Computer Systems Odessa

ConceptDraw **V**

Version 5.0

User's Guide

for Macintosh®

and Windows®

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ConceptDraw

Chapter 1. Welcome to ConceptDraw V

Computer Systems Odessa Corporation present you *ConceptDraw* - a powerful application for creating professional-looking business and technical documents. ConceptDraw works both on the *Mac and PC* platforms.

What's New in this Version

More Powerful Diagramming

Thanks to the completely rebuilt kernel, ConceptDraw V enables you to work much faster with complex diagrams. It consumes less resources and easily handles large files. The new way of sharing common data of pictures lets use a lot of images to sketch really impressive charts. The better support for OLE allows viewing any OLE objects even on the Macintosh platform, while the Vector Picture technology gives you the power to work with most complex CAD documents, imported through the DXF files. In ConceptDraw V you can work with as many layers as you need.

New Flexible Interface

New exciting look and feel, customizable toolbars and a variety of floating dialogs make ConceptDraw V interface more friendly and let easily access program's tools. ConceptDraw V adheres to the What You See Is What You Get principle and features anti-aliasing, bringing your diagramming to a new level of presentation quality.

Advanced Libraries and Template-Based Wizards

ConceptDraw V offers an advanced set of task-related shapes. Each shape features intelligent behavior either defined or set manually and stores additional information in its Custom Properties. For more productive work, a number of task-based Wizards will guide you through the basic stages of creating documents.

Intelligent Connectors
The new intelligent connectors automatically find routes around on their way objects and display gaps or bridges at the points, where they cross other connectors.

Advanced Color Support
ConceptDraw V gives you the ability to use both indexed colors from a predefined palette or set a color directly by selecting its components. ConceptDraw V supports two color schemes - RGB and CMYK which let make print-ready quality documents out of ConceptDraw charts and diagrams.

New Text Editor
ConceptDraw V features fully redesigned text editor. It works correctly on both Mac and PC platforms and allows preserving styles, while sharing files across these platforms. It also supports for Unicode providing for correct support of all languages. The new editor enables you to assign several hyperlinks in the text within a single shape and use Subscripts and Superscripts.

Work with Diagrams Created in MS Visio
Import MS Visio diagrams and work with them in ConceptDraw V, owing to the support of MS Visio XML format.

Ability to Read Data from Databases
ConceptDraw V features the essential ability to connect to any ODBC compliant database and visualize its data in ConceptDraw diagrams.

Create Enterprise-Level Visualization Solutions
The built-in scripting language - ConceptDraw Basic - and support for an open XML for ConceptDraw format, as well as a number of other formats provides developers with powerful means to build rich customized solutions based on ConceptDraw V graphics engine.

AutoSave Your Work
Your documents are automatically saved and can be recovered, in emergency cases, when you are unexpectedly forced to quit the application.

Password-Protect Your Documents
You can protect documents with password and limit access to confidential information to authorized users only.

ConceptDraw for Business and Technical Drawing

ConceptDraw is a powerful cross-platform application, that will help you visualize and structure information, add illustrations and drawings to your documents. It's perfect for those, who work in the fields such as:

ConceptDraw

- business and management,	- education,
- technology,	- creative work, etc.

You can use ConceptDraw to create:
- ✓ Any kinds of business diagrams,
- ✓ Web site plans,
- ✓ Network diagrams and software flowcharts,
- ✓ High-quality technical drawings,
- ✓ Organization charts,
- ✓ Flowcharts,
- ✓ Tables and illustrations,
- ✓ Sketches and visual materials, etc.

ConceptDraw will help you to make all this fast and easy. That's possible thanks to the program's intuitive interface, powerful and easy-to-use drawing tools, and many pre-drawn library shapes. Templates will help to quickly create most common documents.

ConceptDraw is available for two platforms: *Windows* and *Macintosh*, and you can easily exchange your documents across them. All documents, library and template files can be opened in both *Windows* and *Macintosh* versions, and no conversion is needed.

Registration

To become a registered user, fill out the registration form on our Web site:

http://www.conceptdraw.com/registration

Registration gives you the following benefits:
- ✓ Unlimited free technical support,
- ✓ Free maintenance;
- ✓ E-mail notification about updates, new libraries and other components, events and special offers,
- ✓ Discounts for upgrades and other products of ConceptDraw line.

Don't forget to register your copy and subscribe to our e-mail newsletter!

Subscribing to Newsletter

Subscribe to our e-mail newsletter to be timely informed about all ConceptDraw-related news. To do it, just go to our web site

www.conceptdraw.com

and enter your e-mail address in the box at the bottom area of any page.

Once your address is submitted, you'll start to receive our newsletter with information about updates, new products, new libraries, useful downloads, special offers and events, and other useful information related the Concept-Draw world.

Downloading Updates

You can download updates from our web site **www.conceptdraw.com**. The fastest way to check for updates for your product is to choose **Get Latest Update** from the **Help** menu in ConceptDraw. You'll be taken straight to a Web page, containing a link to the update, corresponding to your platform and interface language. Click on the link to download the file. Once it's downloaded, run the installer to update ConceptDraw.

Attention! Don't forget to quit ConceptDraw before installing the update.

Technical Support

We offer unlimited free technical support by e-mail to our registered users. See the **Registration** section on how to register.

To send us a problem report or feature request, fill out the contact in the Support section on our Web site.

Replies are normally sent within one business day. We are always happy to answer your questions and hear your feedback.

Chapter 2. Starting Your Work in ConceptDraw

ConceptDraw V is a multi-window environment, that allows you to work with several documents at a time. It has a large number of toolbars and floating dialogs which make creating vector drawings, schemes and diagrams convenient and fast.

The built-in scripting language (ConceptDraw Basic) lets you automate working with documents, making it possible to create "smart" shapes or use external data sources for generating a document - such as databases or spreadsheets.

Working Environment:
Windows, Toolbars and Libraries

When you launch ConceptDraw for the first time, the **Template Gallery** dialog comes up. This dialog lets you choose a template to base your document on.

If you don't want to see this dialog at start-up, remove the **Show At Startup** check. For this Quick Start guide we won't need templates. Click on the *Blank document* button in the **Template Gallery** dialog to create a blank document.

The document window will come up, with the main menus, several toolbars and a blank document.

The document window in Windows:
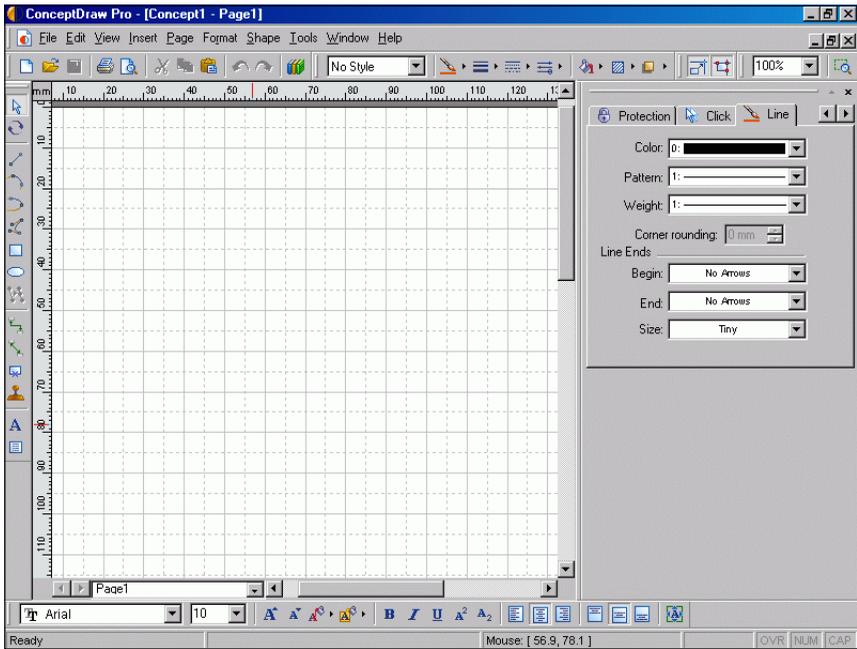
The document window in Mac OS X:

ConceptDraw
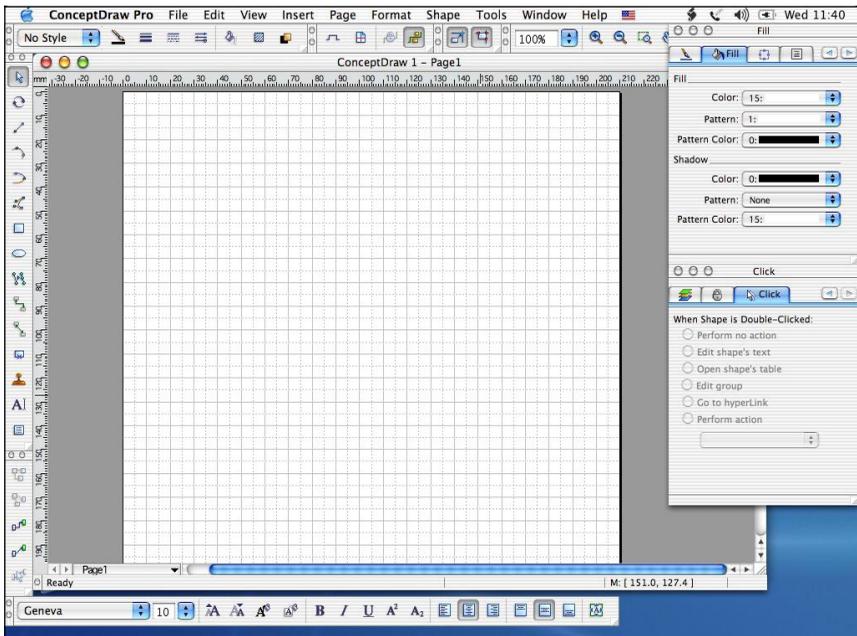
The user can re-arrange and customize toolbars; however, we will use the default toolbar settings for the purpose of this exercise.

The **Drawing Tools** toolbar is located in the left part of the document window and contains the main tools for drawing and editing shapes and their text.

At the top of the document window you can see the main program menu and all or some of the following toolbars: **Main** - for working with document files (opening, saving, printing, copy/paste commands and other), **Formatting** - for working with line and fill colors and styles, the **Snap & Glue** toolbar which toggles the Snap and Glue modes on/off, the **Zoom** toolbar that is used to increase/decrease the zoom level in the document.

The **Text** toolbar, that controls text formatting of shapes, is located at the bottom of the screen.

By default, the grid is displayed for more convenient and precise drawing. It can be disabled from the **View / Grid** menu.

*By choosing the **Rectangle** tool you can draw a rectangle in the document, using the mouse.*

Press and hold down the mouse button, and drag the mouse across the page to draw a rectangle of the desired size and form. On releasing the mouse button, the rectangle will appear.

*To select the rectangle, switch to the **Select** tool and click somewhere on the rectangle. To deselect it, click away from the rectangle.*

To move the rectangle to some other place, click and hold the mouse button on it, drag it to the needed location and then release the mouse button.
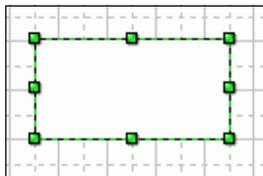
When you are in the select mode, you can resize the rectangle by dragging the corresponding resize handle.

To remove the selected shape, press the **Delete** key.

If you double-click the rectangle, or press **F2** when the rectangle is selected, the text editing mode will turn on. Each shape can have text. The text editing mode will also turn on automatically if you start typing when the shape is selected.

If you press and hold the **Ctrl** (in Windows) or **Cmd** (in Mac OS) key when dragging a shape, you will drag a copy of the shape instead of the original shape. You can carry the copy to the needed location and release the mouse button to drop it there.
Besides, the selected shape can be moved with the keyboard (the arrow keys).

If you click on a resize handle of a selected shape, the resize handle will get selected and you can use the arrow keys to move the resize handle and reshape the shape by doing so.

Below you'll find an example of creating a simple diagram in ConceptDraw, using templates and library shapes.

For information about the **Template Gallery** dialog see **Dialogs - Modal Dialogs - *Template Gallery***,
about the **Drawing Tools** toolbar see **Toolbars - *Drawing Tools***,
about the **Main** toolbar see **Toolbars - *Main***,
about the **Formatting** toolbar see **Toolbars - *Formatting***,
about the S**nap & Glue** toolbar see **Toolbars - *Snap & Glue***,
about the **Zoom** toolbar see **Toolbars - *Zoom***,
about the **Text** toolbar see **Toolbars - *Text***,
about operations on shapes see **Shapes - *Operations on Shapes***,
about working with text see *Text*.

Creating a Diagram

ConceptDraw is perfect for drawing organization and workflow charts. This chapter describes how you can create an org chart by using ConceptDraw.

Lets draw an organization chart of a fictional company. The chart demonstrates how departments are related inside the company. The following departments exist: headquarters, strategy department, finance department, IT department, administration, marketing department, public relations department, legal department, personnel department, sales department, research and development department, logistics department, production department and security department.

The resulting chart will look as follows:

ConceptDraw
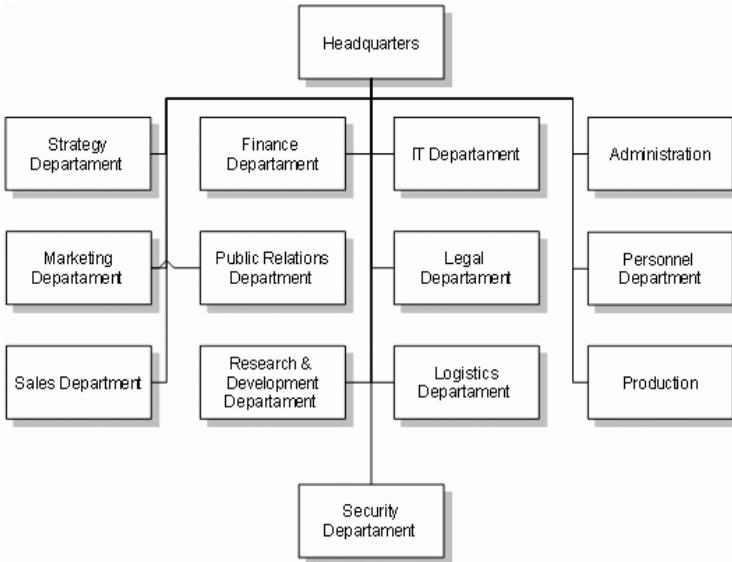
Let's start creating the chart.

We are going to use templates to speed up the work. In the **File** menu choose **Template Gallery.** The **Template Gallery** dialog will come up, where you can choose the needed template. Select the "Organization Charts" category in the left part of the dialog, and the "Organization Chart - simple" template.
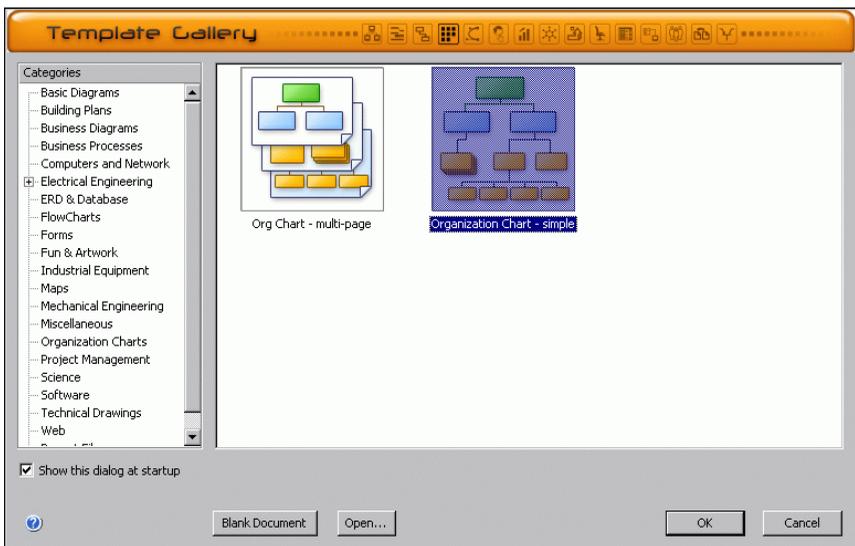
Click **Ok**. A new blank document will be opened.
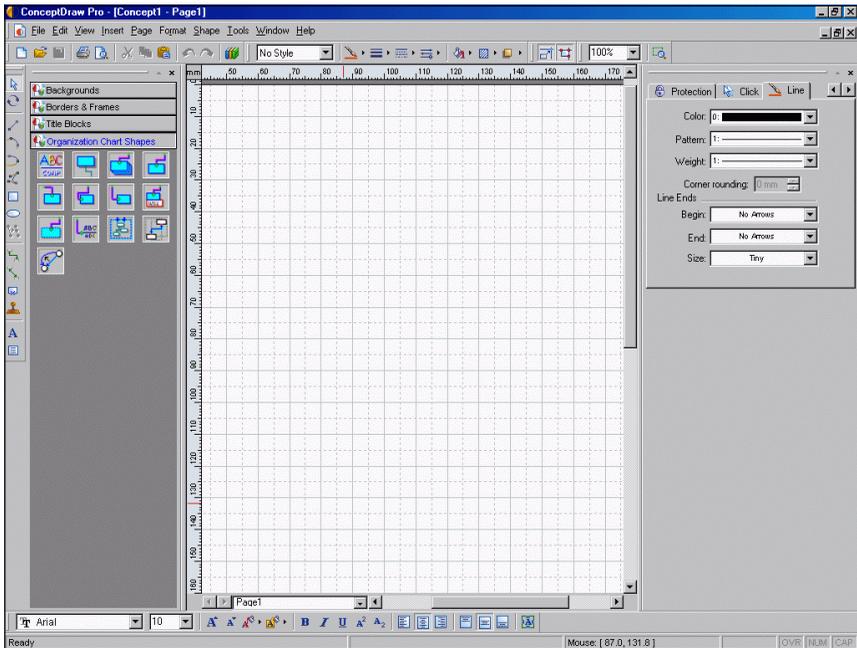
You will see the library window with open libraries. We'll need the "Organization Chart" library. Activate it by clicking on its title bar. You will see library shapes which can be used for drawing an org chart.

To place a library shape on the page, you may use 2 methods. You can either drag a shape from the library with the mouse, and drop it on the page, or you can use the **Stamp** tool. The second method is convenient when you need to use the same library shape many times in the document.

*On the **Drawing Tools** toolbar, select **Stamp Tool** and select the needed shape in the library.*

Then click on the document page where you want the shape to be inserted. The selected library shape will be inserted where you clicked.

In the library, choose the shape with this icon and place it on the page as described above. Now you need to add text to the shape. Select the shape in the document and type "Headquarters".

ConceptDraw
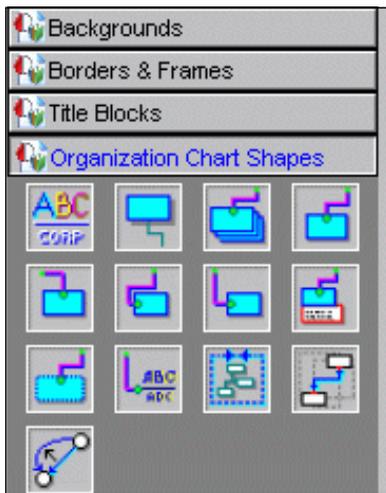
Library shapes and icons may vary a bit in different versions of the software.

Repeat this for all other departments.
In the result, you should get the following scheme:
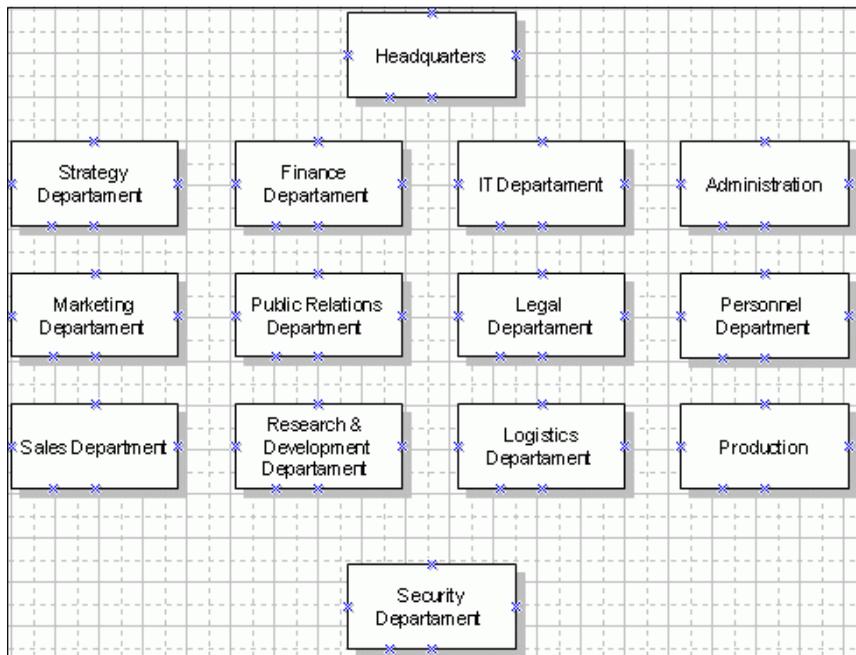
Blue crosses mark the connection points. Connection points won't be visible when printed or exported to a graphic file (same as the grid). If you don't want to see connection points, you can hide them using the **View / Connection Points** menu.

*To see how the document will look when printed, use the **Print Preview** button on the **Main** toolbar, or the corresponding command from the **File** menu.*

Now you need to establish relationship between the shapes. For this it's more convenient to see the connection points of shapes. If connection points are hidden, enable them from the **View / Connection Points** menu.

*Now, on the **Drawing Tools** toolbar choose the **Smart Connector**.*

Move the mouse pointer to the bottom connection point of the Headquarters shape. The connection point will be marked with a red cross.

Click and hold the mouse button, and drag the mouse to the right connection point of the shape, that denotes the Strategy department.

Release the mouse button.

To adjust the connectors, use their control handles, located in the points, where their legs meet, and in the middle of the sides. When you reshape a connector, its legs will be added or removed depending on its form.

By manipulating the handles you can reshape the connectors as needed for your drawing.

Connect all other shapes in the same way. Adjust the connectors so that they look as on the original chart.

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The result must look as follows:

For more information about the **Template Gallery** dialog see **Dialogs - Modal Dialogs - *Template Gallery***, about the library window - see **Windows - *Library***, about the **Drawing Tools** toolbar - see **Toolbars - *Drawing***

Tools, about the **Main** toolbar see **Toolbars - *Main***, about connection points and connectors - see **Shapes - *Connecting Shapes***.

What You Can Use ConceptDraw For

Thanks to its powerful drawing capabilities ConceptDraw can be used by people, working in different fields: IT specialists, software developers, engineers, managers.

The product is recommended to managers, designers, network specialists, programmers and project managers, scientists.

You can use ConceptDraw to create all kinds of diagrams, database schemes, interface modelling, process schemes, organization charts, network diagrams, formulas and schemes of physical processes.

ConceptDraw comes with many library shapes for different tasks. There are libraries for org charts, medical libraries, electrical libraries, libraries for computer networks and software interfaces. The libraries contain ready-made shapes, which you can use in your drawings.

ConceptDraw supports a large number of popular graphic formats, allowing you to use it together with other applications.

It also allows you to create your own libraries, for your specific purposes.

Chapter 3. Document

Documents in ConceptDraw are used to store your diagrams, schemes and drawings on your computer. Documents can be of various size, format (A4, A3, Letter) and orientation (portrait, landscape). They can consist of one or more pages, and include links to other documents, files or Internet addresses. ConceptDraw offers many tools for working with documents.

Creating a New Document

To create a new **ConceptDraw document** you can do one of the following:
   a) Choose **New Document** from the **File** menu,
   b) Click the **New Document** button on the toolbar,
   c) Or use the keyboard shortcut.

*To create a new document, click the **New Document** button on the toolbar, or use the keyboard.*

Ctrl+N   Cmd+N

A blank new document will open in a separate window.

By default, each new document is based on the template file Blank Drawing.cdt (located in the Libraries folder).
*You can choose another template file to base new documents upon - see the **Document Templates** section for further information.*

Creating a Document Using a Template

You can create a new document based on an existing *template*.

A template file contains a document with all its settings (scale, grid, units of measure, etc.) and a list of libraries that may be useful for this type of document. When you create a new document using a template, a copy of the document in the template is created, and the libraries, listed in the template file, are opened.

Templates can also contain scripts, written in ConceptDraw Basic, and executed once you've opened the template. Such scripts can be used to generate documents automatically. For instance, a script can connect to a database or a spreadsheet, ask questions to the user and create a document based on this information. Using templates helps you to automate the tasks you do repeatedly for new documents - such as configuring document settings or opening necessary libraries. And scripts can automate even the process of creating the document itself.

Templates are especially helpful when documents need to include some common elements - such as a standard title or a company logo.

To create a document using a template:

1. Choose **File / *Template Gallery***, or use the **Open** button on the toolbar to call the standard ***Open*** dialog. Set the file type to *ConceptDraw Templates (.cdt)* to show just template files.
2. Select the desired ConceptDraw template file.

*You can use the **Open** button on the **Main** toolbar.*

Ctrl+Alt+N   Cmd+Opt+N

For further information on creating and using templates see the "***Document Templates***" section.

Importing Files

You can import files, created in other applications, and use them in your documents. ConceptDraw supports *importing* of the following file formats:

Raster formats

Microsoft Windows Bitmap	(*.bmp, *.dib)
CompuServe graphics interchange format	(*.gif)
Microsoft icon	(*.ico, *.icon)
Joint Photographic Experts Group JFIF format	(*.jpeg, *.jpg)

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Portable Network Graphics	(*.png)
Photo CD	(*.pcd, *.pcds)
ZSoft IBM PC Paintbrush	(*.pcx)
Adobe Photoshop bitmap	(*.psd)
Irix RGB image	(*,sgi)
SUN Rasterfile	(*.ras, *.sun)
Truevision Targa image	(*.tga, *.icb, *.vda, *.vst)
Tagged Image File Format	(*.tif, *.tiff)
Word Perfect Graphics	(*.wpg)
X Windows system bitmap	(*.xbm, *.xpm)

Vector, multimedia, text and other formats:

Windows Metafile	(*.wmf, *.emf)
Macintosh PICT	(*.pct)
AutoCad DXF	(*.dxf)
XML for Visio	(*.vsx)
PowerPoint document	(*.ppt)
Text Data (Outline and Flow Data formats)	(*.txt)

There are two methods for importing files:

    a) Choose the desired item in the **File / Import** submenu.

    b) Call the standard **Open** dialog from the **File** menu and select the desired type of file from the list.

Importing Pictures From Graphic Files

You can import pictures from files of various graphic formats (see the list above) and use them in ConceptDraw documents. That will help to add impact to your documents, make them look more professional and impressive.

To *import* a picture from a graphic file:

Choose **Import / Graphic File...** from the **File** menu.

The file open dialog will come up. Choose the required file and click OK (the *Open* dialog is described in the **Dialogs - Modal Dialogs** section).

A new document will be created, with the imported picture in the center of the drawing page.

You can do some editing over pictures - *resize*, *rotate and flip*, apply *shadow* and some other. See the **Pictures** section for details.

> *You can select several graphic files at once in the **Open** dialog. In this case each picture will be placed in a separate ConceptDraw document.*

Importing Textual Data

With ConceptDraw you can *visualize textual data*. The program reads data from a text file, and a diagram is generated based on the textual description.

The description must be in one of the two supported formats:
Flow Data Format - it's used to create documents, which consist of objects with fixed coordinates and connected with connectors (for instance, flowchart diagrams);
Outline Format - used to generate tree diagrams where shapes have hierarchical structure. You may first write an outline in a text editor, and then use ConceptDraw to automatically generate a visual diagram out of it.

To import textual data, choose **Import / Text Data...** from the **File** menu.

Importing MS PowerPoint Files

ConceptDraw allows you to import data from *PowerPoint* files.
ConceptDraw supports files, created in Microsoft PowerPoint 2000 (*Windows*) and PowerPoint X (*Mac OS X*).

To *import* a PowerPoint document into ConceptDraw:
Choose **Import / Microsoft PowerPoint...** from the **File** menu.
The file open dialog will come up. Choose the required file and click OK (the ***Open*** dialog is described in the **Dialogs - Modal Dialogs** section).

Objects in the PowerPoint file will be converted into ConceptDraw shapes. You can edit them as regular ConceptDraw shapes - resize, rotate, flip, change line and shadow style, text, etc.

Saving a Document

ConceptDraw V can save documents in the following formats:
- in the binary ConceptDraw 5.0 format (.CDD),
- in the textual XML for ConceptDraw format (.CDX),
- in the binary ConceptDraw 1.x format (.CDD).

XML for ConceptDraw format is an exact textual alternative to the binary ConceptDraw 5.0 format; these formats are fully equivalent to each other. The ConceptDraw 1.x format is supported to preserve compatibility with earlier versions of ConceptDraw.

When you save a document in the ConceptDraw 1.x format you may lose some data or functionality not supported in ConceptDraw 1.x (for instance, scripts).

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By default, documents are saved in the format in which they were opened. The default format for new documents can be set in the **Preferences** dialog, tab **Save**. For a detailed description of this dialog, see **Dialogs - Modal Dialogs - *Preferences***).

ConceptDraw also allows to:
- save documents as Templates (CDT),
- save an entire working environment as Workspace (CDW). It includes all open documents and libraries, with their positions on the screen). It helps to save the current state and quickly return to it later.

Saving Documents

*To **save** an active document, choose **Save** from the **File** menu, or click the **Save** button on the toolbar.*

Ctrl+S   Cmd+S

When you first time save the document, you can choose its name and location in the **Save As** dialog.
If you have saved this document already, the modified document will be saved under its existing name.

*To save a modified document under some other name, choose the **Save As** command under the **File** menu.*

Ctrl+Shift+S   Cmd+Shift+S

Specify the new name and location in the **Save As** dialog. The active document will get a new name and will be stored in the specified location.

You may also ***create a copy*** of the active document:
Use the **Save Copy As** command from the **File** menu, and choose the name and location for the copy.

When you use the **Save Copy As** command, the name of the original document remains the same; it doesn't change as with the **Save As** command.

In the Mac OS X version you can return to the last saved state of the document by choosing **Revert to Saved** from the **File** menu.

Saving a Document as a Template

You can save an active document as a *ConceptDraw template* (**.cdt**), and use it to create similar documents.

Choose **Save As Template** from the **File** menu. The **Save As** dialog will come up. Specify a name for the template and save it. For more information about this dialog, see **Dialogs - Modal Dialogs - *Save*.**

> *If you want the template to be compatible with older versions of ConceptDraw, you may save it as **ConceptDraw 1.x Template.** In this case some functionality, not supported in earlier versions, will be lost (for instance, scripts).*

For more details about templates see the ***Document Templates*** section.

Saving Workspace Files

If you regularly work with the same set of documents and libraries, then you can save it as a workspace file. A **workspace file** contains the list of open documents, size and arrangement of windows and the list of open libraries.

To save the current state of the application in a workspace file, use the **Save Workspace** command from the **File** menu. The **Save As** dialog will come up. Specify the name and location for the workspace file and click **Save**.

> *All information about open documents and libraries together with their on-screen arrangement will be saved in the workspace file.*
>
> Ctrl+Alt+S   Cmd+Opt+S

See the ***Workspace Files*** section for more information.

Exporting a Document

To use ConceptDraw together with other programs, you can export ConceptDraw documents to various formats.

Very often it's needed to view or print a document on different computers and platforms. In this case you can export your document to the PDF format.

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By publishing your documents on the Web you can easily share them with many people.

To make a presentation you may want to use MS PowerPoint.

To insert your drawing into other documents (for instance, Word or PageMaker), you need to transform it into a file of some graphic format. To exchange documents with MS Visio users, support for Visio document format is needed.

ConceptDraw is well equipped for these tasks.

Exporting to PDF

ConceptDraw V can export your documents to **Portable Document Format** (PDF) which is widely used for exchanging and printing documents on various platforms and operating systems.

This format allows to preserve the correct look of your documents because the needed fonts are stored right in the PDF file. Also, in a PDF document you can search and copy text.

Hyperlinks, contained in the original document, remain working in the PDF file.

To *export* the active document to PDF, choose **Export / PDF** from the **File** menu.
The **Save As** dialog will come up, asking you for the name of the PDF file.

During the export, the fonts used in your ConceptDraw document are embedded into the PDF file. All pages of the document are exported. Pictures and text are compressed to reduce the size of the PDF file.

Exporting to HTML

ConceptDraw is well integrated with the Internet. By exporting your document to HTML you can easily publish it on the Web.

To save your document as HTML files, use the **Export / HTML** from the **File** menu. Export parameters can be configured in the *HTML Properties* dialog.

For more details about exporting to HTML, read *Exporting a Document to HTML Files* in the **Internet** chapter.

Exporting to PowerPoint Format

ConceptDraw can export documents to the **PowerPoint** file format, letting you use your ConceptDraw drawings in PowerPoint presentations.

ConceptDraw creates files for Microsoft PowerPoint 2000 (*Windows*) and PowerPoint X (*Macintosh*).

To *export* the active document to PowerPoint, choose **Export / Microsoft PowerPoint**... from the **File** menu.
The **Save As** dialog will come up, asking you for the name of the file.

Having saved the file, you can open it in PowerPoint and continue working on it - add animation effects, sound, backgrounds, etc.

Exporting to Graphic Formats

You save separate ConceptDraw shapes or the entire document in various *graphic formats*.

You can *export* to the files of the following formats:

Raster formats:

Microsoft Windows Bitmap	(*.bmp, *.dib)
CompuServe graphics interchange format	(*.gif)
Microsoft icon	(*.ico, *.icon)
Joint Photographic Experts Group JFIF format	(*.jpeg, *.jpg)
Portable Network Graphics	(*.png)
Photo CD	(*.pcd, *.pcds)
ZSoft IBM PC Paintbrush	(*.pcx)
Adobe Photoshop bitmap	(*.psd)
Irix RGB image	(*,sgi)
SUN Rasterfile	(*.ras, *.sun)
Truevision Targa image	(*.tga, *.icb, *.vda, *.vst)
Tagged Image File Format	(*.tif, *.tiff)
Word Perfect Graphics	(*.wpg)
X Windows system bitmap	(*.xbm, *.xpm)

Vector formats:

Windows Metafile	(*.emf)
Macintosh PICT	(*.pct)
AutoCad DXF	(*.dxf)

This will help you illustrate your text documents with nice-looking drawings, schemes and diagrams and use the drawings, created in ConceptDraw, in other applications.

> *If you need to export separate shapes rather than the entire drawing, select the needed shapes before exporting.*

To *export* the active document to one of the supported graphic formats, choose **Export / Graphic File...** from the **File** menu. The *Save As* dialog will appear. Specify a name for the new graphic file and choose a format

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from the drop-down list. Then the picture properties dialog will come up, where you can set parameters for the resulting picture. For more information of available settings for graphic files see the section **Dialogs - Modal Dialogs -** *Picture Properties*.

Printing a Document

ConceptDraw provides flexible printing options - you can set any size of the printed page, tile the document over several sheets, preview the results before printing.

Before printing, you should prepare the document and set up some printer parameters.

Choosing Paper Size and Printer

To adjust the printer and print page settings, select **Print Page Setup** *from the* **File** *menu.*

Ctrl+Shift+P   Cmd+Shift+P

This will bring up the standard dialog, where you can choose the printer, specify paper size and page orientation, etc.

For more information about print settings and the Page Setup dialog see **Dialogs - Modal Dialogs -** *Page Setup.*

Document Printing Parameters

The printing parameters of the *active document* can be specified in the **Document Properties** dialog (menu **File** / **Document Properties**).

On the **Page** tab you can set the size of a *document page*.

The **Printing** tab controls the following parameters:
- paper orientation,
- paper placement method (if the document page size is larger than one printer page),
- justification (where the drawing is positioned on the printed page if it's smaller than one page),
- printed page size:
  the document page may be printed in its **actual size**,
  or correspond to the current **zoom** level of the document,
  or be tiled over the **necessary number** of paper sheets.

More information about the **Document Properties** dialog and the **Printing** tab can be found in the section **Dialogs - Modal Dialogs - *Document Properties.***

Breaking Down the Document into Printer Pages

The drawing area size may often be larger or smaller, than one *printer page*.

Note, that the document page size and orientation are not always the same, as the printer page:

> The *document page* size is set when the document is created. You can modify it in the **Document Properties** dialog (**File** menu) on the **Page** tab.
> The printer page size can be chosen in the ***Page Setup*** dialog (choose **Print Page Setup** from the **File** menu).

That's why it's important to see how the drawing area will be broken down into printer pages. To do this, enable the **Page Breaks** option under the **View** menu. The drawing area will be divided up into page-sized rectangles, shown with thin gray lines. Non-printable areas will be marked in gray

If necessary, you can modify the document parameters (menu **File / *Document Properties***) and the print settings (menu **File / *Print Page Setup***).

Print Preview

After all settings are done, you can view the representation of the printed document without printing it.

> *Choose **Print Preview** from the **File** menu, or click the **Print Preview** button on the toolbar.*

> Ctrl+Alt+P   Cmd+Opt+P
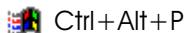
For more information about the **Print Preview** mode refer to the section **Windows - *Print Preview.***

Printing

Once the document and printer are properly configured, you can print the document by using one of the following ways:

> a) Click **Print** in the *Print Preview* window;
> b) Click the **Print** button on the toolbar;
> c) Choose the **Print** command from the **File** menu;
> d) Use the keyboard shortcut.

ConceptDraw

The **Print** dialog will come up with the default printer selected.
In this dialog you can specify the range of pages to print, the number of copies and some other settings.

More information about the **Print** dialog and available printing options you can find in the section **Dialogs - Modal Dialogs - *Print.***

Working with Pages

A ConceptDraw document may have one or several pages.
Pages are convenient when the document contains information of different kind - such as text descriptions, drawings or pictures. You may place different information on different pages and refer to them with the help of hyperlinks. When you export a document to HTML, all links between pages will be preserved in HTML.

Adding a Page

To add a new page to the active document, choose **Add** from the **Page** menu, or click the **Add Page** button on the **Pages** toolbar. The **Add Page** dialog will come up. By default, the program names new pages automatically as "Page - *N*", where *N* is the new page number. You can change this name to a new one. After you click **OK** the new page will be added at the end of the page list, and will become active.

For more information about the **Page Properties** dialog see **Dialogs - Modal Dialogs - *Page Properties***.

Background Pages

ConceptDraw V let you assign a page as background for one or more pages of the document. First you need to create a background page. Activate a page you want to make background. Call **Properties** from the **Page** menu. The **Page Properties** dialog will come up. Enable the **Make it background page** option. Click **OK.** Now for each page you want to apply background to, you can choose the background page in the **Page Properties** dialog.

For more information about the **Page Properties** dialog see **Dialogs - Modal Dialogs - *Page Properties***.

Going to Another Page

To navigate between pages you can use the drop-down list in the bottom-left corner of the document window. Or you can also use the arrows nearby to go to the previous / next page.

You can use the buttons on the **Pages** toolbar to go to the first or last page of the document, next / previous page, or choose a page from the list.

For more information about the **Pages** toolbar see **Toolbars - *Pages***.

Reordering Pages

To change the page order, choose **Reorder** from the **Pages** menu. In the **Reorder Pages** dialog you can specify a new order for the pages.

For more information about the **Reorder Pages** dialog see **Dialogs - Modal Dialogs - *Reorder Pages***.

Naming a Page

You can see the page name on the document window title bar. To rename a page, choose **Properties** from the **Page** menu. In the **Page Properties** dialog you can give a new name, assign it a background, or turn it into a background page. Click **OK** to apply changes.

For more information about the **Page Properties** dialog see **Dialogs - Modal Dialogs - *Page Properties***.

Deleting a Page

To delete a page, choose **Delete** from the **Page** menu or use the **Delete Page** button on the **Pages** toolbar. The **Delete Page** dialog will come up, where you can choose a page to be deleted.

For more information about the **Delete Page** dialog see **Dialogs - Modal Dialogs - *Delete Page***.

Hyperlinking to Pages

To each ConceptDraw shape you can assign a hyperlink, pointing to another page of the document and thus navigate between pages as you do in a Web browser. To point a hyperlink to a page of a document, use the **Hyperlink** dialog (menu **Format / Hyperlink / Edit**). Apart from a page, the hyperlink can point to a file, application, URL or an object inside the current document.

ConceptDraw

For more information about the **Hyperlink** dialog see **Dialogs - Modal Dialogs -** *Hyperlink*.

Layers

You can use **layers** to organize related shapes on one page in the document. For example, when you draw a house plan, you may put the electrical system to one layer, the water-supply system to another, etc. This makes work more convenient, because you won't accidentally alter the shapes on other layers.

Unlike in the earlier versions, the number of layers in ConceptDraw V is not limited. By default, a document has 9 layers.

Modifying Layer Properties

Each layer has a set of properties which can be changed in the floating dialog *Layers*. To call this dialog, enable **Floating Dialogs /** *Layers* from the **View** menu.

In this dialog you can modify the following layer properties:
- *Layer Name* - to rename a layer, double-click on its name, enter a new one and press **Enter** or click away from the field.
- *Active* - only one layer at a time can be active. All the new shapes drawn or dropped on the page are assigned to the active layer.
- *Visible* - check/uncheck this option to show/hide the shapes of the layer.
- *Lock* - lets you lock all the shapes of the layer from editing. You may find this helpful for creating borders, background drawings, etc.
- *Color* - marks all shapes on the layer with one color. To assign the color, click on the Color box and specify the color in the menu which appears. All the shapes of the layer will take the chosen color. To restore the original colors of the shapes, just uncheck the option.
- *Print* - controls whether the shapes on the layer will be printed. If you don't want the layer to be printed, remove the small printer icon by clicking it with the mouse.

> *To modify a setting for all the layers at once, you can click on the title bar of a section.*

You can also choose the active layer from the **Layers** toolbar.
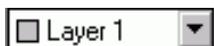
For more information about the Layers dialog see the section **Dialogs - Floating Dialogs - *Layers***. For information about the Layers toolbar see **Toolbars - *Layers***.

Assigning a Shape to a Layer

Each shape belongs to a certain layer on the page. When you create or drop a shape on the page, it is assigned to the active layer. You can put one or more selected shapes to another layer.

To do this, you can drag the shapes over the floating dialog **Layers** and drop them on the name of the layer you wish to assign them to. Another method is to use the **Shape Properties** dialog.

> *Select **Shape Properties** from the **Format** menu, or use the shortcut:*
>
> Ctrl+Shift+C   Cmd+Shift+C

In the dialog, select the **Information** tab. In the drop-down list choose the new layer for the shape.

For more information about the **Shape Properties** dialog see **Dialogs - Modal Dialogs - *Shape Properties***.

Working with a Document

ConceptDraw offers you a number of handy tools and facilities for working with documents. You can modify and save settings for each particular document, multi-page documents, connected with hyperlinks.

Scrolling

> *To scroll the document, you can use the vertical and the horizontal scroll lines, or the **Scroll Hand** tool located on the **Zoom** toolbar.*

> *Some of the tools on the **Zoom** toolbar may be not displayed by default. To display all available tools on the toolbar, call the **Customize** dialog (menu **View / Toolbars**). Choose the **Toolbars** tab, select the **Zoom** toolbar in the list and click **Reset**. The toolbar will be set to display all its tools.*

ConceptDraw

If a page is large and only a part of it is displayed, the **Scroll Hand Tool** lets you view it in a handy and quick way. It looks like you grab the page with the hand and move it before you.

Switch to the **Scroll Hand Tool**, grab the page with the mouse and move it in the direction you need.

To quit the *hand scroll mode*, just choose some other tool (for instance the **Select Tool** on the **Drawing Tools** toolbar).

You may also use the keyboard for scrolling:

Scroll one screen up

PgUp	PgUp

Scroll one screen down

PgDn	PgDn

Go to the top-left corner of the page

Ctrl+Home	Cmd+Home

Go to the bottom-left corner of the page

Ctrl+End	Cmd+End

For more information about the Zoom toolbar see **Toolbars - *Zoom***. The Customize dialog is described in **Dialogs - Modal Dialogs - *Customize***.

Zooming

Zooming makes for more comfortable editing. It can help you view the whole page, or see some shapes of the drawing in close-up. You can increase or decrease magnification using the **Zoom In** and **Zoom Out** tools on the **Zoom** toolbar. The following standard zoom levels are provided (in % of actual size): 1,2,3,6,13,25,50,75,100,125,150,200,400,800,1600,2500. Each time you use the zoom tools, zoom level changes one step higher or lower.

*To **enlarge** the view, click **Zoom In** on the toolbar, or select **Zoom In** from the **View** menu. You can also use the keyboard.*

Ctrl+"+"	Cmd+"+"

The shapes appear closer and you can work with greater precision.

To see a larger part of the drawing, click **Zoom Out** *on the* **Zoom** *toolbar, or select* **Zoom Out** *from the* **View** *menu. You can also use the keyboard.*

Ctrl+"-"   Cmd+"-"
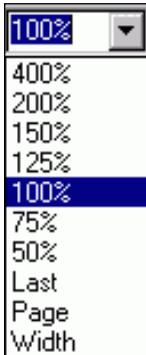
You can select the desired zoom level or enter a custom value using the **Zoom** tool on the tool-bar (also available from the **View / Zoom** menu). The values may range from 1% to 2500%.

Additional commands in the list are:
Last - to return to the previous zoom level,
Page - to view the whole page,
Width - to view the entire page width.

These commands are also accessible from the **View / Zoom** *menu.*

To return to the actual size of the document, just set 100% in the zoom field, or select **Actual Size** from the **View** menu.

The **Zoom Box** *tool is handy for quickly enlarging or diminishing the view of the selected area on the page.*

To enlarge the view: Use the mouse to select the desired rectangular area on the page. On releasing the mouse, the enclosed part will be enlarged to fit the entire window.
To diminish the view: Holding down the **Alt** (**Option**) key, use the mouse to select an area on the page. On releasing the mouse button, page view will be diminished. The larger the area enclosed by the zoom box, the smaller zoom level will be set.

Simply clicking on the page with this tool selected works similar to the **Zoom In** tool (or to the **Zoom Out** tool if you hold down the **Alt**(**Option**) key).

To select the Zoom Box tool do one of the following:
     a) Click the **Zoom Box** button on the toolbar,
     b) Choose **Zoom Box** from the **View** menu,
     c) Use the keyboard.

*To activate this mode, click the **Zoom Box** button, or apply the **Zoom Box** command from the **View** menu.*

Ctrl+Shift+Z   Cmd+Shift+Z

*To quit the **Zoom Box** tool, just choose some other tool (for instance, **Select Tool** on the **Drawing Tools** toolbar).*

For more information about the Zoom toolbar see **Toolbars - *Zoom***.

