Wizard** menu proposes the following commands:

<u>Display a</u> <u>bitmap in</u> an obiect	Display a bitmap in the selected objects
<u>Create and</u> display a bitmap	Create a bitmap from the selected objects and use it to paint the objects
from an object	
<u>Create a</u> <u>soft edge</u> <u>shadow or</u> <u>mask</u>	Create a soft edge shadow for the selected objects

# Page Menu Commands

The **Page** menu proposes the following commands:

<u>Settings</u>	Page Settings
Options	Rendering options
Wire Frame	Wireframe display
Vectorial	Vectorial display
Real	Real display
Zoom In	Zoom in with the mouse
Zoom Out	Previous zoom level
Zoom Page	Full page zoom
Grid	Sub menu allowing to control grids.
Guidelines	Sub menu allowing to control guidelines.
Show Ruler	Display or hide the ruler
Redisplay	Refresh the display
Screen	
Selection	Sub menu allowing to change the selection method

## **Tool Menu Commands**

The  $\ensuremath{\textbf{Tool}}$  menu proposes the following commands:

<u>Selection</u>	Activate the selection tool
Freehand	Activate the freehand drawing tool
Drawing	
<u>Rectangle</u>	Activate the rectangle drawing tool
Ellipse	Activate the ellipse drawing tool
Text	Activate the text tool