Rulers and Grid

Rulers and **Grid** help you position the shapes precisely in your documents, and measure the dimensions of the shapes which are on page. The Rulers and Grid use the units of measure set for the document.
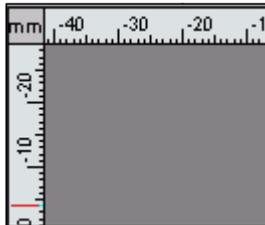
Rulers show the horizontal and vertical measurements for the document. In the top left-hand corner of the window (where the horizontal and the vertical rulers meet) you can see the units of measure of the document. You can change the unit of measure for the current document in the **File / Document Properties** dialog (the **Settings** tab).
To *show/hide* rulers, toggle the **Rulers** option under the **View** menu.

Another function of the rulers is that you can drag vertical and horizontal *Guide Lines* out of them. You can glue shapes to a guide line, and they will be moved together with the line, retaining their arrangement.
To insert a guide line, click on the ruler, drag the guide out of it, and place it where you want it to appear. When you release the mouse button, the guide will appear.

Grid is made up by thin lines crossing the document at equal intervals

The grid helps to position shape more precisely. You can *show/hide* the grid in the document. Use the **Grid** option in the **View** menu.
By default, the grid is not printed with the document.
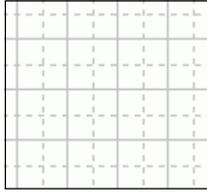
If you want grid **to be printed**, set the **Fixed Grid** mode in the **Grid & Rulers** dialog (**Tools / Grid & Rulers**).

Non-Fixed grid is never printed.

The **Grid & Rulers** dialog also lets you modify some other parameters of the grid for the active document.

For more information about the **Grid & Rulers** dialog see **Dialogs - Modal Dialogs - *Grid & Rulers***.

Guide Lines and Gluing

Sometimes you may need to align shapes horizontally or vertically, and retain this alignment when moving all these shapes. This can be done by gluing shapes to a **Guide Line**. After you glue the shapes, you can move the guide line, and they all will be moved together with it.
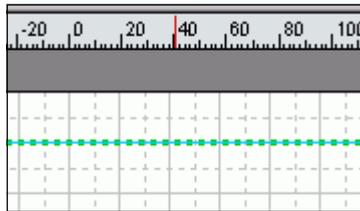
A **Guide Line** is a special ConceptDraw shape which is used for aligning shapes and positioning them precisely.

To insert a horizontal or vertical guide line in your document, click on the corresponding ruler (horizontal or vertical), and holding down the mouse, drag a line out of the ruler. Drop the guide line in the position where you need to put it.

You can manipulate (select, move, duplicate, delete) guides in the same way as other shapes.

*The **Gluing** mode is active by default. It allows you to glue shapes to guide lines.*

ConceptDraw

You can enable or disable this mode in the **Snap & Glue** dialog from the **Tools / Snap & Glue**, and set **Glue to guides** there. Or you can use the Glue tool on the **Snap & Glue** toolbar.

To **glue** a shape, move it to the guide line so that its side touches the guide line, and release the shape. The shape will be glued to the guide with the side of the alignment box. Resize handles on the glued side will turn red. Then you can carry the guide with the glued shape. To unglue a shape, move it away from the guide.
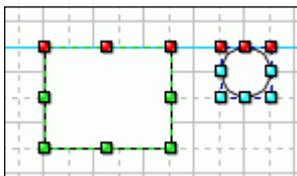
Guide lines are not printed.

You can also glue control handles to a guide line. Turn the Glue mode on and move the control handle to the guide line. On releasing the mouse button, the control handle turns red. Now, when you move the guide line, glued control handles move with it.

It's also possible to glue control handles to connection points of shapes. It's convenient when you need to make one shape dependant on another shape's position.

More information about the **Snap & Glue** dialog can be found in the **Dialogs - Modal Dialogs -** *Snap & Glue* section.
For details about the **Snap & Glue** toolbar see **Toolbars -** *Snap & Glue*.
Control handles are described in **Shape Parameter Table -** *Adding Control Handles to a Shape*.

Document Settings

You can configure some parameters that make working with the document more comfortable.

Scale

When you are drawing a layout that represents a large real-world object, you may have to use scale (e.g. *1 cm = 1 m*). The **Scale** of the document can be specified in the **Document Properties** dialog (**File / Document Properties**), on the **Settings** tab.

In the dialog you can choose one of the standard preset ISO scales:
1:1000, 1:500, 1:200, 1:100, 1:50, 1:25, 1:20, 1:10, 1:5, 1:2.5, 1:2, 2:1,
5:1, 10:1, 20:1, 50:1.
If the *Metric (ISO)* option is active, you can choose one of these standard
values from the drop-down list.

If you need a custom scale, choose the *Custom* option and specify the
desired proportion in the corresponding fields: e.g. *1 = 3*, *1 in = 1 ft*, *1 cm
= 1 km*, etc.

The default scale is 1:1. If you need to use another scale for many or all
future documents, save that scale configuration in a template file, and
create all new documents from this template.

For more information about the **Document Properties** dialog see **Dialogs
- Modal Dialogs -** *Document Properties*.

Units of Measure

The application uses certain units of measure for all numeric values which
are entered and displayed.

The following units of measure are supported:

- **For dimensions and distances:**

inches, decimal	in
inches, fractional	in
feet, decimal	ft
feet, decimal inches	ft, in
feet, fractional inches	ft, in
yards	yd
miles	mi
millimeters	mm
centimeters	cm
meters	m
kilometers	km

- **For angles:**

degrees	deg
radians	rad

- **For font size:**

points	pt

You can see the currently used units of measure in the top left-hand
corner of the document window, where the horizontal and the vertical
rulers meet.

ConceptDraw

You can specify the units of measurement for the active document in the **Document Properties** dialog, on the **Settings** tab (menu **File / Document Properties**).

If you constantly work with the units of measure other than default, you can set them to be used constantly in all new documents.
Call the **Preferences** dialog (menu **Edit / Preferences**) and go to the **Default** tab.
Choose a new value in the **Units Of Measure** field.
Then each new document will use these units of measure.

> *In any input field of ConceptDraw dialogs, you can specify values in the measurement systems other than default. Just put the appropriate suffix after the number, e.g. 13 in, 2 mm, 6.5 ft.*

For more information about the **Document Properties** dialog see **Dialogs - Modal Dialogs -** *Document Properties*.

Color Palette

When you choose a line or fill color from the corresponding button menus on the toolbar, you may need other colors than those offered in the menus. You may click "More Colors" in the bottom of the menu to bring up the **Color** dialog. It lets you pick any of the 256 colors, which make up the color palette of the document.

For more information about the **Color** dialog see **Dialogs - Modal Dialogs - *Color***.

Document Templates

In ConceptDraw you can use document templates to make your work more efficient. Templates are convenient when you need to create many similar documents that have the same settings.

Template in ConceptDraw is a file that contains a document with its settings (units of measure, grid size, scale and other properties) and a list of libraries to open. The document in its turn can contain scripts in ConceptDraw Basic. Such scripts can connect to external data sources, such as a database, a spreadsheet and other. Thus, templates can help to generate documents automatically, saving your time.

Template files have **.cdt** extension.

Using Templates

When you open a template, you open a copy of the sample document stored in the template, and all the libraries according to the list. The document appears in a new window, and the libraries are added to those already open in the library window.

Templates are particularly helpful in several cases:

✓ When you need to create multiple documents of similar look (for instance, a weekly report form, or a product presentation template) and include common basic elements (company logo, standard header, etc.). In this case, simply save the sample as a template once, and use this template for creating new similar documents.

✓ When your documents require specifically customized settings (related to your country specifics or to your purposes). This may involve page size, units of measure, font styles, text formatting, grid properties, etc. To eliminate the need of reconfiguring your documents each time, set all the parameters once and save them in one or more template files.
Note that the settings for each new document are taken from the *Blank Drawing.cdt* template stored in the **Libraries** folder.

✓ When you have to create a document related to a specific field (for instance, draw an office layout or a company structure), it is usually a good idea to use task-related object libraries supplied with the program. ConceptDraw includes ready-made templates with lists of the necessary libraries you may use for each specific task. These templates are stored in the same folders as the corresponding libraries. You can create similar templates which include the libraries you need for your custom purposes, and they will be opened each time you use the template.

For more information about opening templates, please refer to the ***Creating a Document Using a Template*** section.
For specifics on creating and saving templates, see ***Saving a Document as a Template***.

The Default Template

By default, settings for each new document are taken from the *Blank Drawing.cdt* template which is stored in the **Libraries** folder inside the ConceptDraw folder.
To create a document from another template, use the **Template Gallery** which can be called from the **File** menu.

ConceptDraw

For more information about opening templates, please refer to the *Creating a Document Using a Template* section.

If you need to change the default template for all new documents, call the **Preferences** dialog from the **Edit** menu. On the **Default** tab, specify the location of the needed template file, and click **OK** to save the new setting. Then every new document will be created from the template you specified.

Location of Templates

All templates supplied with ConceptDraw are located in the *Libraries* folder of the program's root directory. Normally, the Libraries folder contains task-related subfolders. The template files themselves are located in these folders. They have **.cdt** extension.

The path to the *Libraries* folder is stored in the **Preferences** dialog (menu **Edit / Preferences**) on the **Paths** tab. The same path indicates which folder will be shown in the **Template Gallery** dialog.
So if you move the Libraries folder to another location, specify it on the **Paths** tab: it will be easier to find the templates every time you need them.

As you create your own templates, you may store them in any location. But it is better to store all the templates in one location: they will be easier to access.

Transporting Templates

When moving a template file from one computer to another, keep in mind that a template file only stores references to its libraries rather than the actual libraries. So, you should move the required libraries along with the template. Make sure that the template and the libraries keep their relative paths with respect to one another. Alternatively, you can place the libraries in the same folder with the template.

Chapter 4. Shapes

ConceptDraw offers a variety of tools for working with shapes. You can draw segments and figures, group several shapes into one, connect them with connectors and more. The program comes with hundreds of pre-drawn shapes, collected in the libraries. Special tools help to position shapes precisely, align and distribute multiple shapes. Apart from shapes, created in ConceptDraw, you can insert pictures from graphic files and OLE objects.

About Shapes in ConceptDraw

Shapes are the "building blocks" of any ConceptDraw document. ConceptDraw works with several types of shapes. They are: *Figures, Connectors*, *Groups*, *Pictures*, *OLE Objects* (Windows version only).

Figures

Figures are made up of elementary **segments**. There are four types of **segments**: *LineTo*, *SectorTo*, *ArcTo*, *SplineTo*.
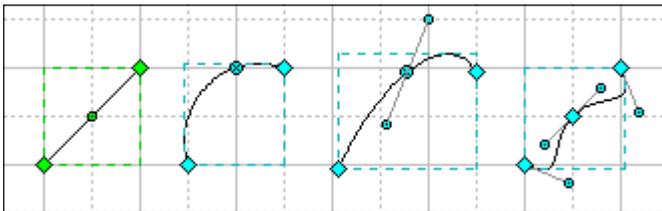
Connected segments form a solid path called **Geometry**. If the beginning of the first segment coincides with the end of the last one, the geometry becomes closed and is filled by default.

ConceptDraw
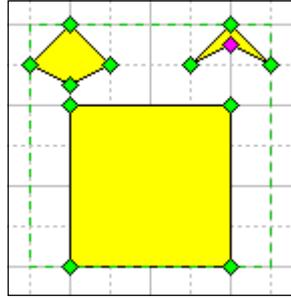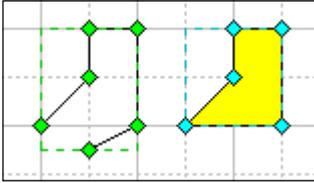
A **figure** may contain several geometries, so it may look like a group of several shapes. But unlike the shapes within a group, all geometries that form a *figure* always have the same line and fill *properties*. (A *group* may include any shapes of different types with different line styles, fill colors, etc.). See ***Drawing a Shape with Drawing Tools*** for details.

ConceptDraw also lets you work with *special shapes*, such as connectors, pictures, and OLE objects. Connectors can be created by means of the application; pictures and OLE objects are imported from other applications or files.

Connectors

Connectors are used to connect two shapes together. The connector's distinguishing feature is that it keeps the shapes connected even if they are repositioned, resized, etc.
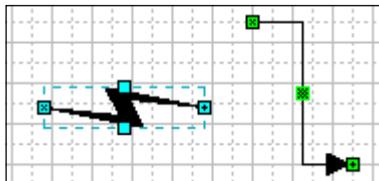
There are two methods for connecting: to the ***entire shape*** (connector changes the point to which it's connected when you move the shape) and to a ***connection point*** of a shape. For details see the ***Connectors*** section.

Groups

A **Group** is composed of two or more shapes. You can create a group of shapes easily, and work with a group the same way you work with a single shape. You can still select and edit individual shapes by selecting them inside the group. However, it may be more convenient to use **Edit Group** window. You can call it with the **Edit Group** command from the **Shape** menu. For details see the ***Grouping and Ungrouping*** section.

Pictures

Pictures can be imported to ConceptDraw from graphic files of different formats (see the list of formats in the **Importing Files** section).

For the pictures, only limited editing is possible (rotating, resizing, etc.). For details see the **Pictures** section.

OLE Objects

The *Windows* version of ConceptDraw supports **Object Linking and Embedding** capabilities (*i.e.* it is an OLE-compatible application). So objects created in other programs can be inserted into your document. In ConceptDraw, OLE-objects can be repositioned and resized. For full editing, you can call the native application from within ConceptDraw.

You can find more information in the section **Using ConceptDraw Shapes in other OLE-compatible Applications**.

Drawing a Shape with Drawing Tools

To create a new shape, you can use the **Line**, **Sector**, **Arc**, and **Spline** tools from the toolbar.
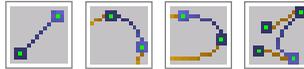
Choose a tool and use the mouse to draw a segment.

To add another segment to it, start drawing from one of the endpoints of the existing one. This will lengthen the geometry.
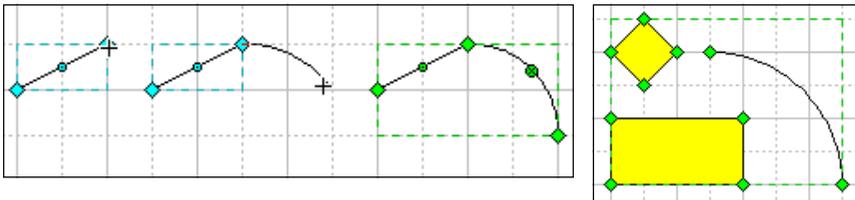
If you start drawing a segment at any position with **Ctrl** (in *Windows*) or **Cmd** (in *Mac OS*) held down, this segment will be assigned to the currently selected shape, expanding it with a new geometry. So, the shape may consist of two (or more) separate geometries, but it's still one shape.

If you hold down the **Shift** key when drawing, the *constrained* drawing mode switches on. The way in which the constrained segments behave depends on the segment type.

ConceptDraw

Basic Segments

LineTo: a line segment. It can be created with the **Line** tool. To constrain a line to any 45-degree angle, hold down the **Shift** key as you drag.

*To switch to the **Line** tool, you can also select **Line Segment** from the **Insert** menu, or press*

Ctrl+3

ArcTo: a sector of a circle. It can be created with the **Sector** tool. The direction in which you first drag the mouse determines which way the curve bows. The point where you release the mouse button defines the other endpoint of the sector. To change the direction in which the curve bows, hold down the **Shift** key when you drag.

*To switch to the **Sector** tool, you can also choose **Sector Segment** in the **Insert** menu, or press*

Ctrl+4

EllipseTo: an elliptical quarter segment. Use the **Arc** tool to create it.

*To switch to the **Arc** tool, you can also select **Arc Segment** from the **Insert** menu, or press*

Ctrl+5

Spline To: a smooth curve (also called spline). It can be created with the **Spline** tool. This tool works like a pencil on paper, the only difference is that the curve results smooth rather than jagged. Once drawn, the spline is easy to modify by adjusting its vertices and adjustment handles.

*To switch to the **Spline** tool, you can also check **Spline Segment** in the **Insert** menu, or press*

Ctrl+6

*You can control the smoothness of the spline. This can be done with the **Spline Smooth** control in the Geometry floating dialog. Spline smoothness may range from*

0 to 100. When it equals 0, the spline is not smoothened at all and exactly follows the movements of the mouse. 100 provides maximum smoothness. For details see **Dialogs - Floating Dialogs - Geometry.**

Elementary Shapes

Besides single segments, you can also draw some widely-used shapes: rectangle, ellipse, "Text" shape. Use the corresponding toolbar buttons for each of them.

Rectangle: creates a filled rectangle. Drag the mouse to determine its size. By holding down the **Shift** key as you draw, you constrain the rectangle to a square.

To switch to the **Rectangle** *tool, you can also select* **Rectangle** *from the* **Insert** *menu, or press*

Ctrl+7

Ellipse: draws a filled ellipse. Drag the mouse to determine its size. By holding down the **Shift** key as you drag, you constrain the ellipse to a circle.

To switch to the **Ellipse** *tool, you can also select* **Ellipse** *from the* **Insert** *menu, or press*

Ctrl+8

Edit Text: creates a "Text" shape. Drag the mouse to determine the size of the box. If you hold down the **Shift** key as you drag, you will get a square box. After you release the mouse button, the **Edit Text** mode switches on, and you can type the text in the box.

To switch to the **Edit Text** *mode, you can also select* **Text** *from the* **Insert** *menu. In any other tool mode, you can activate the text editing mode for a while: just select the needed shape and press* **F2**. *And when you finish editing text, press*

F2 or Esc

ConceptDraw

Inserting a Shape from a Library

The fastest way to create drawings is to use pre-drawn library shapes. ConceptDraw comes with a large collection of library shapes that cover various topics. When you create a document from a template, the libraries associated with this template are opened automatically.

There are several methods for adding a library shape to a document:

a) *Drag and Drop*:
Grab the library shape by its icon in the library window, drag it to the place in the document where you want to put it and release the mouse button.

b) *Double-click*:
If you double-click a library shape in the library window it will be inserted in the center of the active document window.

c) *Copying and pasting*:
Call the context menu on the library shape, and choose **Copy** from the menu. The shape will be copied to the Clipboard. Then go to the document and choose **Paste** from the context menu. The contents of the Clipboard will be inserted in the mouse position.

For more details about using the libraries see the ***Libraries*** section.

Operations on Shapes

ConceptDraw V offers a variety of ways of working with shapes. You can change shape properties, assign text and hyperlinks, rotate and resize shapes and many more.

Selecting

Selecting a Shape

To work with a shape, you need to ***select*** it. Selected shapes are surrounded by a dashed green or blue line which shows the shape's *alignment box*.
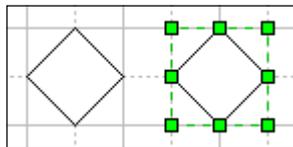
In most cases, the **Select** mode is used for selecting shapes. To switch to the **Select** mode, use any of the following ways:

a) click on the **Select** button on the toolbar,
b) choose **Select** in the **Tools** menu,
c) or use the keyboard.

*To switch to the **Select** mode, click on the **Select** button or use the keyboard.*

Ctrl+1   Ctrl+1

To **select** a shape, just click it with the mouse.
When you select a shape, it also shows **handles** which you can drag to modify some properties of the shape. Handles vary with the type of the shape and the tool which is currently active on the toolbar. Here you can see how an ellipse looks if selected in different tool modes: Select, Line, Arc.
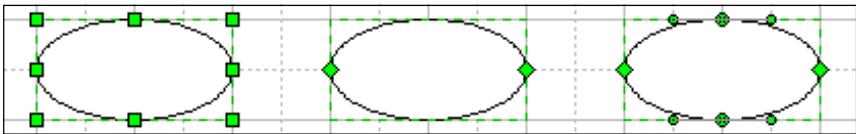
Multiple Selection

To **select several shapes** at a time, click them one by one, holding down the **Shift** key. To deselect one of the selected shapes, hold down **Shift** and click this shape again (this can be done for Select Box as well, see below).

*In the **Select** or **Rotate** tool modes, you can also use **Select Box** for selecting multiple shapes. Click the mouse beyond all the shapes you want to select, and while holding down the mouse button, drag it across the shapes to embrace them with a box. All the shapes touched by the resulting thin-line box will appear selected.*
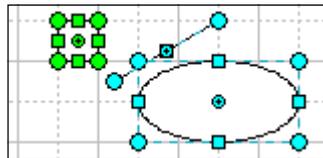
To **select all** the shapes on the page, choose **Select All** from the **Edit** menu.

Ctrl+A   Cmd+A

The **Select Connected** command from the **Edit** menu allows to select all shapes, connected to the currently selected shape with connectors.

To cancel the selection, click outside the selected shapes.

Primary and Secondary Selection

When several shapes are selected, one of them displays *green* handles: this is the **primary** selected shape. All the other selected shapes show blue handles: they are **secondary** selected shapes.
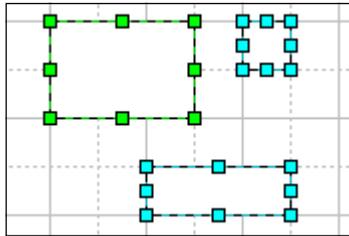
Some operations distinguish between the primary shape and the secondary selected shapes. They use the primary shape as a model for other shapes (*Align, Distribute*, etc). Other operations such as *Information, Hyperlink, Connection Point*, work with the *primary* shape only, and ignore the rest. You can reassign the primary shape - click another selected shape to make it primary (it will display green handles).

Selecting Shapes Inside a Group

It's also possible to select shapes that are part of a group.
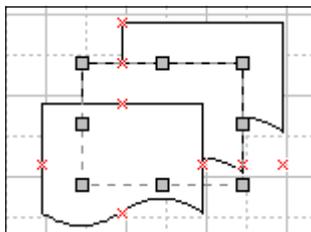
To do this, select the group first and then click on a shape inside the group to select that shape. If the group contains other groups you may need to click a few times until you select the desired shape.

For more comfortable editing (moving, rotating, reshaping, adding or deleting elements), you can use the group editing window. Use the **Edit Group** command under the **Shape** menu. The group will be opened in a separate window, where you can edit it as if it were ungrouped.

Selecting Shapes in the Order they were Created

You can also use the **Tab** key to select shapes. Each time you hit **Tab**, you select shapes in the order in which they were created or dropped on the page, starting from the currently selected shape. The program will adjust the document page each time you press **Tab**, so that the selected shape is shown in the center of the screen. If no shape is selected, hitting **Tab** will select the first shape you have drawn or dropped on the page.

You can also use the **Select Next** command under the **Edit** menu with the same result.

Holding down the **Shift** key when hitting **Tab** reverses the selection order - so does **Select Previous** under the **Edit** menu.

Copying and Pasting

You can exchange information between ConceptDraw and other applications by using the Clipboard. The Clipboard is a temporary storage area used by the system to transfer data between documents and applications. By using the **Cut**, **Copy** and **Paste** commands, you can copy the selected text or shapes onto the Clipboard and then insert it to another location.

Cut and Copy
The **Copy** command creates a copy of the selected shapes or text and places it onto the Clipboard.

*Use **Copy** tool on the toolbar, or select **Copy** from the **Edit** menu.*

Ctrl+C   Cmd+C
Ctrl+Ins

Once there is some data on the Clipboard, it can be inserted into the same document, or other documents and applications.

The **Cut** command combines two operations: **Copy** and **Delete**. It places the selected items on the Clipboard, and then deletes them from the document.

*To use this command, choose **Cut** from the **Edit** menu, or click the **Cut** button on the toolbar.*

Ctrl+X   Cmd+X
Ctrl+Del

On the Macintosh platform, ConceptDraw uses the PICT format to exchange data with other applications.

Paste

The **Paste** command inserts the content of the Clipboard into the cursor position.

*To perform the command, select **Paste** from the **Edit** menu, or use the **Paste** tool on the toolbar.*

Ctrl+V   Cmd+V
Shift+Ins

If you paste an object created in another OLE-compatible application, it will be inserted as an OLE Object.

In the Mac version, if the Clipboard contains text, it will be inserted into the shape with primary selection (the one displaying green handles). When none of the shapes are selected, a "Text" shape will be created and the text will be pasted into it.

"Paste Special..."

You can use the **Paste Special** command to choose in what form the content of the Clipboard will be inserted into your ConceptDraw document (picture, text, etc.).

*You can perform the **Paste Special** command from the **Edit** menu or use the keyboard:*

Ctrl+Alt+V   Cmd+Opt+V

"Paste in Place"

If there is a ConceptDraw shape on the Clipboard, the **Paste in Place** command lets you paste the content of the Clipboard into the *same relative position on a page* as that from where the original shape was copied or cut.

*You can call the **Paste in Place** command from the **Edit** menu or use the keyboard:*

Ctrl+Shift+V   Cmd+Shift+V

This operation is particularly useful when you need to copy or move a shape into another document (or onto another page) so that it's placed in the same position on the page as the original shape.

> For pasting objects from other applications, this command works just the same way as the **Paste** command.

Duplicating

To duplicate the selected shape(s), select **Duplicate** from the **Edit** menu.

Ctrl+D   Cmd+D

The first copy will appear slightly below and to the right from the original shape.
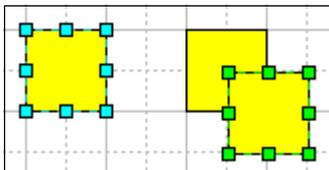
The **Duplicate** operation allows to create multiple copies and position them with the desired offset. This is convenient for drawing for instance, a fence - when the distance between each next and previous element is always equal. To create multiple copies with the same offset, perform the duplicate operation once, and move the first copy to the needed position. Each subsequent copy will appear at the same relative distance, as the first copy to the original shape. This way you can quickly and accurately create drawings with many repeating elements.

Another option is to duplicate shapes by using the mouse. You may find it more convenient, as it lets you create a copy and move it to a desired location at the same time. Hold down the **Ctrl** (in *Windows*) or **Option** (in *Mac OS*) key and drag a copy out of the selected shape to the place where you want to position it.

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Moving

You can use the keyboard or the mouse for moving shapes.

Moving Shapes with the Keyboard

Only selected shapes can be moved with the keyboard. (See **Selecting** for specifics).

Moving shapes by pixels helps you position the shapes more precisely. Press an **Arrow** key to move the selection by one screen pixel with each keystroke. Use a higher *Zoom* level for more precise positioning.

If you hold down **Shift** when moving the selection by **Arrow** keys, the shape(s) will be moved by bigger steps.

Make sure there are no handles selected on the shape before you start moving it with the keyboard, otherwise you'll move the handles instead of the shape itself.

Moving shapes with the Mouse

You can drag a shape with the mouse when the pointer turns into a black arrow over this shape.

To move several shapes at a time, select them (holding down the **Shift** key) and start dragging when the pointer turns into a black arrow over one of the selected shapes.

The ways of moving a shape may vary depending on the tool mode which is currently on.

1) When the **Select**, **Rotate**, **Rectangle** or **Ellipse** tool is active, you can move a shape by dragging either its *body* or the *alignment box*.

2) With such tools as **Line**, **Sector**, **Arc**, **Spline** or **Connectors**, you can move a shape by dragging its *alignment box* (so the shape(s) should be selected).
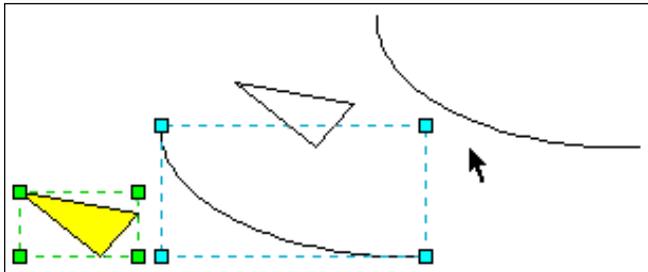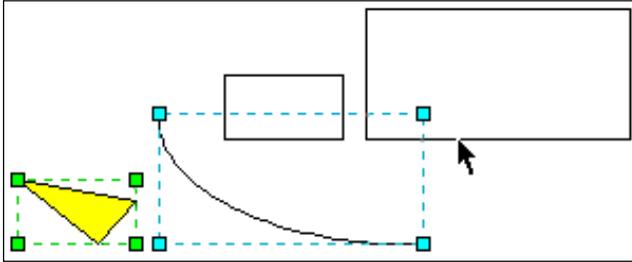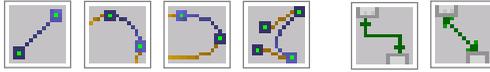
When moving a shape with the mouse, you only see its contour. In case you'd like to see the whole shape, stop the mouse and wait for a moment - it will appear in full detail.

To constrain the movement of a shape to strictly vertical or horizontal, hold down the **Shift** key while you drag the shape, or use the **Shift+Arrow** keys.

> *You can protect a shape from being moved horizontally or vertically. In the **Protection** dialog check **X Position** to prohibit the horizontal movement, and **Y Position** for the vertical movement. By checking both of these options you lock the shape against repositioning.*

> *The way shapes behave when moved is also determined by whether the **Snap** mode is on or off.*

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If the **Snap** tool is on, the shape you are moving jumps to the nearest snap locations (usually the grid nodes), instead of following the mouse directly. This functionality lets you easily align shapes by the grid lines and guides.

Sometimes you may need to position a shape right in the center of the page. To do this, select the shape and use the **Center Page** command from the **Shape / Move To...** menu. With the **Center Vertically** and **Center Horizontally** commands you can center the vertical or horizontal position of the shape(s) respectively.

Rotating and Flipping

Rotating Shapes

You can *rotate* a shape by dragging its **rotation handles**. These are the round handles (usually green or blue) in the corners of the shape's *alignment box*.

*To switch to the Rotation mode, you can use the **Rotate** tool, or choose **Rotate** in the **Tools** menu.*

When you select a shape in the *Rotation* mode, it shows the *rotation handles*, and you can drag them to rotate the shape.

When you drag a rotation handle, the shape turns around its *rotation center*. By dragging the handle farther out from the shape, you decrease the step of rotation from 30 degree to 0.1 degree, and thus increase the accuracy. The current angle (in degrees) is displayed in the *Status bar*.
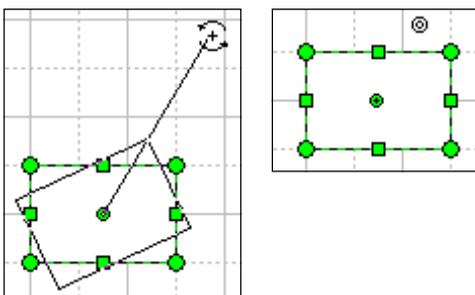
The **rotation center** is also a handle, it looks like a plus sign in a green circle. You can reposition it by dragging it with the mouse.

If several shapes are selected, you may rotate each of them separately, by dragging a rotation handle of a shape.

If you start dragging with **Ctrl** (in *Windows*) or **Cmd** (in *Mac OS*) held down, all the selected shapes will rotate simultaneously around their common rotation center.
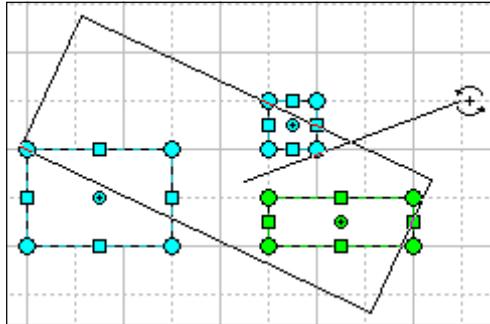
*You can switch between the **Select** and **Rotate** modes by clicking on the alignment box of the shape.*

You can also use the keyboard to rotate the selected shape(s):

Counterclockwise by 1 degree

Ctrl+Left Arrow   Cmd+Left Arrow

Clockwise by 1 degree

Ctrl+Right Arrow   Cmd+Right Arrow

Counterclockwise by 0.1 degree

Ctrl+Shift+ Left Arrow   Cmd+Shift+ Left Arrow

Clockwise by 0.1 degree

Ctrl+Shift+ Right Arrow   Cmd+Shift+ Right Arrow

To rotate the selected shapes by 90-degree increments, you can
   a) use the **Rotate Left (90)** and **Rotate Right (90)** commands from the **Shape / Rotate and Flip**;
   b) use the **Rotate Left** or **Rotate Right** tools on the Action toolbar;
   c) use the keyboard.

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	Rotate 90 degrees left
	Ctrl+L Cmd+L

	Rotate 90 degrees right
	Ctrl+R Cmd+R

*You can protect a shape from rotating and its rotation center from repositioning. To do this, check the **Rotate** option in the **Protection** dialog. Locked shapes will display gray padlocks in place of rotation handles and the rotation center, indicating that you can't rotate them.*

Flipping Shapes

Flipping changes the shape as if it were reflected in a mirror down or across its middle.

To flip the selected shapes, you can

    a) use the **Flip Vertical** or **Flip Horizontal** commands from the **Shape / Rotate and Flip** menu,

    b) use the keyboard:

	Flip Vertical
	Ctrl+J Cmd+J

	Flip Horizontal
	Ctrl+H Cmd+Opt+H

    c) use the **Flip Vertical** or **Flip Horizontal** tools on the Action toolbar.

These operations transpose the opposite sides of the shape with respect to an imaginary horizontal or vertical line that goes through the rotation center of the shape.
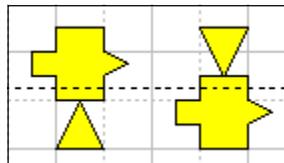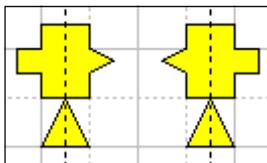
If several shapes are selected, the imaginary line goes through their common rotation center.
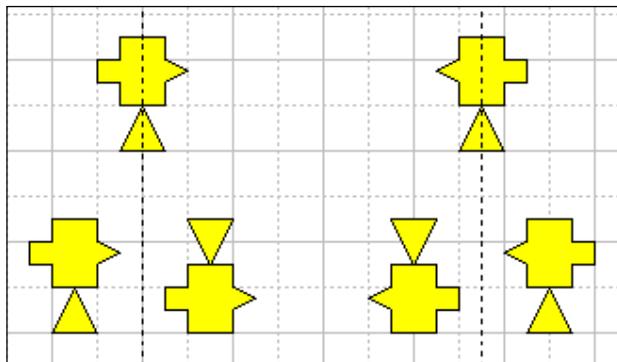
Resizing

Resizing Shapes with the Mouse and with the Keyboard

To resize a shape, use its **resize handles**. They look like small square boxes, usually green or blue, and appear when you select a shape.

To resize a shape preserving its proportions, drag any of its four corner handles.
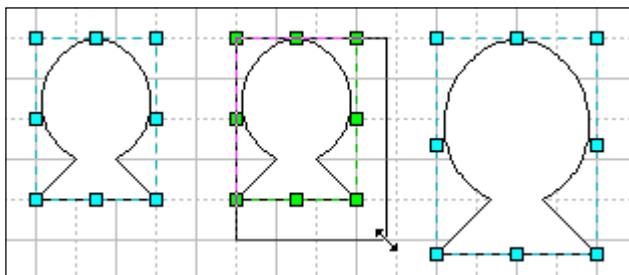
To change the width or height only, drag the corresponding side handle.
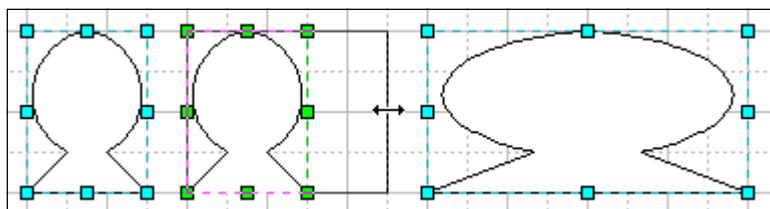
ConceptDraw

You can resize shapes in either way in the following tool modes: **Select**, **Rectangle**, **Ellipse**.

In the **Rotate** mode, you can only resize shapes unproportionally.

If the **Snap** mode is on, the handle you drag will jump automatically into the nearest snap location (usually a grid node, or to the nearest shape - depending on the Snap settings).

You can also use the keyboard to resize shapes: click the needed resize handle to select it (the selected handle turns magenta), and then use the **Arrow** keys to move it by 1 pixel, or **Shift + Arrow** keys to move it faster.

As you resize a shape, the *Status Bar* registers how the width and height change. (To show the Status bar, check **Status Bar** in the **View** menu).

If you need to resize *several shapes* to the same proportion, you can use one of the following ways:

a) Select these shapes and group them (menu **Shape / Group**), resize the group by moving its resize handles, and then ungroup it back (menu **Shape / Ungroup**) to get separate shapes.

b) You can select the relevant resize handles on the shapes (hold down **Shift** when clicking), and then resize all the shapes together by moving their selected resize handles all together - using the mouse or the keyboard.

In this dialog, you can check the options for protection:

Width (to prevent width from altering),

Height (to prevent height from altering) and

Aspect Ratio (preserves the proportions, and allows to resize only proportionally).

Locked handles will appear as gray padlocks, indicating that they can't be worked with.

> *Unproportional resizing may also change one segment type into another. For instance, you can change a SectorTo segment into ArcTo by altering its width or height.*

> *It is possible to hide resize handles so that they won't appear on the shape. To do this, uncheck Show Shape Handles in the **Behavior** floating dialog.*

How Shapes Behave within a Group

You can set how a shape will behave within a group when the group is resized.

The **Behavior** floating dialog lets you to choose among the following 3 options:
- *Scale With Group* - always change the size of the shape as the group's size changes.
- *Reposition Only* - move the shape without changing its size.
- *Use Group Settings* - behave according to the settings of the group to which the shape belongs.

The last option is set by default.

Resizing Shapes Using the Make Same Tools

Sometimes you may need to make one or more shapes equal in size with another shape that serves as a *model*.

You can use the **Make Same** tools (menu **Shape / Make Same**) to equalize the dimensions automatically.

Shape / Make Same Width - to resize the selected shapes to the width of the primary shape,

Shape / Make Same Height - to resize the selected shapes to the height of the primary shape,

Shape / Make Same Size - to equalize both width and height of the selected shapes,

Shape / Make Same Style - the visual attributes of the primary shape (line width, colors, fills, text formatting) are copied to other selected shape.

These and other tools are also available from the **Arrange** toolbar. See the **Toolbars - *Arrange*** for more information.

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First select the *model shape*, so that it displays green handles (*primary selection*).
Then hold down **Shift** and select the shapes which you want to fit in size to the model.
Then use of the **Make Same** tools described above.

Here you can see how the **Make Same Width** tool works:
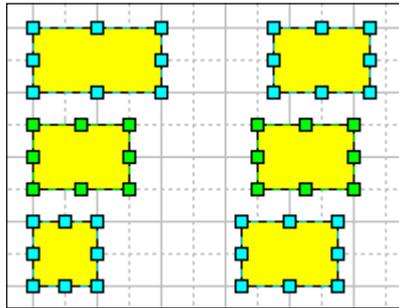
> *The width and height of shapes are taken as the width and height of their alignment boxes (the shape's alignment box is displayed by a green or blue dashed line when you select the shape).*

Resizing a Shape to Fit Its Text

Sometimes you may need to make a shape the same size as the text it holds.

> *The **Fit To Text** tool shrinks or enlarges the selected shape so it matches the size of its text box.*

Here's an example of how this tool works:
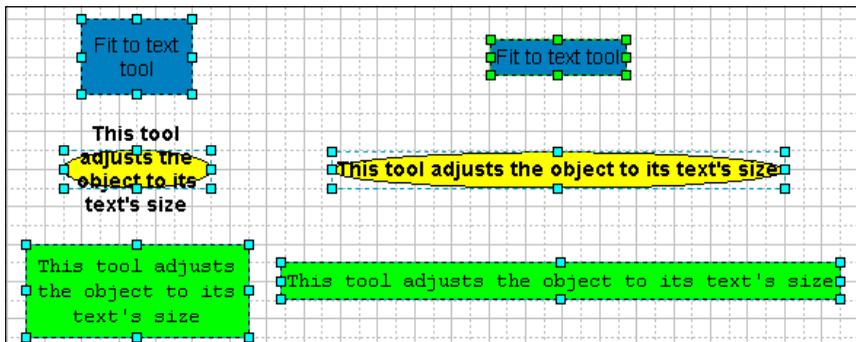
Reshaping

For shapes of different types, you can use several types of handles to reshape them.

To change the form of a *figure* made up of *segments*, you use its **vertices** and **adjustment handles**.

To manipulate *1-D shapes*, you can use their **endpoints**.

Smart Connectors and some library shapes have **control handles** which can be used to adjust their position and form.

Using Vertices and Adjustment Handles

To ***change the form*** of a *figure*, use its **vertices** and **adjustment handles**. You can select these handles and reposition them, thus changing the arrangement and form of the segments that make up the figure.

To ***select*** a handle, click it with the mouse. You can select more than one handle: hold down the **Shift** key as you click. The selected handles appear in magenta.

You can ***reposition*** the selected handles by dragging them with the mouse (when the mouse cursor turns into a cross with arrows ⁺ over them), or by using the **Shift + Arrow** keys.
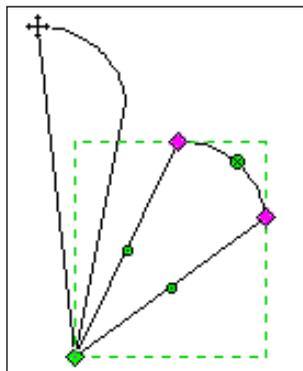
A **vertex** is a small diamond-shaped handle which appears in the point where two segments meet.

To see the vertices of a shape, select it with any of the **segment tools**: **Line**, **Sector**, **Arc** or **Spline** (you can also choose these tools from the **Insert** menu).
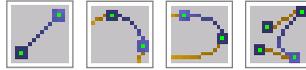
By dragging a vertex, you change the form of the shape (the form and arrangement of its segments).
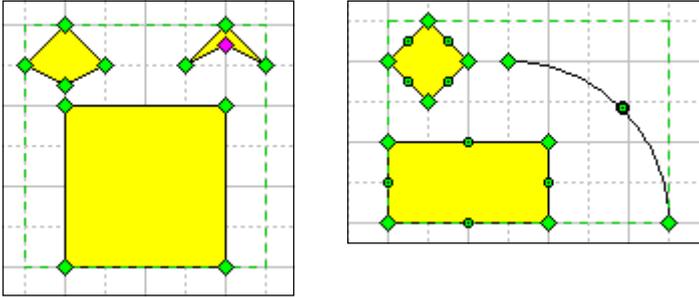
*By deleting a vertex, you **delete** the segments to which it belongs. The vertices next to the deleted one will be connected with a segment of the same type as the deleted ones (the priority is as follows: spline, arc, sector, line).*

The **Adjustment Handles** are small round handles which appear on the segments between the vertices.

To make these handles visible and manipulate them, you can apply the **Sector** tool or the **Arc** tool.
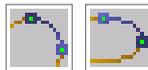
The adjustment handles are used to change the curvature of the segment:

1) A *line segment* can be transformed into a sector of a circle by dragging its adjustment handles with the **Sector** tool or the **Arc** tool.
2) For *a segment of a circle*, the adjustment handles change its curvature.
3) For *an elliptic arc segment*, they adjust the angle and the value of the arc eccentricity.
4) For *a spline segment*, adjustment handles come associated with vertices. By dragging these handles, you alter the curvature of the spline sections near the corresponding vertices.

For more information about the elementary segments see the ***Drawing
Shapes with Drawing Tools*** section.

Operations on Vertices and Adjustment Handles

Besides moving vertices and adjustment handles, you can perform some
additional operations on them.

To ***select / deselect*** a vertex or an adjustment handle, just click it with the
mouse. To select more than one handle, hold the **Shift** key down as you
point and click each additional handle. The selected handles turn magenta.
Now, any operation on handles will affect all the selected handles
simultaneously.
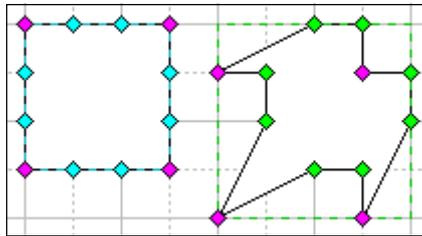
If you ***select a vertex*** and ***reposition*** it with the **Shift** key held down, its
movement will be *constrained*. The vertex will move strictly along the line
coming out of the *preceding vertex* at any 45 degree angle.
If the **Right Shift** key is pressed, the movement will be constrained with
respect to *the following vertex*.

To ***delete*** the selected handles, use the **Del** key. Deleting a handle deletes
the segment with which the handle is associated.

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*rotation handle, all the selected rotation handles of shapes will move along, but the selected resize handles of shapes will stay in place. With the **Arrow** keys, you move all the selected handles simultaneously (the response of each hanlde will depend on its type).*

Adding Vertices

You can use the **Insert Vertex** tool to insert an additional vertex into a segment. Adding a vertex may be considered as dividing an existing segment into two parts.

*To **add a vertex** to a segment, activate the **Insert Vertex** tool on the toolbar or check **Insert Vertex** in the **Tools** menu.*

Select the figure, and between two existing vertices on the figure's contour, click on the place where you want to add a new vertex. The new vertex appears and divides the segment into two new ones.
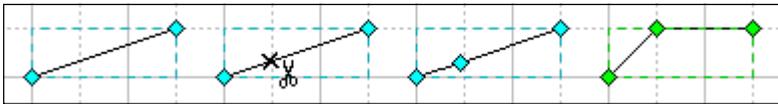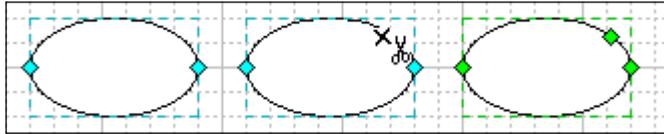
By inserting vertices, you can also **cut the lines** and **divide a geometry** into several ones:

hold down the **Cmd** (in *Mac OS*) or **Ctrl** (in *Windows*) key when inserting a vertex. In this way you cut the line in the place you insert the vertex. For a closed figure, this operation will open it.
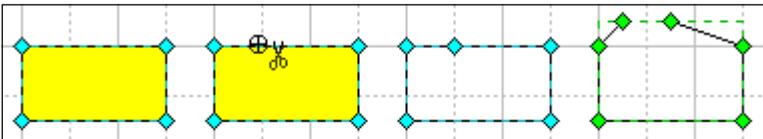
For an open figure, this operation will divide the geometry to which the vertex was added.

And vice versa, if you need to merge several geometries into one, superpose their endpoints so that they form a solid path, select them all and use the **Shape / Operations / Join** command. See ***The Join, Combine and Separate Operations*** for more detail.

Working with 1D Shapes

Connectors and all other 1D shapes have the *begin point* and the *end point*, called **endpoints**.
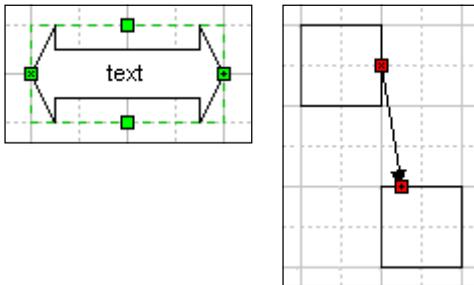
By dragging an endpoint, you resize and rotate the shape at the same time.

And besides, the endpoints are capable of ***gluing*** to the *connection points* of other shapes, so all 1D shapes can be regarded as connectors as well.

You can make any shape behave as a 1D shape (turn it into a connector). Select the shape and in the ***Behavior*** dialog, in the **Interaction style** section, select ***Line (1-Dimensional)***, and the shape will display the endpoints. You can use such an shape as a connector.

To learn more about connectors, see the ***Connectors*** section.

Smart Connectors and some library shapes have **control handles** which can be used to adjust their position and form.

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Using Control Handles

By dragging a control handle, you can change a certain characteristic of the shape on which it appears (*e.g.* the shape of a smart connector, the size of a circular sector etc.).
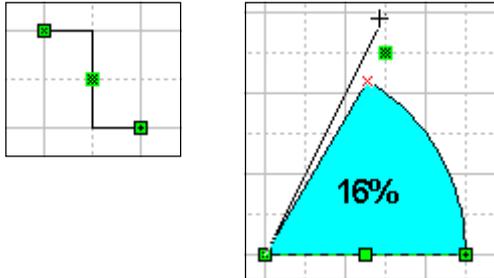
Control handles at the ending points are capable of **gluing** to the *connection points* of other shapes, the way the endpoints of connectors are:
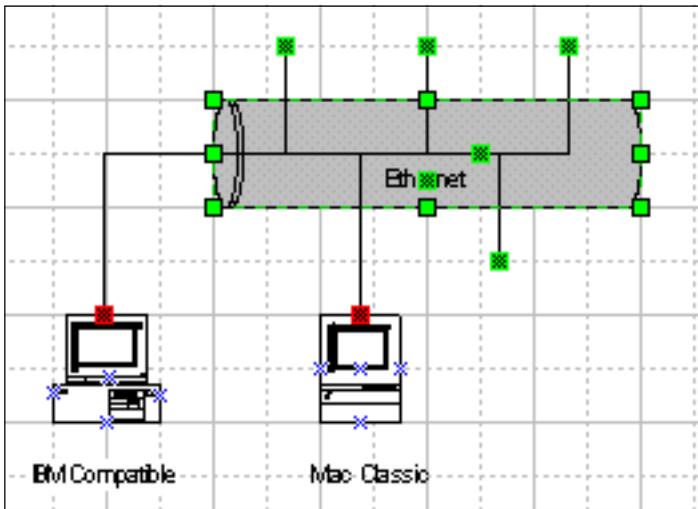
Library shapes often have control handles. You cannot create or delete them other than from the Shape Parameter Table (see **Shape Parameter Table - *Adding Control Handles to a Handle***).
You can also use the Shape Parameter Table to *add control handles* to any shape you create in ConceptDraw.

Changing the Front-to-Back Order

Each time you draw a shape, or take it from another document or from a library and drop on the page, the shape gets registered in the order list. ConceptDraw displays shapes according to their position in the order list, so most recent shapes may overlap the ones you created earlier.

Sometimes you may want to change the display order of the shapes. To put the selected shapes to back or to front in the view, you can use the following operations:

1) **Send To Back** - sends the shape to the back of the order list, so that it is displayed behind all other shapes.

> *Select the **Send To Back** item in the **Shape / Display Order** menu or use the keyboard shortcut:*

 Ctrl+B   Cmd+B
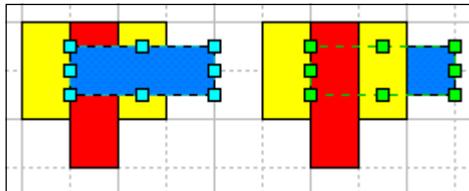
2) **Bring To Front** - brings the shape to the front of the order list, so that it is displayed above all other shapes.

> *Select the **Bring To Front** item in the **Shape / Display Order** menu or use the keyboard shortcut:*

 Ctrl+F   Cmd+F

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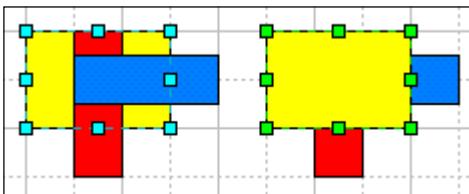
3) **Send Backward -** positions the shape one step higher in the order list.

*Select the **Send Backward** item in the **Shape / Display Order** menu or use the keyboard shortcut:*

Ctrl+Shift+B   Cmd+Shift+B
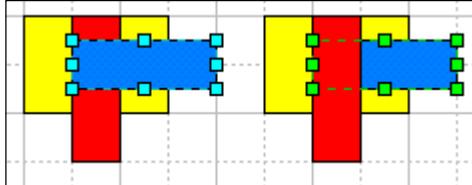
4) **Bring Forward -** positions the shape one step higher in the order list.

*Select the **Bring Forward** item in the **Shape / Display Order** menu or use the keyboard shortcut:*

Ctrl+Shift+F   Cmd+Shift+F
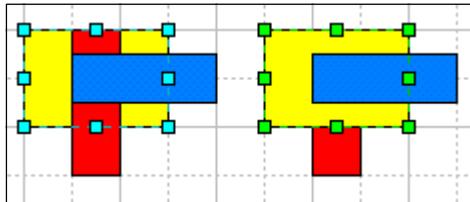
Distributing Shapes

The **Distribute** tools lets you place three or more shapes at *equal distances* between the alignment boxes (or between their sides or centers). This operation can be applied to 2-D shapes only.

The shapes are distributed with respect to the primary shape (the one that displays green handles).

All these commands are also available from the **Shape / Distribute** menu, or you can use the **Arrange** toolbar (see the **Toolbars - *Arrange*** section).

You can choose among the following 8 distribution options:

Horizontal:		**Vertical:**	
	Distribute Horizontal Spacing - *creates unified distances between the alignment boxes,*		***Distribute Vertical Spacing*** - *creates unified distances between the alignment boxes,*
	Distribute Left Edges - *between the left edges of the alignment boxes,*		***Distribute Top Edges*** - *between the top edges of the alignment boxes,*
	Distribute Centers - *between the centers of the shapes,*		***Distribute Middle*** - *between the centers of the shapes,*
	Distribute Right Edges - *between the right edges of the alignment boxes;*		***Distribute Bottom Edges*** - *between the bottom edges of the alignment boxes.*

Here you can see how the **Distribute Vertical Spacing** option works: it unifies the vertical spacing between the shapes.
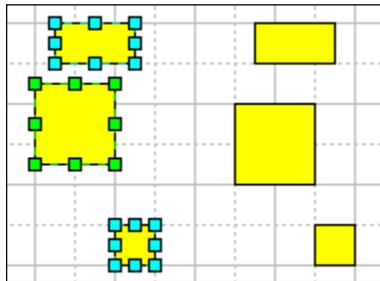
Aligning Shapes

When several shapes are selected, you can ***align*** them in different ways with respect to the primary selected shape (the one displaying green handles).

The **Align** tool places the shapes so that their *alignment boxes* are arranged along a certain horizontal or vertical line. This line is related to the primary shape, going either along one of the sides, or through the center of its alignment box.

These commands can be performed from the **Shape** / **Align** menu. You can also use the **Arrange** toolbar (see **Toolbars -** ***Arrange***).

There are 6 alignment types:

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Vertical:		**Horizontal:**	
	Align Left,		*Align Top*,
	Align Center,		*Align Middle*,
	Align Right.		*Align Bottom*.

Here's an example of the Align Left operation:
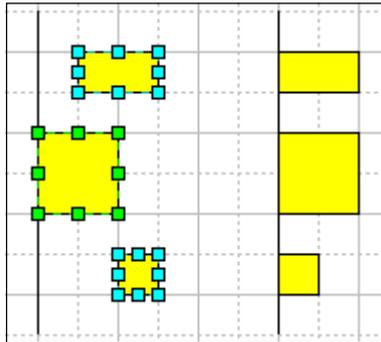
The Join, Combine and Separate Operations

In ConceptDraw, *figures* are shapes made up of one or more segments. Several segments joined together are called *geometry*. A figure may contain more than one geometry.

The **Shape / Operations** menu holds the commands for working with figures and geometries.

To create complex figures, you can use the **Combine** operation to make up a figure consisting of several geometries.

This operation can be reversed by the **Separate** command which splits a complex figure into separate geometries.

The **Join** operation lets you merge the segments with coinciding endpoints into one geometry, and also form a closed figure by merging separate segments of its contour.

Combine

The **Combine** operation is a special case of *grouping*: it is applied only to **figures**, and it *groups* them into a complex figure with a unified line and fill formatting of all its geometries.

If you want to make up a complex figure by *grouping* several figures that have the same *properties* (fill color, line color, line thickness, etc.), select these figures and use the **Combine** operation: menu **Shape / Operations / Combine**. When the properties of the figures are the same, it is better to *Combine* them rather than *Group*: combined figures take up less space when saved.
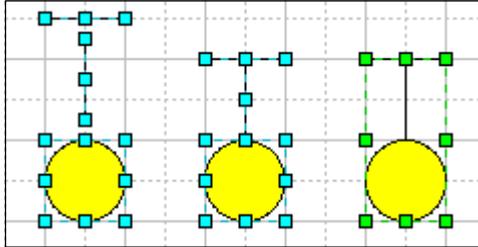
If overlapping figures are combined, the overlapping areas become transparent. This feature is extremely useful for creating "holes" in the closed figures.
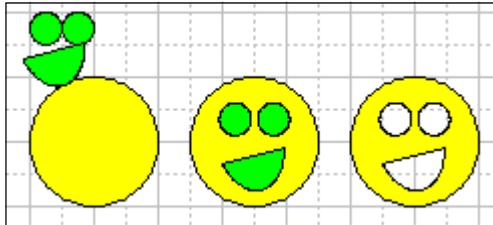
*If you **combine** figures having different line and fill properties, all the elements will be formatted after the primary selected figure.*

Join

The **Join** operation (menu **Shape / Operations / Join**) lets you *merge* several selected figures into one. All the elements take a unified formatting after the primary selected figure.

The essential difference from the **Combine** operation is that if a solid path results after the operation, it becomes a single geometry. So when several geometries have some coinciding endpoints, the **Join** operation merges them into one geometry. (The **Combine** operation just groups figures with

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the same properties, but never merges them.) That is why when a closed figure results after the **Join** operation, it is filled automatically (this never happens when the figures are combined).

Two geometries   One geometry
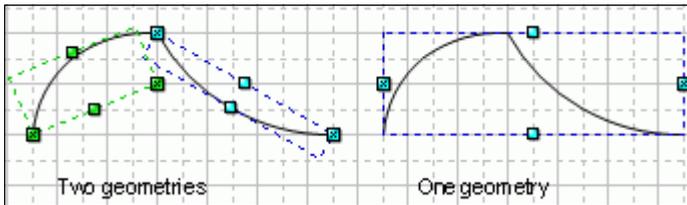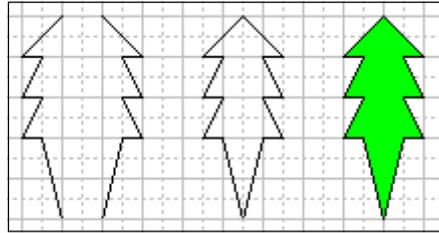
*Be sure to superpose the endpoints precisely (they must have the same coordinates). The **Snap** mode is very helpful for this purpose.*

You can see the difference between the **Combine** and **Join** operations from the illustration below:

Two shapes   Shape that consists of two geometries   Shape that has one geometry
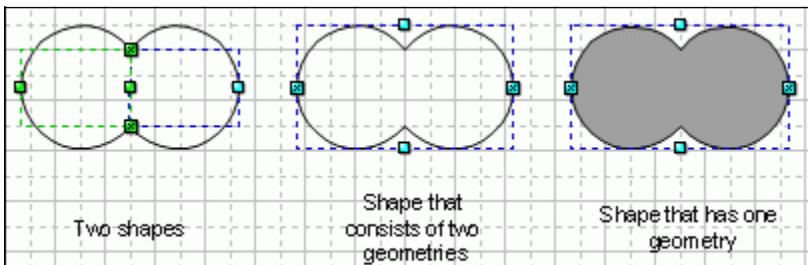
*If the geometries being joined can not be merged into one (if they have no coinciding endpoints), the **Join** operation works in the same way as **Combine**. And since the resulting figure in this case consists of several geometries, it can be split into separate geometries by **Separate**.*

Separate

Figures may consist of several *geometries* (each geometry is a solid path of joined segments).

The **Separate** operation (**Shape / Operations / Scattering**) lets you *split* a complex figure into separate *geometries*, so it is inverse to the **Combine** operation. If a figure consists of several geometries, the **Separate** operation will form a separate shape for each geometry of the figure. It looks like dividing a figure into parts it consists of.
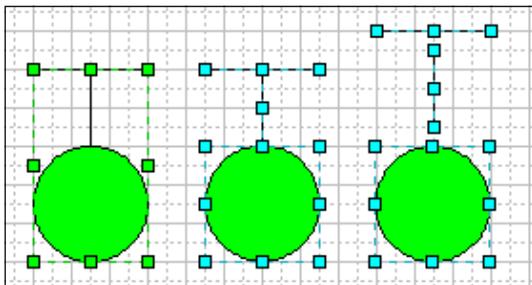
*The **Separate** operation takes no effect if you try to split a single geometry (for instance, the one resulted after the **Join** operation).*

*To split a single geometry into parts, you should first divide it into several geometries: activate the **Insert Vertex** tool, and holding down **Ctrl** (in Windows) or **Cmd** (in Mac OS), click to indicate the points where you want to split the geometry. Then perform **Separate**.*

Grouping and Ungrouping

ConceptDraw lets you group several shapes to make them behave as a single shape. The resulting group has its own alignment box, and such operations as resizing, rotating and repositioning affect all shapes in the group at once.

*To **group** several shapes, select them (holding down the **Shift** key), and then use the **Group** command from the **Shape** menu.*

 Ctrl+G   Cmd+G

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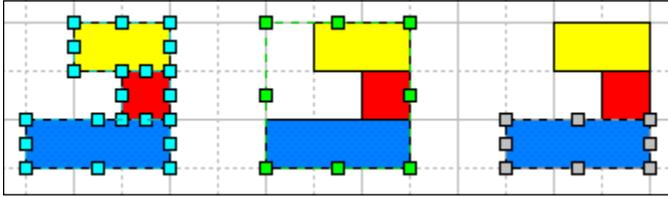
*To **ungroup** the grouped shapes, select the group(s) and use the **Ungroup** command from the **Shape** menu. Then you can work with each shape separately.*

🖼 Ctrl+U   🖼 Cmd+U

When you resize or rotate a group, all the included shapes are usually resized with the same proportion or rotated by the same increment (such behavior is set by default). So grouping is also helpful if you need to perform the same operation on several shapes.

But you can set a specific behavior for any shape within a group: for instance, you may set some shapes to be only repositioned when the group is resized. For more specific information, please see the **Resizing** section.

A group may have its own text. When you select a group and start typing text, the text belongs to entire group. When you ungroup the group, it text appears in form of a separate text shape, which has the same dimensions as the group had.

Even when grouped, the shapes can still be worked with. You can modify a shape's properties (line color, fill color, text) once you select it inside the group:
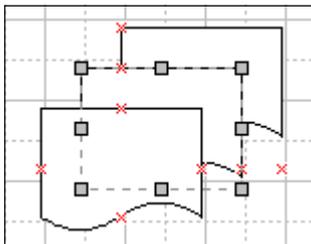
*You can also reposition and resize shapes selected inside a group, however, it may be more convenient to use the **Edit Group** command from the **Shape** menu:*

🖼 Ctrl+E   🖼 Cmd+E

A new window will be opened, displaying all the shapes inside the group. In this window, you can select any of these shapes and modify them as if they were not grouped. After you finish editing, close the window for the changes to take effect.

> *A special case of grouping is the **Combine** operation (**Shape / Operations / Combine**). The difference is that combined shapes take unified style properties (line and fill color, line thickness, etc.) after the primary selected shape (that with green handles), whereas grouped shapes retain all their individual properties. **Combine** is preferable when you need to create a complex figure consisting of several elements (geometries) because combined shapes take less memory than grouped ones.*

Substituting a Shape with Another Shape

Sometimes you may need to replace several shapes of certain form in a drawing with some other shape (e.g. in a flowchart, or in a network diagram, etc.). Of course, you can delete shapes one by one and create new ones at the same positions. But in this case you would have to reproduce each shape's text, formatting (color, fill etc.), and reconstruct all links to other elements on the scheme.

ConceptDraw lets you easily cope with this task by using the **Substitute** operation. It lets you replace the selected shape (*source shape*) with another one (*target shape*), changing its form but preserving the text, formatting and connections to other shapes. The *target shape* may be chosen from a library or from the same document.

The **Substitute** operation can be used for one or several shapes at a time.

To perform the operation:

1. First, select the *target shape* (*model*) in the library or in the document.

    a) To select a target shape *from a library*, just activate the needed library and click on the shape.

    b) To select a target shape *from the same document*, click it with the mouse. This shape should have the primary selection (display green handles). Make sure that there is no library shape selected in the active library (you can simply hide the libraries by pressing **F4** or using the **View / Libraries** menu).

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2. Then, hold down **Shift** and select the *source shape(s)* which you need to replace. The source shape(s) will show blue handles (secondary selection).

3. When the *source shape(s)* and the *target shape* are selected, apply the **Substitute** command from the **Edit** menu, and the *target shape* will be substitute all *source shapes*.

Ctrl+Space   Cmd+Spase

In fact, the **Substitute** command only changes the *form* of the shape, preserving its *connections* with other shapes (by way of connectors tied to the shape) and its *properties*: size, line formatting, fill and shadow properties, text content and text properties.

If the source or target shape is a *group*, the internal formatting such as line and fill properties can not be rendered properly (as they may vary in shapes within a group). In this case, only the size, text and connections are preserved.

Copying Shape's Visual Attributes

ConceptDraw has a set of tools that allow to copy visual attributes (color, line properties, text formatting, etc.) from a desired shape and apply them to other shapes.

The primary shape (with green selection) serves as the model; its attributes are copied to other selected shapes (with blue selection). The following tools can be used:

Make Same Line Properties - copies line properties of the primary selected shape to other selected shapes.

Make Same Fill Properties - copies fill and shadow properties (pattern and color) of the primary selected shape to other selected shapes.

Make Same Text Properties - copies text attributes: font type and size, text color and style; font background color; margins and indentation. These attributes are taken from the first symbol of the primary shape's first paragraph, and are applied to entire text of other selected shapes.

Make Same Visual Attributes - copies all visual attributes: line, fill and text properties.

These operations can be accessed from the **Shape / Make Same** menu. It also contains some other operations, used for resizing shapes, which are described in the *Resizing* section.

Deleting

You can delete shapes from a document by selecting them and then pressing the **Del** or **Delete** key.
The **Delete** command from the **Edit** menu has the same effect.

Make sure no handles are selected on the shape (the selected handles appear in magenta). Otherwise, you will delete the handles instead of the shape.

> *You can lock shapes to protect them from deleting. In the **Protection** floating dialog check the **From Deletion** option. Then the program will respond with a warning message each time you attempt to delete the shape.*

Undo and Redo

"Undo"

When creating and editing shapes, mistakes are inevitable. So, you may need to cancel a sequence of recent actions and return the document to its previous correct state. The **Undo** command can be used for this purpose.

> *To reverse the last action, click the **Undo** button on the toolbar, or choose **Undo** from the **Edit** menu. The menu always specifies the type of the action that will be undone.*

Ctrl+Z   Cmd+Z

The number of consecutive actions that can be undone is limited. The default value is 30. You can set the desired value for the active document in the *Document Properties* dialog (**File / Document Properties**). The higher the number, the more memory the program requires to store the actions.

"Redo"

The **Redo** operation is inverse to **Undo**. Use it to reverse the latest **Undo** operation.

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*Click the **Redo** button on the toolbar, or select **Redo** from the **Edit** menu.*

Ctrl+Y   Cmd+Y

Connecting Shapes

ConceptDraw offers you powerful methods for connecting shapes: by gluing the **connectors** to shapes or to their **connection points**, you can establish connections which will be preserved even when the shapes are repositioned, flipped or resized.

And moreover, you can connect several shapes at a time, connect shapes automatically, and turn any shape into a connector.

Connectors

Connectors are used for tying shapes together. They rebuild automatically and keep the shapes connected even when they are moved, resized, etc.

You can use **direct connectors** (straight lines) and **smart connectors** (made up of horizontal and vertical lines).

*To draw a Smart Connector, use the **Smart Connector** tool on the toolbar or choose **Smart Connector** from the **Insert** menu.*

*To draw a Direct Connector, use the **Direct Connector** tool on the toolbar or choose **Direct Connector** from the **Insert** menu.*
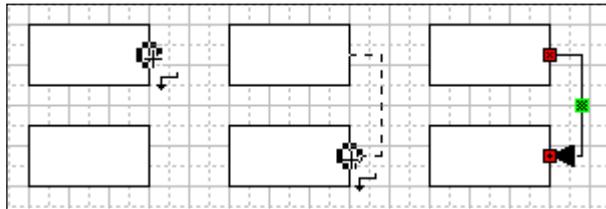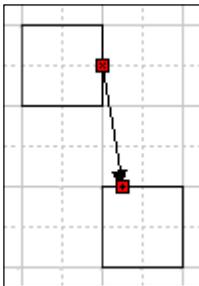
All connectors have the *begin point* and the *end point* (that is, they are 1D shapes). By dragging an endpoint, you can change the form and size of a

connector. The most important function of the **endpoints** is that you can *glue* them to the shapes or to their connection points to *establish connection*.
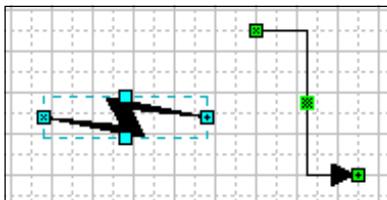
To *break the connection*, just carry the connector to some other place or drag its glued endpoints away from the shapes.

You can manipulate the connectors in the same way as you do with other shapes - you can select them, send to back or to front, delete, set formatting (line color and style, arrowheads - see details in the **Shapes - Shape Properties - *Line Properties*** section).

You can also assign *text* to a connector as to any other shape - just select it and start typing the text.
On a Smart Connector, the associated text appears on its central control point, or where the lines meet.
On a Direct Connector, the text stretches along the connector, from its begin point to the end point.

You can manipulate reposition connector's text with the **Text Box** tool.
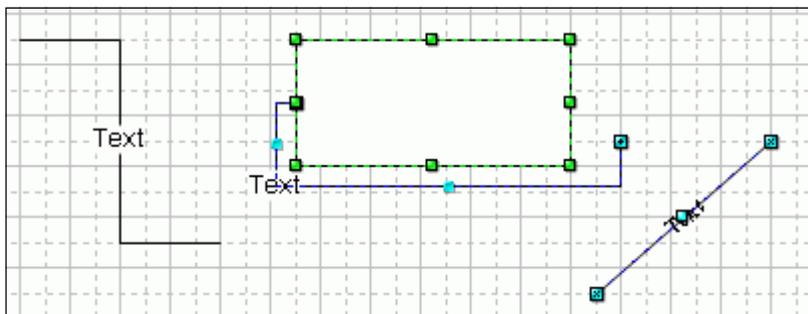
There are two types of connection:
1. Connection to the *entire shape*,
2. Connection to a *connection point* of the shape.

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Connecting to the Entire Shape

Position one the endpoints of the connector over the center of the shape's *alignment box*, until a black rectangle appears round the shape. On releasing the mouse button, a magenta square will indicate the point at which the connector is currently glued to the shape. As you move the shape, the point of connection changes its location - it jumps to the middle of the side of the *alignment box* **nearest** to the connector.
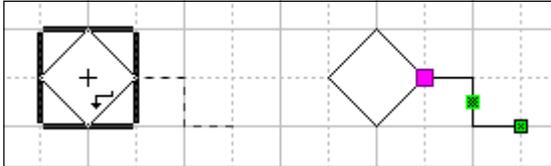
Connecting to a Shape's Connection Point

This way of connecting lets you glue the connector to a certain particular place on the shape (or even outside it). The connector will remain attached to this exact place - **connection point** - when you manipulate the shapes.

Each shape has 4 *default* connection points - in the middle of each side of its *alignment box*. They become visible when you position an endpoint of a connector over one of them.

You can create additional connection points - on the shape or outside it. Use the **Connection Point** *tool from the Drawing Tools toolbar (or the* **Insert / Connection Point** *menu) to create, move and delete connection points.*

Position one of the endpoints of the connector over the shape, until you see a gray plus in a circle indicating the pointer is over a connection point of the shape. Release the mouse button to establish the connection. The glued endpoint turns red, indicating the place of connection.
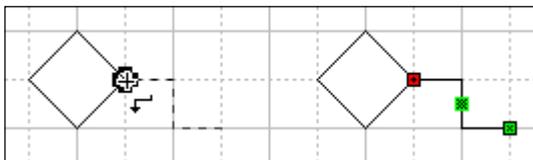
Connection Points

Connection Points are the points associated with shapes, to which connectors and control handles can be attached. They look like *blue* crosses that appear on a shape or near it. When the shape is *primary selected*, the connection points assigned to this shape are displayed in *red*. Connection points may lie both on the body of the shape and outside it. Then the red color helps us tell to which shape the connection point belongs.
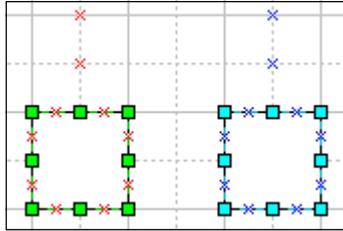
The **Connection Point** tool is used to create, move or delete connection points. To choose it, do one of the following:

    a) Click the **Connection Point** button on the **Drawing Tools** toolbar,

    b) or select **Connection Point** from the **Insert** menu,

    c) or use the keyboard.

*To work with connection points, use the **Connection Point** tool.*

    Ctrl+0   Cmd+0

To *add a connection point* to a shape:

    1. Select the shape
    2. Switch to the **Connection Point** tool.
    3. Click in the place where you want to insert a new connection point.

*If the **Snap** mode is on, the connection points you add will be pulled to the nearest snap locations (normally grid lines and nodes). If you want to position the connection points precisely, you can turn **Snap** off on the fly by holding down the **Alt** key (in Windows) or **Cmd** key (in Mac OS). When you release the modifier key, the **Snap** mode will be restored again.*
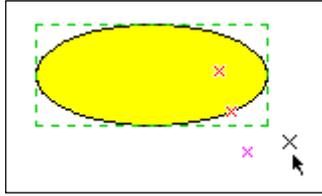
If you put a new Connection Point over a shape (no matter whether selected or not), the new connection point is assigned to that shape (the shape will become selected automatically).

If you put a new Connection Point outside any shape, it is assigned to the currently selected shape. If several shapes were selected, the new connection points are added to the shape with primary selection.

In the **Connection Point** mode you can select, reposition and delete connection points.

To *select* a connection point, move the mouse over it, so that the pointer changes to ✛, and click the mouse button. The selected connection point turns magenta. If you need to select several connection points, hold down **Shift** when clicking.

To *move* a connection point, drag it with the mouse to a new location.
To move several connection points at a time, select them and drag by one of the selected connection points (start dragging when the pointer changes to ✛ over this connection point).

To *delete* one or more connection points, select them (hold down **Shift** for multiple selection) and press the **Del** key.

In ConceptDraw, you can choose to *show / hide* connection points of shapes. Use the **Connection Points** option in the **View** menu to hide or show connection points.
Note that the connection points remain functional even when they are not visible.

When shapes are inside a group, you can still use their connection points. Normally, these connection points are not visible. But when you select a shape in a group, its connection points appear in gray, and you can glue connectors to them.

If you want to always see the connection points of grouped shapes, enable **Connection Points in Groups** in the **View** menu.

For more information about the **Drawing Tools** toolbar, see **Toolbars - Drawing Tools.**

For more information about the **Snap & Glue** toolbar, see **Toolbars - *Snap & Glue***.

Smart Connector

The **Smart Connector** is made up of vertical and horizontal lines which form a solid path. The number of connector legs is not limited by default, however, you can set a maximal number in the ***Document Properties*** dialog, the **Advanced** tab. The main feature of the Smart connector is its ability to change the route depending on how you reposition connected shapes and if there are other shapes on the way.
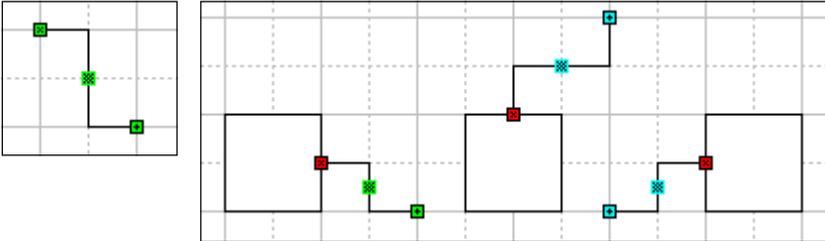
The **Control handles** on the legs of the connector let you adjust its shape.

*To create a Smart connector, use the **Smart Connector** tool from the **Drawing Tools** toolbar.*

To get two shapes connected straight away, start and finish drawing the connector over the connection points of the shapes.
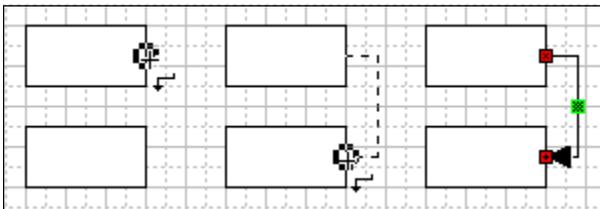
Another way is to draw a connector first, and then glue its endpoints to the shapes as you need.

*You can also choose **Smart Connector** from the **Insert** menu to switch to the **Smart Connector** tool.*

Ctrl+9   Cmd+9

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In ConceptDraw V connectors became even smarter:
If you enable **Flow Around Objects** in the connector's context menu, it will avoid shapes on its way. Besides you can choose to display line jumps in places where smart connectors cross each other.

For more information about the **Drawing Tools** toolbar see **Toolbars - Drawing Tools**.

Direct Connector

The **Direct Connector** lets you connect shapes with straight lines, and rebuilds when the shapes are moved.

You can draw it with the help of the ***Direct Connector*** *tool.*

To get two shapes connected straight away, start and finish drawing the connector over the connection points of the shapes.
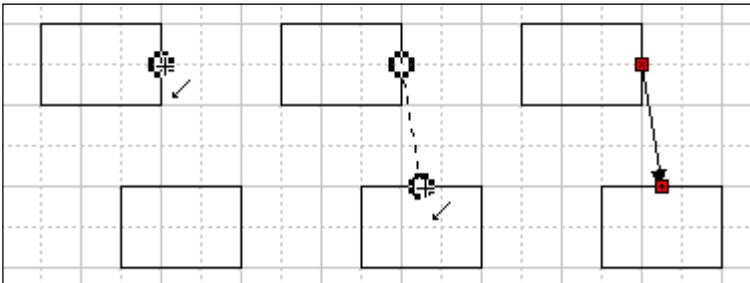
Another way is to draw a connector first, and then glue its endpoints to the shapes as you need.
You can turn any shape into a connector by simply changing it into a 1D shape. Select the shape and call the **Shape Properties** dialog from the **Format** menu. Choose the **Behavior** tab and in the **Interaction style** section of this dialog, select *Line (1-D).* The shape will show the begin point and the end point which appear in the middle of the left and right sides of the shape's *alignment box*.

For a 1D shape, dragging the endpoints affects its width and angle at once. By dragging the size handles, you control its height. If the **Rotate** tool is on, the endpoints are substituted with rotation handles.

Connecting Multiple Shapes

ConceptDraw also offers you handy tools for connecting one shape to several other shapes at a time, by way of connecting to the entire shapes. These following tools are located on the **Connect Shapes** toolbar: **Connect with Smart Connector** and **Connect with Direct Connector**.
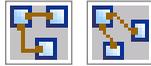
To connect a shape to one or more others:

1. Select the shape you want to connect to other shapes (it will display green handles - for primary selection).
2. Then, with the **Shift** key held down, select the shapes to which the first shape will be connected (they will display blue handles - for secondary selection).
3. Click the **Connect with Smart/Direct Connector** button. The shape with *primary selection* will be connected to the other selected shapes.

For more information about the **Connect Shapes** toolbar see **Toolbars - *Connect Shapes***.

Auto-Connection Modes

In ConceptDraw, you can use the two modes for connecting shapes automatically: the **Smart Connection Mode** (uses the *smart connector*) and **Direct Connection Mode** (uses *direct connector*).

The modes can be chosen on the *Connect Shapes* toolbar.

When in an auto-connection mode, any shape that you add to the document (draw or drop on the page, paste from another application, take from a library etc.) gets automatically connected to the previously selected shape by an automatic connector.

Auto-connection modes are very useful for quickly sketching large schemes. You do not need to think about connecting shapes, you just arrange them on the page.

For example, you can switch to the **Smart Connection Mode** and draw or select the initial element of the scheme. Then you draw other elements of your scheme, and each new shape you add will be connected automatically to the previous selected shape. You can select a shape and then start creating a new one which should be connected to it.

ConceptDraw

For more information about the **Connect Shapes** toolbar see **Toolbars - *Connect Shapes***.

Shape Properties

Each shape has a set of properties, which you can alter - color, line style and weight, fill color and pattern, text properties, etc.
In ConceptDraw you can change these properties by using the corresponding tools, or the dialogs.

Line Properties

Lines are part of any ConceptDraw shape. You can change line properties in the **Shape Properties** dialog, the **Line** tab, which can be called from the **Format / Shape Properties** menu or from the shape's context menu.

Alternatively you can use the tools on the **Formatting** toolbar: **Line Color**, **Line Weight**, **Line Pattern**, **Arrow Style** (for open figures, segments, connectors).

These buttons offer several most common choices. For more options, choose the bottom item in the button menus - the **Shape Properties** dialog will appear with open **Line** tab.

The **Line** tab of the **Shape Properties** dialog allows you to change various line parameters - pattern, color, weight, arrowhead type and size.

For more information about the **Shape Properties** dialog see **Dialogs - Modal Dialogs - *Shape Properties***, about the **Formatting** toolbar - see **Toolbars - *Formatting***.

Fill Color and Pattern

For any closed shape you can assign a fill color and pattern. They can be changed in the **Shape Properties** dialog (the **Fill** section of the **FIll** tab), which can be called from the **Format / Shape Properties** menu or the shape's context menu.

Alternatively you can use the tools on the **Formatting** toolbar: **Fill Color** and **Fill Pattern**.

When you click on these buttons, menu appears with a number of choices.

For more information about the **Shape Properties** dialog see **Dialogs - Modal Dialogs -** *Shape Properties*, about the **Formatting** toolbar - see **Toolbars -** *Formatting*.

Shadow

You can apply *shadow* to shapes, sets its fill and pattern.
On the **Formatting** toolbar you can set the shadow color by using the **Shadow Color** button. The button menu offers a selection of colors.

Or you can use the **Shape Properties** dialog (**Fill** tab, **Shadow** section), which is called from the **Format / Shape Properties** menu, or the shape's context menu.

> *ConceptDraw allows you to change the* ***shadow offset****. The offset is set for the entire document. Call the* ***Document Properties*** *dialog from the* ***File / Document Properties*** *menu. Select the* ***Settings*** *tab. In the* ***Shape Shadow Offset*** *section set the desired distance in the* ***Right*** *and* ***Down*** *fields (you may use any units of measure with the appropriate suffix, e.g. 1 in, 35 mm). Click* ***OK****.*

For more information about the **Shape Properties** dialog see **Dialogs - Modal Dialogs -** *Shape Properties*, about the **Formatting** toolbar - see **Toolbars -** *Formatting*.
For information about the **Document Properties** dialog see **Dialogs - Modal Dialogs -** *Document Properties*.

Behavior

ConceptDraw lets you set behavior and some other parameters of shapes.

You can protect certain properties of shapes against modifying:
- protect shape width against changing;
- protect shape height against changing;
- protect the aspect ratio;
- protect the begin point of a connector against repositioning;
- protect the end point of a connector against repositioning;
- protect the shape from repositioning horizontally or vertically;
- protect the shape from rotation.

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Also you can protect shapes from deleting. Or you can turn a shape into a connector.

You may choose how to display selected shapes - whether to display their alignment boxes, resize or control handles.

All this can be done in the **Shape Properties** dialog. For more information about the **Shape Properties** dialog see **Dialogs - Modal Dialogs - *Shape Properties***.

Information

To view or set information about a shape, select the shape and choose **Format / Shape Properties**. In the **Shape Properties** dialog, choose the **Information** tab.

In the **Name** field you can name the shape.

In the **Description** field, you can provide information describing the shape. If such shape is *exported to HTML*, these notes will be displayed as tips in the browser when the mouse cursor points to this shape.

The **ID** and **SubID** fields are used for reference only, and cannot be modified.
> **ID** is the individual number of the shape according to the order in which shapes are created on the page.
> **SubID** is the sequential number of the shape within a group. It is changed when the operations like **Send Backwards**, etc. (see ***Changing the Front-to-Back Order***).

> *The ID and SubID values are used when you describe one shape through another by using formulas. In the table, they are used as references to parameters of other shapes. For more specific information, refer to the **Shape Parameter Table** section.*

For more information about the **Shape Properties** dialog see **Dialogs - Modal Dialogs - *Shape Properties***, about exporting a document to HTML - see **Internet - *Exporting a Document to HTML Files***.

Double-Click Action

When you double-click a shape, some action is usually performed: the text editing mode is switched on, or the hyperlink is opened, etc.
You can modify the double-click action for one or more shapes. Select these shapes and call the **Shape Properties** dialog, the **Double-Click** tab.

The following options are available:
- Perform no action
- Edit the shape's text
- Edit the shape's parameter table. For more information see *Shape Parameter Table*.
- Open the group in a new window (only if the shape is a group).
- Open the hyperlink. This option is set by default for shapes that have a hyperlink. For more information about hyperlinks see the *Internet* section.
- OLE verb - if it's an OLE object (Windows only), then double-clicking will open it for editing in the native application. This is the default option for OLE objects. For more information see **OLE Objects**.
- Perform a command in the user's context menu. If there are several items, each double-clicking will perform the next command in the list. For more information see **Shape Parameter Table** - *Adding User-Defined Context Menu to a Shape*.

For more information about the **Shape Properties** dialog see **Dialogs - Modal Dialogs -** *Shape Properties*.

Hyperlinks

ConceptDraw lets you link its shapes to documents, document pages, files or Internet locations, providing quick access to data of various kinds.

You can assign and edit hyperlinks of the shapes by using the **Hyperlink** dialog. Select the shape and use the **Format / Hyperlink / Edit** menu to call this dialog. It lets you create hyperlinks of different types or disable the hyperlink.

Creating and editing hyperlinks is described in the *Internet* section.

By assigning a hyperlink to a shape you also change the double-click action: double-click will *open the hyperlink* (see *Double-Click Action*).

For more information about the **Hyperlink** dialog see **Dialogs - Modal Dialogs -** *Hyperlink*.

Pictures

ConceptDraw lets you import pictures from various graphic files and insert them into your documents. You can also create new pictures by converting ConceptDraw shapes to various graphic formats. Unlike the previous versions, ConceptDraw V can import vector images and store them in an internal vector format. Such vector pictures take up much less resources and allow to perform additional operations on them.

Pictures and Graphic Formats

Picture - is one of the shape types, used in ConceptDraw.
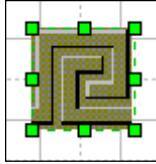
To insert a picture into your document, use the **Insert / Picture** menu. The file open dialog will come up, where you can choose a picture to be inserted. In the Preview window you can see a small image of the picture.

> *To find the desired file easier, you can choose the needed file format in the **Files of type** box.*

Click the **Open** button to open the selected file.
The picture will be inserted in the center of the active window. Note that the picture is now part of the document and is no longer related to the file it was taken from.

> *If you want the picture to be opened in a separate document, open it using the **File / Import** command. For more information, refer to the **Document - Importing Files** section.*

Raster Pictures

Raster pictures are stored inside the document and allow limited editing only: you can resize, reposition and rotate them.

ConceptDraw supports the following raster formats: BMP, ICO, GIF, JPEG, PNG, PCD(Photo CD), PCX, PSD, SGI(Irix), SUN Rasterfile(*.ras, *.sun), Targa(*.tga), TIFF, X Window system bitmap(*.xpm, *.xbm).

Vector Pictures

Working with vector pictures is very much like working with raster ones, except for some additional possibilities.

ConceptDraw supports the following vector graphic formats: Windows metafile(*.wmf, *.emf), Macintosh PICT(*.pct), AutoCad DXF(*.dxf), Word Perfect Graphics(*.wpg).

Once you've inserted a vector image, you can transform it to ConceptDraw shapes. This is described in the following section.

Converting Vector Pictures

Being a vector drawing program, ConceptDraw provides more control on imported vector images, compared to raster ones. You can convert vector images to ConceptDraw shapes for further editing. ConceptDraw V also employs a proprietary Vector Picture format, which helps to increase performance and reduce document size when working with vector graphics.

When a vector image is inserted into a document, it's stored either in its original format, or is transformed into the proprietary ConceptDraw Vector Picture format. This depends on the platform and original format of the vector image.

For instance, an image in EMF format is stored in its original format in the Windows version of ConceptDraw. It allows for a limited set of operations - resizing, repositioning or rotation, and the original format is preserved.

If a document with such image is opened in the Macintosh version of ConceptDraw, the picture will be automatically transformed into the proprietary ConceptDraw Vector Picture format; however, the original EMF image is also preserved in the document for better compatibility with the Windows version.

The same happens with images in the PICT format. The only difference to EMF is that PICT images are stored in the original format on the Macintosh, and converted into ConceptDraw Picture Format in the Windows version.

Some vector formats, such as Autocad DXF are converted into the internal ConceptDraw format immediately and are never stored in the original format.

You can convert a vector image into a group of ConceptDraw shapes. Select the image in the document, and choose **Convert / To Group** from the **Shape** menu.

The result will be a group of ConceptDraw shapes, with which you can work as with any ConceptDraw group - ungroup and work with individual shapes, or edit shapes inside the group without ungrouping.

Sometimes an opposite operation may be required. Documents containing large number of shapes need a lot of memory, and may cause the program to work slowly. In most cases shapes don't contain complex formulas or control handles, can be converted to the Vector Picture format. This saves memory and increases performance for complex documents.

To convert selected shapes to Vector Pictures, choose **Convert / To Vector Picture** from the **Shape** menu. To transform the Vector Picture back into a group of shapes, perform the **Convert / To Group** command.

> *The Vector Picture format doesn't preserve all properties of ConceptDraw shapes. Complex formulas and control handles will be lost when you convert shapes to Vector Pictures, and won't be restored when you convert Vector Picture back to ConceptDraw shapes.*

Defining and Using Named Styles

Normally in a diagram similar elements tend to have similar style - fill pattern, line width and color, shadow. Shape text and comments are also made with certain fonts and font size. All these properties properties can be collectively defined as a *style*.

The drop-down list on the **Formatting** toolbar lets you select the drawing style. This style will be applied to all selected shapes. All new shapes added to your drawing will adopt the chosen style as well.

In ConceptDraw V you can create your own styles and save them for future use.

To create a style, choose **Define Styles** under the **Format** menu. The **Define Styles** dialog will come up. In this dialog you may set parameters for the new style - line weight and color, fill pattern and color, font attributes and more.

Click the **Add...** button and give a name to the style. It will be added to the list of styles, allowing you to choose it in the drop-down list on the **Formatting** toolbar.

Named styles are a great time-saver, as they eliminate the need of setting lots of parameters for each new shape. You just need to do this once, save the settings as a style and apply to desired shapes with a click of the mouse.

For more information about the **Formatting** toolbar see **Toolbars** - *Formatting*.

Detailed description of the **Define Styles** dialog can be found in **Dialogs - Modal Dialogs -** *Define Styles*.

Custom Properties

In ConceptDraw V you can create custom properties for shapes. That is, a shape can act as a visual database field that stores data you can retrieve in a report. For instance, a computer shape in a network diagram can store data about the cost, model, inventory number, system configuration and other.

You can set the program to ask for desired parameters when you insert a library shape in the document. For instance, when you are adding a computer shape from a library, ConceptDraw may ask you to specify its configuration, manufacturer or cost.

Custom properties data can be used in calculations in ConceptDraw Basic scripts. This is useful for creating automatic reports based on your drawings.

To assign or modify custom properties, choose **Custom Properties** from the **Format** menu, or from the shape's context menu. If the shape has no custom properties, the program will bring up the **Define Custom Properties** dialog, where you can create them. Otherwise, the **Custom Properties** dialog will come up, where you can edit existing properties.

In the open **Custom Properties** dialog use the **Define** button to set a new custom property.

Here is a simple example of how to use shape's custom properties:

For instance, let's have the program ask to assign shape's text each time the shape is copied.

Create a new document (from the **File / New Document** menu), then on the **Drawing Tools** toolbar select the **Rectangle** tool, and draw a rectangle. This is the shape we are going to work with.

Then from the **Format** menu select **Custom Properties.**

A message will come up, asking if you wish to create a new custom property.

After you confirm it, the **Define Custom Properties** dialog will open, where you can define one property at a time. In the **Label** field you can enter a name for the property (for instance, "Shape's Text"). Choose String in the **Type** field. In the **Value** field enter the text you wish to assign to the shape. Enable the **Verify** option so that the **Custom Property** window come up every time you copy the shape or drag it from the library. Click **OK**.

The **Custom Properties** dialog will appear. In the Shape Text field you can modify the text you have assigned. Click **OK**.

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Now you need to make the shape's text dependant on the custom properties value. This can be done in the shape's parameter table. Select the rectangle you've created and press **F3** (or choose **Show Table** from the **Shape** menu. The shape parameter table will open in a separate window. Now you need to insert a section in the table, that controls the shape's text. Choose Insert Section from the Edit menu. The **Insert Table Sections** dialog will come up. In the dialog, check the **Text** option. Click **OK**.

The **TextField** section will be added to the parameter table. In the **TheText** field of the **TextField** section enter the following formula:

$$=CustomProp.Value1$$

Now close the parameter table window.

Copy the rectangle by dragging it with the mouse with the **Ctrl** (Win) or **Option** (Mac) key held down. For each copy the **Custom Properties** window will appear. You can change the custom property text in that window. After you click **OK**, this text will be assigned to the rectangle and will show up in the drawing.

Custom properties are useful for creating library shapes. When you drop a shape with custom properties on a document, you can specify additional parameters for it.

Additional information:
About the **Custom Properties** dialog - see **Dialogs - Modal Dialogs - *Custom Properties***,
About the **Define Custom Properties** dialog - see **Dialogs - Modal Dialogs - *Define Custom Properties***,
About the **Drawing Tools** toolbar - see **Toolbars - *Drawing Tools***,
About formulas and shape parameter table - see ***Shape Parameter Table***,
About the **Insert Table Sections** dialog - see **Dialogs - Modal Dialogs - *Insert Table Sections***.

Chapter 5. Text

Most of shapes in ConceptDraw can contain **text**.

ConceptDraw offers you extensive formatting capabilities, and various tools for working with text.

Adding Text to a Shape

To add text to a shape, just select this shape and start typing text in it. The **text editing mode** turns on immediately to let you enter and edit the text. (You can also use the **F2** key to activate the text editing mode).
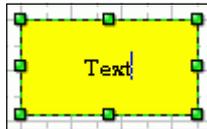
If the text appears too small, the view will **zoom in** automatically for better visibility.

Such behavior is set by default. You can customize it in the **Preferences** dialog (**Edit / Preferences**), on the **View** tab. Here you can set the minimal font size in points for the visible text. For smaller values, *autozooming* will be activated when you edit text. This tab also lets you disable autozooming if necessary.

When you finish editing, press **Esc** or **F2**, or just click outside the text box to quit the text editing mode.

When in the text editing mode, you can use the **Text** toolbar to change font, font size, font attributes (bold, italic, underlined), and other properties. You may turn on the **Text Auto-Expand** mode to make shapes grow after their text.

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For more information about the **Text** toolbar see **Toolbars - *Text.***

Editing Text

To edit a shape's text, you need to switch to the text editing mode. Select the shape and press the **F2** key. If the shape has no hyperlink and its double-click behavior wasn't altered, you may also double-click the shape to start editing text. The text editing mode will turn on, where you can type or delete text, change its formatting. To leave the text editing mode, press **F2** or **ESC**. You may also click away from the shape.

See also the ***Adding Text to a Shape*** section.

Searching and Replacing Text

In ConceptDraw you can search for words or phrases in a document and replace them with required text. On the **Edit** menu, click **Find/Replace**. In the Find/Replace dialog enter the sting you wish to find, and (if needed) - the string you want to replace it with. Click **Find Next**. If a match is found, the program will make this text selected and you can replace it if you wish.

For more information about the **Find/Replace** dialog see **Dialogs - Modal Dialogs - *Find/Replace***.

Formatting Text

You can change text properties using the *text formatting tools* on the **Text** toolbar.

*You can also use the **Text Properties** dialog (menu **Format / Text**).*
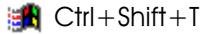
 Ctrl+Shift+T   Cmd+Shift+T

The changes apply:
1) If a text block is selected - to the *selected text block*;
2) If one or more shape is selected - *to all selected shapes text.*

To change formatting for a portion of text, select it.

Enter the *text editing mode* (by pressing **F2** or choosing the **Text** tool), then select the needed text area using the mouse or **Arrow** keys with **Shift** held down.

You can change font and font size, font and background color, text alignment and style either with the *text formatting tools* or in the **Text Properties** dialog. Some parameters, such as indents and margins, can only be set in the **Text Properties** dialog.

*New shapes adopt the most recent formatting settings. This helps to maintain consistent look throughout the document. The **Increase Font Size** and **Decrease Font Size** apply to selected shapes or text blocks only, and don't affect global formatting settings.*

To change font for selected shapes or text blocks, use the **Font** tab of the **Text Properties** dialog (menu **Format / Text**), or the toolbar:

Select a new font from the drop-down list on the **Text** toolbar.

To change the font size, choose one from the font size list, or type the desired size in the box.
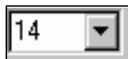
*To increase/decrease the font size by one point, use the **Increase Font Size** and **Decrease Font Size** buttons.*

 Ctrl+">"   Cmd+">"
Ctrl+"<"   Cmd+"<"

	*To change text color, use the **Text Color** tool.*

Such font attributes as **Bold**, **Italic** or **Underline** can be set by clicking the corresponding buttons on formatting toolbar or by using the keyboard.

B	*Bold Text*	
	Ctrl+B	Cmd(Ctrl)+B

I	*Italic Text*	
	Ctrl+I	Cmd(Ctrl)+I

U	*Underline Text*	
	Ctrl+U	Cmd(Ctrl)+U

By default, text has no background and text boxes are transparent (except for the text boxes of connectors).

You can assign the background color for the text in the selected shape(s) in two ways:

- Use the **Text Background** tool.
- Call the **Text Properties** dialog (menu **Format / Text**).
  On the **Text Block** tab click the **Text Background** button and choose a color from the palette.
  To remove the text background color, check the **Transparent** option.
  Click **OK** to apply the changes.

	***Text Background** button.*

Each shape's text consists of one or more paragraphs. Each paragraph begins with a new line. To start a new paragraph, press the **Enter** key. For each paragraph, you may set *alignment* and *indentation*.
You can align selected *paragraph(s)* on the left side of the *Text Box*, on its right side, or on its center.

To align a paragraph, click somewhere within its bounds and click on one of the alignment tools on the toolbar: **Align Left**, **Align Center**, or **Align Right** or use the keyboard:

Align Left

    🖥 Ctrl+L   🖥 Cmd(Ctrl)+L

Align Center

    🖥 Ctrl+E   🖥 Cmd(Ctrl)+E

Align Right

    🖥 Ctrl+R   🖥 Cmd(Ctrl)+R

Several selected paragraphs can be aligned likewise (select them with the mouse or use **Shift + Arrows**).

If no paragraph is active, the alignment will be applied to the whole text of the selected shape(s).

Vertical alignment determines the position of the *whole text* with respect to its *Text Box*. You can align the text at the top, middle or bottom of the Text Box. Select the shape(s) and use the following toolbar buttons: **Align Top**, **Align Middle** or **Align Bottom**.

> *The text alignment can also be set in the **Text Properties** dialog (**Format / Text**): you can specify the horizontal alignment on the **Paragraph** tab, and the vertical alignment on the **Text Block** tab.*

For more information about the **Text** toolbar see **Toolbars - *Text***.
For more information about the **Text Properties** toolbar see **Dialogs - Modal Dialogs - *Text Properties*.**

Repositioning Text

> *You can reposition the text with respect to the shape by manipulating its **Text Box**. This can be done with the **Text Box** tool.*

You can select it on the **Drawing Tools** toolbar or from the **Insert / Text Box** menu.

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This tool lets you select, resize, rotate and move a shape's *Text Box*, changing its appearance and position *independently* of the shape to which the text belongs.

Select the Text Box tool and click on a shape with text. The text's alignment box will appear, allowing to you reposition, rotate or resize the text box by dragging the handles.
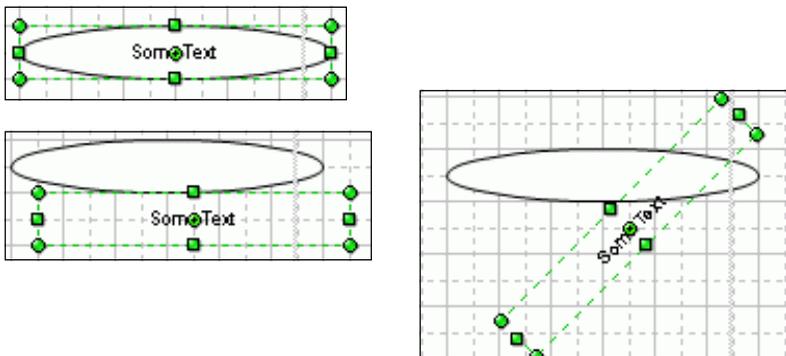
This tool is especially useful for working with Direct Connectors.

> *The* **Text Box** *tool can be used to draw Text shapes (shapes, that contain only text). To draw a Text shape, switch to the* **Text Box** *tool and drag it to draw a rectangular area, and on releasing the mouse button start typing.*

Adjusting a Shape's Size to Fit Its Text

Sometimes you may need to make a shape the same size as the text inside it. You can do this in the following way:

Select the shape, then select **Fit to Text** from the **Shape** menu. The shape will be enlarged or shrunk to match the size of its text (its *text box*).

> *You can also use the* **Fit To Text** *tool on the* **Arrange & Make Same** *toolbar.*

For more information about the **Arrange & Make Same** toolbar see **Toolbars - Arrange & Make Same**.

The Text Auto-Expand Mode

*You can use the **Text Auto-Expand** mode if you want the shape to grow automatically when you add text to it.*

When this mode is on, the shape grows in width to fit the longest line of the text, and in height according to the number of lines in the text. Resizing only takes place when you edit the text.

Once activated, this mode works for all the open documents during the entire work session. It is reset when you quit ConceptDraw.

If the Text Box does not coincide with the shape's alignment box, only the text box is resized. For 1D shapes, it is only the text box that is resized. The actual shape won't change its size.

ConceptDraw

Chapter 6. Libraries

ConceptDraw offers you a number of ready-made shapes which you can use in your documents. They are grouped in topical sets as **library files**. Thus, a library is a collection of shapes usually related to a certain topic (*e.g.* flow chart, computer network, engineering, etc.).

In ConceptDraw, you can customize the existing libraries and create new ones (both by grouping the existing shapes and by adding new ones).

Using Libraries and Library Shapes

To *open* one or more libraries:

1. Click the **Open Library** button on the toolbar or use the **File / Library / Open** menu. The **Open** dialog will come up and show the folder containing the libraries.
2. Click to select the needed library. To open several libraries at once, hold down **Ctrl** (in *Windows*) or **Cmd** (in *Mac OS*) when selecting.
3. Click **Open**, and all the chosen libraries will appear in the separate **Library** window.

> *You can use the **Open Library** tool on the **Main** toolbar.*

> Ctrl+Shift+O   Cmd+Shift+O

Both libraries and documents can be opened by dragging their file icons into the application window, or onto the application icon.

> *Re-opening a currently opened library will just make it active, not duplicate it.*

To *close* a library, call its *context menu* on its title bar and select the **Close** command from the menu.

To close *all* the open libraries, choose **Close All** from the context menu.

You can also use menu commands: **File / Libraries / Close** and **File / Libraries / Close All**.

All the libraries supplied are located in the **Libraries** folder of the application's root directory. The **Libraries** folder contains task-related subfolders. The library files themselves (with **.cdl** extension) are located in these folders.

The path to the **Libraries** folder is set in the **Preferences** dialog (menu **Edit / Preferences**) on the **Paths** tab. It points to the folder, which will be open with the *Open Library* command.

So if you move the Libraries folder to another location, don't forget to modify the path in the **Paths** tab: it will be easier to find the libraries when you need them.

If you create your own libraries, you may store the new library files in any location. But it is more convenient to create task-related subfolders inside the **Libraries** folder, and place your library files there.

All the open libraries are displayed in the special **Library window**. It usually appears to the left from the document windows.

The library window displays the content of the *active library*, and holds the *tabs* with the titles of all the open libraries. The tab of the currently active library is shown as selected. To *activate* any library from the list, just click the corresponding title tab. Only one library at a time can be active.
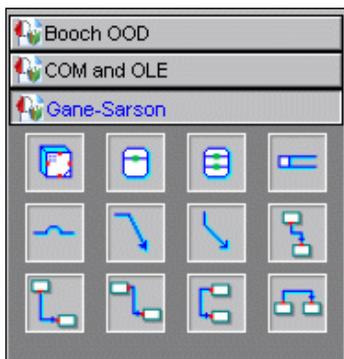
The shapes of all the libraries can be displayed in two ways: in the form of *icons* or *text*.

In the *text* view, just the names of the library shapes are displayed in a list. In the *icon* view, you can pause the pointer over a shape to see a tip with

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its name. The shape's prompt also appears in the status bar. The selected shape shows a red border around its icon.

You can switch between the text and icon views either from the menu (**View / Libraries Window**), buttons on the **Libraries** toolbar (can be enabled from the **View / Toolbars / Libraries** menu) or from the library context menu.

To hide or show the library window, press **F4** or use the **View / Libraries Window** menu.

You can easily *reposition* the library window:

In the Macintosh version, grab the library window at its title bar and carry to a new place.

In the *Windows* version, the library window can be *docked* to either side of the application window, or be in the floating state. To *dock/ detach* the library window, double-click on its *title*. You can drag the detached window to any location. Another way to dock the library window is to move it close to the application window side. You can disable docking in the **Preferences** dialog, **View** tab.

There are several ways of inserting a library shape into your document:

- By *dragging and dropping*:
  Select the needed library shape and drag it from the library window to the document page. Release the mouse button where you want a copy of the shape to be inserted.
- By *double-clicking* the shape:
  If you double-click a shape in the library window, its copy will be inserted in the center of the active document page.
- By *copying and pasting*:
  Use the **Copy** command from the shape's *context menu* or from the **Edit** / **Library Object** menu.
  The copy of the shape will be placed on the Clipboard. Then, in the document window, call the *context menu* again and use the **Paste** command. The content of the Clipboard will be inserted in the position of the pointer.

*The **Stamp Tool** mode lets you use a library as a set of drawing tools.*

You can also use the **Insert / Stamp** menu to switch to this mode.

If there is no shape selected in the library, this tool will clone the selected shape(s) in the document. If several shapes are

selected, their copies will be grouped
automatically. In this case, immediate
resizing is also possible.

For more information:
about the **Preferences** dialog - see **Dialogs - Modal Dialogs - *Preferences***,
about the **Library** window - see **Windows - *Library*,**
about the **Libraries** toolbar - see **Toolbars - *Libraries*,**
about the **Drawing Tools** toolbar - see **Toolbars - *Drawing Tools*.**

Creating and Editing Libraries

ConceptDraw lets you create your own libraries and edit the existing ones (move, delete, add and replace shapes).For manipulating the library files and shapes, you can use the **File / Library** menu commands or the **Libraries** toolbar:
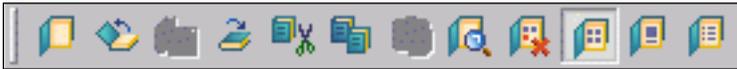
*You can create a custom shape library by using the **File / Library / New** command, the **New Library** button on the **Libraries** toolbar, or the keyboard.*

Ctrl+Shift+N   Cmd+Shift+N

An empty library box will appear in the *library window*. Now you can add shapes into it: paste them from documents or from other libraries.

To ***save*** a library, get the *context menu* on its title and use the **Save** command.

If you need to save the library *under another name*, choose the **Save As** option. The **Save As** dialog will come up to let you specify the name and location of the library file.

*For saving the active library, you can also use the **Save** and **Save As** commands from the **File / Library** menu, or the **Save Library** button on the **Libraries** toolbar.*

If any changes were made to a library after the previous saving, the application offers you to save the changes when you close the library.

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To set or modify the properties of a library, or to assign a title to a new library, use the **Library Properties** dialog. To call this dialog, get the *context menu* on the library's *title bar* and select the **Properties** option.
For the *active library*, you can also use the **File / Library / Properties** menu.

In this dialog you can specify the title of the library (which is displayed on its button in the library window), and also add information about the author and the company, a subject, and provide a short description. To save the changes, click **OK** in the dialog and then save the library.

To assign or modify the text, that appears when you pause the mouse pointer over a library shape, use the **Library Item Properties** dialog. To open it, call the context menu on the library shape and choose **Properties.** The **Item Name** field contains the pop-up hint text, and the **Item Prompt** field contains the text that is displayed in the Status Bar.

For more information:
about the **Library Window** see **Windows - *Library*,**
about the **Libraries** toolbar - see **Toolbars - *Libraries*,**
about the **Library Item Properties** dialog - see **Dialogs - Modal Dialogs - *Library Item Properties*.**

Adding Shapes to a Library

You can add new shapes from your drawings to libraries. There are several ways of doing it:

- By *dragging and dropping*: Point to a shape in the document, and holding down the mouse button, drag the shape from the document window to the library window. When you release the mouse button, a copy of the shape will be added to the library.
- *By copying and pasting*: Select the shape and copy it to the Clipboard (you can use the **Copy** command from the **Edit** or *context* menu). Then, in the library window, call the *context menu* for a shape in the library near which you want your shape to be inserted, and click **Paste** on the menu. The shape will be inserted from the Clipboard in the library, and will become selected. To add a shape to the end of the library, call the context menu at an empty place in the library window and paste the shape there.
- For a selected shape you can choose the **Put into Library** option from the **Edit** menu. The shape will be inserted in the place of the currently selected shape in the library, moving it aside. If there is no shape selected in the library, the shape from the document will be inserted at the end of the library.

*To insert a shape from the Clipboard into the active library you may use the Paste command from the **Edit / Library Object** menu.*

If you select several shapes and then drag or paste them to the library, they will be inserted as group (one library shape).

As a shape is inserted into the library, the software creates its library icon automatically. But you can change the library shape's icon if necessary - see **Shape's Icon**.

For more information about the **Library Window** see **Windows - *Library.***

Replacing a Library Shape

When renewing your library shapes, you may need to update a library shape without changing its icon.

*To do this, use the **Replace** command from the **Edit** / **Library Object** menu, or use the keyboard.*

 Ctrl+Shift+I   Cmd+Shift+I

Select the shape in the library, then the updated shape in the document, and perform the command. The selected shape in the library will be replaced with the selected shape in the document.

Shape's Icon

In the *icon view* mode (the **View as Icon** in the **View / Libraries Window** menu), the shapes are displayed in the library window in the form of icons. When you add a shape into a library, the application creates its icon automatically. However, you can replace it with a custom icon.

To do this:
1. Create a Windows Bitmap (.bmp) picture in any graphics editor.
2. Apply the **Change Icon** command from the *context menu* of the shape, which icon you want to replace.
3. Use the file open dialog to find the picture for the new icon, and click **OK**.

The current shape's icon will be replaced with the new one.

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Chapter 7. Internet

ConceptDraw provides you with extended Internet integration: you can create and use hyperlinks, send documents via E-mail, and save your drawings in HTML format to place them on the Web easily.

Sending a Document by E-mail

You can e-mail your documents from within ConceptDraw.

Open (or make active) the document you need to e-mail, and choose the **Send via E-Mail** command from the **File** menu.
A new e-mail message will be created in the default mail client. The document will be attached to this message. Specify the e-mail address to which you want to send the document and add your comments in the body of the message if necessary.
To send the message, click the corresponding button in the mail program (usually the **Send** button).

Searching the Internet

ConceptDraw allows you to launch an Internet search from the application.

*Click **Search the Internet** button on the toolbar, and ConceptDraw will launch the searcher in the browser which is available in your system.*

You can set which *Internet browser* and *search engine* should be addressed by default:
Call the **Edit / Preferences** dialog, and use the **Paths** tab to configure these settings.

For more information about the **Preferences** dialog see **Dialogs - Modal dialogs - *Preferences***.

Using Hyperlinks

ConceptDraw lets you link your drawings to other documents or Web pages, as well as to other files and programs, providing quick access to data of various kinds. A hyperlink can be assigned to any shape in your document.

You can assign and edit the hyperlinks of the shapes by using the **Hyperlink** dialog. It lets you create hyperlinks of different types or disable the hyperlink. You can also create the links to *Internet and e-mail addresses* by typing them directly in the shape's text. To do this, enable the **Mark hyperlinks in text** option in the ***Preferences*** dialog, the **View** tab. The program will recognize the addresses in the text and assign the hyperlink to the shape. ConceptDraw looks for the following words in the text:

"http://"	"www."	"ftp://"	"file://"	"telnet:"
"https://"	"mailto:"	"news:"	"gopher://"	"wais:"

All the text after such word up to the first space will be treated as a hyperlink. This is an easy and useful way of assigning hyperlinks to shapes if the destination is an Internet or e-mail address which should be visible in the document. To delete or re-assign the hyperlink, use the **Hyperlink** dialog.

> To **open a hyperlink**, double-click on the shape when the mouse cursor turns into 🖑.

To **edit** a *text hyperlink*, select the shape and press **F2** to activate the text editing mode. When you finish editing (click outside the shape), the software will recognize the new hyperlink automatically.

Besides e-mail and Internet addresses, you can link your document to another page or shape in the document, another ConceptDraw document, or to any other file or application. To create and edit hyperlinks of all kinds, you can use the **Hyperlink** dialog.

To **assign** a hyperlink to a shape, or to **edit** the existing link:
1. Select the shape.
2. Open the **Format / Hyperlink** menu, and select the **Edit** option.

> You can also get this command from the shape's context menu, or use the keyboard.

🏴 Ctrl+Shift+E   🏴 Cmd+Shift+E

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The **Hyperlink** dialog will come up for you to specify the destination of the hyperlink.

To *open* a hyperlink, you can use one of the following alternatives:
   a) double-click the shape when the mouse cursor turns into 🖐 ;
   b) get the context menu of the shape and use the **Hyperlink / Open** command (also available from the **Format** menu),
   c) select the shape and use the **Open Hyperlink** button on the **Web** toolbar.
   d) select the shape and use the keyboard.

*Select the object and use the **Open Hyperlink** button or keyboard.*

🖳 Ctrl+Shift+H   🖳 Cmd+Shift+H

For more information about the **Hyperlink** dialog see **Dialogs - Modal Dialogs - *Hyperlink***.

For more information about the **Web** toolbar see **Toolbars - *Web***.

Exporting a Document to HTML files

ConceptDraw lets you export your drawings to HTML to place them on the Web easily.

To save a document in the HTML format, use the **File / Export / HTML** menu. If you need to export only the particular shapes on the page, *select* them before exporting.

In ConceptDraw, the HTML export is highly customizable. You can configure the HTML export settings in the **HTML Properties** dialog, which appears during exporting.

More information about the **HTML Properties** dialog can be found in the **Dialogs - Modal Dialogs - *HTML Properties*** section.

Working with Documents on a Remote FTP-Server

When more than one person works with a document, it's a good idea to store the document on a file server, so that other members of the workgroup have access to the latest version of the document.

ConceptDraw supports working with documents, located on a remote computer (server). The server is accessed via the FTP protocol. The built-

in FTP client allows to pick the documents up from the server for editing, and then put them back without leaving ConceptDraw.

To **edit** a document, located on the server, from the **File** menu select **Open from FTP Server**. The **Open from FTP Server** dialog will come up.

The **Server** field contains the name of the server, where your documents are stored. The fields **Login and Password** are used for user identification. In the **Path** field you specify which document you are going to edit and where it's located.
On clicking **Download**, the document will be copied to your computer and opened for editing.

To save the document to the FTP server, select **Save to FTP Server** from the **File** menu. The **Save to FTP Server** will appear.

All its fields are the same as in the dialog described above.
If you work with a document regularly, it's convenient to save all access settings in Bookmarks.

*To do this, press the **Bookmarks** button in the right corner of the access settings dialog.*

A drop-down menu will come, where you can choose or edit existing bookmarks, or add a new one.

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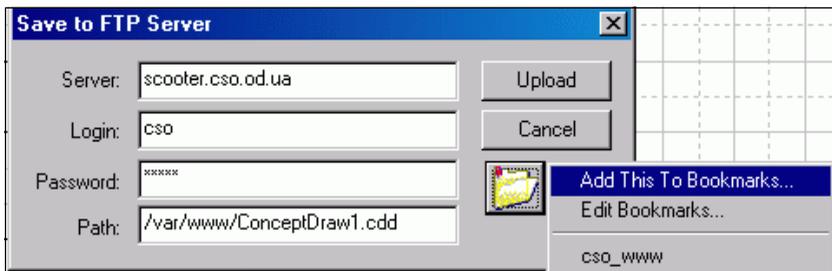
By choosing **Add This To Bookmarks...** you can add the new bookmark to the list of existing ones. The parameters, which are displayed on the dialog, are remembered in the bookmark. The **Add Bookmark** dialog will come up, where you can enter the name of the bookmark. When you select a bookmark, the settings stored in it are automatically put in the corresponding fields of the dialog. To edit an existing bookmark, choose **Edit Bookmarks...**. The **Edit Bookmarks** dialog will come up where you can edit previously saved bookmarks.

Bookmarks are stored with the application settings and can't be transferred from one computer to another.

For more information:
about the **Open from FTP Server** dialog - see **Dialogs - Modal Dialogs - *Open From FTP Server***,
about the **Save to FTP Server** dialog - see **Dialogs - Modal Dialogs - *Save To FTP Server***,
about the **Add Bookmark** dialog - see **Dialogs - Modal Dialogs - *Add Bookmark***,
about the **Edit Bookmarks** dialog - see **Dialogs - Modal Dialogs - *Edit Bookmarks***.

Chapter 8. Shape Parameter Table

Each ConceptDraw shape is described by dozens of parameters, such as numbers, text or formulas.

All the parameters are brought together in the **shape parameter table** where you can modify any of them. The table thus gives you full control over the appearance and behavior of the shape.

Displaying the Shape Parameter Table

To call the **Parameter Table** of a shape, select it and use the **Show Table** command from the **Shape** menu, or just press the **F3** key. This will open the shape's table in a new window.

You can use the following elements of the table:
- the **input field** lets you edit the contents of the selected cell (enter the value or formula);
- the **sections** represent groups of parameters: transform characteristics, geometries, line properties, fill format, text format, protection, etc.;
- the **cells** show the value or formula for each parameter of the shape; you can select a cell and modify its contents in the input field;

The **menu bar** holds the commands which you can apply to the table (save the table, modify the table view, manipulate sections, etc.).

The **input field** is at the top of the window. When you click a cell in the table, its contents appears in the input field where it can be edited.
By double-clicking a cell its contents in the input field will also become selected.
To finish editing and apply the changes, press the **Enter** key.
To return to the initial values, press the **Esc** key.
You can also use the corresponding buttons to the left of the input field.
If you enter an invalid formula or value, the program will display an error message.

A **cell** is the place where the application stores a certain parameter of the shape.
To *select (activate)* a cell, just click it with the mouse. Once the cell is *active*, you can edit its content in the *input field* at the top of the table window. You can use the **Arrow** keys to activate another cell.
To quickly start *editing*, double-click the needed cell, and its content appears selected in the *input field*.

What you see in the cell depends on which *viewing mode* is set for the table: **Values** or **Formulas**.
When in the **Values** mode, all cells show the values in the current units of measure set for the document.
When the **Formulas** mode is on, all cells that contain formulas display the formulas. The cells which have no formulas show the values in the *tenths of millimeter* or in *radians* (for angles).

To switch to the needed *view mode*, just check the corresponding option in the **View** menu.
Note that if a cell contains a formula, the *input field* will always show a *formula* when you select the cell, regardless of the viewing mode.

You can input values in the units of measure other than default, by specifying the corresponding suffix after the number, e.g. *12 in, 3.5 ft, 0.66 m*. When

editing a cell, you can use the data stored in another cell, by clicking that cell with the mouse:

Inserts the formula from the cell you clicked into the input field

| Single click | Single click |

Inserts the numeric value of the cell into the input field

| Ctrl+click | Cmd+click |

Inserts the cell title into the input field (to refer to it in formulas)

| Alt+click | Opt+click |

The Table's Sections

The **Shape Parameter Table** has a number of sections. Each section describes a certain property of the shape (for instance, its position, dimensions, text, etc.). You can hide any section or make it visible again. To **show/hide** the sections, use the **View Sections** dialog (select **Sections** in the **View** menu).

Some sections may be missing if the shape does not have the corresponding attribute or function (for instance, control handles or the context menu).

To **add sections**, use the **Insert Sections** dialog. To call it, select **Insert Section** from the **Edit** menu.

Here is the list of sections the table may have: *Transform*, *Geometry*, *Endpoints*, *Controls*, *Connect*, *Variables*, *Line Properties*, *Fill Format*, *Protection*, *Text Transform*, *Character Format*, *Paragraph Format*, *Text Block Format*, *Text Field*, *Miscellaneous*, *Actions*, *Glue Info*, *Custom Properties*.

One of the sections is *active* (its title bar appears in blue). You can edit the contents of the *cells* in the active section.
To **activate** a section, just click its title bar or any of the cells inside it.

Each section can be minimized to its *title bar*. To **minimize** a section, activate it and then click on its *title bar*.
If the section is minimized, you can click on the *title bar* again to **expand** the section.

For some sections (such as *Geometry, Controls, Connect, Variables, Font Format, Paragraph Format, Actions*), a row of cells may describe a single

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element of the shape (such as a control handle, a linear segment of a figure, and so on). It this case, operations on the whole row are possible: **Add Row**, **Delete Row**. They are available from the **Edit** menu, or from the context menu.

For more information about the **View Sections** dialog see **Dialogs - Modal Dialogs -** *View Sections*.

Formulas

By using formulas, you can make one parameter of a shape dependent on other parameters, or on the actions of the user. Here are some examples of formulas:
- ✓ Variables.X1+(Variables.X2-Variables.X1)*0.293
- ✓ _min(0;Geometry1.X2-Variables.X2)
- ✓ =_IF(Variables.X1=1;_Setf("Variables.X1";0);Setf("Variables.X1";1))

If you want to reference a cell in a formula, indicate the cell name (displayed in red near the cell), for instance Width, TextAngle, etc. *<cell_name>*

The sections to which you can add cells (such sections as *Geometry, Controls, Connect, Variables, Font Format, Paragraph Format, Actions*) are referred to in a different way: *<section_name>.<cell_name>*

The *cell name* is made up of the *column name* and the *line number*, *For example*: "Controls.YDyn1"; "Variables.Y2"; "Connect.X1".

For the *Geometry* section, the *section name* also includes the *section number* - because a figure may have more than one geometry.
For example: "Geometry1.Y1", "Geometry2.C2".
So, for the first two cells the names look like this: "Geometry1.Visible" and "Geometry1.Filled".

Formulas often include **functions**. The full list of functions and their specifics can be found in the *Function Reference* section.

You may need to address cells describing other shapes.
Every shape has its *identification number:* you can see it in the *title bar* of the table window, or on the **Information** tab of the **Shape Properties** dialog (the **ID** field).
This ID is used when you address the parameters of the shape: *<Shape_ID>.<section_name>.<cell_name>*
For example: "ObjID13.Geometry2.X1", "ObjID2.Width".

If the shape *belongs to a group*, the **Parent** prefix is used to access the group parameters: *Parent.<section_name>.<cell_name>*
For example: "Parent.Height".

If you need to refer to a shape inside a group, the following structure is used: ***Child<number>.<section_name>.<cell_name>***
For example: "Child2.Angle".
The ***number*** parameter corresponds to the order of the shape within the group. You can find this number in the **Information** tab of the **Shape Properties** dialog (the **SubID** field).

The application creates some formulas automatically. Such formulas are called **default formulas**. For instance, when you create a line, the program will describe one of its parts as follows:

Geometry1		
Visible	1	Filled
Name	X	Y
1.Start	Width*0.000000	Height*0.000000
2.LineTo	Width*0.300000	Height*0.666667
3.LineTo	Width*0.450000	Height*0.000000
4.LineTo	Width*0.600000	Height*0.000000
5.LineTo	Width*1.000000	Height*1.000000

Here, "Width*0.75000" and "Height*0.666667" are *default formulas*.
Due to these formulas the vertices maintain their relative positions with respect to the alignment box of the shape when the shape is resized. These formulas change automatically when you reposition the shape's vertices or the shape itself.

If a formula has the "**=**" sign near it, it means that the formula can not be changed in any way other than by editing its cell.
If the formula hasn't the "**=**" sign before it, it may be altered automatically when you modify the shape and apply actions which change this parameter.

If the parameter indicates dimensions (width, height, etc.), you need to specify the unit of measure for the value. You can use the corresponding suffix after the value - for instance, *15 mm, 25 in*, etc. For instance, the **Width** parameter of the **Transform** section can look like this: ***=15 mm***

If you don't specify the unit of measure, the value will be in ConceptDraw internal units (1 internal unit = 0.1 mm).
For angles the internal units of measure are radians. If you want to set angles in degrees, add "deg" to the value: ***= 30 deg***

Operators in Formulas

Starting from ConceptDraw V you can use operators in formulas, apart from the logical functions ***AND, _IF***, ***_NOT***, ***_OR*** and ***XOR***.

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The following operators are supported: logical operators **AND**, **EQV**, **IMP**, **NOT**, **OR**, **XOR**; comparison operators **<, >, <=, >=, =, <>**; exponentiation **^** or ******; negation/subtraction **-**; adding **+**; multiplication and division ***, /**; integer division ****; modulo arithmetic **MOD**; string concatenation **&**.

Logical operators

Operator	Description
AND	Logical "AND", conjunction. TRUE if both arguments are TRUE, otherwise FALSE. If the arguments are numbers, performs bitwise comparison. *Example:* **2>3 AND 2<5** returns **TRUE** **2 AND 3** returns **2** (bitwise comparison)
EQV	Used to perform a logical equivalence on two expressions. For logical expressions returns TRUE only if both expressions evaluate to TRUE, or if both expressions evaluate to FALSE. The same (only bitwise) applies to numeric expressions. The following table illustrates how result is determined:

For logical expressions.			*For numeric expressions.*		
A	*B*	*A EQV B*	*a*	*b*	*a EQV b*
True	*True*	*True*	*1*	*1*	*1*
True	*False*	*False*	*1*	*0*	*0*
False	*True*	*False*	*0*	*1*	*0*
False	*False*	*True*	*0*	*0*	*1*

Operator	Description
IMP	Used to perform a logical implication on two expressions. For numeric expressions works bitwise. The following table illustrates how result is determined:

For logical expressions.			*For numeric expressions.*		
A	*B*	*A IMP B*	*a*	*b*	*a IMP b*
True	*True*	*True*	*1*	*1*	*1*
True	*False*	*False*	*1*	*0*	*0*
False	*True*	*True*	*0*	*1*	*1*
False	*False*	*True*	*0*	*0*	*1*

Operator	Description
NOT or **!**	Used to perform logical negation on an expression. For numeric expressions works bitwise. The **NOT A** and **!A** forms are fully equivalent. The following table illustrates how result is determined:

For logical expressions.		*For numeric expressions.*	
A	*NOT A*	*a*	*NOT a*
True	*False*	*1*	*0*
False	*True*	*0*	*1*

OR   Used to perform a logical disjunction on two expressions. Returns TRUE if at least one of the expressions is TRUE, otherwise returns FALSE. For numeric expressions works bitwise.
The following table illustrates how result is determined:

For logical expressions.			*For numeric expressions.*		
A	*B*	*A OR B*	*a*	*b*	*a OR b*
True	*True*	*True*	*1*	*1*	*1*
True	*False*	*True*	*1*	*0*	*1*
False	*True*	*True*	*0*	*1*	*1*
False	*False*	*False*	*0*	*0*	*0*

XOR   Used to perform a logical exclusion on two expressions. Returns TRUE only if one of the two expressions is TRUE, and the other is FALSE.
The following table illustrates how result is determined:

For logical expressions.			*For numeric expressions.*		
A	*B*	*A XOR B*	*a*	*b*	*a XOR b*
True	*True*	*False*	*1*	*1*	*0*
True	*False*	*True*	*1*	*0*	*1*
False	*True*	*True*	*0*	*1*	*1*
False	*False*	*False*	*0*	*0*	*0*

Comparison Operators

The operators *<, >, <=, >=, =, <>* are used to compare two expressions.
Syntax: *<result>=<expression1> <comparison_operator> <expression2>*.

Arithmetic Operators

Arithmetic operators are: Exponentiation **^** or ***; negation/subtraction **-**; adding **+**; multiplication and division *****, **/**; integer division ****; modulo arithmetic **MOD**; string concatenation **&**.

Operator	Description

^ or ****   Used to raise a number to the power of an exponent.
Example: ***2**10*** results in ***1024***.

-   Used to find the difference between two numbers or to indicate the negative value of a numeric expression.
Example: ***-5***
                        -(-3) equals ***3***.

+   Used to sum two expressions. Returns a Boolean value if both expressions are Boolean, or a numeric value if both expressions are numeric. For string expressions, concatenates the strings. If one of the expressions is a string, and the other is not a string -

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the non-string is converted to a string and both strings are concatenated.

Example: **1+1** results in **2**,

                       2+"some string" results in **"2some string"**,

                       "some string"+234 results in **"some string234"**.

-   Subtracts one expression from the other.

     Example: **1-3** equals **-2**,

                       7-4 equals **3**.

*   Used to multiply two expressions.

/   Used to divide two expressions and return a floating-point result. Division by zero returns the first expression and no error occurs.

****   Used to divide two numbers and return an integer result.

     Example: **11 \ 4** equals **2**

                       9 \ 2 equals **4**

MOD   Used to divide two numbers and return only the remainder.

     Example: **10 MOD 3** returns **1**

                       8 MOD 5 returns **3**

                       8 MOD 3 returns **2**

&   Used to force string concatenation of two expressions. Returns a String value. If an expression is not a string, it is converted to a string prior to the operation.

     Example: **"some "&"string"** returns **"some string"**,

                       34&"string" returns **"34string"**,

                       45&56 returns the string **"4556"**.

> *In fact, this operator is not arithmetic, but belongs to this group because it has the same precedence as other arithmetic operators.*

> *Negation and Subtraction are different operators with different precedence, though they are denoted with the same sign "**-**".*

Operator Precedence

When several operations occur in an expression, each part is evaluated and resolved in a predetermined order. That order is known as operator precedence. Parentheses can be used to override the order of precedence and force some parts of an expression to be evaluated before others. Operations within parentheses are always performed before those outside. Within parentheses, however, normal operator precedence is maintained.

The operators, supported in ConceptDraw, can be divided into 3 groups: arithmetic, comparison, logical. When expressions contain operators from more than one category, arithmetic operators are evaluated first, comparison operators are evaluated next, and logical operators are evaluated last.

Within individual categories, operators are evaluated in the order of precedence shown below:

Arithmetic Operators	Comparison Operators	Logical Operators
^ or **	=	NOT
negation"-"	<>	AND
*, /	<	OR
\	>	XOR
MOD	<=	EQV
+, -	>=	IMP
&		

For more information about the functions see **_Function Reference_**
For more information about the **Shape Properties** dialog see **Dialogs - Modal Dialogs - _Shape Properties_**.

Adding Control Handles to a Shape

Control handles are defined in the Controls section of the table. Control handles can be used to create shapes with intelligent behavior. They can be associated with a parameter or a group of parameters of a shape, allowing you to easily modify the shape by repositioning its control handle. Many library shapes have control handles.

The Controls section is used to create control handles. To add this section to the table, select **Insert Section** from the **Edit** menu. In the **Insert Section** dialog enable the **Control Handles** option and click **OK**. This inserts the Controls section in the table. The section already contains one row.

Example: In this example, a control handle is added to a group of two rectangles so that the second rectangle move when the control handle is moved.

Create a new document by selecting **New Document** from the **File** menu, or pressing the button on the main toolbar.

Then choose the Rectangle tool - either from the **Drawing Tools** toolbar, from the **Insert** menu, or from the keyboard.

 Ctrl+7   Ctrl+7

Draw two rectangles.

Select them and group using the **Group** command from the **Shape** menu.

Now lets display the Parameter Table for the entire group. Press **F3** or select **Show Table** from the **Shape** menu.
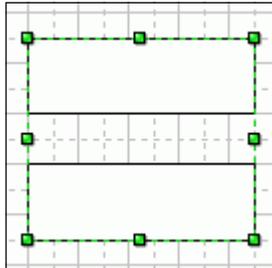
We need to create two sections in the table: the *Controls* section, describing the control handle, and *Variables* section, which will be used to pass the coordinates of the control handle from the parent shape to the child shape. Choose **Insert Section** from the **Edit** menu and in the dialog enable the **Control Handles** and **Variables** options.

Click OK. Two sections - Controls and Variables will be inserted in the table.

Now you need to edit the Variables section so that it contains the coordinates of the control handle.

Controls	X	Y	XDyn	YDyn	XBe
1	_IF(_OR(Controls.X	_IF(_OR(Controls.Y	Controls.X1	Controls.Y1	0
Variables	X	Y			
1	Controls.X1	Controls.Y1			

In the Variables.X1 cell, enter "Controls.X1". In the Variables.Y1 enter "Controls.Y1". Now these values are to be passed to the child shape.

Then, lets protect the control handle from repositioning vertically. To do this, enter 1 in the Controls.YBeaheviour1 cell.

Select the frontmost rectangle in the group. Press F3 to call its parameter table. We'll need the Transform section.

Transform			
Width	_HYP(Parent.Width*	FlipX	FALSE
Height	_HYP(Parent.Width*	FlipY	FALSE
Angle	0.000000	LocPinX	Width*0.500000
GPinX	Parent.Width*0.500(	LocPinY	Height*0.500000
GPinY	Parent.Height*0.187		

In the GPinX cell enter *Parent.Width*0.500000+Parent.Variables.X1-Width/2*.

This means that when you move the control handle with the mouse horizontally, the frontmost rectangle will move together with the control handle. You can program much more complex behavior by using the formulas. The libraries contain a lot of shapes with such behavior.

For more information:
about the **Controls** section see *The Table's Sections - Controls*,
about the **Variables** section see *The Table's Sections - Variables*,
about the **Main** toolbar - see **Toolbars -** *Main*
about the **Drawing Tools** toolbar - see **Toolbars -** *Drawing Tools*,
about the **Insert Sections** toolbar see **Dialogs - Modal Dialogs -** *Insert Table Sections*,
about the functions see the *Function Reference*.

Adding User-Defined Context Menu to a Shape

You can use the shape parameter table to create user-defined menu for shapes. A user-defined menu is convenient for changing the shape's form or text quickly. The Actions section is used to describe the user-defined menu.

Example: Let's create a custom menu for a rectangle. This menu will contain one item: "Make Width 200mm" which will set the width of the rectangle to 200 mm.

*Create a new document using the **File / New Document** command, or by clicking on the main toolbar.*

*Then on the **Drawing Tools** toolbar click, or select **Insert / Rectangle** from the menu - or use the keyboard:*

 Ctrl+7   Ctrl+7

Now draw a rectangle and press **F3** to display its table (or choose **Shape / Show Table** from the menu).

By default, the Actions section doesn't exist in the table - you need to create it. Select **Insert Section** from the **Edit** menu. In the **Insert Section** dialog, choose **Actions**. The **Actions** section will be added to the table. It already contains one row, which is enough for this example.

To the Action cell enter

_SETF("Width";200 mm)

_SETF if a function that sets a value for a parameter. In our case, it sets a 200 mm width for the shape.

In the Menu cell enter the name of the menu item - Make Width 200mm.

Actions	Action	Menu	Prompt	Checked	Disabled
1	0.000000	"Make Width 200mm"	""	FALSE	FALSE

Now if you close the table, and right-click the rectangle, you'll see a new item in the menu - "Make Width 200mm", which will make the width of the rectangle equal to 200 mm.

For more information:
about the **Actions** section see *The Table's Sections*,
about the **Main** toolbar - see **Toolbars -** *Main*
about the **Drawing Tools** toolbar - see **Toolbars -** *Drawing Tools*,
about the functions see *Function Reference*.

Using Formulas to Control Shapes

In ConceptDraw V it became possible to program behavior of shapes, which is triggered by an *event* - such as repositioning the shape, resizing it, etc.

Events are specified in formulas, separated with a semicolon:
<formula>; <event1>; <event2>; <event3>

On event a formula is re-calculated and the contents of cells, referenced to by the formula, is updated.

Below is an example of how the program handles events. In the example there is a connector connected to two shapes.

The are the cells from the **Glue Info** section:

ConnectObjBegin	**1;ShapeID1.EventMove**
ConnectObjEnd	**2;ShapeID2.EventMove**

After the semicolon go the events on which the parameters will be re-calculated (when either of the shapes is moved). The parameters themselves - the IDs of the connected shapes - are not changed, however, other parameters in the **EndPoints** section are dependent on them.

BeginX	**_CONNECTBEGINX(ConnectObjBegin; ConnectObjEnd;ConnectTypeBegin)**
BeginY	**_CONNECTBEGINY(ConnectObjBegin; ConnectObjEnd;ConnectTypeBegin)**

EndX	***_CONNECTENDX(ConnectObjBegin;*** ***ConnectObjEnd;ConnectTypeEnd)***
EndY	***_CONNECTENDY(ConnectObjBegin;*** ***ConnectObjEnd;ConnectTypeEnd)***

These parameters include the parameters, to which the event is assigned and they will be re-calculated on that event.

Let's describe the events that exist in ConceptDraw V.

Shape's Events.

The following events can be assigned to any ConceptDraw shape. They are specified in the formula in this form: ***[<shape_name>.]<event_name>***

Event	*Triggered When*
EventMove	The shape is moved.
EventResize	The shape is resized.
TextEventMove	The shape's text box is moved.
TextEventResize	The shape's text box is resized.
CharPropEvent	The *Character Properties* section of the table or text formatting in shape are changed.

Also, changing any variable in the parameter table can be an event. For instance, if after a semicolon you write ***<shape_name>.Width*** in a formula, the formula will be re-calculated only when the width of the specified shape is changed.

Variables Describing a Document

Apart from the variables from the shape parameter table you can use in formulas some variables, which contain various properties of the document (these properties are contained in the ***Document Properties*** dialog:

DocTitle	The title of the document.
DocSubj	The subject of the document.
DocAuthor	The author.
DocCompany	The name of the company / organization.
DocDesc	The description.
DocSnapSens	Snap sensitivity.
DocPageSizeX	Returns the page width in the current units of measure.
DocPageSizeY	Returns the page height in the current units of measure.
DocShadowOffsetX	Horizontal shadow offset.
DocShadowOffsetY	Vertical shadow offset.
DocScale	Scale of the document.

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For more information about the **Document Properties** dialog see **Dialogs - Modal Dialogs -** *Document Properties*.

For more information about the **Page Navigator** floating dialog see **Dialogs - Floating Dialogs -** *Page Navigator*.

Function Reference

Mathematical:
_ABS
_CENTERX
_CENTERY
_CIRCLE_CENTERX
_CIRCLE_CENTERY
_CIRCLES3RD_X
_CIRCLES3RD_Y
_CUT
_ELLIPSE_ANGLE
_ELLIPSE_ASPECT
_FABS
_GRAVITY
_HYP
_LG10
_LN
_LOCALX
_LOCALY
_MAX
_MIN
_MOD
_POW
_RAND
_SIGN
_SQRT
_WORLDX
_WORLDY

Trigonometric:
_ACOS
_ASIN

_ATAN
_ATAN2
_COS
_COSH
_PI
_SIN
_SINH
_TAN
_TANH

Logical:
_AND
_IF
_NOT
_OR
_XOR

Functions for transformation and rounding:
_ANG360
_DEG
_RAD
_ROUND
_FLOOR

Text:
_CHR
_EVALTEXT
_FILENAME
_FULLFILENAME
_MEASURE

_SCALE
_TEXTHEIGHT
_TEXTLEFT
_TEXTLENGTH
_TEXTRIGHT
_TEXTWIDTH
_VALTOTEXT
_VALTOTEXTMES

Date and time:
_DATE
_TIME

Page properties:
_PAGENUMBER
_PAGESCOUNT

Functions for working with ConceptDraw Basic:
_CALLTHIS
_CALLTHIS_1ARG
_CALLTHIS_2ARGS

Functions for calculating end-points of connec-tors:
_CONNECTBEGINX
_CONNECTBEGINY

_CONNECTENDX
_CONNECTENDY

Functions for working with named styles:

Functions for working with line style
_STYLED_ENDSSIZE
_STYLED_LINEBEGIN
_STYLED_LINECOLOR
_STYLED_LINEEND
_STYLED_LINEPATTERN
_STYLED_LINEWEIGHT

Functions for working with fill and shadow
_STYLED_FILLCOLOR
_STYLED_FILLPATCOLOR
_STYLED_FILLPATTERN
_STYLED_SHADOWCOLOR
_STYLED_SHADOWPATCOLOR
_STYLED_SHADOWPATTERN

Functions for working with font
_STYLED_FONTCHARLANG
_STYLED_FONTCOLOR

_STYLED_FONTNUM
_STYLED_FONTPOS
_STYLED_FONTSIZE
_STYLED_FONTSPACING
_STYLED_FONTSTYLE

Functions for working with paragraphs
_STYLED_PARAAFTERSPACING
_STYLED_PARABEFORESPACING
_STYLED_PARAFIRSTLINE
_STYLED_PARAHALIGNMENT
_STYLED_PARALEFTINDENT
_STYLED_PARALINESPACING
_STYLED_PARARIGHTINDENT

Functions for working with text blocks
_STYLED_TXTBKGNDCOLOR
_STYLED_TXTBOTTOMMARGIN
_STYLED_TXTLEFTMARGIN
_STYLED_TXTRIGHTMARGIN
_STYLED_TXTTOPMARGIN
_STYLED_TXTVALIGN

Other:
_SETF

_**ABS**
_ABS(arg)
Returns the absolute value of the *arg* number.
_ABS(str)
Returns the *str* string without changing it.
Examples:
_ABS(-3) = 3
_ABS(0) = 0
_ABS(4) = 4
_ABS("Text") = "Text"

_**ACOS**
_ACOS(arg)
Returns the arc cosine of the *arg* (its value is within the -pi/2 to pi/2 range). The argument value must be within the -1 to 1 range. Otherwise an error code is generated.

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_AND

_AND(arg1;arg2)
Returns the bitwise AND.
_AND(str1;str2)
Returns 1 - if the strings are not empty, and 0 - if at least one of them is empty.
_AND(str;arg)
_AND(arg;str)
Returns *arg*.
Examples:
_AND(1; 0) = 0
_AND(3; 2) = 2
_AND("Hello!"; "") = 0
_AND("Text1"; "Text2") = 1
_AND("Text"; 2) = 2

_ANG360

_ANG360(arg)
Returns the *arg* angle, reduced to the 0 to 2*pi interval.
Examples:
_ANG360(481 deg) = 121 deg
_ANG360(-4.5 rad) = 1.7832 rad

_ASIN

_ASIN(arg)
Returns the arc sine of *arg* (its value is within the -pi/2 to pi/2 range).
The argument value must be within the -1 to 1 range. Otherwise an error code is generated.

_ATAN

_ATAN(arg)
Returns the arctangent of *arg* (the returned value is within the -pi/2 to pi/2 range).

_ATAN2

_ATAN2(arg1;arg2)
Returns the arctangent of *(arg1/arg2)*. Unlike the _ATAN function, _ATAN2 correctly processes expressions where the arg2 value equals 0. Anyway, the returned value is within the -pi/2 to pi/2 range.
Examples:
_ATAN(1; 0) = 90 deg
_ATAN(2; 2) = 45 deg

_CALLTHIS

Calls a function, written in ConceptDraw Basic built-in scripting language. The function being called must have no arguments.

_CALLTHIS("proc_name")

The name of the function must be enclosed in quotation marks.

The function being called must look as follows:

Function proc_name (shp As Shape)[As <Type>]

The **shp** variable represents the shape, from which the function is called. _CALLTHIS returns the result returned by the specified function. The result of _CALLTHIS is of the same type as the result of the function being called.

Example:

Create a new document (use the **File / New Document** menu, or click on the **Main** toolbar).

Choose the **Rectangle** tool on the **Drawing Tools** toolbar and draw a rectangle.

Run the ConceptDraw Basic editor from the menu **Tool / ConceptDraw Basic / Document Script / Edit** and type the following lines:

Function MyProc(shp As Shape) As Byte

Dim ss As String

ss = InputBox$("Enter text for shape")

shp.Text = ss

End Function

This is the code of the *MyProc* function which will be called from the shape's context menu by means of _CALLTHIS. Close the ConceptDraw Basic editor window.

Now let's add a menu item to the rectangle's context menu.

Select the rectangle by using the **Select** tool from the **Drawing Tools** toolbar. Call the shape parameter table by pressing **F3** or choosing **Shape / Show Table** from the menu.

Add the **Actions** section to the shape parameter table. Select **Insert Section** from the **Edit** menu, then in the **Insert Sections** dialog choose **Actions** and click **OK.**

Actions	Action	Menu	Prompt	Checked	Disabled
1	_CALLTHIS("MyProc	"Call proc from CDB	"Click to call proc fro	FALSE	FALSE

The Actions section will be added to the table. In the **Action** cell enter the function:

_CALLTHIS("MyProc")

In the **Menu** cell enter the name of the menu item: "Call ConceptDraw Basic Function". In the **Prompt** field enter the text of the prompt that will appear in the status bar: "Click to call a ConceptDraw Basic function". The **Checked** and **Disabled** cells must have the **FALSE** values. Now close the shape parameter table window and right-click on the rectangle. Its context menu contains a new item - "Call ConceptDraw Basic Function". When you choose this item, a dialog comes up where you can change the text of the shape.

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_CALLTHIS_1ARG

This function works similar to _CALLTHIS except that one parameter is passed to the function being called.

Syntax: **_CALLTHIS_1ARG("proc_name"; arg1)**

Here **proc_name** - is the name of the function to be called, and **arg1** is the parameter passed to it.

The ConceptDraw Basic function being called must look as follows:

Function proc_name (shp As Shape, arg1 As <Type1>)[As <Type>], where **shp** is the shape that calls the function, and **arg1** is the argument to be passed to the function.

> *Note:* The type of the result, returned by **_CALLTHIS_1ARG** must match the type of the result, returned by the function.

_CALLTHIS_2ARGS

This function works similar to _CALLTHIS_*CALLTHIS* and _**CALLTHIS_1ARG**, except that 2 parameters are passed to the ConceptDraw Basic function being called.

Syntax: **CALLTHIS_1ARG("proc_name"; arg1; arg2)**

Here **proc_name** is the name of the function being called, **arg1**, **arg2** are the parameters, passed to it. The function being called must look as follows:

Function proc_name (shp As Shape, arg1 As <Type1>, arg2 As <Type2>) [As <Type>]

Here **shp** is the shape that calls the function, **arg1** and **arg2** are the arguments to be passed to the function.

> *Note:* The type of the result, returned by _***CALLTHIS*** and _***CALLTHIS_1ARG*** must match the type of the result, returned by the function.

_CENTERX

_CENTERX()

Returns the X coordinate of the **center** of the shape.

The center of the shape is:

- For the Smart Connector: the middle of its central segment, if the number of segments is odd, or the crossing point of two middle segments, if the number of the segment is even.
- For other shapes: the center of the alignment box.

This function may be used, for instance, for positioning the Smart Connector's text.

_CENTERY

_CENTERY()

Returns the Y coordinate of the **center** of the shape.

The center of the shape is:

- For the Smart Connector: the middle of its central segment, if the number of segments is odd, or the crossing point of two middle segments, if the number of the segment is even.
- For other shapes: the center of the alignment box.

This function may be used, for instance, for positioning the Smart Connector's text.

_CHR
Returns the character that corresponds to the specified number.
Example:
_*CHR(32)* returns the character with number 32 ("space").

_CIRCLE_CENTERX
_CIRCLE_CENTERX(X1; Y1; X2; Y2; X3; Y3)
Returns the X coordinate of the center of the circle, built upon the three points: (X1;Y1), (X2;Y2) and (X3;Y3).

_CIRCLE_CENTERY
_CIRCLE_CENTERY(X1; Y1; X2; Y2; X3; Y3)
Returns the Y coordinate of the center of the circle, built upon the three points: (X1;Y1), (X2;Y2) and (X3;Y3).

_CIRCLES3RD_X
_CIRCLES3RD_X(X1; Y1; X2; Y2; H)
Returns the X coordinate of the point, that lies at the *H* distance from the middle point of the vector *(X1;Y1) - (X2;Y2)*. If *H* is a positive number, this point is to the left of the vector, if negative - the point is to the right of the vector. This function is used to create an arc of the circle upon two points and the height of the arc.

_CIRCLES3RD_Y
_CIRCLES3RD_Y(X1; Y1; X2; Y2; H)
Returns the Y coordinate of the point, that lies at the *H* distance from the middle point of the vector *(X1;Y1) - (X2;Y2)*. If *H* is a positive number, this point is to the left of the vector, if negative - the point is to the right of the vector. This function is used to create an arc of the circle upon two points and the height of the arc.

_CMYK
Sets a color in the CMYK format.
Syntax: _*CMYK(C;M;Y;K)*
where C, M, Y, K - the components of CMYK color.
Example:
_*CMYK(100;0;100;0)*
Corresponds to yellow-green color.

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It's used to set colors in the shape's parameter table (for such parameters as FillColor from the Fill section, LineColor from the Line Properties section).

_CONNECTBEGINX

It's used in the application to calculate the X coordinate of the connector's begin point.

Syntax: _CONNECTBEGINX(ObjBegin;ObjEnd;TypeBegin)

Here ObjBegin is the ID of the shape to which the begin point of the connector is glued; ObjEnd is the ID of the shape to which the end point of the connector is glued. TypeBegin represents the connection type: values from 1 to 4 indicated connection to a side, -1 corresponds to "no connection", 5 means connection to entire shape.

Normally this function is used by ConceptDraw to calculate the parameters from the EndPoints section of the connectors. The parameters from the **Glue Info** section are also used.

BeginX is calculated as follows: **_CONNECTBEGINX(ConnectObjBegin; ConnectObjEnd;ConnectTypeBegin)**, where **ConnectObjBegin**, **ConnectObjEnd**, **ConnectTypeBegin** are parameters from the **Glue Info** section. See also _CONNECTBEGINY, _CONNECTENDX, _CONNECTENDY.

_CONNECTBEGINY

It's used in the application to calculate the Y coordinate of the connector's begin point.

Syntax: _CONNECTBEGINY(ObjBegin;ObjEnd;TypeBegin)

Here ObjBegin is the ID of the shape to which the begin point of the connector is glued; ObjEnd is the ID of the shape to which the end point of the connector is glued. TypeBegin represents the connection type: values from 1 to 4 indicated connection to a side, -1 corresponds to "no connection", 5 means connection to entire shape.

Normally this function is used by ConceptDraw to calculate the parameters from the EndPoints section of the connectors. The parameters from the **Glue Info** section are also used.

BeginY is calculated as follows:_**CONNECTBEGINY(ConnectObjBegin; ConnectObjEnd;ConnectTypeBegin)**, where **ConnectObjBegin**, **ConnectObjEnd**, **ConnectTypeBegin** are parameters from the **Glue Info** section. See also _CONNECTBEGINX, _CONNECTENDX, _CONNECTENDY.

_CONNECTENDX

It's used in the application to calculate the X coordinate of the connector's end point.

Syntax: _CONNECTENDX(ObjBegin;ObjEnd;ConnectTypeEnd)

Here ObjBegin is the ID of the shape to which the begin point of the connector is glued; ObjEnd is the ID of the shape to which the end point of the connector is glued. TypeBegin represents the connection type: values from

1 to 4 indicated connection to a side, -1 corresponds to "no connection", 5 means connection to entire shape.

Normally this function is used by ConceptDraw to calculate the parameters from the EndPoints section of the connectors. The parameters from the *Glue Info* section are also used.

See also *_CONNECTBEGINX*, *_CONNECTBEGINY*, *_CONNECTENDY*.

_CONNECTENDY

It's used in the application to calculate the Y coordinate of the connector's end point.

Syntax: *_CONNECTENDY(ObjBegin;ObjEnd;ConnectTypeEnd)*

Here ObjBegin is the ID of the shape to which the begin point of the connector is glued; ObjEnd is the ID of the shape to which the end point of the connector is glued. TypeBegin represents the connection type: values from 1 to 4 indicated connection to a side, -1 corresponds to "no connection", 5 means connection to entire shape.

See also *_CONNECTBEGINX*, *_CONNECTBEGINY*, *_CONNECTENDX*.

_COS

_COS(arg)

Returns the cosine of *arg* (the returned value is within the -1 to 1 range).

_COSH

_COSH(arg)

Returns the hyperbolic cosine of *arg*.

_CUT

_CUT(arg; iarg)

This function discards a number of significant digits after the point from *arg*. The *iarg* parameter indicates how many digits to discard. For negative numbers, it discards the digits before the point.

Example:

_CUT(123.4567; 3) = 123.456
_CUT(123.4567;-2) = 100
_CUT(123.4567;0) = 123

_DATE

_DATE()

Returns the date when the document was last time modified.

Example:

_DATE() = 04.09.1999 (Mac)
_DATE() = 04 Sep 1999 (Win)

_DEG

_DEG(arg)

Converts *arg* from radians to degrees.

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Example:
_DEG(3.14) = 180
_DEG(_PI()*3) = 540

_ELLIPSE_ANGLE

_ELLIPSE_ANGLE(koeffX; koeffY; iNumberGeometry; iNumberSegment)
Returns the inclination of the main radius of the ellipse with the central point with (Width*koeffX; Height*koeffY) local coordinates. Other parameters, required for building the ellipse, are taken from the segment with *iNumberSegment* number of the geometry with the *iNumberGeometry* number.
This function is the default formula for the **D** column of the *EllipseTo* segment in the table.

_ELLIPSE_ASPECT

_ELLIPSE_ASPECT(koeffX; koeffY; iNumberGeometry; iNumberSegment)
Returns the ratio between the large and the small radii of the ellipse with the central point with (Width*koeffX; Height*koeffY). Other parameters, required for building the ellipse, are taken from the segment with *iNumberSegment* number of the geometry with the *iNumberGeometry* number.
This function is the default formula for the **C** column of the *EllipseTo* segment in the table.

_EVALTEXT

_EVALTEXT(str)
Converts the string value of *str* to a number.
Example:
_EVALTEXT("123.456 ") = 123.456
_EVALTEXT("123") = 123

_FABS

_FABS(arg)
If *arg* is not zero, returns the absolute value for *arg*.
If *arg* equals zero, returns 1.
_FABS(str)
Returns the string value *str* without changing it.
Example:
_FABS(-3) = 3
_FABS(0) = 1
_FABS(1) = 1
_FABS("Text") = "Text"

_FILENAME

_FILENAME()
Returns the filename under which the document is stored.
Example:

_FILENAME() = "Chart.CDD"

_FLOOR
_FLOOR(arg)
Returns the maximum integer number which is less or equal to *arg*.
Examples:
_FLOOR(123.4567) = 123
_FLOOR(-45.345) = -46
_FLOOR(0) = 0

_FULLFILENAME
_FULLFILENAME()
Returns the filename under which the document is stored with the full path.
Example:
_FULLFILENAME() = "D:\ConceptDraw\Chart.cdd" (Win)
_FULLFILENAME() = "MyDisk:Desktop Folder:Chart.cdd" (Mac)

_GLUETOSERVICE
This function is used to get the coordinates of the shape's rotation center when the shape is glued to a guide line by one of its handles.
_GLUETOSERVICE(<Guide_ID>,<Shape_Handle_Number>)
Depending on the type of the guide line - vertical or horizontal - it returns the corresponding coordinate:
For a vertical guide it returns the Y coordinate (**GPinY**), for a horizontal guide it returns the X coordinate (**GPinX**).

> **Note:** This function is used internally by ConceptDraw when a shape is glued to a guide line.

_GRAVITY
_GRAVITY(Angle; limit1; limit2)
If *Angle* is more than limit1 or less than limit2, returns 0.
If *Angle* is not within the [limit1;limit2] range - returns the pi number.
Examples:
_GRAVITY(30deg; 15 deg; 165 deg) = 0
_GRAVITY(195deg; 15 deg; 165 deg) = pi
Normally, this function is used for setting the orientation of the *Text Box*, so that the text be readable in whatever position of the shape:
_GRAVITY(Angle;-90 deg;90 deg).

_HYP
_HYP(X; Y)
Returns the length of the hypotenuse of the right-angled triangle with X and Y legs.
Example:
_HYP(4; 3) = 5

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_IF

_IF(arg1;arg2;arg3)

If *arg1* is a non-zero number, or a non-empty string, the function returns arg2, otherwise - arg3.

Examples:

_IF(2 > 1; 3; 4) = 3

_IF(""; 3; 4) = 4

_LG10

_LG10(arg)

Returns the decimal logarithm of *arg.*

_LN

_LN(arg)

Returns the natural logarithm of *arg.*

_LOCALX

_LOCALX(X; Y)

Converts the *(X;Y)* point from the global coordinates to local coordinates. Returns the X coordinate for the resulting point.

_LOCALY

_LOCALY(X; Y)

Converts the *(X;Y)* point from the global coordinates to local coordinates. Returns the Y coordinate for the resulting point.

_MAX

_MAX(arg1;arg2)

Returns the bigger of the two numbers: *arg1* and *arg2*.

_MAX(arg;str)

_MAX(str;arg)

Returns the number *arg* (the string value is ignored).

_MAX(str1;str2)

Returns the length for the longest of two strings: *str1* and *str2*.

Examples:

_MAX(4; 6) = 6

_MAX("Text"' ; " Big text ") = 8

_MAX("Text" ; 7) =7

_MEASURE

_MEASURE()

Returns the string containing the current unit of measure.

Example:

_MEASURE() = "ft"

_MIN
_MIN(arg1;arg2)
Returns the minimal of two numbers: *arg1* and *arg2*.
_MIN(arg;str)
_MIN(str;arg)
Returns the number *arg* (the string value is ignored).
_MIN(str1;str2)
Returns the length for the shortest of two strings: *str1* and *str2*.
Examples:
_MIN(4; 6) = 6
_MIN("Text"' ; " Big text ") = 8
_MIN("Text" ; 7) =7

_MOD
_MOD(arg1;arg2)
Returns the excess of *arg1* divided by *arg2*
_MOD(str;arg)
_MOD(arg;str)
Returns the number *arg* it the other argument is the string *str*.
_MOD(str1;str2)
Returns zero if both arguments are strings.
Examples:
_MOD(19; 6) = 1
_MOD("Text" ; "Big text") = 0
_MOD("Text" ; 7) =7

_NOT
_NOT(arg)
If *arg* is zero or an empty string, returns 1.
Otherwise returns 0.
Examples:
_NOT(0)=1
_NOT(123)=0

_OR
_OR(arg1;arg2)
Returns bitwise OR;
_OR(str1;str2)
Returns 1 - if at least one of the strings is non-empty, 0 - if both strings are empty.
_OR(str;arg)
_OR(arg;str)
Returns the number *arg*.
Examples:

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_OR(1; 0) = 1
_OR("Hello!"; "") = 1
_OR("Text1"; "Text2") = 1
_OR("Text";2) = 2

_PAGENUMBER
_PAGENUMBER()
Returns the number of the page to which the shape belongs.

_PAGESCOUNT
_PAGESCOUNT()
Returns the number of pages in the document.

_POW
_POW(arg1;arg2)
Raises *arg1* to a power of *arg2*.
_POW(str;arg)
_POW(arg;str)
Returns the *arg* number if the other argument is a string.
_POW(str1;str2)
Returns zero if both arguments are strings.
Examples:
_POW(2; 3) = 8
_POW("Text" ; " Big text ") = 0
_POW("Text" ; 7) = 7

_RAD
_RAD(arg)
Converts *arg* from degrees to radians.
Examples:
_RAD(90) = 1.57

_RAND
_RAND()
Returns a random value within 0 to 32K range.

_RGB
Sets a color in the RGB format. It's used to set colors in the shape's parameter table (for such parameters as FillColor from the Fill section, LineColor from the Line Properties section).
Syntax: **_RGB(R;G;B)**
where R, G, B are the red, green and blue components respectively. Each component is in the 0-255 range.
Example:
_RGB(255;0;0)
Corresponds to red color.

_ROUND
_ROUND(arg; iarg)
Returns *arg* approximated to *iarg* digits after the decimal point.
Examples:
_ROUND(123.4567; 3) = 123.457
_ROUND(123.4567;-2) = 100
_ROUND(123.67;0) = 124

_SCALE
_SCALE()
Returns a string describing the current scale of the document in the "N : M" format.
Examples:
_SCALE() = "1 : 1"
_SCALE() = "4 in : 1 ft"

_SETF
_SETF(str; arg)
_SETF(str; strarg)
This function changes the values in the table cells. String *str* specifies the name of the cell, where to put the data. The *arg* parameter must contain the new value for the cell. The *strarg* parameter must contain the string with a new formula for the cell.
Examples:
_SETF(”Geometry1.X2”; ”Geometry2.X3/2 + Geometry3.X2/4”)
_SETF(”Width” ; 125 cm)

_SIGN
_SIGN(arg)
Returns the sign of *arg*:
-1, if arg<0,
1, if arg>0
0, if arg=0
Examples:
_SIGN(123.4567) = 1
_SIGN(-123.4567) = -1
_SIGN(0) = 0

_SIN
_SIN(arg)
Returns the sine of *arg* (the returned value is within -1 to 1 range).

_SINH
_SINH(arg)
Returns the hyperbolic sine of *arg*.

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_SQRT

_SQRT(arg)

Returns the square root from *arg.* The resulting value is undefined for negative numbers.

_STYLED_ENDSSIZE

Returns the line ends size for the specified named style.

Syntax: *_STYLED_ENDSSIZE("Style_Name")*

The argument of the function is the name of a pre-defined or user-defined style. Returns a value from 0 to 4 indicating one of the 5 possible sizes. This function is used inside ConceptDraw for assigning a named style to a shape. The value of *_STYLED_ENDSSIZE("Style_Name")* is set in the **LineEndsSize** cell of the **Line Properties** section of the parameter table. Note, that the style name must be enclosed in quotation marks.

_STYLED_FILLCOLOR

Returns the fill color for the specified named style.

Syntax: *_STYLED_FILLCOLOR("Style_Name")*

The argument of the function is the name of a pre-defined or user-defined style.

This function is used inside ConceptDraw for assigning a named style to a shape. The value of *_STYLED_FILLCOLOR("Style_Name")* is set in the **FillColor** cell of the **Fill Format** section of the parameter table.

_STYLED_FILLPATCOLOR

Returns the pattern color for the specified named style.

Syntax: *_STYLED_FILLPATCOLOR("Style_Name")*

The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.

The value of *_STYLED_FILLPATCOLOR("Style_Name")* is set in the **FillPatColor** cell of the **Fill Format** section of the parameter table.

_STYLED_FILLPATTERN

Returns the pattern style for the specified named style.

_STYLED_FILLPATTERN("Style_Name")

The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.

The value of *_STYLED_FILLPATTERN("Style_Name")* is set in the **FillPattern** cell of the **Fill Format** section of the parameter table.

_STYLED_FONTCHARLANG

Returns the number of the language for the specified named style.

_STYLED_FONTCHARLANG("Style_Name")

The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.

The value of _**STYLED_FONTCHARLANG("Style_Name")** is set in the **Language** cell of the **Character Format** section of the parameter table.

_STYLED_FONTCOLOR
Returns the font color for the specified named style.
_**STYLED_FONTCOLOR("Style_Name")**
The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.

The value of _**STYLED_FONTCOLOR("Style_Name")** is set in the **Color** cell of the **Character Format** section of the parameter table.

_STYLED_FONTNUM
Returns the font number for the specified named style.
_**STYLED_FONTNUM("Style_Name")**
The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.

The value of _**STYLED_FONTNUM("Style_Name")** is set in the **Font** cell of the **Character Format** section of the parameter table.

_STYLED_FONTPOS
Returns the position of character with respect to text baseline (0 - normal text, 1 - superscript, 2 - subscript) for the specified named style.
_**STYLED_FONTPOS("Style_Name")**
The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.

The value of _**STYLED_FONTPOS("Style_Name")** is set in the **Pos** cell of the **Character Format** section of the parameter table.

_STYLED_FONTSIZE
Returns the font size for the specified named style.
_**STYLED_FONTSIZE("Style_Name")**
The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.

The value of _**STYLED_FONTSIZE("Style_Name")** is set in the **Size** cell of the **Character Format** section of the parameter table.

_STYLED_FONTSPACING
Returns the spacing between characters for the specified named style.

_STYLED_FONTSPACING("Style_Name")

The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.

The value of *_STYLED_FONTSPACING("Style_Name")* is set in the ***Spacing*** cell of the **Character Format** section of the parameter table.

_STYLED_FONTSTYLE

Returns a number that describes the set of styles of a text block for the specified named style.

_STYLED_FONTSTYLE("Style_Name")

The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.

The value of *_STYLED_FONTSTYLE("Style_Name")* is set in the ***Style*** cell of the **Character Format** section of the parameter table.

_STYLED_LINEBEGIN

Returns a arrowhead type of the beginning of a shape's geometry for the specified named style.

_STYLED_LINEBEGIN("Style_Name")

The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.

The value of *_STYLED_LINEBEGIN("Style_Name")* is set in the ***LineBegin*** cell of the **Line Properties** section of the parameter table.

_STYLED_LINECOLOR

Returns the line color for the specified named style.

_STYLED_LINECOLOR("Style_Name")

The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.

The value of *_STYLED_LINECOLOR("Style_Name")* is set in the ***LineColor*** cell of the **Line Properties** section of the parameter table.

_STYLED_LINEEND

Returns a arrowhead type of the end of a shape's geometry for the specified named style.

_STYLED_LINEEND("Style_Name")

The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.

The value of *_STYLED_LINEEND("Style_Name")* is set in the ***LineEnd*** cell of the **Line Properties** section of the parameter table.

_STYLED_LINEPATTERN

Returns a line pattern for the specified named style.

_**STYLED_LINEPATTERN("Style_Name")**_

The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.

The value of _**STYLED_LINEPATTERN("Style_Name")**_ is set in the **LinePattern** cell of the **Line Properties** section of the parameter table.

_STYLED_LINEWEIGHT

Returns the line width for the specified named style.

_**STYLED_LINEWEIGHT("Style_Name")**_

The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.

The value of _**STYLED_LINEWEIGHT("Style_Name")**_ is set in the **LineWeight** cell of the **Line Properties** section of the parameter table.

_STYLED_PARAAFTERSPACING

Returns the spacing between the current and the next paragraph of the text block for the specified named style.

_**STYLED_PARAAFTERSPACING("Style_Name")**_

The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.

The value of _**STYLED_PARAAFTERSPACING("Style_Name")**_ is set in the **AfterSpacing** cell of the **Paragraph Format** section of the parameter table.

_STYLED_PARABEFORESPACING

Returns the spacing between the current and the previous paragraph of the text block for the specified named style.

_**STYLED_PARABEFORESPACING("Style_Name")**_

The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.

The value of _**STYLED_PARABEFORESPACING("Style_Name")**_ is set in the **BeforeSpacing** cell of the **Paragraph Format** section of the parameter table.

_STYLED_PARAFIRSTLINE

Returns the first line indent setting for the specified named style.

_**STYLED_PARAFIRSTLINE("Style_Name")**_

The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.

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The value of **_STYLED_PARAFIRSTLINE("Style_Name")** is set in the *FirstInd* cell of the **Paragraph Format** section of the parameter table.

_STYLED_PARAHALIGNMENT
Returns the number that specifies the type of horizontal alignment of the paragraph with respect to the text box for the specified style.
_STYLED_PARAHALIGNMENT("Style_Name")
The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.

The value of **_STYLED_PARAHALIGNMENT("Style_Name")** is set in the *HAlign* cell of the **Paragraph Format** section of the parameter table.

_STYLED_PARALEFTINDENT
Returns the left indent of the paragraph for the specified named style.
_STYLED_PARALEFTINDENT("Style_Name")
The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.

The value of **_STYLED_PARALEFTINDENT("Style_Name")** is set in the *LeftInd* cell of the **Paragraph Format** section of the parameter table.

_STYLED_PARALINESPACING
Returns the line spacing setting for the specified named style.
_STYLED_PARALINESPACING("Style_Name")
The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.

The value of **_STYLED_PARALINESPACING("Style_Name")** is set in the *LineSpacing* cell of the **Paragraph Format** section of the parameter table.

_STYLED_PARARIGHTINDENT
Returns the right indent of the paragraph for the specified named style.
_STYLED_PARARIGHTINDENT("Style_Name")
The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.

The value of **_STYLED_PARARIGHTINDENT("Style_Name")** is set in the *RightInd* cell of the **Paragraph Format** section of the parameter table.

_STYLED_SHADOWCOLOR
Returns the shadow foreground color for the specified named style.
_STYLED_SHADOWCOLOR("Style_Name")
The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.

The value of _***STYLED_SHADOWCOLOR("Style_Name")*** is set in the ***ShadowColor*** cell of the **Fill Format** section of the parameter table.

_STYLED_SHADOWPATCOLOR
Returns the pattern background color for the specified named style.
_***STYLED_SHADOWPATCOLOR("Style_Name")***
The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.
The value of _***STYLED_SHADOWPATCOLOR("Style_Name")*** is set in the ***ShadowPatColor*** cell of the **Fill Format** section of the parameter table.

_STYLED_SHADOWPATTERN
Returns the shadow pattern for the specified named style.
_***STYLED_SHADOWPATTERN("Style_Name")***
The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.
The value of _***STYLED_SHADOWPATTERN("Style_Name")*** is set in the ***ShadowPattern*** cell of the **Fill Format** section of the parameter table.

_STYLED_TXTBKGNDCOLOR
Returns the text background color for the specified named style.
_***STYLED_TXTBKGNDCOLOR("Style_Name")***
The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.
The value of _***STYLED_TXTBKGNDCOLOR("Style_Name")*** is set in the ***TextBkgnd*** cell of the **Text Block Format** section of the parameter table.

_STYLED_TXTBOTTOMMARGIN
Returns the bottom margin value of a text block for the specified named style.
_***STYLED_TXTBOTTOMMARGIN("Style_Name")***
The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.
The value of _***STYLED_TXTBOTTOMMARGIN("Style_Name")*** is set in the ***BottomMargin*** cell of the **Text Block Format** section of the parameter table.

_STYLED_TXTLEFTMARGIN
Returns the left margin value of a text block for the specified named style.
_***STYLED_TXTLEFTMARGIN("Style_Name")***
The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.

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The value of _**STYLED_TXTLEFTMARGIN("Style_Name")** is set in the **LeftMargin** cell of the **Text Block Format** section of the parameter table.

_STYLED_TXTRIGHTMARGIN
Returns the right margin value of a text block for the specified named style.
_**STYLED_TXTLEFTMARGIN("Style_Name")**
The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.
The value of _**STYLED_TXTLEFTMARGIN("Style_Name")** is set in the **RightMargin** cell of the **Text Block Format** section of the parameter table.

_STYLED_TXTTOPMARGIN
Returns the top margin value of a text block for the specified named style.
_**STYLED_TXTTOPMARGIN("Style_Name")**
The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.
The value of _**STYLED_TXTTOPMARGIN("Style_Name")** is set in the **TopMargin** cell of the **Text Block Format** section of the parameter table.

_STYLED_TXTVALIGN
Returns a number that specifies the type of the vertical alignment of a text block for the specified named style.
_**STYLED_TXTVALIGN("Style_Name")**
The argument of the function is the name of a pre-defined or user-defined style. This function is used inside ConceptDraw for assigning a named style to a shape.
The value of _**STYLED_TXTVALIGN("Style_Name")** is set in the **VAlign** cell of the **Text Block Format** section of the parameter table.

_TAN
_TAN(arg)
Returns the tangent of arg.

_TANH
_TANH(arg)
Returns the hyperbolic tangent of arg.

_TEXTHEIGHT
_TEXTHEIGHT(str; arg)
This function calculates the height of the text block, when arg is assigned as its width. The str parameter is usually the contents of text field of the shape (the TheText field in the table). When calculating the height, this function considers all current text settings for the shape (styles, indents and margins, etc.).

Examples:
_TEXTHEIGHT(TheText;Width)
_TEXTHEIGHT(TheText;2 in)

_**TEXTLEFT**
_TEXTLEFT(str; iarg)
Returns first *iarg* characters of the *str* string.
Example:
_TEXTLEFT("A big text."; 5) = "A big"

_**TEXTLENGTH**
_*TEXTLENGTH(str)*
Returns the length of the *str* string (the number of characters in the string).
Example:
_TEXTLENGTH("A big text.") = 11

_**TEXTRIGHT**
_*TEXTRIGHT(str; iarg)*
Returns last *iarg* characters of the *str* string.
Example:
_TEXTRIGHT("A big text"; 4) = "text"

_**TEXTWIDTH**
_*TEXTWIDTH(str)*
Returns the width of the *str* string considering all current text settings of the shape (styles, indents and margins, etc.). Normally, this function is used to make the *Text Box* the same width as the width of the longest string in the shape's text.
Example:
_TEXTWIDTH(TheText)

_**TIME**
_*TIME()*
Returns the time when the document was last time modified, in the "Hours:Minutes:Seconds" format.
Example:
_TIME() = "19:27:13"

_**VALTOTEXT**
_*VALTOTEXT(arg)*
Converts the *arg* number into a string and returns the string.
Example:
_VALTOTEXT(567.89) = "567.89"

_**VALTOTEXTMES**
_*VALTOTEXTMES(arg)*

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Converts the *arg* number in a string considering the current unit of measure.
Examples:
_VALTOTEXTMES(15) = "1/16"
_VALTOTEXTMES(1.5 in)+" in." = "1 1/2 in."

_**WORLDX**
_WORLDX(X;Y)
Converts the (X;Y) point from local coordinates to global coordinates. Returns the X coordinate for the resulting point.

_**WORLDY**
_WORLDY(X;Y)
Converts the (X;Y) point from local coordinates to global coordinates. Returns the Y coordinate for the resulting point.

_**XOR**
_XOR(arg1;arg2)
Returns the bitwise XOR.
_XOR(str1;str2)
Returns 1 - if only one string is not empty; 0 - if both strings are empty, or both are not empty.
_XOR(str;arg)
_XOR(arg;str)
Returns the *arg* number.
Examples:
_XOR(1;1) = 0
_XOR("Text1";"Text2") = 0
_XOR("Text"; 2) = 2

Chapter 9. OLE Objects

The Windows version of ConceptDraw is an OLE-compatible application (supports **Object Linking and Embedding**). This feature lets you use ConceptDraw drawings in other OLE-compatible software, as well as work with other applications' objects from within ConceptDraw.

OLE-compatibility means that you can combine objects created in different applications, such as pictures, audio and video files, etc., within a single document.

OLE Objects in ConceptDraw Documents

You can *link* data from other applications to your document. When you create a link to another application's object, your document stores only a reference to the location where its file resides (not the linked object itself). When you change the original data file, all the changes are reflected in your document.

To *modify* a linked object, call its *context menu* or use the **Edit** menu.

At the bottom of the menu, use the **Object <Application>** item. It includes a submenu of actions you can perform on the linked objects: **Edit** and **Open**.

Clicking any of these items launches the **<Application>** in which you can edit the linked object.

> *It is usually enough to double-click an OLE object to launch its editing application.*

You can *embed* objects created in other applications into your ConceptDraw document, and also use objects from ConceptDraw in other applications -

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for instance, illustrate your text documents with charts, diagrams and other drawings. All the embedded data is stored with the document, even if the original file exists.

To *modify* an embedded object, call its *context menu* or use the **Edit** menu. At the bottom of the menu, use the **Object <Application>** item. It includes a submenu of actions you can perform on the linked objects: **Edit** and **Open**. Choose any of these options to launch the **<Application>** where you can edit the embedded object.

> *It is usually enough to double-click an OLE object to launch its editing application.*

If there are other OLE-compatible applications on your system, you can create and insert a new OLE object into your document, and then edit such an object from within ConceptDraw.

To insert a new OLE object, perform the following steps:
1. From the **Insert** menu, select **Object**: the **Insert Object** dialog will appear.
2. Choose **Create New** to create a new object.
3. From the *Object Type* list, choose the needed type.
   If the needed file type is not found in the list, the corresponding application is probably not installed on your system.
4. If you need the object to be displayed as icon only, check **Display As Icon**.
5. Click **OK**.

A new object editing window will appear. In this window you can create a new object using the tools of the corresponding OLE-application.
To finish editing the object, click away from the object (if it is in the ConceptDraw window), or choose **File / Exit** (if the OLE-application was opened in a new window).

To *edit* an OLE object that already exists in your document, call its *context menu* or use the **Edit** menu.
At the bottom of the menu, use the **Object <Application>** item - its exact name varies with the type of the chosen object (for instance, for Microsoft Word objects it is called Document Object).
It includes a submenu of actions you can perform on the linked objects:
- **Edit** - to edit the OLE object inside ConceptDraw.
- **Open** - to open the OLE object in the application where it was created.

After you choose an item, the editing starts. To finish editing, click outside the object editing window (if it is within the ConceptDraw window), or choose **File / Exit** (if the corresponding OLE-application was opened in a new window).

ConceptDraw Objects in Other OLE-Compatible Applications

You can create ConceptDraw objects from within another OLE-compatible application and insert it into your document. For instance, you can insert a ConceptDraw drawing into a Word document.

To insert a ConceptDraw document into another OLE-compatible application, do the following:

1. In the OLE-compatible application, activate the document in which a ConceptDraw object should be inserted.
2. In the **Insert** menu, choose **Object**. The **Insert Object** dialog will appear.
3. Choose the **Create New** option.
4. From the list of the object types available, choose *ConceptDraw Document*.
5. If you need the document to be displayed as icon only, check the **Display As Icon** option.
6. Click **OK**.

You will start editing the new object in the ConceptDraw window. To get back to the primary application, choose **Exit** from the **File** menu.

To *modify* a ConceptDraw document within another OLE-compatible application, call the OLE-object's *context menu* or use the **Edit** menu.
In the menu, use the **ConceptDraw Document** item. It gives you the choice of two actions: **Edit** or **Open**. You can use either of them to turn the object editing mode on.
To finish editing, choose **Exit** from the **File** menu.

It is usually enough to double-click an OLE object to launch its editing software.

You can insert objects stored in ConceptDraw files into the documents in other OLE-compatible applications.

To do this, perform the following steps in the in the OLE-compatible application:

1. In the **Insert** menu, choose **Object**. The **Insert Object** dialog will appear.
2. Choose the **Create From File** option.

3. Click **Browse** and select the needed ConceptDraw file to insert in your document.
4. To *link* the selected file, check the **Link** option. The object in the file will be stored apart from the document, and all the changes made in the source file will be reflected in your document.
Otherwise (if the **Link** option is unchecked), the object will be *embedded* and stored with the document.
5. If you need the object to be displayed as icon only, check the **Display As Icon** option.
6. Click **OK**.

If you need to insert an object from an open ConceptDraw document into a document in another OLE-compatible application, perform the following steps:

1. Select the object.
2. Copy it onto the Clipboard - you can use the **Copy** command from the **Edit** or context menu, or the **Copy** tool.
3. In the target application, activate the document in which the object should be inserted.
4. From the **Edit** menu in the application, choose **Paste** or **Paste Special**.

> *If you select and copy several objects in ConceptDraw, they will be pasted into the application's document as a single object, though when you double-click to edit it as an OLE object, the components can be edited separately.*

Chapter 10. Customizing the Working Environment

ConceptDraw gives you flexibility in working with the documents: you can select and modify the global application settings (used by default and applied to every new document) and specify the custom settings for any particular document.

Application Preferences

Global program configuration can be set in the **Preferences** dialog. This dialog lets you select the default template and specify such settings as scale and units of measure, initialization paths for main files and Internet browser, set the document page properties and check the parameters for document view.

> *To call the dialog, select **Preferences** from the **Edit** menu (from the Application menu on the Macintosh).*

>   🪟 Ctrl+";"   🍎 Cmd+";"

The dialog contains several tabs which respond for various groups of parameters: **Default**, **Paths**, **View**, **Save**, **Advanced**.

✓ The **Default** tab contains settings applied to every new document.

✓ On the **Paths** tab you can specify paths to various components of the application: documents, libraries, templates, help system. Besides, here you can choose a Web browser and search engine to be used for searching the Internet.

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- ✓ The **View** tab controls the appearance of the applications, allows to choose a background color for the document window, and set other parameters of the user interface.

- ✓ On the **Save** tab you can configure the saving parameters: whether to save the document automatically, in which format to save documents (XML for ConceptDraw, ConceptDraw V or ConceptDraw 1.x) and other.

- ✓ The **Advanced** tab controls additional parameters, such as ConceptDraw Basic settings, the editor's font etc.

For more information about the **Preferences** dialog see **Dialogs - Modal Dialogs - *Preferences***.

Customizing the Toolbars

ConceptDraw has several *toolbar lines* in which the tools are grouped by their functions. The application lets you manipulate the toolbars to facilitate your work.

The toolbars can be docked to the *application menu bar* in the upper part of the screen, or placed in floating state anywhere in the screen area.

To ***move*** a toolbar, grab it by its window title or by the space between the icons, and drag it to the needed location.

ConceptDraw lets you set which toolbars should be visible on the screen, and show/hide the needed toolbar at any moment. For example, you may want to hide some rarely used toolbars for economic use of the screen space.

To ***show/hide*** a toolbar, you can use the **View / Toolbars** menu, or just call the *context menu* on any of the toolbars.
In the list of the toolbars, just check which toolbar should be displayed, or uncheck the toolbar which you want to hide.

The tools and operations from the hidden toolbars can be called easily from the *main menu*.
You can also use the *shortcuts* for switching between the tools or performing certain operations.

A toolbar can be resized by dragging its right bottom corner. The buttons will re-arrange automatically to adopt the new size.

In ConceptDraw V you can also remove or add buttons on toolbars.

Use the **Customize** dialog to configure toolbars (the menu **View / Toolbars / Customize**). Apart from toolbars, you can configure the menus, keyboard shortcuts and other parameters in this dialog.

For more information about the toolbars see the *Toolbars* section.

For more information about the **Customize** dialog see **Dialogs - Modal Dialogs -** *Customize*.

Customizing the Floating Dialogs

ConceptDraw V introduces *floating dialogs*, which help to speed up working with shapes. When you change a parameter in a floating dialog, the results are displayed immediately in the drawing, not after you close the dialog.
You can display or hide floating dialogs from the **View / Floating Dialogs** menu. You can dock, reposition and resize the dialogs. Also, you can organize several dialogs in a tabbed palette. To do this, drag a dialog with the mouse and drop it onto another dialog. ConceptDraw has the following floating dialogs:

- *Line* - controls line color, weight, style, the size and style of arrowheads.
- *Fill & Shadow* - sets the fill and shadow.
- *Protection* - allows to protect a shape's parameters against changing: width, height, position and other.
- *Behavior* - determines how a shape behaves when resized, when it's parent group is resized and more.
- *Click* - specifies the action, which is performed when a shape is double-clicked: open parameter table, open hyperlink, edit text and other.
- *Information* - here you can see the ID and SubID of a shape, specify its name or assign it to a layer.
- *Layers* - allows to work with the layers. For more information see **Document -** *Layers.*
- *Page Navigator* - allows to work with the pages of the document. For more information see **Document -** *Pages*.
- *Geometry* - here you can view and change the dimensions and position of a shape.

For more information about each of the dialogs see **Dialogs -** *Floating Dialogs*.

Working with Windows

ConceptDraw opens each document in a separate window. It is also possible to open *several windows* for working with the same document (e.g. if you need to see several pages simultaneously, or view the pages at different zoom levels).
To open a new window for the active document, select the **New Window** command from the **Window** menu.

To **close** the active window, you can
- a) click the respective button on the window headline;
- b) apply the **Close Window** command from the **Window** menu;
- c) or use the keyboard.

To quickly close all the windows together, select the **Close All** *command from the* **Window** *menu.*

The **Close** *command from the* **File** *menu can be used to close the active window together with all the other windows in which the same document is displayed.*

Ctrl+F4   Cmd+W

To **switch** between the open windows, you can use the **Window** menu. It holds the list of open windows and the documents displayed in them. The tick marks the active window. To switch to another window, just select it in the list. If the number of open windows is more than 9, and the needed window is not displayed in the **Window** menu list, click "More Windows". A dialog will appear, which holds the complete list of all open windows (the active one is shown selected). You can select the needed window in the list and click **OK** to make it active.

ConceptDraw lets you switch between all the open windows quickly, activating them one after another.

To cycle through open windows, use the following keys:

Ctrl+F6, Ctrl+Tab

or apply the **Next** command from the *window's menu* (see the icon to the left of the **File** menu).

Note: You can also use the **Window** menu commands to **arrange** the open windows automatically:

Cascade - for arranging the windows so that they overlap partly, and each window can be activated easily;

Tile Vertically and **Tile Horizontally** - for arranging the windows vertically or horizontally as non-overlapping tiles.

On the Macintosh each window has a *number* (e.g. if you open 5 windows, they will get numbers from 1 to 5). You can activate the window by pressing its number key together with the **Cmd** key.

Workspace Files

ConceptDraw lets you save the entire workspace if you need to work with the same set of documents and libraries often.

A **workspace** file stores information about the sizes and arrangement of all windows open in the application, and the list of open documents and libraries. This allows you to customize your working environment only once and use it repeatedly.

Workspace files have the **.cdw** extension.

Saving a workspace is especially helpful in several cases:

✓ When you often work with the same set of documents and libraries.

✓ When you work with documents displayed in a specific way (this may concern magnification, tables of shape parameters, the active pages of documents, etc.) Saving a workspace lets you easily reproduce the suitable arrangement of windows.

To *open* a workspace file:
1. On the **File** menu, click **Open**.
2. Select the workspace file you want to open.
3. Click **Open**.

To *save* the current state of the application in a workspace file:
1. If necessary, save all the open documents and libraries.
2. Select **Save Workspace** from the **File** menu. The file dialog comes up.
3. In the dialog, navigate to the desired folder where the new file will be located.
4. Enter the workspace filename in the corresponding field.
5. Click **Save**.

Ctrl+Alt+S   Cmd+Opt+S
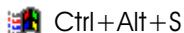
All information about the currently opened documents and libraries and their look and on-screen arrangement will be saved in the workspace file.

When moving a workspace file from one computer to another, keep in mind that a workspace file only stores references to the documents and libraries. So, you ought to move all the necessary documents and library files along with the workspace. Make sure that the workspace file and the required components keep their relative positions with respect to one another. Alternatively, you can place the documents and library files in the same folder with the workspace file.

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Chapter 11. ConceptDraw Basic

Conceptual Information

ConceptDraw Basic is a high-level scripting language. Starting from version 5.0 ConceptDraw introduces support for its proprietary built-in scripting language - ConceptDraw Basic. This adds the following advantages:

- Extends the functionality of ConceptDraw according to the needs of the users.
- Allows to process and visualize external data in ConceptDraw.
- Makes possible integration of third-party application with ConceptDraw.
- Enables a wide range of cross-platform solutions, based on ConceptDraw.

ConceptDraw Basic technology (unlike Automation on Windows, AppleScript on the Macintosh) is fully cross-platform, working in the ConceptDraw environment. The built-in scripting language realizes the specification of the modern high-level scripting language combined with support for ConceptDraw objects and database access objects. The supported list of ConceptDraw objects provides virtually unlimited control over documents, application windows, libraries, pages and shapes.

ConceptDraw Basic has the power and simplicity of modern realizations of the BASIC language. The language core of ConceptDraw Basic is almost fully compatible with such popular realizations of BASIC, such as Visual Basic, REALbasic.

With the introduction of ConceptDraw Basic technology ConceptDraw becomes one of the most powerful platforms for your custom visual solutions.

Application, Document, Page and Shape Level Scripts

ConceptDraw supports four execution levels of the ConceptDraw Basic scripting language: Application level, Document level, Page level, Shape level. This means that for any ConceptDraw document or it's page or any shape in the document you can assign a program written in ConceptDraw Basic. Also one can create a program on the entire application level. Any execution level contains at least a built-in module with program code in ConceptDraw Basic.

Execution levels of ConceptDraw Basic are organized in a hierarchy (see the figure below), which reflects how global variables and procedures are inherited from higher levels to the lower ones.
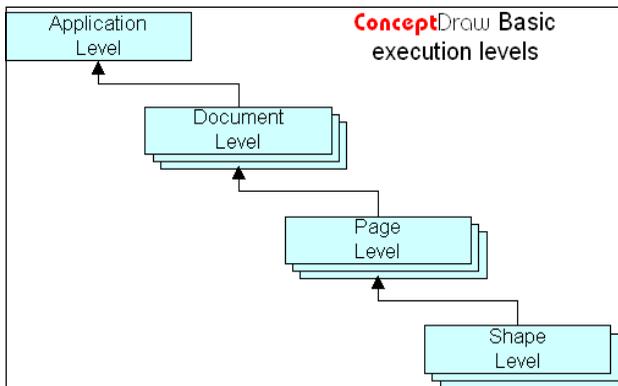
This means, that a script, created for any shape (on the shape level) also shows all global variables and procedures that belong to higher levels: Page, Document and Application. In its turn, a page-level script shows all global variables and procedures of the Document and Application levels. And finally, a document-level script shows global variables and procedures of the Application level. Thus, the hierarchy of execution levels determines the functional purpose of ConceptDraw Basic scripts at different levels. *Application levels script* is intended for re-assigning the behavior of the entire application, and also for defining global variables and procedures, which may be often used in various documents. For instance, with the help of interface configuration and an application-level script in ConceptDraw Basic it's possible to turn ConceptDraw into a specialized application for computer network designers. One should just write the commonly used routines (for instance, calculation of the cost of the components) as application-level scripts and run them using the user-defined menu. Then the user will be able to automatically calculate the cost of the components for any network diagram.

Document level script is intended for document-specific calculations and also for defining global variables and procedures, used in the code of different pages or shapes of the document. For instance, a document-level script can be used to define specific procedures for creating templates. This may look like a wizard, that asks questions specific to a certain document type. Based on the user input, the script can determine the number and size of pages, create these pages and place necessary shapes on them.

Page level script is intended for calculations and actions, specific to a certain page of the document, as well as for defining global variables and procedures, used in the code of the shapes on that page. Scripts at this level may be used together with document-level scripts when creating templates. Creating graphic objects (shapes) is slightly easier at the page level, than at the document level.

Shape level script is intended for calculations, specific to certain graphic object (shape). For instance, at allows to program an element of a bar chart in such a way, that in can reflect values from a data base or an external file. Library shapes can also have scripts.

How Scripts Can Be Used to Create Wizards

Wizards, contained in some of the templates, supplied with ConceptDraw, represent a typical example of what ConceptDraw Basic scripts can be used for. Such wizards normally consist of one or more dialogs, which come up when you create a new document, based on the corresponding template.

Templates or documents, which have built-in wizards, include ConceptDraw Basic scripts at the level of the document, page or even shapes, located on the pages of the document, or in libraries, opened together with the template. Often the scripts are used to get data from the wizards into the ConceptDraw document. The wizards themselves are stored in external modules (dynamic libraries, or DLLs) on the Windows, or in shared libraries on the Macintosh. These libraries can be created in any environment (C, C++, Pascal, Objective C, etc.) which support building such libraries. The libraries contain a row of interface-procedures, called by the scripting program in ConceptDraw Basic, and finally gets the necessary data, which are integrated into ConceptDraw with the help of ConceptDraw Access Objects. For instance, when you create a new document based on the "Database Structure Wizard" template, a document-level script, built in the template is launched, which runs the "Reverse Engineering" wizard. This script calls a procedure from the CDWizards library, which represents a dialog, that asks the user the parameters for finding the database source and necessary parameters for extracting the database structure. Then the scripts asks the results of the wizard from the CDWizards library, gets the necessary information and uses it to base the database structures using the pre-drawn library shapes.

For more information about constructions, built-in functions and objects of the scripting language, and detailed description of the principles and organization of ConceptDraw Basic see "ConceptDraw Basic Reference".

Working with the Basic Editor in ConceptDraw V

The Professional edition of ConceptDraw V contains a built-in editor for editing scripts written in ConceptDraw Basic. You can call the editor from the menus *"Tools / ConceptDraw Basic / Application Script"*, *"Tools / ConceptDraw Basic / Document Script"*, *"Tools / ConceptDraw Basic / Page Script"*, *"Tools / ConceptDraw Basic / Shape Script"*, depending on the execution level of the script you need to edit. Each of the menus contains the *"Edit..."* and *"Remove"* items. The *"Edit..."* item opens the Basic editor window with the script of the corresponding execution level. The *"Remove"* item removes the script of the chosen execution level.

The built-in CDBasic editor is a regular text editor with such editing functions as Copy, Cut, Paste, Find/Replace etc. The editor has its own main and context menus. The full list of menu commands of the CDBasic editor can be found in the following sections: "*Basic Editor Menu*", "*Basic Editor Context Menu*", "*Basic Output Context Menu*".

Editing External Modules

The editor allows to edit scripts of both built-in and external modules. The script texts are stored in the UTF-8 encoding. In fact, you can use any editor, supporting the UTF-8 encoding, to edit ConceptDraw Basic scripts. External modules can be connected by using the **#Include** statement. The main and context menu contain commands for working with external modules. So, the *"File / Include Source..."* command calls the Open dialog and inserts the **#Include** statement with the filename of the external module, chosen in this dialog. Such external module can be opened both from the *"File / Open Script..."* menu and the *"File / Open Source"* menu, if the insertion point is located in the line with the **#Include** statement. The *"File / Exclude Source"* command removes the **#Include** statement from the line with insertion point.

Compilation and Execution of Scripts

By choosing the *"Build / Compile"* command you can compile the source of the script to check it for syntax errors. Or you can run the program by using the *"Build / Run"* command. The source code of the script will be

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compiled, and if there are no errors, executed. If a script is resident or being executed, you can stop it by using the *"Build / Stop"* command.

You can also use the "*CD Basic*" toolbar to run and stop scripts. It contains three buttons; the *"Run"* and *"Stop"* do the same as the corresponding menu commands, and the "*Pause*" button suspends executing script for a while, showing a dialog with the corresponding message. On closing the dialog, execution of the script is resumed.

A script can be executed automatically when an object, containing the script is loaded. That means that an application-level script will run when you launch the application. When you load a document or created a document from a template, the document level script is launched automatically. Then, if the document-level script remains resident, the scripts at all page levels are executed subsequently, starting from the first page. Once a page-level program has been executed, and provided it remains resident (it wasn't stopped by the **End** statement), scripts of the shapes on the page are launched. A shape-level script is also started automatically, once the script-containing object has been inserted into the document from a library or duplicated.

To enable/disable automatic launching of scripts, use the corresponding flag in the *application preferences*, which are saved with the application.

For detailed description of the principles of ConceptDraw Basic see "ConceptDraw Basic Reference".

CDBasic Output Window

The *"CDBasic Output"* window is used by the program to display errors and warning and debug messages displayed with the **Trace** statement.

This service window can be enabled/disabled from the *"Build / CDBasic Output Window"* menu.

The CDBasic compiler displays service messages in the *"CDBasic Output"* window, and if any errors are found in the script during compiling, they are displayed as well. Normally an error message includes the error number, a short description and the module and line number, where the error occurred. If you double-click on such message, the editor opens the required module and places the insertion point into the line where the error was found.

Going to the Specified Line of a Script

Sometimes when you edit a script you may need to go to a certain line of the code. For instance, when you get a run-time error, it may include the number of the line in the code, where the error occurred. You can navigate to the desired line in the editor window, by using the *"Line Number"* dialog, called from the *"Edit / Go To Line..."* menu of the editor.

Chapter 12. Dialogs

Dialogs are the main means of communication between the program and the user. They are used to set various components and properties of the program. The dialogs also provide information. ConceptDraw has two types of dialogs: *Modal Dialogs*, *Floating Dialogs*

Modal Dialogs

These dialogs are mostly called from the menus, or by using the keyboard shortcuts. While this dialog is open, you can't work with other dialogs or tools. As a rule, modal dialogs have several standard buttons:

OK - closes the dialog and applies the changes.

Cancel - closes the dialog without applying the changes.

Apply - applies the changes without closing the dialog.

Help (?) - displays context help.

The settings are not applied until you click the *OK* or *Apply* buttons.

"Template Gallery" Dialog

This dialog helps you choose a template to base a new document on.

> *To call the dialog, select **Template Gallery...** from the **File** menu or the keyboard.*

Ctrl+Alt+N   Cmd+Opt+N

Categories - lets you choose a topic of the document. Each topic contains a group of templates with preview pictures. When you select a template, you can see its brief description below. To create a new document from a selected template, click OK or double-click the template's preview picture.

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Template Gallery in Mac OS X.
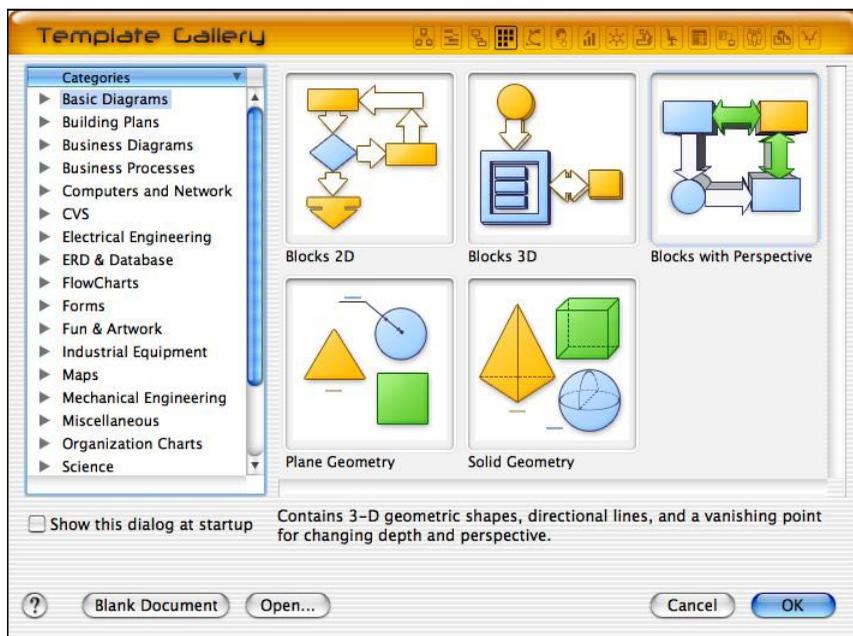
Show this dialog at startup - specifies whether this dialog will be displayed when you launch the application. You can also change this setting in the **Preferences** dialog.

Blank Document - creates a blank document based on default settings (see the **Default** tab of the **Preferences** dialog for details).

Open - closes this dialog and calls the **Open** dialog where you can choose an existing file to open.

"Document Properties" Dialog

This dialog is used to set the parameters of the current document.

To call it choose **Document Properties...** from the **File** menu**.**

The dialog contains several tabs, which control various groups of settings:

> *General* - contains information that describes the document
> *Page* - sets the size and orientation of the document pages
> *Settings* - sets the scale, units of measure, etc.
> *Printing* - contains print settings
> *Preview* - sets document preview properties
> *Advanced* - contains settings that control access, export to HTML, the behavior of connectors.

The *General* tab in Windows.
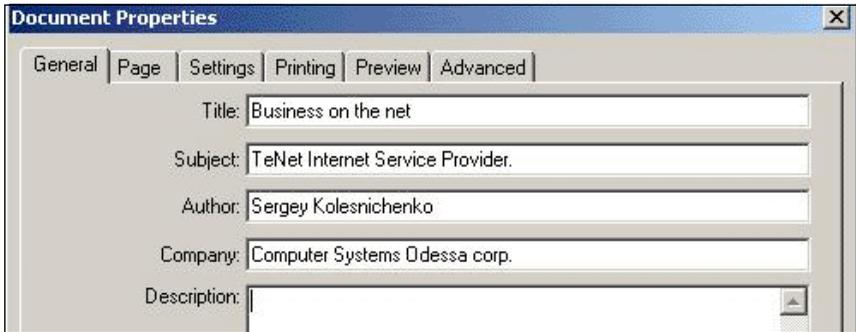
Title - contains the title of the document
Subject - contains the subject of the document
Author - contains the name of the author
Company - contains the name of the company
Description - a detailed description of the document

The *Page* tab in Mac OS X.
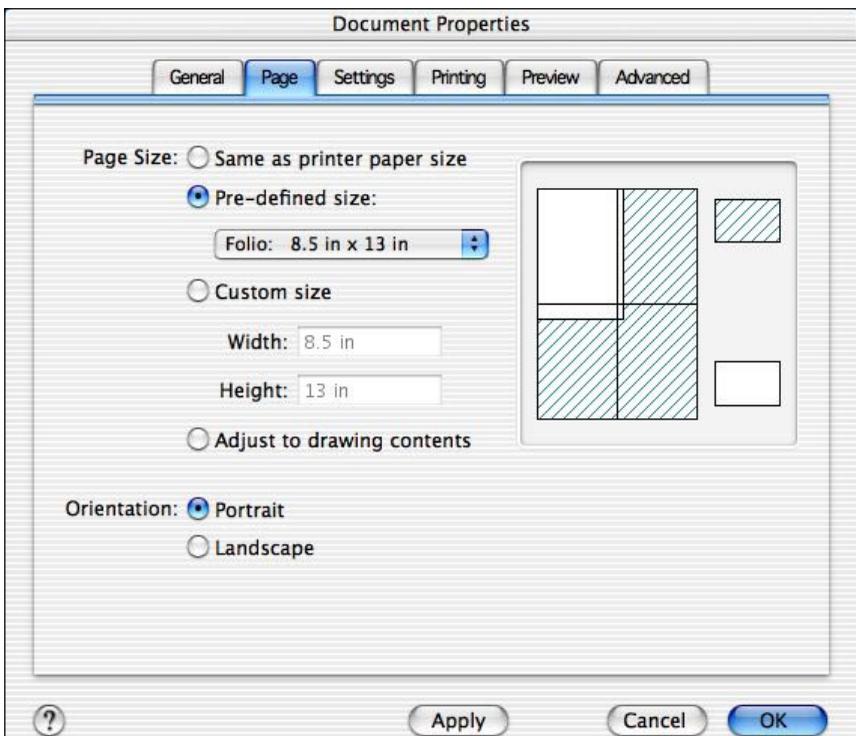
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The left part of the tab contains the settings. The right part has the preview area, where you can see the results of the changes you apply. The document page is represented by the white rectangle, the printer page is represented by the shaded rectangle. The size and orientation of the printer page are taken from the current print settings.

The *Page Size* setting allows to choose the size of the document page. The following options are available:

Same as printer paper size - the document page has the same size as the printer page.

Pre-defined size - allows to choose one of the pre-defined sizes from the drop-down list.

Custom size - lets you set a custom page size:

Width - specifies the page width, *Height* - specifies the page height.
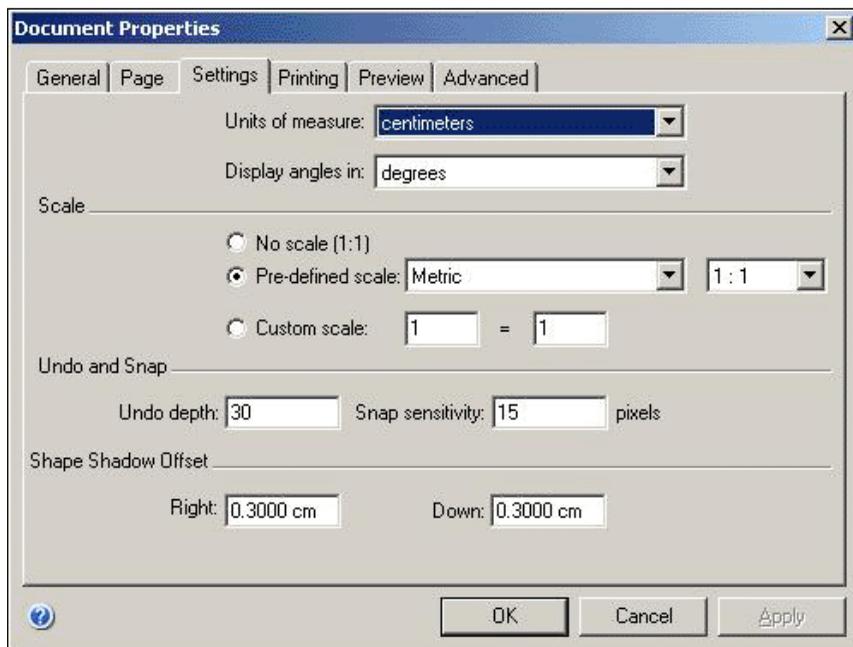
Adjust to drawing contents - the page size is set enough to fit all shapes in the drawing. If the document contains several pages, the biggest value is used.

The *Orientation* setting specifies the orientation of the document page:

Portrait - the page is taller than it's wide.

Landscape - the page is wider than it's tall.

The *Settings* tab in Windows.

Units of measure - allows to choose the unit of measure from the drop-down list.

Display angles in - sets whether to display the angles in degrees or radians. The *Scale* setting determines the scale of the document. The following options are available:

No scale (1:1) - the 1:1 scale.

Pre-defined scale - allows to choose a scale from the list. The scale is set with the help of two drop-down lists. The first one allows to choose the type of the drawing: Metric, Civil Engineering, Mechanical Engineering, Architectural.

Depending on the chosen option you can choose a pre-defined scale in the second drop-down list. If the *Civil Engineering* or *Architectural* options are chosen, non-metric (imperial) units of measure are set automatically in the *Units of measure* field. You can change the units of measure manually if needed.

Custom scale - sets a user-defined scale. You can use different units of measure by specifying the appropriate suffix after the value (for example, 1 ft = 1 in).

The *Undo and Snap* section controls the Undo/Redo and Snap settings. *Undo depth* - specifies the number of consecutive actions you can undo. The default value is 30. Making it much higher takes a lot of memory and can slow down the program.

Snap sensitivity - sets the distance from which snapping and gluing are activated. This distance is set in pixels and does not depend on the scale or magnification. The default value is 15 pixels.

Shape Shadow Offset - indicates the shadow offset for the shapes with shadow:

Right - the distance the shadow is offset to the right,

Down - the distance the shadow is offset down.

The *Printing* tab in Mac OS X.

The left part of the tab contains the settings. The right part has the preview area, where you can see the results of the changes you apply. The document page is represented by the white rectangle, the printer page is represented by the shaded rectangle. The size and orientation of the printer page are taken from the current print settings.

The *Print zoom* setting lets you specify at which size the document page will be printed:

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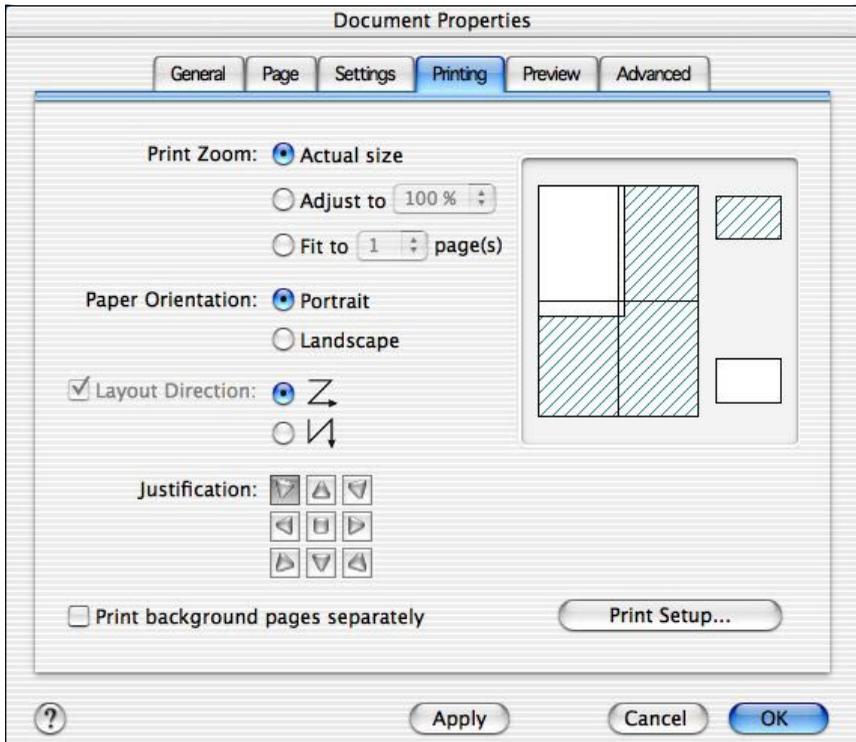
Actual Size - the document will be printed in its normal size.

Adjust to - the document will be zoomed in or out when printed. You can choose a value from the list or input it manually. 100% corresponds to the actual size. If the zoom level is greater than 100%, the document will be increased, if less - reduced.

Fit to ... page(s) - lets you fit the document page on the given number of the printer pages (the zoom level will be chosen automatically).

The *Paper Orientation* setting controls the printer page orientation:

Portrait - the page is taller than it's wide.

Landscape - the page is wider than it's tall.

> *This setting doesn't affect the orientation of the document page (see the Page tab).*

The *Layout Direction* setting specifies how the document is tiled across paper sheets (if its page is larger than one print page). It can be tiled either down and then over, or over and then down. If the document page is smaller than the print page, this parameter is ignored.

The *Justification* setting controls the position of the document on the print page (if the document page is smaller than the print page). You can use the 9 arrows to specify the position. The changes will be displayed in the preview area of the tab.

The *Print background pages separately* sets whether the background pages should be printed as regular document pages.

The *Print Page Setup* button calls the system dialog where print settings can be set (see the **Page Setup** dialog).

The *Preview* tab in Windows.
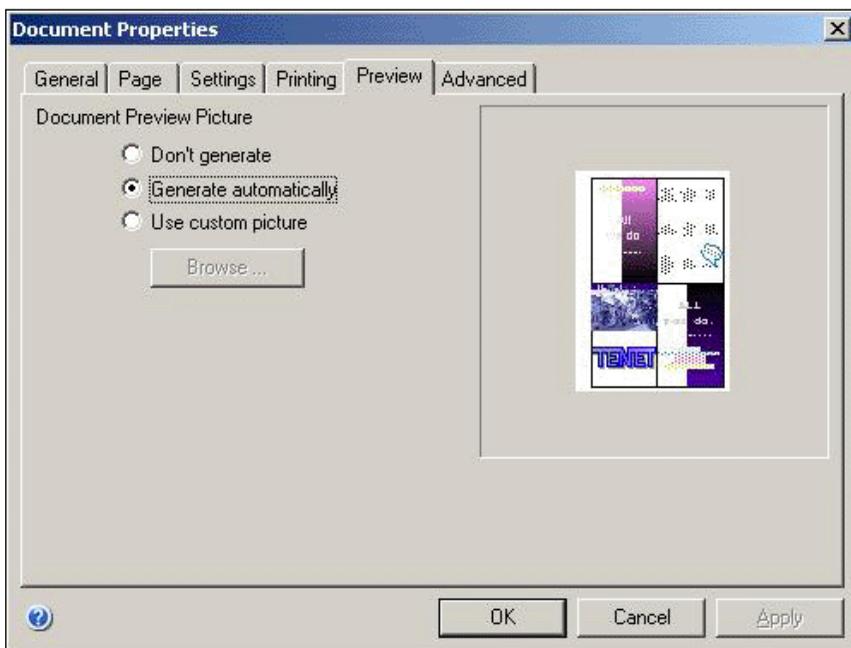
The left part of the tab contains the settings. The right part has the preview area, where you can see the results of the changes you apply.

The *Document Preview Picture* setting specifies how the document preview is formed:

> *Don't generate* - preview is not generated. That means that you can't preview the contents of the document in the file open dialog.
> *Generate automatically* - the program uses the first page of the document to generate the preview.

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Use custom pictures - the user can specify a custom picture as preview for the document. You can use the *Browse* button to choose the picture.

The *Advanced* tab in Mac OC X.
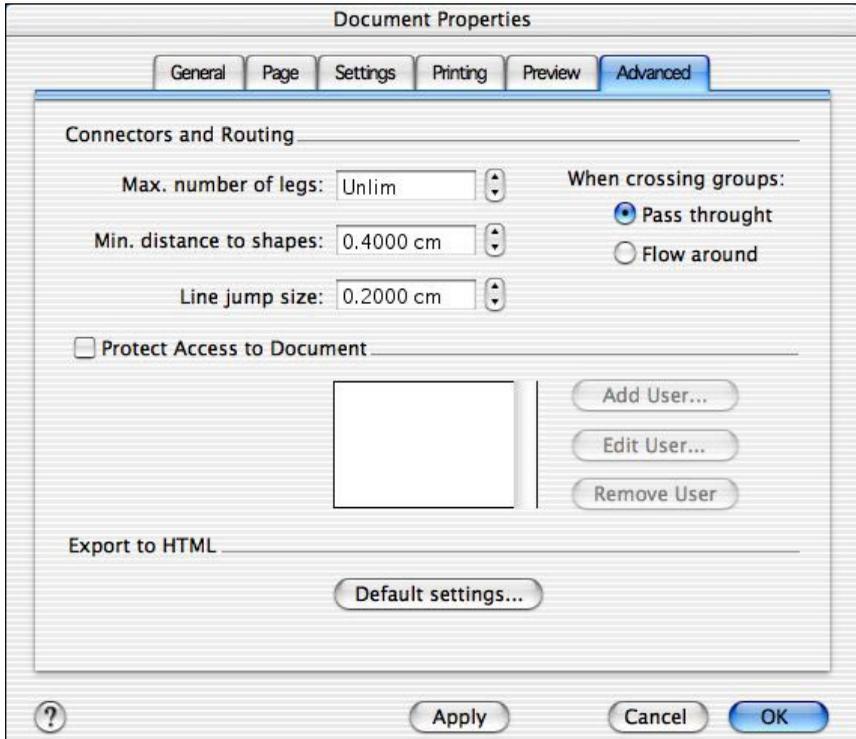
The *Connectors and Routing* section contains settings that describe the behavior of smart connectors.

   Max. numbers of legs - sets the maximum number of connector's legs. By default the number of legs is not limited.
   Min. distance to shape - sets the minimum distance the smart connector keeps from the shapes on its way.
   Line jump size - indicates the size of connector crossings.

> *This setting only determines the size, not the type and style of the crossing (see the* **Smart Connector** *section for details).*

The *When crossing groups* setting controls how the connector behaves when it crosses a group:

Pass through - passes through the group, flowing around the shapes inside.

Flow around - flows around the entire group as if it were a single shape.

The *Protect Access to Document* area lets you limit access to the document. The program will ask for a user name and password on an attempt to open the document. Only authorized users will be able to view and edit the document.

Add User - adds a new user to the list,

Edit User - allows to change the user name and password,

Remove User - deletes user from the list.

> *This feature is supported only for the documents in the ConceptDraw V format. It's not supported for the documents saved in the ConceptDraw 1.x format.*

The *Export to HTML* section lets specify the default settings for HTML export.

Default Settings... calls the dialog where HTML export settings can be configured. These settings will be used by default. You can change the export settings for each particular document when exporting it to HTML (see the **Exporting a Document to HTML Files** section).

"Preferences" Dialog

This dialog controls the application settings.

To call the dialog, choose **Preferences** from the **Edit** menu (the *application menu* on the Mac).

The dialog contains several tabs, where various settings are grouped:

Default - contains the default settings for new documents,

Paths - specifies paths to various components of the application,

View - determines the appearance of some components of the application,

Save - contains the saving parameters of the documents,

Advanced - describes scripting and ConceptDraw Basic Editor settings.

The *Default* tab in Windows.

This tab describes the parameters of the documents, created with the **New** command. You can choose whether to base a new document on the default settings or on a default template file:

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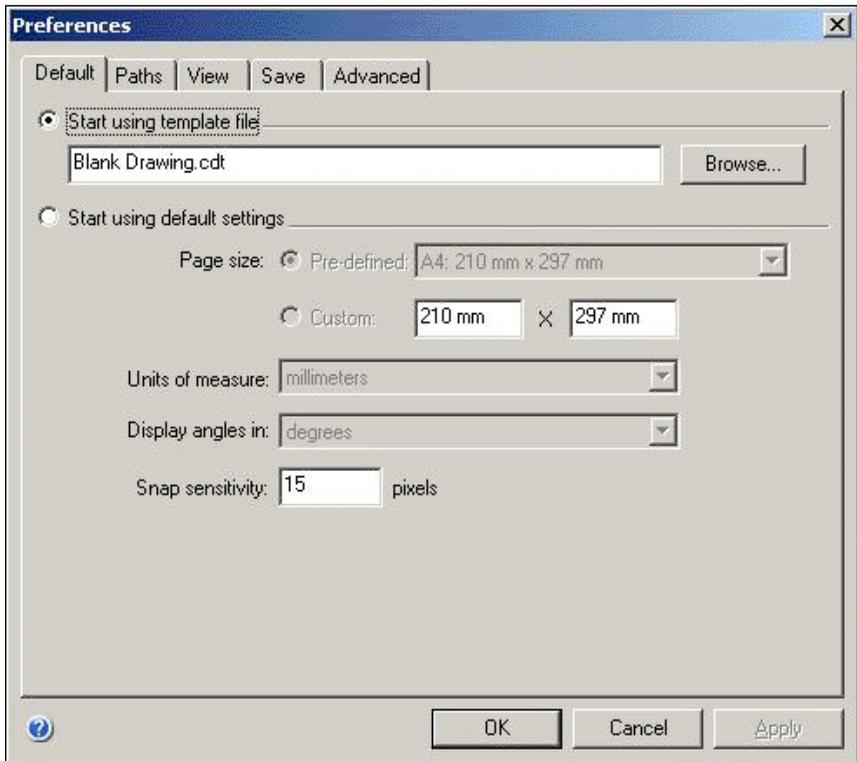
Start using template file - allows to choose a template file, on which every new document will be based. Use the Browse button to choose the file, or specify the path in the edit field.

Start using default settings - indicates, that the document is created with the default parameters, listed below:

> The *Page size* setting determines the size of the document page. You can choose between:
>
> *Pre-defined* - allows to select a size from the list.
>
> *Custom* - specified by the user.

Units of measure - choose the units of measure from the list,

Display angles in - choose whether to display angles in degrees or in radians.

Snap sensitivity - sets the distance at which snapping and gluing are activated. This distance is set in pixels and does not depend on the scale or magnification. The default value is 15 pixels.

The *Paths* tab in Mac OS X.
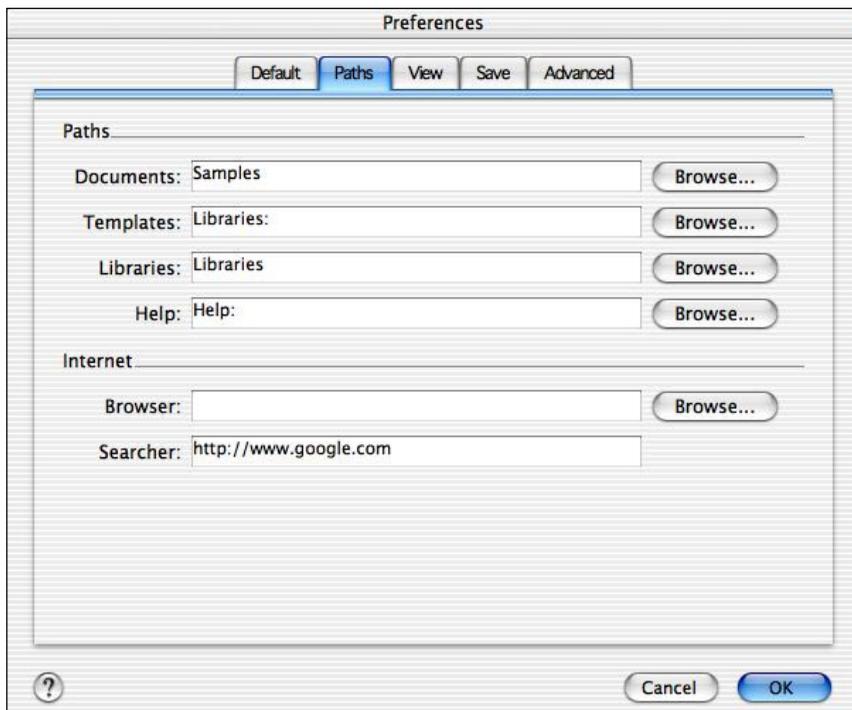
The *Paths* section describes paths to various components of ConceptDraw V. You can type the paths manually or set by using the *Browse* button.

> *Documents* - path to documents, by default points to the folder with samples,
>
> *Templates* - path to template files (normally is the same as the path to libraries),
>
> *Libraries* - path to library files,
>
> *Help* - path to the help files.

The *Internet* section contains the following fields:

> *Browser* - sets the path to the Internet browser. If this path is not set, the program will use the default system browser.
>
> *Searcher* - allows to choose an Internet search engine used to search the Internet. By default, www.google.com is offered.

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The *View* tab in Windows.
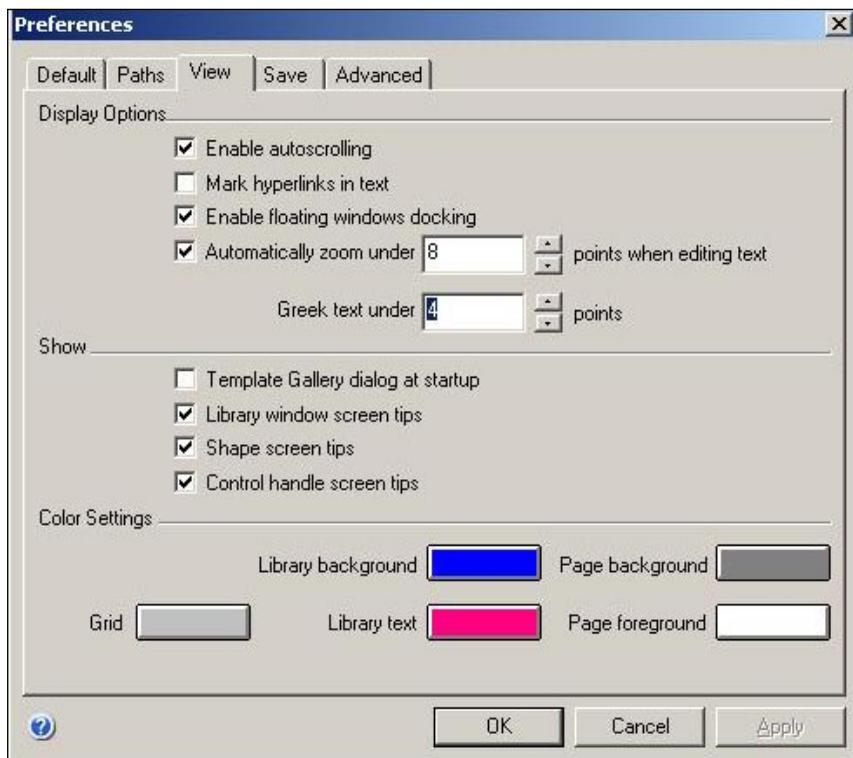
The *Display Options* section determines how text and hyperlinks are displayed in the program:

> *Enable autoscrolling* - if enabled, the document will be scrolled when you position the mouse pointer over an edge of the window.
> *Mark hyperlinks in text* - turns on the hyperlink autoparsing mode.
> *Automatically zoom under ... points when editing text* - lets you adjust the text editing functionality. You can enable the autozoom in the document if the text looks too small, and set the minimum font size acceptable for text editing mode (setting the font size best viewed).
> *Greek text under ... points* - when visible font size is less than specified displays shaded blocks instead of characters.

The *Show* section contains settings for screen tips and **Template Gallery** dialog.

> *Template Gallery dialog at startup* - if enabled, this dialog will be displayed every time you launch ConceptDraw.
> *Library window screen tips* - specifies whether to display screen tips when the mouse pointer is paused over a library shape.

Shape screen tips - specifies whether to display screen tips for shapes in a document (see the description of the **Information** floating dialog and the **Information** tab of the **Shape Properties** dialog).

Control handle screen tips - specifies whether to display screen tips for control handles.

The *Color Settings* section allows you to choose color of the library window and some other elements of ConceptDraw. The current color is displayed on the button besides the item. To change the color, click on the button and choose a new color from the Color dialog.

Grid - sets the color of the grid lines.

Library background - sets the library window background color. This option is present in the Windows version only. In the Macintosh version this color is determined by the system color scheme.

Library text - sets the color of the shape names in the library window.

Page background - sets the background color of the document window.

Page foreground - sets the page color in the document window.

The *Save* tab in Mac OS X.

ConceptDraw
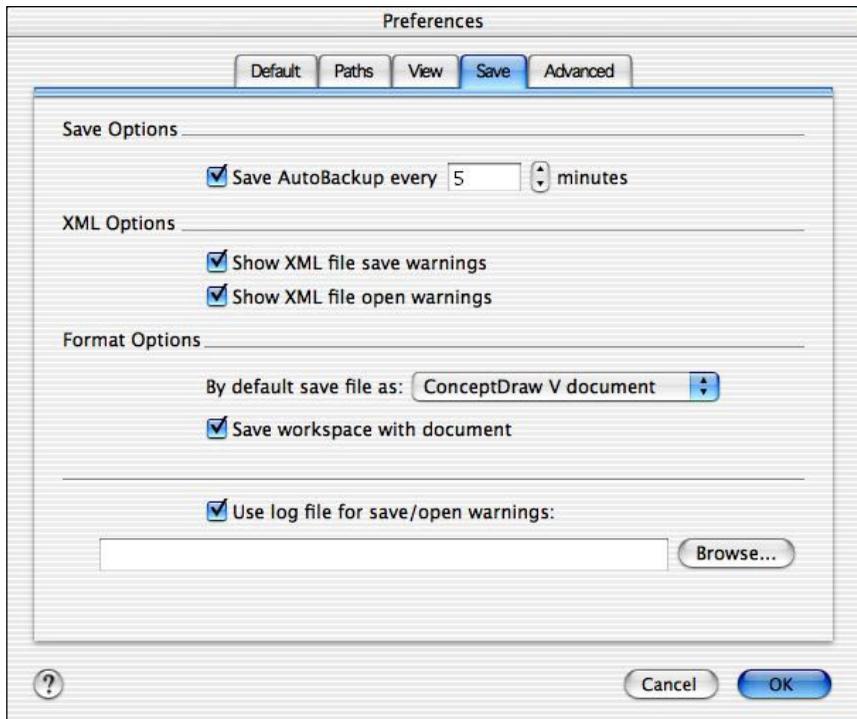
The *Save Options* section describes the auto-save parameters of the application:

> *Save AutoBackup every ... minutes* - saves a backup copy of the document automatically after the specified time interval.

> > *If you're working with large multi-page documents, don't specify a very small interval as it may slow down working.*

The *XML Options* section describes settings for working with documents in the XML for ConceptDraw format:

> *Show XML file save warnings* - sets whether to display warnings when saving a document in the XML for ConceptDraw format.
> *Show XML file open warnings* - sets whether to display warnings when opening a document in the XML for ConceptDraw format.
> *Use log file for save/open warnings* - allows to specify a log file to which warnings will be written. Use the *Browse* button to set a path to the file.

The *Format Options* section contains the parameters that set the default format of the document.

> *By default save file as* - sets the format in which new documents will be saved. The following options are available: ConceptDraw 1.x document, ConceptDraw V document, XML for ConceptDraw.

> > *The ConceptDraw 1.x document format is used to preserve compatibility with previous versions of ConceptDraw. When you save a document to this format you may lose some data if it's not supported in the earlier versions (for instance, scripts, corner rounding, some text attributes). You should only save documents in this format if you plan to use them in ConceptDraw version 1.x.*

> *Save workspace with document* - if this parameter is enabled, the document stores the arrangement of open windows, libraries, etc. This arrangement is restored when you open the document.

The *Advanced* tab in Windows.
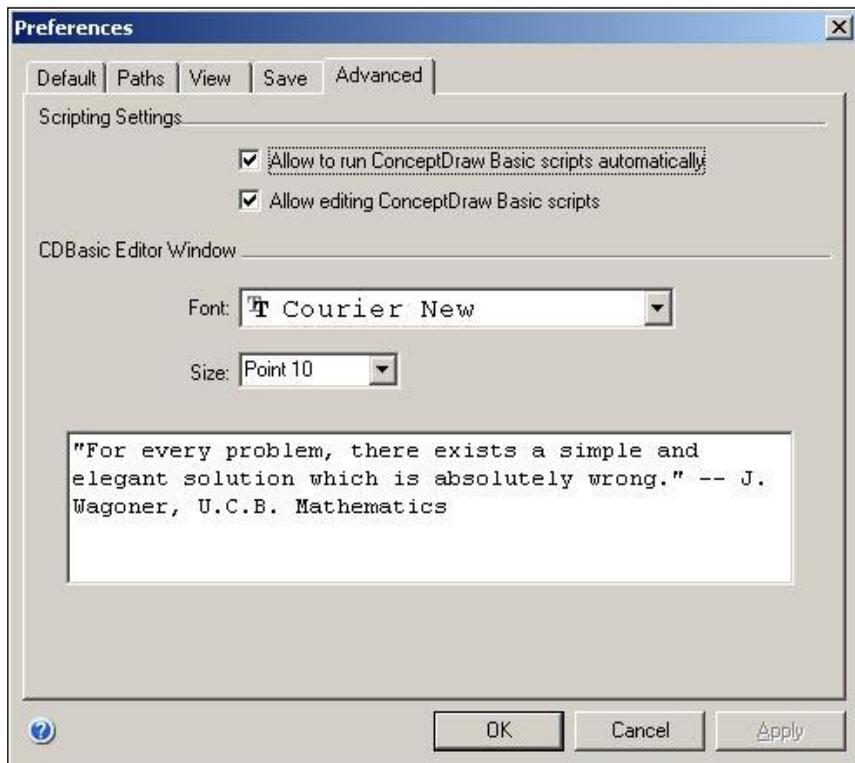
The *Scripting Settings* section sets how ConceptDraw Basic scripts will be treated by ConceptDraw:

> *Allow to run ConceptDraw Basic scripts automatically* - allows the program to run scripts automatically,
> *Allow editing ConceptDraw Basic scripts* - allows to edit scripts.

The *CDBasic Editor Window* specifies how the CDBasic Editor window looks. You can choose the font and font size, and preview them in the area below:

> *Font* - select a font from the list,
> *Size* - select a font size from the list.

ConceptDraw

"Shape Properties" Dialog

This dialog is used to modify properties of a shape.

> *You can call this dialog from the **Format / Shape Properties** menu, from the context menu or by using the keyboard.*

Ctrl+Shift+C   Cmd+Shift+C

The dialog contains the following tabs:

Line - describes the line attributes of a shape, such as line color, pattern, weight, type and size of line ends, corner rounding.
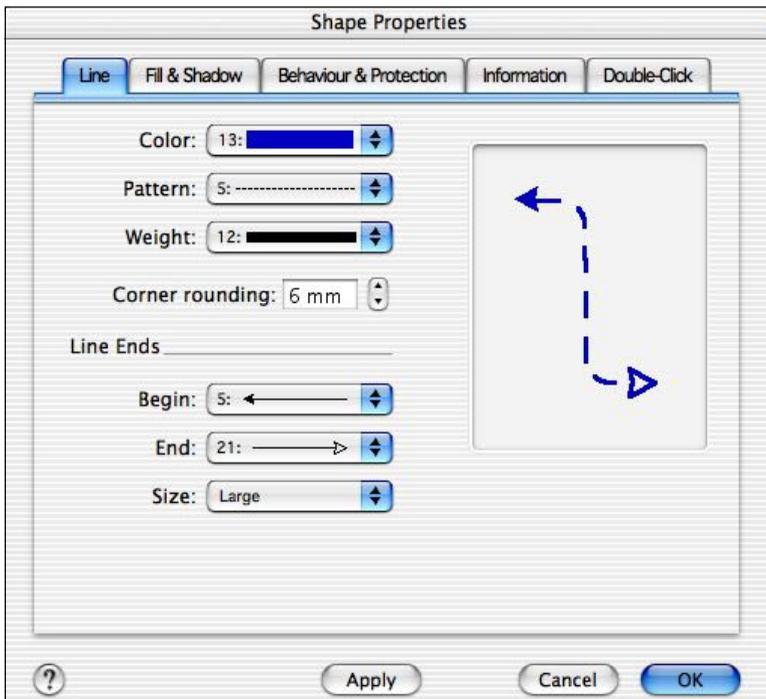
Fill - describes the fill and shadow attributes of shapes.

Behavior & Protection - determines how the shape interacts with other shapes, allows to protect some parameters from changing.

Information - contains basic information about the selected shape.

Double-Click - allows to assign an action that is performed when the shape is double-clicked.

The *Line* tab in Mac OS X.

If there are no shapes selected, the tab displays the settings that will be applied to new shapes. If there are shapes selected, it will display the attributes of the selected shapes. In the right section of the tab you can preview how the line will look with the specified settings.

Color - allows to choose a line color from the list. The color scheme is indicated to the left from the color - the index in the color palette, **RGB** or **CMYK**. You can choose the main 32 colors from the list; for more colors choose *Custom* at the bottom of the list. The **Color** dialog will come up where you can select the needed color.

Pattern - sets the line pattern (solid or dotted). The index may be in the 0 - 15 range. The 0 value means the line is not displayed (*No Line*).

Weight - sets the line weight. There are 10 pre-defined values in the list: No Line, 0, 1, 4, 8, 12, 16, 20, 24, 28. The line weight is specified in *units*. The last item in the list, Custom, is used to call the **Custom Line Weight** dialog, where you can set any other line weight. The 0 value means that the line will always look as if it had the 1 weight, regardless of the zoom level.

Corner Rounding - sets the radius used for corner rounding.

The *Line Ends* specifies the parameters of the line ends.

> *Begin* - allows to choose an arrowhead for the beginning of the line. You can choose an arrowhead within the 1 - 60 range. The *No Arrows* item denotes no arrowhead.
> *End* - allows to choose an arrowhead for the end of the line. You can choose an arrowhead within the 1 - 60 range. The *No Arrows* item denotes no arrowhead.
> *Size* - sets the arrowhead size. The following sizes are offered: Tiny, Small, Medium, Large, Huge.

The *Fill* tab in Windows.

If there are no shapes selected, the tab displays the settings that will be applied to new shapes. If there are shapes selected, it will display the attributes of the selected shapes. In the right section of the tab you can preview how the shape will look with the specified settings.

The *Fill* section contains the fill attributes of the shape.

> *Color* - sets the fill color. The color scheme is indicated to the left from the color - the index in the color palette, **RGB** or **CMYK**. You can choose the main 32 colors from the list; for more colors choose *Custom* at the bottom of the list. The **Color** dialog will come up where you can select the needed color.

*Concept*Draw
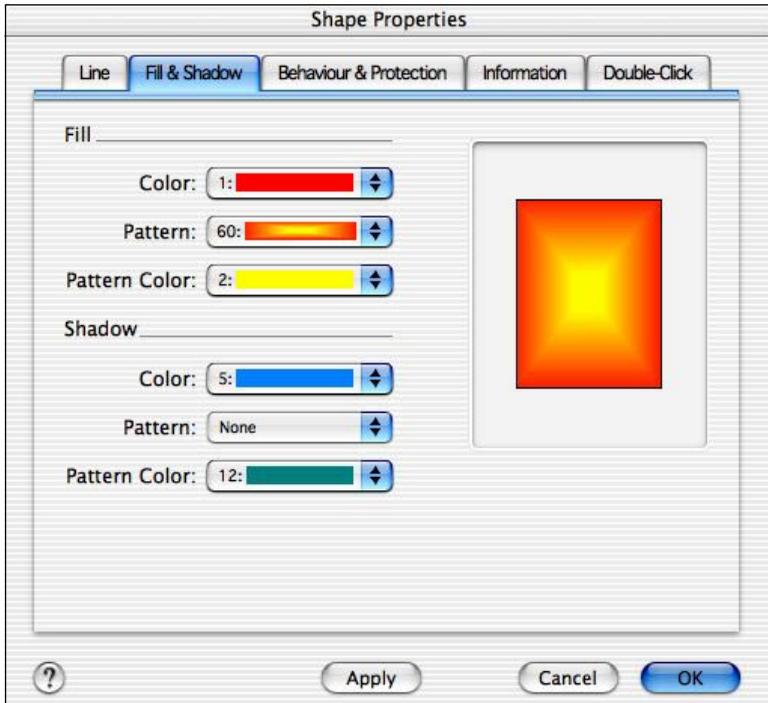
Pattern - sets the fill pattern. The index may be in the 0 to 38 and 50 to 69 range. The 0 value means the shape is not filled, the 1 value indicates a plain fill, values from 2 to 38 denote various fill patterns, 50 - 69 are for gradient fills.

Pattern Color - sets the pattern color (the color of pattern elements, or background color for a gradient fill). The color scheme is indicated to the left from the color - the index in the color palette, **RGB** or **CMYK**. You can choose the main 32 colors from the list; for more colors choose *Custom* at the bottom of the list. The **Color** dialog will come up where you can select the needed color.
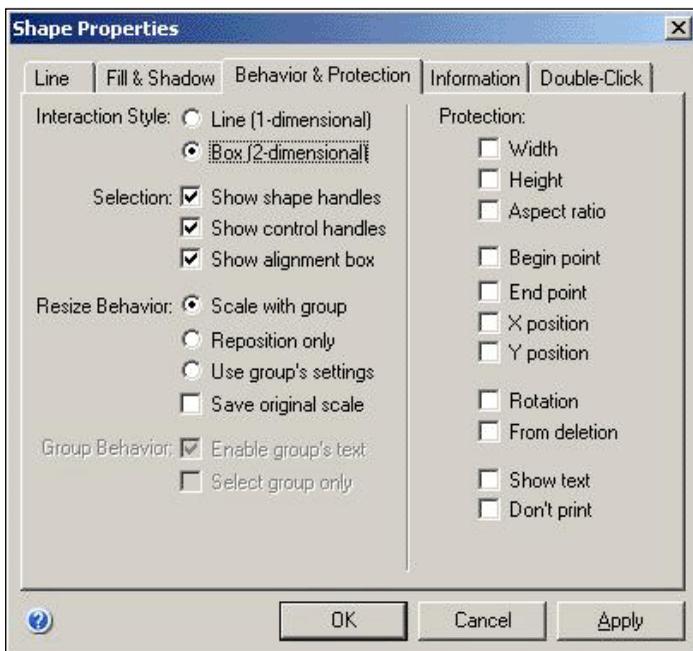
The *Shadow* section is used to set the shadow fill and pattern. It contains the same fields as the *Fill* section.

The *Behavior & Protection* tab in Windows.

The *Interaction Style* section determines whether the shape is a connector or not, and lets you turn any shape into a connector if necessary:

>   *Line(1-D)* - the shape behaves as a line - it has a begin and end point (is a *1D-shape).* Such shape can be used as a connector.
>   *Box(2-D)* - the shape behaves as a *2D-shape*, that is, it has width and height.

The *Selection Highlighting* section describes how the shape is displayed when selected. The following options are available:

>   *Show shape handles* - display or hide the handles on the shape's alignment box. This option is on by default.
>   *Show control handles* - display or hide the *control handles* of the shape. This option is on by default.
>   *Show alignment box* - display or hide the shape's alignment box. This option is on by default.

The *Resize Behavior* section describes how the shape behaves within a group when the group is resized:

>   *Scale with group* - always resize the shape as the group is resized. This option is set by default.

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Reposition only - simply move the shape without changing its size.
Use group's settings - the shape uses the behavior settings of the group to which it belongs.
Save original scale - if this option is on, the shape will keep its size when inserted into a document with some other scale. Otherwise, the size of the shape will be changed according to the scale settings of that document.

The *Group Behavior* section describes how the group behaves.
Enable group's text - allows the group to have its own text.
Select group only - sets whether you can select shapes inside the group.

The *Protection* section allows to protect some properties of the shape from changing.
Width - locks/unlocks the shape's width against resizing.
Height - locks/unlocks the shape's height against resizing.
Aspect ratio - if on, the ratio between the width and height is always preserved when the shape is resized.

Begin point - for 1D shapes, locks/unlocks the begin point against repositioning.
End point - for 1D shapes, locks/unlocks the end point against repositioning.
X position - locks/unlocks the horizontal (X) position of the shape.
Y position - locks/unlocks the vertical (Y) position of the shape.

Rotation - locks/unlocks the shape against rotation.
From deletion - locks/unlocks the shape or its vertices against deleting.

Show text - sets whether to display the shape's text.
Don't print -sets whether the shape can be printed.

The *Information* tab in Mac OS X.

When more than one shapes are selected, displays information for the primary selected shape.
ID - indicates the unique number of the shape in the current document.

Sub ID - indicates the number of the shape in its parent group. It's used for referring to shapes inside a group.

Name - in this field you can type the name you want to assign to the shape.

Layer - assigns the shape to a layer.

Shape Properties

| Line | Fill & Shadow | Behaviour & Protection | Information | Double-Click |

ID: 6   Sub ID: 1

Name:

Layer: ▢ Layer 1 ⬍

Type: Shape

Width: 63.5000 mm

Height: 38.1000 mm

Angle: 0.0 deg

Description:

(?)   (Apply)   (Cancel)   (OK)
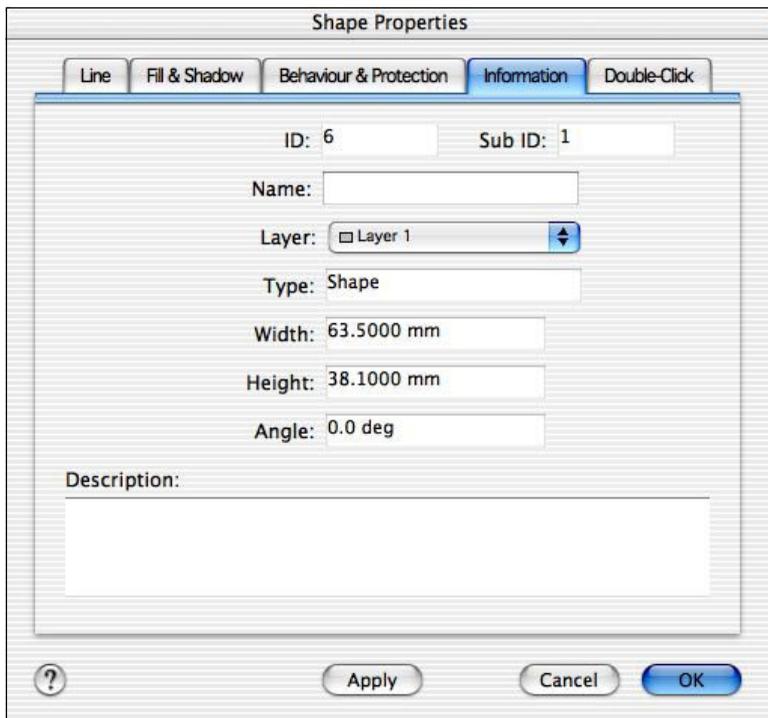
Unlike other fields on this tab, the layer field affects all selected shapes, not the primary shape only.

Type indicates the type of the shape. The following types exist: *shape, group, connector, smart connector, raster picture, vector picture mf, vector picture pict, vector picture vf, OLE paint.*

Width - displays the width of the shape.

Height - displays the height of the shape.

Angle - displays the angle of the shape.

Description - in this field you can provide a description of the shape.

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The *Double-Click* tab in Windows.
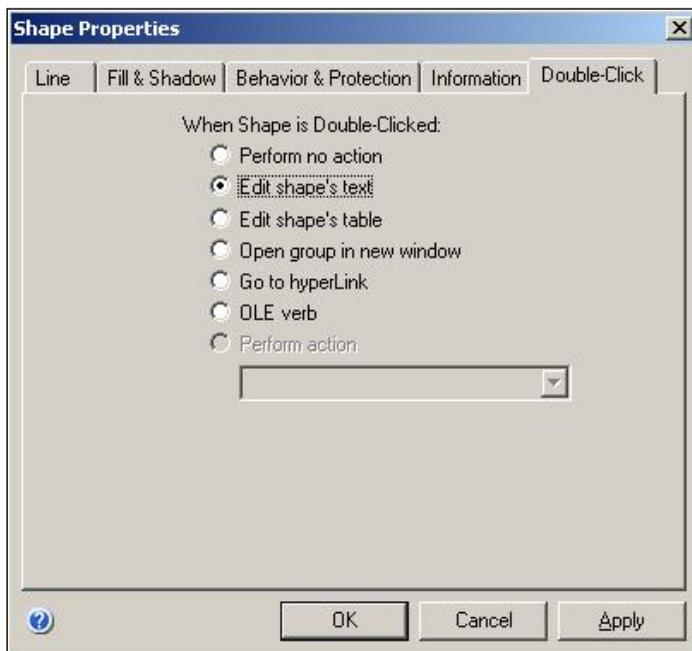
This tab specifies the action, performed when the shape is double-clicked:

Perform no action - nothing happens.

Edit shape's text - turn on the text editing mode.

Edit shape's table - display the shape parameter table.

Open group in new window - open the Edit Group window, where you can edit the shapes inside the group (this option is only available for groups).

Go to hyperlink - open the hyperlink (available if the shape has a hyperlink).

OLE Verb - perform the OLE action (available only for the *OLE paint* type shapes).

Custom action - perform a user-defined *action*. Two modes are available: you can choose an action from the list, or choose the *Action Loop* option - in this case each time the shape is double-clicked the next action from the list is performed.

"Text Properties" Dialog

You can use the **Text Properties** dialog to set or modify various attributes of the shape's text.

> *You can call this dialog from the **Format / Text** menu, from the context menu (**Text Format**) or by using the keyboard.*

Ctrl+Shift+T   Cmd+Shift+T

When you call the dialog, three situations are possible:
1. One of the shapes is in the *text editing mode* - the all changes will be applies to the selected text in the shape.
2. One or more shapes are selected - the changes will be applied to the whole text of the selected shapes.
3. None of the shapes is selected - the changes are applied to default settings for new shapes.

The **Text Properties** dialog contains the following tabs:
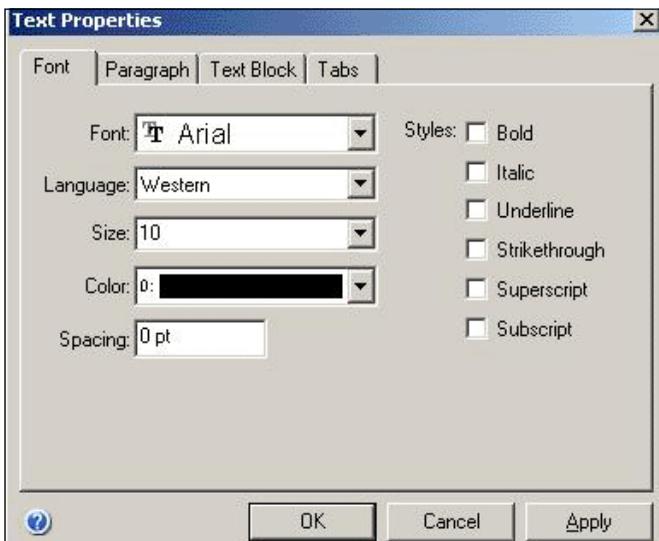   *Font* - specifies the font, font style and other attributes,
    Paragraph - specifies various paragraph properties. The end of a paragraph is denoted by the linefeed character (inserted with the Return (Enter) key),
    TextBlock - sets text block parameters of the shape,
    Tabs - allows to add, delete or modify tab stops.

The *Font* tab in Windows.

ConceptDraw

Font **-** allows you to choose a font from the list of installed fonts.

🪟 *Language* - sets the language (encoding) for characters. It's required to exchange documents with applications which don't support Unicode, and with ConceptDraw 1.x.

Size **-** specifies the font size in points. 1 point = 1/72 inch.

Color **-** sets the text color. You can choose a color from the color palette, or set a custom color.

Spacing **-** specifies by how much to increase or decrease the distance between characters (in points). Enter 0 for normal spacing, a positive number - to increase spacing, a negative number - to decrease spacing.

The *Styles* allows to apply one of the following styles to font: *Bold*, *Italic*, *Underline*, *Strikethrough*, *Superscript*, *Subscript*.

🖥 *Plain* - disables all font styles.

The *Paragraph* tab in Mac OS X.
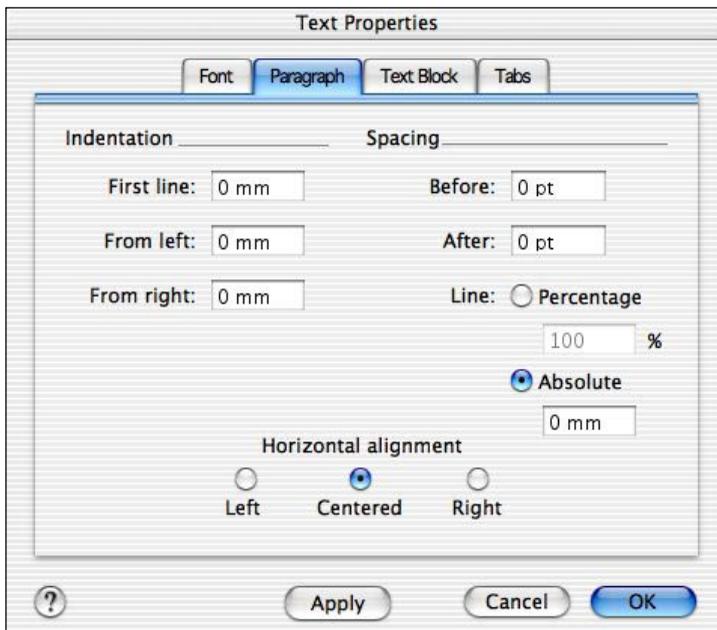
The *Horizontal Alignment* section describes how the paragraph is aligned relative to the shape's text box. The following alignment types are available:

Left - to the left side of the text box,
Centered - the lines are justified with respect to the center of the text box.
Right - to the right side of the text box.

The *Indentation* section allows to set indents for the paragraph in millimeters or inches (depending on the measurement system of the document).
First Line - specifies the indent for the first line of the paragraph,
From Left - specifies the left indent for all lines of the paragraph,
From Right - specifies the right indent for all lines of the paragraph.

In the *Spacing* section you can set the distance between the lines of text. The distance is specified in points (though you can use other units of measure too). A positive value increases the distance, a negative value - decreases the distance.
Before - changes the spacing between the current and the previous paragraphs,
After - changes the spacing between the current and the next paragraphs,
Line - changes the distance between the lines for all selected paragraphs. When you set the value in percent (120%,150%, etc) the spacing will be based on the font size. Also, you can set a fixed value in points. The default value is 100%.

The *TextBlock* tab in Windows.

ConceptDraw
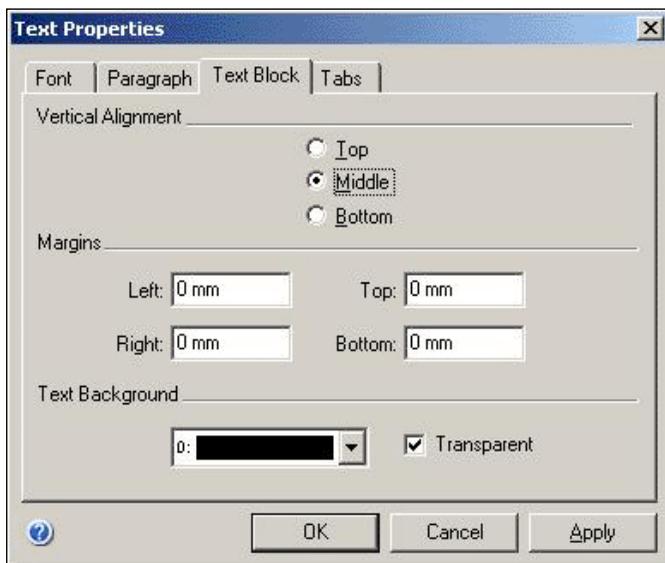
The *Vertical alignment* section determines how the text block is positioned relative to the shape's text box:

    Top - moves the text to the top of the text box,

    Middle - centers the text in the middle of the text box,

    Bottom - moves the text to the bottom of the text box.

The *Margins* section describes margins for the text block (the margins are specified in millimeters or inches depending on the measurement system of the document).

    Left - specifies the left margin for the text block,

    Right - specifies the right margin for the text block,

    Top - specifies the top margin for the text block,

    Bottom - specifies the bottom margin for the text block,

Text Background allows to choose a background color for the text.

Transparent sets transparent background for the text (this option is on by default).

The *Tabs* tab in Mac OS X.
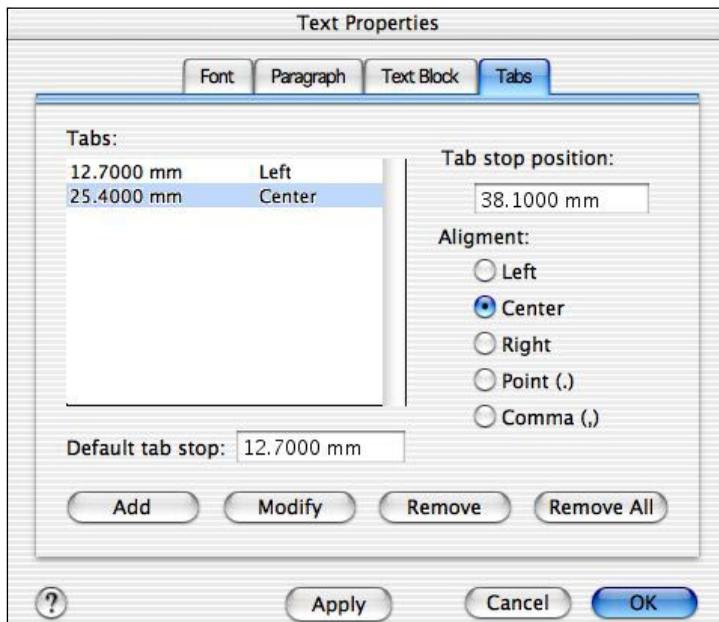
The *Tabs* table contains the list of current tab stop positions. The left column shows the tab position, the right one specifies the alignment type with respect to the position.

Tab Stop Position area allows to modify the tab position, selected in the *Tabs* table**.**

Default Tab Stop - specifies the default tab position for the entire shape. By default, it's 1/2 inch.

The *Alignment* section specifies how text is aligned with respect to the tab position:

> *Left* **-** places the left edge of the text in the specified position,
> *Center* - places the center of the text in the specified position,
> *Right* - places the right edge of the text in the specified position,
> *Decimal(.)* - if there's the point separator (.) in the text, the text is aligned by the point.
> *Comma(,)* - if there's the comma separator (,) in the text, the text is aligned by the comma.

The picture below demonstrates possible types of alignment:

Tab stop positions are shown with red lines.

Add - adds to the *Tabs* list the tab stop described in *Tab Stop Position*. For convenience, after you click the *Add* button, the setting in the *Tab Stop Position* area is increased by the value of *Default Tab Stop***.**

Modify - replaces the settings of the tab stop selected in the Tabs list with the settings, displayed in the *Tab Stop Position* field and in the *Alignment* section.

Remove - removes the tab stop position selected in the list.

Remove All **-** removes all tab stops from the list.

"Add Page / Page Properties" Dialog

In this dialog you can modify the properties of the pages of the document.

To call the dialog, select **Properties** from the **Page** menu, or right-click page list in the left bottom corner of the document window and choose **Page Properties** from the context menu (see ***Going to Another Page***). You can also use the button on the **Pages** toolbar.

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The same dialog is called when you want to add a page (from the **Page /
Add** menu, context menu or the **Pages** toolbar). See *Adding a Page*.

The *Add Page / Page Properties* dialog in Windows.

Page Name - specifies the name of the page.

Make it background page - indicates whether the page is a background
page. Background pages can be used as background for other pages of
the document.

Background - allows to choose a background page for the current page
from the list. The list contains the pages, which have the *Make it background
page* flag set.

"Delete Page" Dialog

Use this dialog to delete a page of the document.

To call the dialog, select **Delete** from the **Page** menu, or right-click page
list in the left bottom corner of the document window and choose **Delete
Page** from the context menu (see *Going to Another Page*). You can also
use the button on the **Pages** toolbar.

The *Delete Page* dialog in Mac OS X.
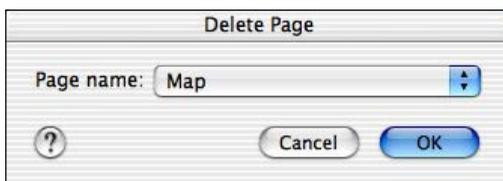
Page name - the name of the page to be deleted. When you delete the
active page, the next page in the list becomes active.

"Reorder Pages" Dialog

This dialog is used to change the order in which the pages go in the document.

To call the dialog, select **Reorder** from the **Page** menu, or right-click page list in the left bottom corner of the document window and choose **Reorder Pages** from the context menu (see *Going to Another Page*). You can also use the button on the **Pages** toolbar.

The *Reorder Pages* dialog in Windows.

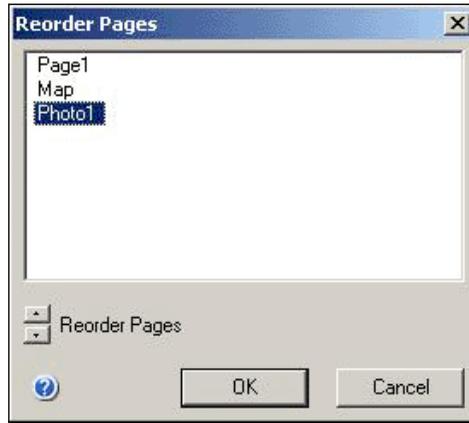In the dialog you can see the list of the pages of the document. Select the page or pages which you want to reposition, and use the *Reorder Pages* buttons to move them up and down in the list. To select more than one page, hold down the **Shift** or **Ctrl** (**Cmd**).

Reorder Pages - is used to move the pages up and down the list.

> *The top page can't be moved higher and the bottom page - lower in the list. If you selected several pages, and one of them is the top (bottom) page you won't be able to move the pages up (down) the list.*

"Go to Page" Dialog

This dialog is used to navigate through the pages of the document.

To call the dialog, select **Go To** from the **Page** menu, or right-click page list in the left bottom corner of the document window and choose **Go to Page** from the context menu (see *Going to Another Page*). You can also use the button on the **Pages** toolbar.

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The *Go to Page* dialog in Mac OS X.
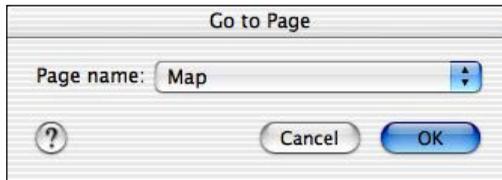
Page name - the list of the pages in the document, where you can choose the page to go to.

"Hyperlink" Dialog

Use this dialog to assign hyperlinks to shapes.

You can assign hyperlinks to words/characters in the shape's text. This can only be done in the *text editing mode*. The links are assigned to the selected words/characters.

The *Hyperlink* dialog in Windows.

Hyperlinks in ConceptDraw can be of the following types: a hyperlink to an Internet address, to a page or shape in the current document, to any other file or application.

No hyperlink - shape (shape's text) have no hyperlink.

Internet address **-** sets a hyperlink to an Internet address. When such link is opened, the program launches the default browser and goes to that address. You can type the hyperlink address manually, select from the list or click *Browse* and copy the link from the Internet browser.

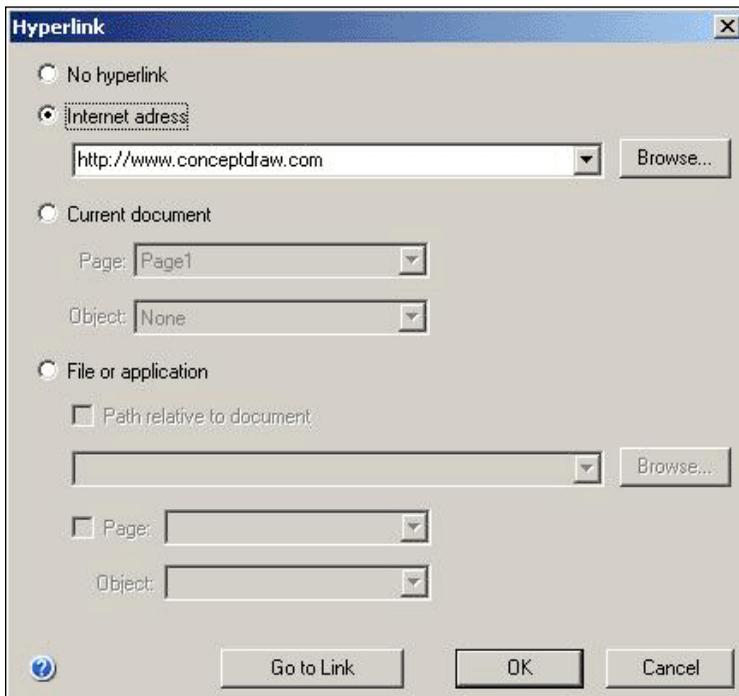*Current document* - sets a hyperlink to a page in the current document. You can choose the page from the list. If needed, you may also point to a particular shape on the page: choose the shape from the *Object* list. When such hyperlink is opened, the program will go to the specified page and focus the view on that shape.

File or application - sets a hyperlink to any file, application or another ConceptDraw document. When you open such hyperlink, the specified file or application will be opened. Use the *Browse* button to choose the file using the standard file dialog.

> *Path relative to document* - setting this flag changes full path to the file to the path relative to the current document. The document must be saved at least once (the file must exist on the disk). To indicate the parent directory, use ".." (for example: "..\Tada.wav").

> > *Relative path is convenient when you plan to move the document to another computer. Don't forget to move the related files and folder together with the document, if you want to keep the hyperlinks.*

Page, *Object* - if the selected file is a ConceptDraw document, you can specify a page and a shape to go to in the document.
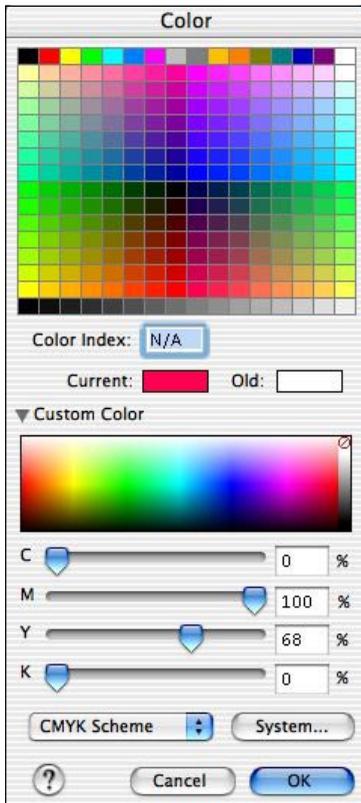
Go to Link - allows to go to the hyperlink without closing the dialog.

ConceptDraw

"Color" Dialog

This dialog is used to set color for a shape, its text or other attributes.

You can call this dialog by choosing the **More Colors...** from the appropriate toolbar button menu.

The *Color* dialog in Mac OS X.

In the upper part of the dialog you can choose one of the 256 colors of the document's color palette (each document can create it's own palette - see **Document Settings** - *Color Palette*. Also see the description of the *Color Palette* dialog).

Current - shows the currently chosen color.

Old - shows the color being changed.

Color Index - indicates the number of the currently chosen color in the color palette.

The *Custom color* section allows to choose or set any color, available in the chosen color scheme.

To choose the needed color, click on it with the mouse.

You can specify a color manually in one of the two available color schemes: RGB or CMYK. The currently chosen scheme is shown in the drop-down list:
- *RGB Scheme*
- *CMYC Scheme*

The **R(ed)**, **G(reen)**, **B(lue)** or **C(yan)**, **M(agenta)**, **Y(ellow)**, **(blac)K** slide bars allow to change each component of the color scheme.

> *In the RGB Scheme the color components may range from 0 to 255; in the CMYC Scheme the components are shown in percents and may range from 0 to 100.*

System - calls the system color dialog.

"Color Palette" Dialog

This dialog is used to load and save the 256 color palette of the document.

You can call it from the **Tools / Color Palette** menu.

The *Color Palette* dialog in Mac OS X.

The square area with 256 color cells represents the current palette. By clicking a the cell you can call the ***Color*** dialog and choose a new color for that cell.

Load palette - loads the new color scheme of the document from a palette file (.pal).

Save palette - saves the new color scheme of the document in a palette file (.pal).

"Define Custom Properties" Dialog

This dialog is used to create, modify and delete custom properties of a shape.

This dialog can be called by clicking the *Define* button in the ***Custom Properties*** dialog.

The *Define Custom Properties* dialog in Windows.
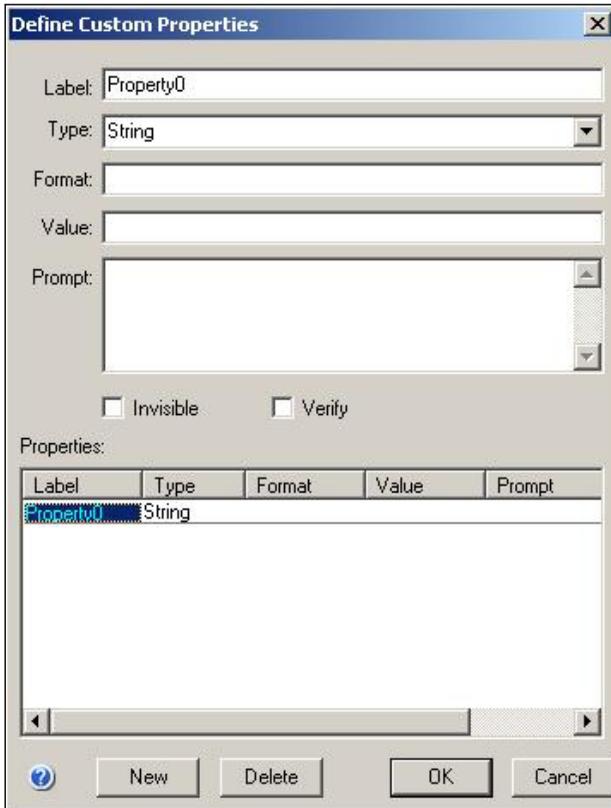
The *Properties* section in the lower part of the dialog contains a list of custom properties of the shape. To modify or view a property in the upper part of the dialog, click on its name in the list.

    New - creates a new property and adds it to the list.

    Delete - deletes the property, selected in the table.

Each custom property is described by the following fields:

Label - the name of the property. It's used when the property is referenced to in formulas or CD Basic scripts.

Type - the type of the property, can have one of the following values: *String*, *Number*, *Fixed List*, *Variable List*, *Boolean*.

> *The information about the type is used in the* **Custom Properties** *dialog: when entering values of the Fixed List, Variable*

*List or Boolean types you're offered to
choose one from the list. Also information
about types can be used by CD Basic.*

Format - contains the list of possible values for the properties that have the *Fixed List* or *Variable List* types. The values are delimited by semicolon ";". For values of other types this parameter is ignored.

Value - indicates the default value,

Prompt - the text of the tip,

Invisible - specifies whether to show this property in the **Custom Properties** dialog,

Verify - if enabled, checks if the property has a value, and if it hasn't, the user will be asked to provide one.

"Custom Properties" Dialog

This dialog is used to view and edit user-defined data of shapes.

You can call the dialog from the **Format / Custom Properties** menu, or from the context menu in the document window (the **Custom Properties** item). Prior to calling the dialog, select the shape which properties you're going to view or edit. If there are several selected shapes, the properties will be shown for the shape with primary selection (the one that displays green handles). If the shape has no custom properties, you'll be offered to define them and the **Define Custom Properties** dialog will be opened.

The *Custom Properties* dialog in Windows.
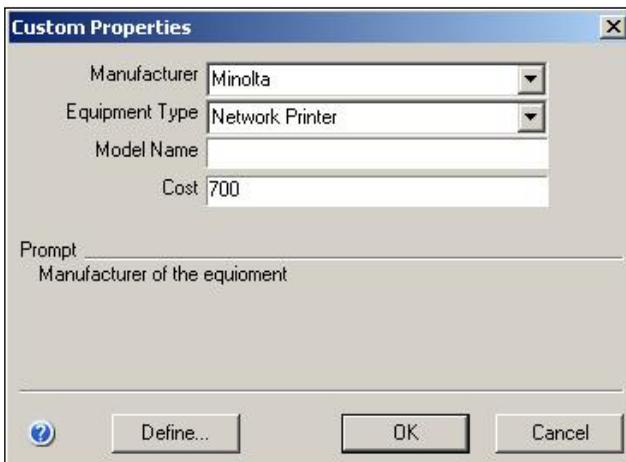
The upper part of the dialog displays the list of custom properties of the shape. The list contains the names of the properties (the *Label* field in the **Define Custom Properties** dialog) and the values of the properties (the *Value* field in the **Define Custom Properties** dialog). Depending on the value format, the value field may be either an input field, or a drop down list.

Prompt - displays the tip for the property (if it was defined in the *Prompt* field of the **Define Custom Properties** dialog).

Define... - calls the **Define Custom Properties** dialog where you can edit the existing properties, or add new ones.

"Define Styles" Dialog

This dialog is used to create, modify and delete named styles.

You can call the dialog from the **Format / Define Styles...** menu.

The *Define Styles* dialog in Mac OS X.
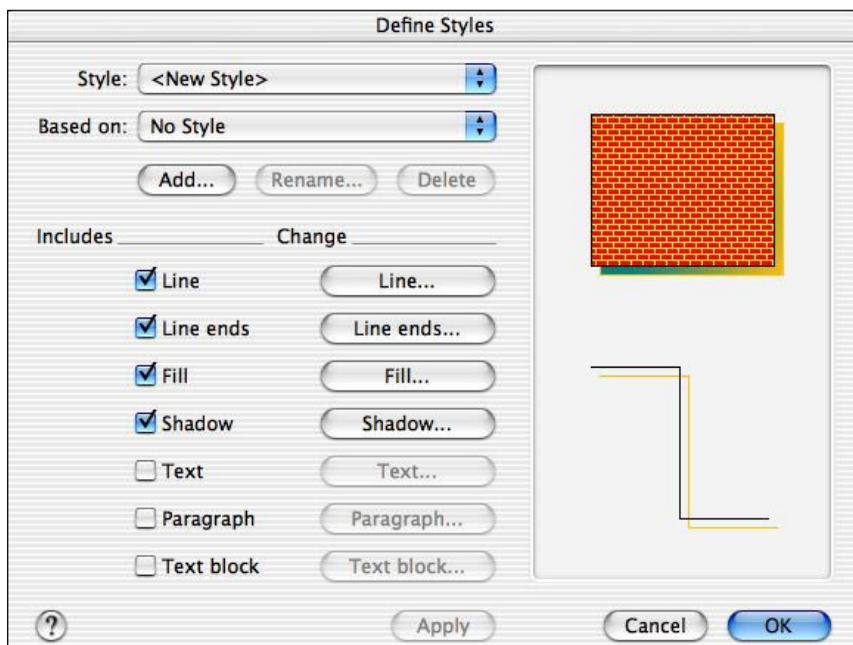
In the right part of the dialog you can preview the elements of which the style is made up.

Style - the style being edited.

Based on - the style on which the current style is based. You can select if from the list of existing styles.

Add (Change) - adds the new style to the list or adds changes to the existing style, selected from the list.

Rename - renames the selected style.

Delete - deletes the selected style from the list.

The *Includes* section specifies which elements will be included in the style:
>*Line* - includes line properties (color, weight, pattern),
>*Line ends* - includes line ends parameters (arrowhead style and size),
>*Fill* - includes the fill properties (color and pattern),
>*Shadow* - includes the shadow properties (color and pattern),
>*Text* - includes the text properties (font, style, font size),
>*Paragraph* - includes the paragraph formatting parameters (indents, line spacing, alignment),
>*Text Block* - includes the text block parameters (margins, alignment).

The *Change* section allows to change the style elements:
>*Line* - sets line properties,
>*Line ends* - sets line ends properties,
>*Fill* - sets fill properties,
>*Shadow* - sets shadow properties,
>*Text* - sets text parameters,
>*Paragraph* - sets paragraph formatting parameters,
>*Text Block* - sets text block parameters.

>*Named styles are stored together with the document. Don't forget to save the document after you've added or modified a style.*

"Find/Replace" Dialog

This dialog allows you to search for and replace text in ConceptDraw shapes. The search can be performed either in the current document, or in the documents on disk (including folders and subfolders). You can edit the document without closing this dialog - it remains floating over the document, and you can always return to it and search for the next match.

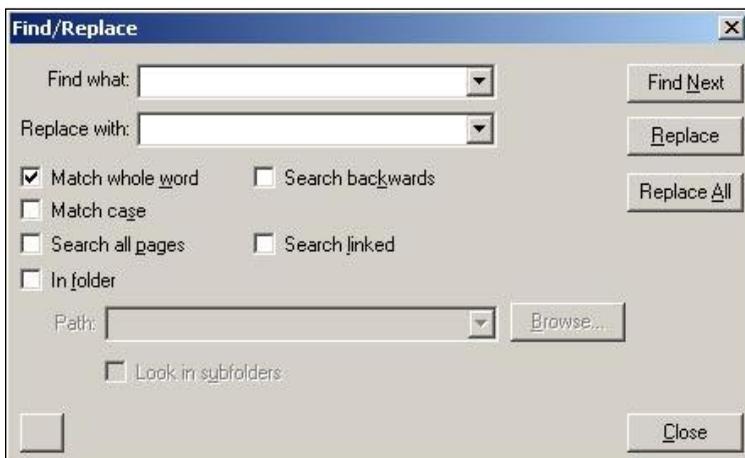>*You can call the dialog from the **Edit / Find/Replace...** menu or by using the keyboard:*

>Ctrl+Alt+F   Cmd+Opt+F

ConceptDraw

The *Find/Replace* dialog in Windows.

Find what - here you can specify the string to be found. You can either type the text, or select one of the previously searched strings.

Replace with - a string with which the found string will be replaced.

Match Whole Word - search only complete words. For instance, if "leg" is being searched, the "leg" world will be found, and "legion" and "legend" will be ignored.

Match Case - specifies whether to differentiate capital and small letters in the search.

Search All Pages - specifies whether to search on the current page, or on all pages of the document. By default only the current page is searched.

Search Backwards - searches in reverse direction.

Search Linked - specifies whether to search in the hyperlinked pages or documents (see **Hyperlinks**, **Hyperlinking to Pages**).

In Folder - search in all ConceptDraw located in the folder, specified in *Path*. All open documents that are not in the *Path* folder are ignored.

Path - specifies the path to the folder, where the search will be performed. You can type it manually, or choose by using the *Browse* button.

Look In Subfolders - specifies whether to search in subfolders of the folder, indicated in *Path***.**

Find Next - finds the next match. If the match is found, the text editing mode is turned on and the found text gets highlighted. If the *In Folder* or

Search Linked options are enabled, and a match is found in one of the non-opened documents, the document will be opened automatically.

Replace - replaces the found string with the string in *Replace with***.**

Replace All - replaces all matches with the string in *Replace with*.

"Flow Data Format Settings" Dialog

Use this dialog to specify which delimiters are to be used to separate the data fields in Flow Data Format.

To call the dialog, use the menu **File / Export / Text data / Flow Data Format...**

This dialog in Mac OS X.

Field separator **-** specifies which symbol is used to separate the data fields in a text string. The possible symbols are: comma ',' , semicolon ';', tab.

The corresponding symbols are marked with bold in the examples:
Template**;**"Blank Drawing.cdt"
Shape**;**"Shape29"**;**"Shape29"**;;**"2.4800 cm"**;**"2.5950 cm"**;**"4 cm"**;**"2.2500 cm"**;;;**

Text delimiter - specifies how to mark text strings. The possible symbols are: apostrophe ' ' ' , quotation mark ' " '.
Link;"Shape20";"Shape20";;"Shape4";"Shape32";
Link;"Shape21";"Shape21";;"Shape4";"Shape33";

Comment character - specifies the symbols that denotes the beginning of a comment. The possible symbols are: '#', '/', ';', '\'.
/ Company:
/ Description: (not specified)
/ Created: 24 Jul 2003 15:38:17
/^--^

> *Only selected shapes on the active page will be exported to the Flow Data file.*

"Outline Export Settings" Dialog

This dialog is used to set importing parameters for outline (structured text).

You can call the dialog from the menu **File / Export/Text Data/Outline Format...**

The _Outline Export Settings_ dialog in Windows.

The _Use indents_ section allows to set how to outline levels will be marked.
You can choose one of the following:

    Tabulation - a tab symbol will be used to denote a new level.

    Space - a space will be used to denote a new level.

The _Output Options_ section sets other parameters of the exported document:

    Include hyperlinks - specifies whether to include the text of the hyperlinks in the resulting file:

        Top manager

        Project manager MindMap

        >>Link: www.mindmap.com

        Project manager ConceptDraw

        >>Link: www.conceptdraw.com

    Use numeration - specifies whether to use numbers to denote outline levels:

        1.2.1. Programmers team

        >>Note: ConceptDraw V team

        1.3. Project manager ProjectPlanner

        >>Link: www.projectplanner.com

    Include shape notes - specifies whether to include shape descriptions in the resulting file:

        Programmers team

        >>Note: ProjectPlanner team

View export result - specifies whether to open the resulting outline in a text editor after it has been exported.

> *The exported shapes must be connected with connectors. Also, one shape should be selected - it will be the top level in the outline. The shapes, connected with the selected shape directly or through other shapes will be represented in the outline.*
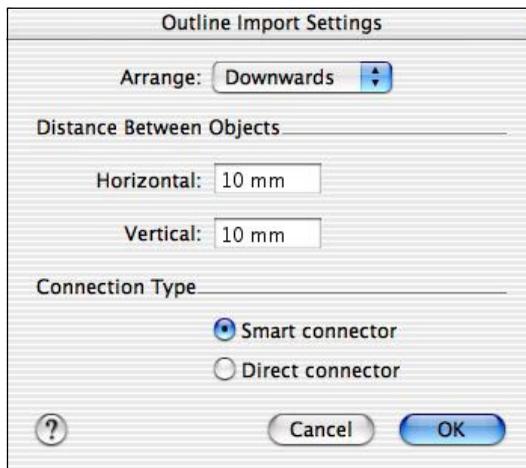
"Outline Import Settings" Dialog

This dialog is used to control how the drawing will be formed from a text outline.

To call this dialog, use the menu **File / Import / Text data / Outline Format...**

The *Outline Import Settings* dialog in Mac OS X.

```
                 Outline Import Settings

            Arrange: [ Downwards  ▲▼ ]

    Distance Between Objects _____

         Horizontal: [ 10 mm ]

           Vertical: [ 10 mm ]

    Connection Type _____

                    ● Smart connector
                    ○ Direct connector

      (?)                    ( Cancel )   (  OK  )
```

Based on the structure, described in the outline file, the program draws an hierarchical tree composed of shapes, connected with connectors.

Arrange - sets the direction in which the tree will be generated. The following settings are possible:

    Rightwards - text blocks will be positioned from left to right (the first shape on the left).

    Leftwards - text blocks will be positioned from right to left (the first shape on the right).

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Downwards - text blocks will be positioned from top to bottom (the first shape at the top). This is the default value.

Upwards - text blocks will be positioned from bottom to top (the first shape at the bottom).

The *Distance between objects* sets the distance between the shapes - elements of the scheme:

Horizontal - the horizontal distance between the shapes.

Vertical - the vertical distance between the shapes.

The *Connection type* settings specifies which connectors are to be used to connect the shapes:

Smart connector - smart connectors will be used.

Direct connector - direct connectors will be used.

"Grid & Rulers" Dialog

This dialog is used to configure the view of the *grid* and the *rulers*.

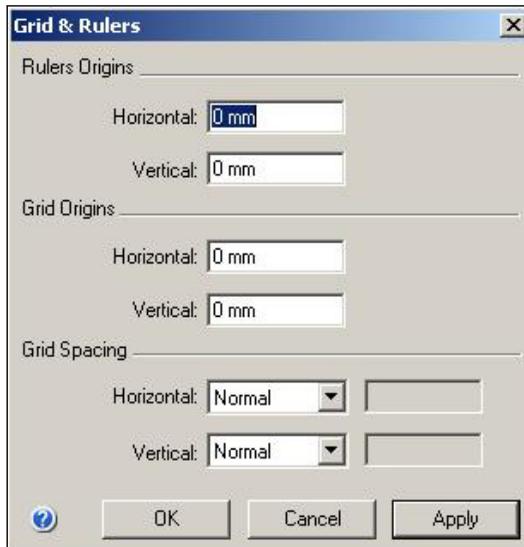*This dialog can be called from the **Tools / Grid** menu or with the keyboard.*

📋 Ctrl+Shift+G   📋 Cmd+Shift+G

The *Grid & Rulers* dialog in Windows.

The *Rulers Origins* - sets the starting point (*origin*) for the rulers. The origin represents the horizontal and vertical offset relative to the upper left corner of the page.

> *Horizontal* - horizontal offset. The possible range is -320 mm to +320 mm.
>
> *Vertical* - vertical offset. The possible range is -320 mm to +320 mm.

The *Grid Origins* - sets the starting point (*origin*) for the grid lines. The origin represents the horizontal and vertical offset relative to the upper left corner of the page.

> *Horizontal* - horizontal offset. The possible range is -320 mm to +320 mm.
>
> *Vertical* - vertical offset. The possible range is -320 mm to +320 mm.

The *Grid Spacing* section specifies the size of the grid cells.

> *Horizontal* - sets the width of the grid cells: *Normal, Fine, Coarse, Fixed.* The *Fixed* option allows to input a custom value within the 0 mm to 320 mm range.
>
> *Vertical* - sets the height of the grid cells: *Normal, Fine, Coarse, Fixed.* The *Fixed* option allows to input a custom value within the 0 mm to 320 mm range.

"HTML Properties" Dialog

The *HTML Properties* dialog is used to set the parameters of HTML export, and also configures the default HTML export settings.

The dialog can be called from the **File / Export / HTML...** menu. To access the default HTML export parameters, click the **Default settings...** button on the **Advanced** tab of the ***Document Properties*** dialog.

The *HTML Properties* dialog in Mac OS X.

The *Save Images As* setting allows to choose the format of the graphic file, in which the drawing will be saved. One of the following options can be chosen:

> *GIF format* - the image will be saved in the GIF format.
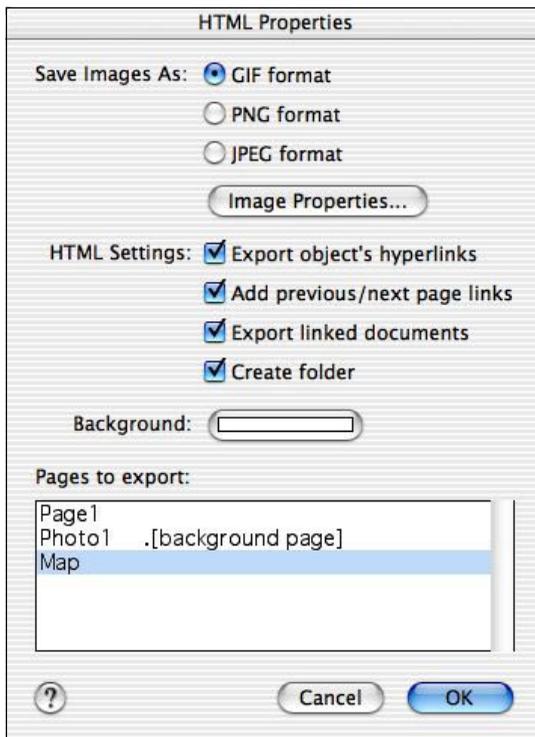>
> *PNG format* - the image will be saved in the PNG format.
>
> *JPEG format* - the image will be saved in the JPEG format.
>
> *Image Properties* allows to configure parameters for the chosen format.

The HTML Settings sections describes additional HTML settings:

> *Export object's hyperlinks* - specifies whether to preserve the hyperlinks of shapes in HTML

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Add previous/next page links - specifies whether to add the next/ previous page buttons when exporting multi-page documents.

Export linked documents - specifies whether to export to HTML ConceptDraw documents, linked to the current document. If not set, hyperlinks to original ConceptDraw files are preserved.

Create folder - saves all the files, generated during the HTML export, in a separate folder. The name of the folder is the same as the name of the first HTML file.

Background - sets the background color for the HTML file. When the button is clicked, the *Color dialog* is opened. The color on the button is the color of the background in the HTML file.

Pages to export - allows to select the pages to be exported to HTML. By default, all pages of the active document are exported.
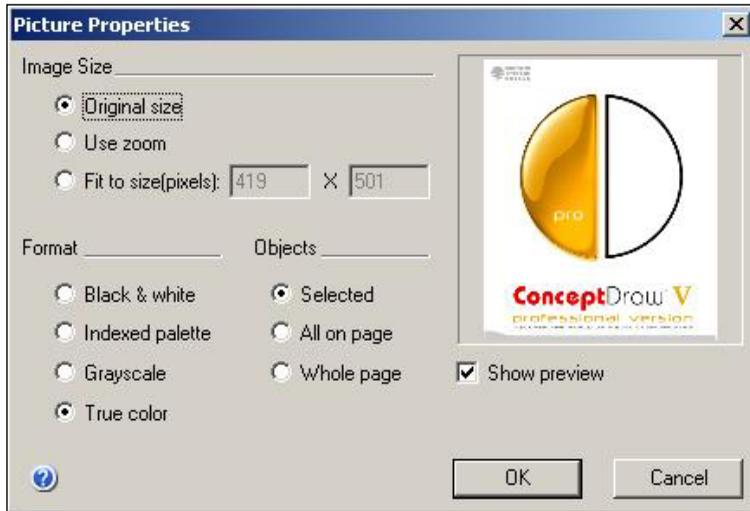
You can select / deselect the pages by using the mouse and the Ctrl (Cmd) and Shift keys.

"Image Properties" Dialog

This dialog is used to configure export settings of ConceptDraw shapes to other graphic formats.

This dialog can be called from the **File / Export / Graphic File** menu.

The *Image Properties* dialog in Windows.

In the *Image Size* section, you can choose one of these options:

> *Original size* - the shapes will be exported in their original size, regardless of the current zoom level.
>
> *Use zoom* - the shapes in the graphic file will be of the same size as they appear on screen (at the current zoom level).
>
> *Fit to size(pixels)* - this option lets you assign custom dimensions to the picture - specify the width and height in pixels.

The *Format* section is available for some raster formats (BMP, TIFF, PNG). Here you can adjust color depth or quality for the image.

> *Bi-Level* - monochrome image (2 colors).
>
> *Grayscale* - grayscale image, 256 shades of gray maximum.
>
> *Indexed palette* - an image with indexed palette. The maximum number of colors is 256.
>
> *True Color* - image in 32 bit color (truecolor).

For some formats (for instance, JPEG) you can also specify image quality: *Quality* - by using the slide bar, you can set the quality within the range of 1% to 100%. Note that better quality increases the file size.

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In the *Objects* section, you specify which shapes will form the image in the graphic file:

> *Selected* - only the selected shapes from the active page. The image size will be equal to the total bound of all selected shapes.
>
> *All on page* - all the shapes which are on the page and outside it. The image size will be large enough to fit for all shapes.
>
> *Whole page* - to export the entire page with all the shapes which are within the page.

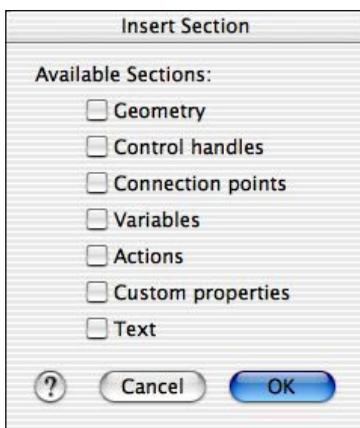You can preview the results in the Preview area.
Show preview - enables/disables preview.

"Insert Sections" Dialog

This dialog is used to insert new sections in the shape parameter table.

You can edit the dialog from the **Edit / Insert Section** menu, or from the shape's context menu in the table view.

The *Insert Section* dialog in Mac OS X.

In the dialog you can choose which sections are to be added in the table:

Geometry - adds a new Geometry section. It's available for all shapes except groups.

Control handles - adds the Controls section, that describes control handles. A shape can have just one Controls section.

Connection points - adds the Connection Points section, that describes connection points. A shape can have just one Connection Points section.

Variables - adds the Variables section, that describes user-defined variables. A shape can have just one Variables section.

Actions - adds the Actions section, that describes user-defined actions. A shape can have just one Actions section. The first 15 actions are available from the shape's context menu.

Custom Properties - adds the Custom Properties section, that describes user-defined data. A shape can have just one Custom Properties section.

Text - adds the Text section, that describes the text properties. A shape can have just one Text section.

"View Sections" Dialog

This dialog is used to display or hide existing sections of the shape parameter table. If the corresponding option is enabled, the section is visible, otherwise - hidden.

You can call this dialog from the **View / Sections** menu or from the context menu in the shape parameter table view.

The *View Sections* dialog in Windows.
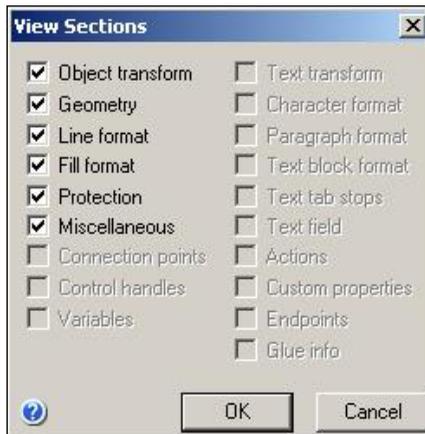
Object Transform - display/hide the Transform section.

Geometry - display/hide the Geometry section.

Line Format - display/hide the Line Properties section.

Fill Format - display/hide the Fill Format section.

Protection - display/hide the Protection section.

Miscellaneous - display/hide the Miscellaneous section.

Connection Points - display/hide the Connection Points section.

Control Handles - display/hide the Control Handles section.

Variables - display/hide the Variables section.

Text Transform - display/hide the Text Transform section.

Character Format - display/hide the Character Format section.

Paragraph Format - display/hide the Paragraph Format section.

Text Block Format - display/hide the Text Block Format section.

Text Tab Stops - display/hide the Text Tab Stops section.

Text Fields - display/hide the Text Fields section.

Actions - display/hide the Actions section.

Custom Properties - display/hide the Custom Properties section.

End Points - display/hide the End Points section (available for 1D shapes and connectors only).

Glue Info - display/hide the Glue Info section (available for 1D shapes and connectors only).

"Library Item Properties" Dialog

This dialog is used to view and set the properties of library shapes.

You can call this dialog from **Edit / Library Object / Properties** menu or from the context menu in the library window.

The *Library Item Properties* dialog in Mac OS X.
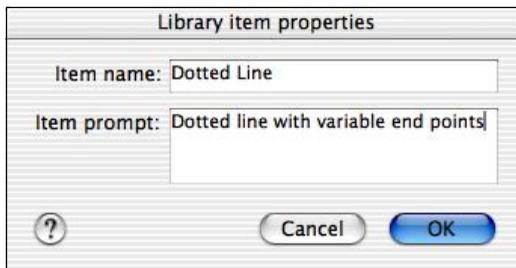
Item name - sets the name of the library shape.
Item prompt - sets a brief description of the library shape.

These properties are displayed when you position the mouse pointer over a shape in the library. The *Item name* appears as a tip over the shape, and the *Item prompt* is shown in the status bar.
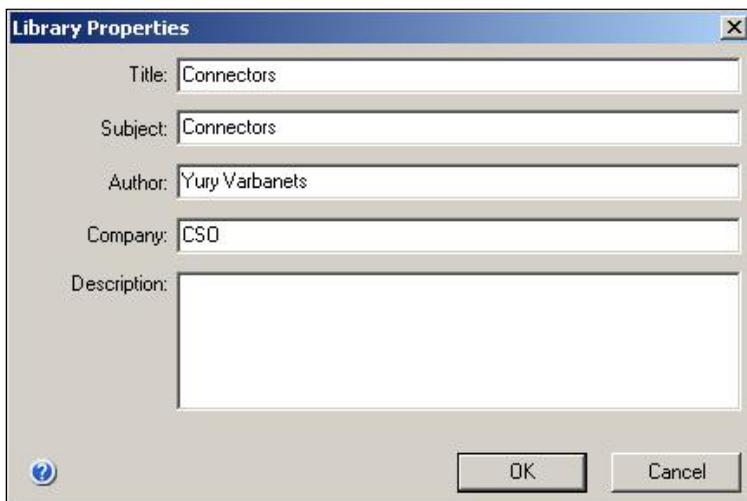
"Library Properties" Dialog

This dialog is used to view and set library properties.

You can call this dialog from **File / Library / Properties** or from the context menu in the library window.

The *Library Properties* dialog in Windows.

Title - the name of the library.
Subject - the brief description of the library.
Author and *Company* - information about the creators of the library.
Description - additional information about the library.
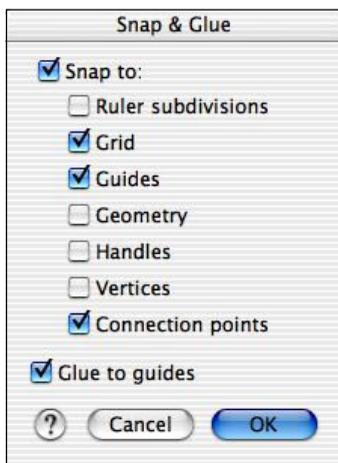
"Snap & Glue" Dialog

This dialog is used to configure the snapping and gluing settings.

*You can call this dialog from the **Tools / Snap & Glue** menu or by using the keyboard:*

Ctrl+Shift+U   Cmd+Shift+U

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The *Snap & Glue* dialog in Mac OS X.

If *Snap to* is enabled, you can specify the conditions when snapping will be activated:

> *Ruler Subdivisions* - the shape will snap to the imaginary lines coming out of the rulers' subdivisions. Use this for very precise positioning.
>
> *Grid* - the shape will snap to the grid nodes.
>
> *Guides* - the shape will snap to the guide lines.
>
> *Geometry* - the shape will snap to the outlines of other shape. It is usually helpful when you need to attach a shape to another shape.
>
> *Handles* - the shape will snap to resize handles of other shapes.
>
> *Vertices* - the shape will snap to vertices of other shapes.
>
> *Connections Points* - the shape will snap to connection points of other shapes.

Glue to Guides - allows shapes to glue to guide lines.

Snap sensitivity (the distance from which snapping is activated) can be set in the **Document Properties** dialog, the **Settings** tab.

"Open from FTP Server" Dialog

This dialog allows to open documents, located on a remote FTP server.

You can call this dialog from the **File / Open From FTP Server** menu.

The *Open from FTP Server* dialog in Windows.

Server - the address of the FTP server
Login - user's login
Password - user's password
Path - the name of the document and path to it.

The button with the folder icon can be used to add, edit or select bookmarks, which store information about frequently used servers and documents. For more information, see ***Working with Documents on a Remote FTP-Server***.

"Save to FTP Server" Dialog

This dialog is used to save documents to a remote FTP server.

You can call this dialog from the **File / Save To FTP Server** menu.

The *Save to FTP Server* dialog in Mac OS X.

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Server - the address of the FTP server
Login - user's login
Password - user's password
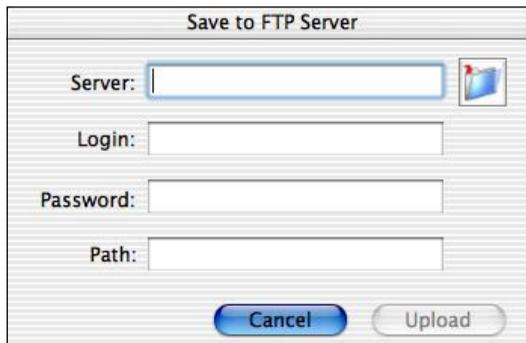*Path* - the name of the document and path to it.

The button with the folder icon can be used to add, edit or select bookmarks, which store information about frequently used servers and documents. For more information, see **Working with Documents on a Remote FTP-Server**.

"Add Bookmark" Dialog

This dialog is used to add a new bookmark, containing the parameters needed to connect to a remote FTP-Server, to the list of bookmarks.

You can call this dialog from the Bookmark button menu in the **Open From FTP Server** and **Save To FTP Server** dialogs.

The *Add Bookmark* dialog in Windows.

Name - the name of the new bookmark.

> *The bookmark parameters (server name, login, password, path) are taken from the fields of the **Open From FTP Server** or **Save To FTP Server** dialogs.*

"Open" Dialog

This dialog is used to open ConceptDraw documents and to import documents of supported formats.

> *The dialog can be called from the **File / Open** menu, the **Open** button on the **Main** toolbar or by using the keyboard:*

> Ctrl+O   Cmd+O

The dialog is also called when importing files (see the **Importing Files** section).

The *Open* dialog in Windows.
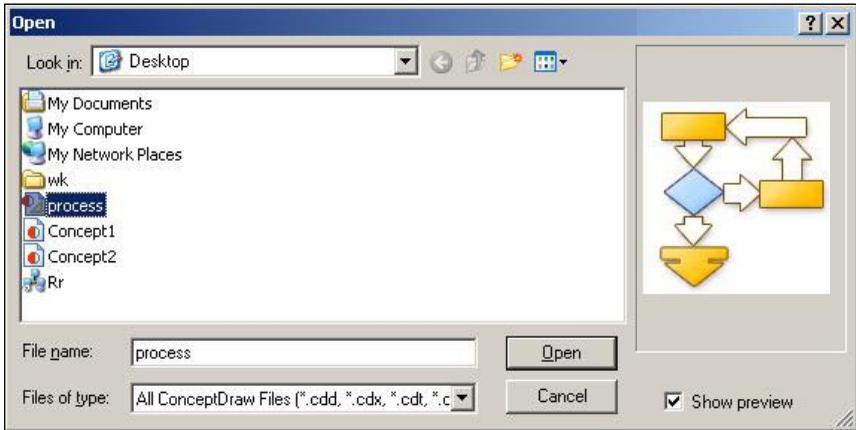
The *Open* dialog in Mac OS X.

In this dialog you can choose to show only files of the desired type.

In the Preview area you can preview the contents of ConceptDraw documents and graphic files.

Show Preview - enable/disable the preview picture.

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In the list, choose the document you want to open, and double-click it with the mouse. To select more than one document, hold down the **Shift** or **Ctrl** (**Cmd**) keys.

Open - opens selected documents.

Cancel - closes the dialog.

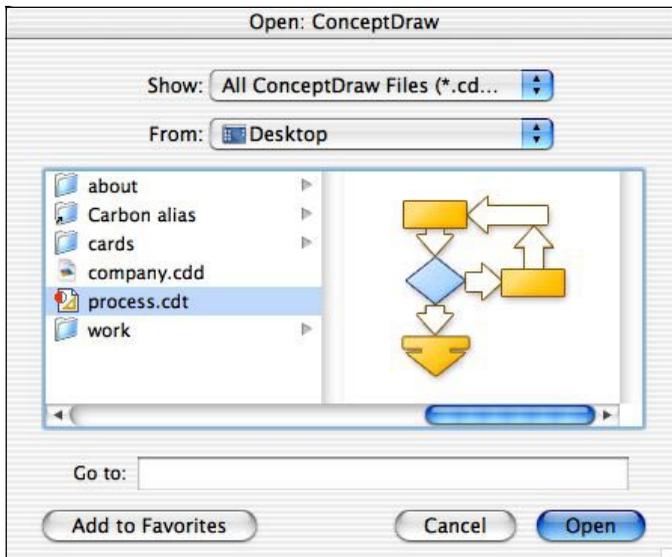> *By default, this dialog shows only ConceptDraw files. To show files of other types, choose the corresponding type in the drop-down list.*

"Save" Dialog

This dialog is used to save documents, templates, workspace files and files of other formats, exported by ConceptDraw.

> *This dialog can be called from the **File** menu by the **Save** (if you save the file for the first time), **Save As**, **Save Copy As**, **Save As Template**, **Save Workspace** commands or by using the keyboard.*

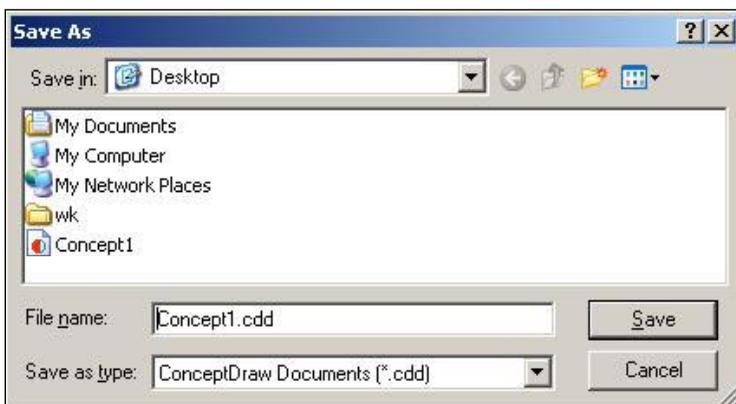|	
Ctrl+S	Cmd+S
Ctrl+Shift+S	Cmd+Shift+S
Ctrl+Alt+S	Cmd+Alt+S

This dialog is also called when you export files (see the **Exporting a Document** section).

The *Save* dialog in Windows.

The *Save* dialog in Mac OS X.
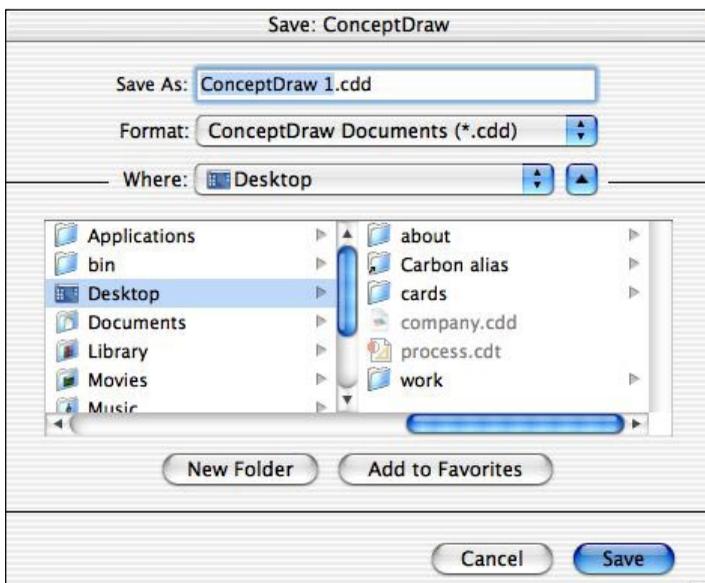
Depending on the command you use to call the dialog, you get different save options. When you use the **Save** and **Save As** commands, you can save in one of the following formats:

- ConceptDraw V document
- XML for ConceptDraw file
- ConceptDraw 1.x document

If you use the **Save As Template...**, **Save WorkSpace...** commands, you'll be able to save a template or workspace file respectively. To save files in other formats, use the **File / Export** menu.

Save - saves the document.

Cancel - closes the dialog.

"Paste Special" Dialog

This dialog is used to insert various objects from the Clipboard into a ConceptDraw document.

This dialog can be called from the **Edit / Paste Special** menu.

The *Paste Special* dialog in Windows.

Source - indicates from where the object was copied.
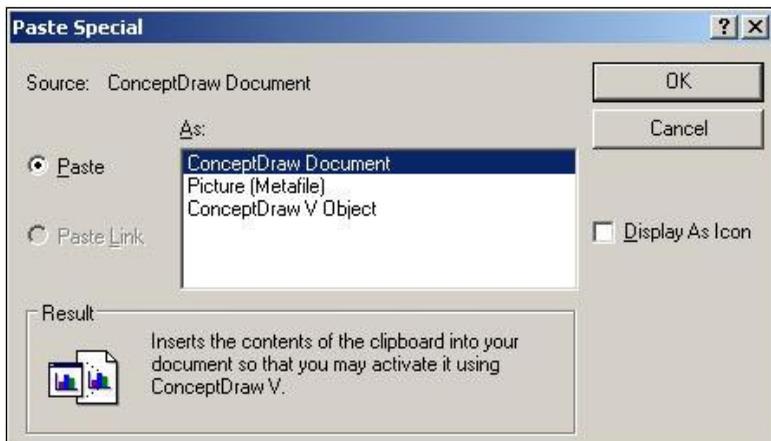
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As - offers available formats in which the object can be pasted.

Paste - the object will be embedded into the ConceptDraw document and will be stored together with it.

Paste Link - pastes a reference to the object, rather than the object itself. When the source file is changed, the object in the ConceptDraw document will be changed respectively. Only a link to the object is stored with the document.

Result - explains what will happen when you insert the object in the selected format.

Display As Icon - specifies whether to object should be displayed as icon, or in its original form.

Change Icon - allows to choose an icon for the object. This option is available only if the *Display As Icon* option is enabled.

The *Paste Special* dialog in Mac OS X.
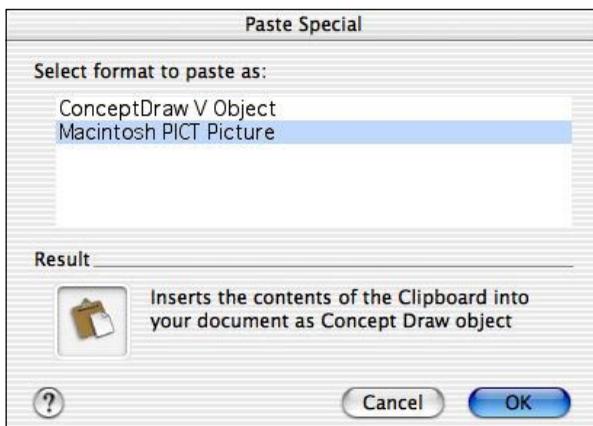
Select format to paste - offers available formats in which the object can be pasted.
Result - explains what will happen when you insert the object in the selected format.

"Page Setup/Print Setup" Dialog

This is a standard system dialog which is used to configure the printer page settings.

> *You can call the dialog from the **File / Page Setup** menu or by using the keyboard.*

Ctrl+Shift+P   Cmd+Shift+P

The *Print Setup* dialog in Windows.
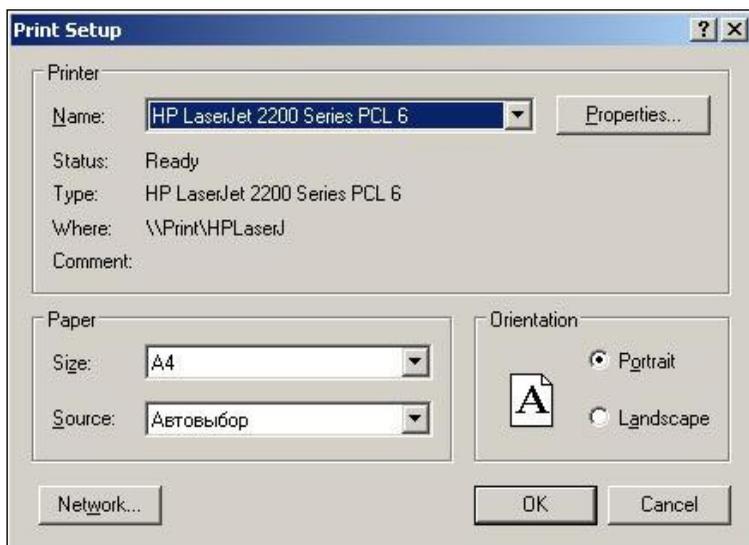
The *Printer* section shows the current printer. You can change it or configure as necessary.

     Name - allows to choose on of the installed printers from the list.
     Properties - calls the printer setup dialog for the chosen printer.
     Status - shows the current state of the printer.
     Type - shows the type of the printer.
     Where - shows where the printer is located.
     Comment - contains additional comments.

The *Paper* section lets you configure paper parameters.

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Size - allows to set the page size.
Source - specifies the paper source.

The *Orientation* section is used to set the printer page orientation:
Portrait - the page is taller than it's wide.
Landscape - the page is wider than it's tall.

Network - is used to configure network printers.

The *Page Setup* dialog in Mac OS X.
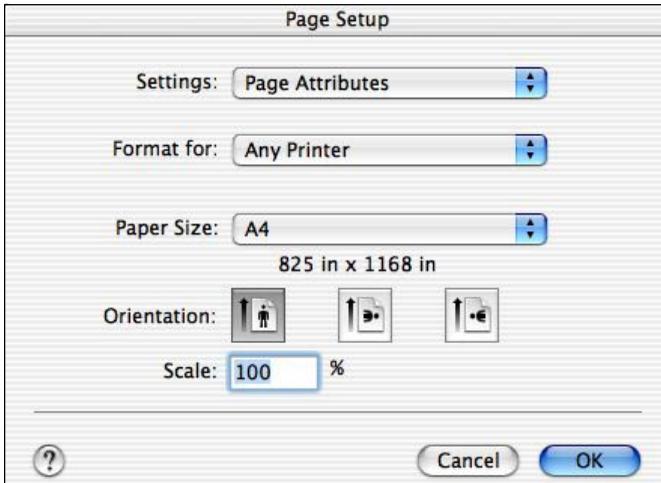
Settings - sets page attributes.

Format for - allows to choose the printer to adjust the page for.

Paper Size - sets the page size.

Orientation - sets the page orientation.

Scale - sets print scale.

"Print" Dialog

The **Print** dialog is a system dialog, which allows you to specify the printer, the range of pages to be printed, the number of copies, and some other settings.

> *You can call this dialog from the **File / Print** menu or by using the keyboard.*
>
> Ctrl+P   Cmd+P

The *Print* dialog in Windows.
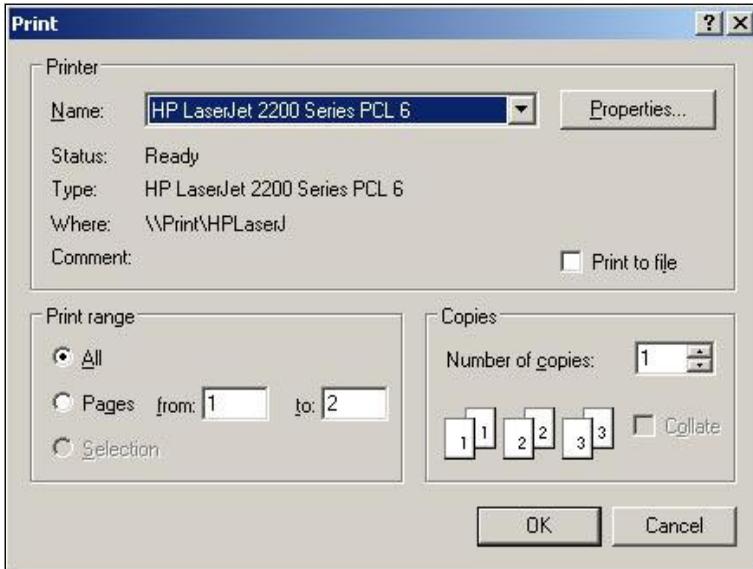
In the *Printer* section, the active printer is specified. If necessary, you can still select another printer or modify the settings.

Name - allows to choose on of the installed printers from the list.

Properties - calls the printer setup dialog for the chosen printer.

Status - shows the current state of the printer.

Type - shows the type of the printer.

Where - shows where the printer is located.

Comment - contains additional comments.

Print to file - lets you save the document in a file of special format, which can be printed without resorting to ConceptDraw.

The *Print range* section lets you select the range of the pages to be printed:

All - print all pages.

Pages - print pages within the *from* - *to* range.

Selection - print selected text block (not supported in ConceptDraw).

The *Copies* section is used to specify the desired number of copies:

Number of copies - number of copies.

Collate - how the pages should be grouped. This option is available when you print more than one copy.

ConceptDraw

The *Print* dialog in Mac OS X.
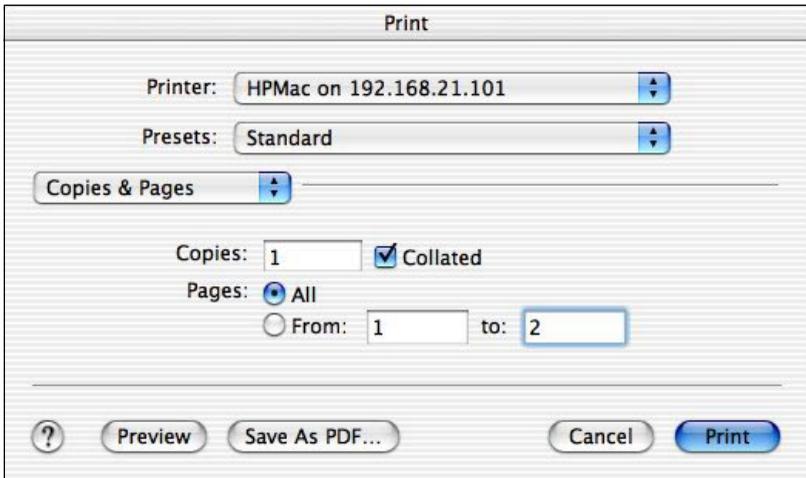
Printer - allows to choose a printer from the list.

Preset - lets you choose groups of settings from the list.

The *Copies & Pages* section is used to specify the desired number of copies:
    Copies - number of copies.
    Collated - sets whether the pages should be grouped.
    The *Pages* section sets the print range:
    All - print all pages.
    From...to... - print only pages within the specified range.

Preview - preview the result before printing.

Save As PDF - print the document to a PDF file rather than to the printer.

"Edit User" Dialog

This dialog is used to edit user details. You can limit access to the document to authorized users only.

This dialog is called when you click the **Add User** or **Edit User** buttons in the **Advanced** tab of the ***Document Properties*** dialog.

The *Edit User* dialog in Mac OS X.

User - the name (login) of the user.
Password - the password. It can contain any symbols. The password is case-sensitive.
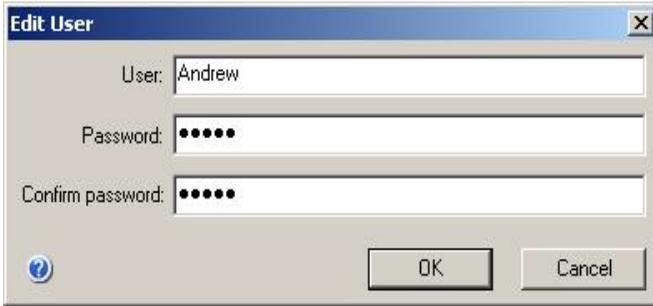
Confirm password - enter the password here to confirm it.

"Login" Dialog

This dialog asks user login and password for documents with protected access.

This dialog appears when you try to open a protected document. If such user name and password are not authorized to view the document, the document is not opened.

The Login dialog in Windows.
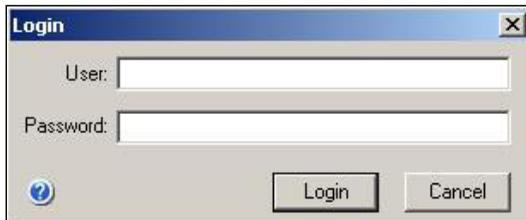
User - the name (login) of the user.
Password - password.

> To protect the document and specify authorized users, use the Document Properties dialog, the Advanced tab.

"Flash Export Settings" Dialog

This dialog is used to configure the parameters of the resulting .swf file when exporting the document to Macromedia Flash format.

This dialog is called from the menu **File / Export / Macromedia Flash (SWF)**.

The *Flash Export Settings* dialog in Mac OS X.

The *Slide Show* setting specifies when the next page of a multi-page document will be displayed:

> *None* - only the first page is displayed.
> *Mouse Click* - the next page will be displayed on a mouse-click.
> *Timer* - the next page will be displayed in the specified time interval (in seconds).

Use Navigation Buttons the following navigation buttons will be inserted into the Flash file:
Go to first page,
Go to previous page,
Go to next page,
Go to last page.

"ConceptDraw Licence Entry" Dialog

This dialog asks the user to provided the serial number and personal information to register the copy of the program.

It appears when you launch an unregistered copy of the program for the first time.

This dialog in Windows.

Name - the name of the user.
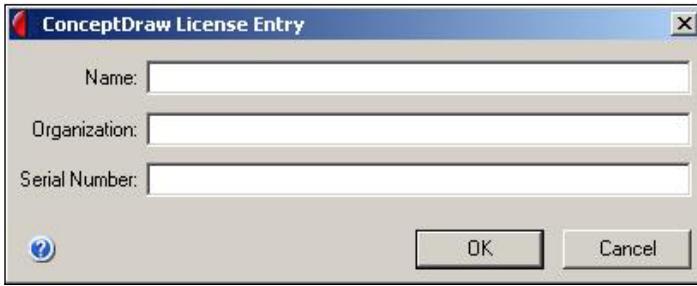
Organization - the name of the organization or company.
Serial Number - the serial number, provided when you purchase the software. It's either included in the box or is sent by e-mail.

"XML Parser Messages" Dialog

This dialog informs about the status of parsing files in XML for ConceptDraw format.

This dialog opens after a document in XML for ConceptDraw is loaded.

The dialog in Windows.

The dialog in Mac OS X.

ConceptDraw

In the main area you can see the results of parsing an XML file.

Show this dialog next time - specifies whether to display this dialog next time you open a file in XML for ConceptDraw format. This flag can also be set in the **Preferences** dialog, on the *Save* tab.

Close - closes the dialog.

> *This dialog displays messages generated by the parser of XML for ConceptDraw regarding errors in the input file.*

"HTML Export Results" Dialog

This dialog is used for viewing the results of exporting documents to the HTML format.

This dialog is displayed after export to HTML is complete.

The *HTML Export Results* dialog in Windows.
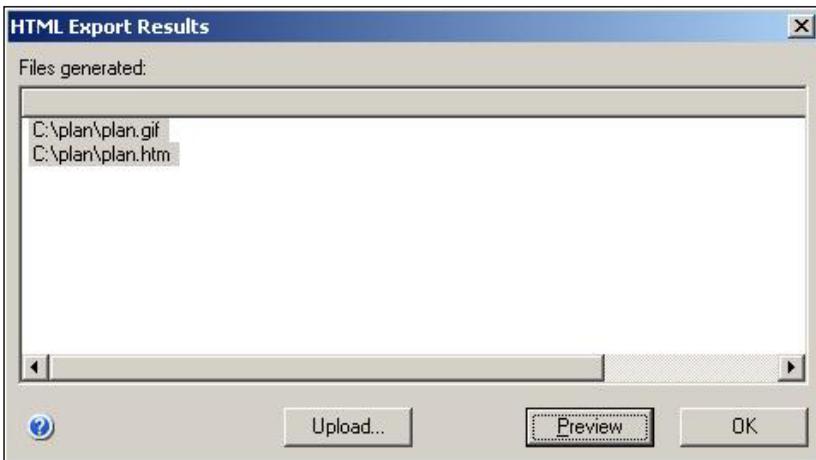
Files generated - shows the list of files generated during the export.

Upload - calls the **Save To FTP Server** dialog for uploading the generated files to a server (for instance, for publishing on a Web site).

Preview - calls the default Web browser, allowing to view the results of HTML export.

"Line Number" Dialog

This dialog is used to go to the line with a specified number in ConceptDraw Basic Editor.

This dialog can be called when you're in the ConceptDraw Basic Editor window.

The *Line Number* dialog in Mac OS X.
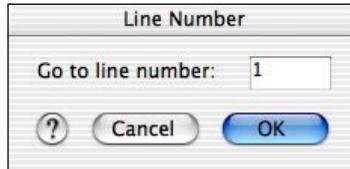
Go to line number - specifies the line number to which to go.

"Edit Bookmark" Dialog

This dialog is used to edit bookmarks for working with documents on a remote FTP server.

This dialog is called from the Bookmark button menu, the **Edit Bookmark** item, in the ***Open From FTP Server*** and ***Save To FTP Server*** dialogs.

The *Edit Bookmark* dialog in Windows.
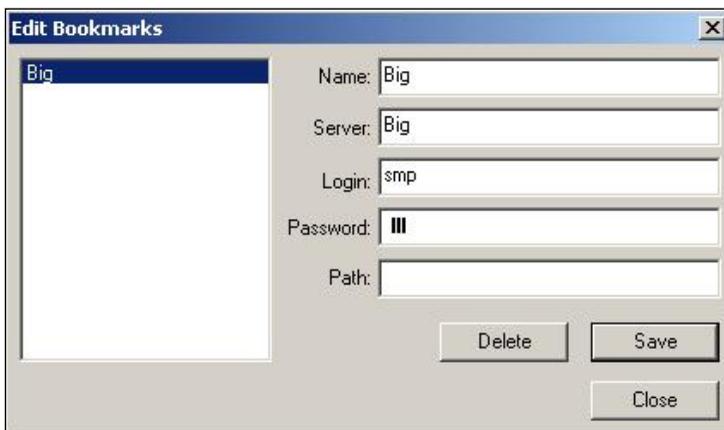
The left part of the dialog contains the list of existing bookmarks. The fields on the right contain the details of the selected bookmark. To select a bookmark, click on it in the list.

     Name - the title of the bookmark.

     Server - the address of the FTP server.

Login - user name (login).
Password - password for accessing the server.
Path - the filename and path to the document.
Delete - deletes the bookmark, selected in the list.
Save - saves information about the bookmark.

"Customize" Dialog

This dialog is used for customizing the user interface of the program (menu commands, toolbars, keyboard shortcuts).

This dialog is called from the **View / Toolbars / Customize** menu of from the context menu, called on one of the toolbars.

The Customize dialog on the Windows platform has the following tabs:
Commands - customizes commands in the menus and on the toolbars.
Toolbars - configures the toolbars.
Keyboard - sets keyboard shortcuts.
Menu - configures the main menus.
Options - configures tool tips, icon size, etc.

The Customize dialog in the Mac OS X version has the following tabs:
Commands - customizes commands in the menus and on the toolbars.
Toolbars - configures the toolbars.

The *Commands* tab in Windows.
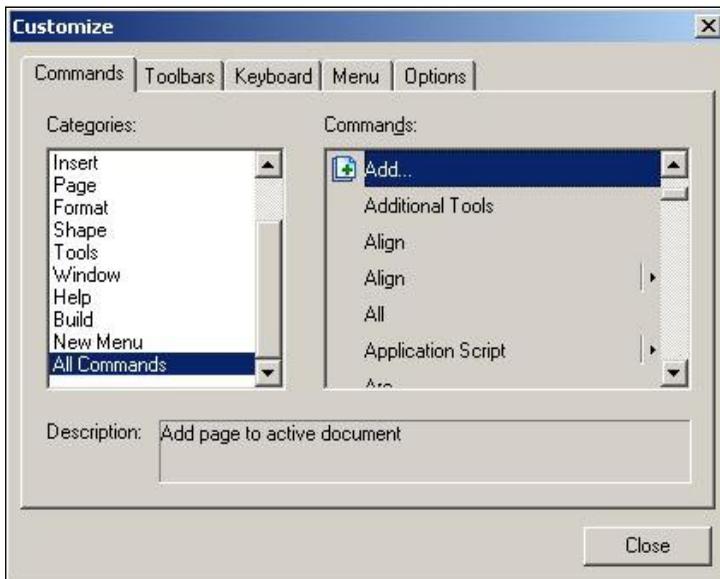
Categories - represents a list of categories. The commands of the selected category are displayed in the *Commands* area.

Commands - a set of commands.

Description - the description of the selected command.

You can draw commands from the *Commands* list to any toolbar or menu with the mouse. On releasing the mouse button the command will be inserted in the menu or toolbar in the cursor position.

To delete a command from a menu or a toolbar, grab it with the mouse and drag back onto the dialog window.

> *You can reposition commands between toolbars and menus without using this dialog - simply drag a command holding down the* **Alt** *key.*

The *Toolbars* tab in Windows.
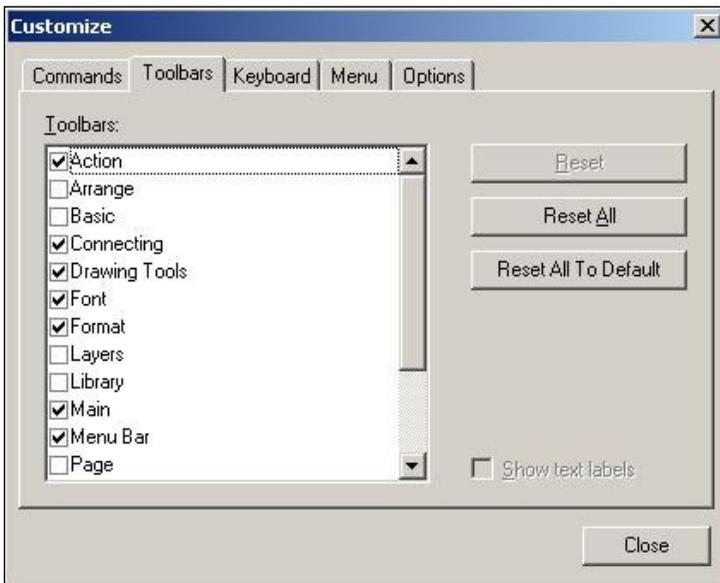
Toolbars lists the toolbars, available in the program. Enables toolbars have a check mark near the name. To disable or enable a toolbar, click on the corresponding box.

Reset - shows all buttons, associated with this toolbar.

Reset All - shows all buttons on all toolbars.

Reset All To Default - resets all toolbars to their default state.

ConceptDraw

The *Keyboard* tab in Windows.
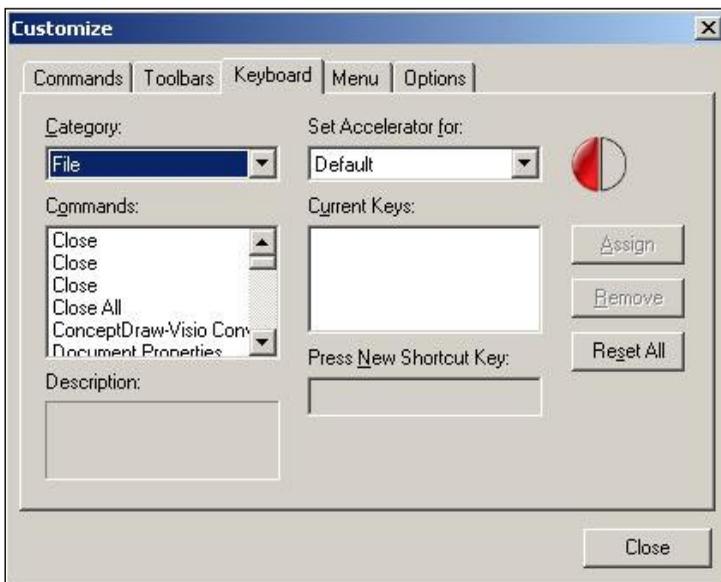
Categories - represents a list of categories. The commands of the selected category are displayed in the *Commands* area.

Commands - a set of commands.

Description - the description of the selected command.

Set Accelerator for - specifies for which set of menus and toolbars the accelerator (shortcut) is assigned. Two sets are available:

> *Default* - menus and toolbars for working with the document, table and group windows.
>
> *ConceptDraw Basic* - menus and toolbars for working with ConceptDraw Basic editor.

If after you've entered the new shortcut in the *Press New Shortcut Key* field, the *Assign* button remains disabled it means that this command is not available in the chosen set.

Current Keys - currently defined shortcuts.

Press New Shortcut Key - a new shortcut. When you are in this field, every key you press will be displayed in the field by a letter, number or the key name.

Assign - assigns the entered shortcut to a menu or toolbar command.

Remove - removes the shortcut.

Reset All - resets all commands and shortcuts to their default state.

The *Menu* tab in Windows.
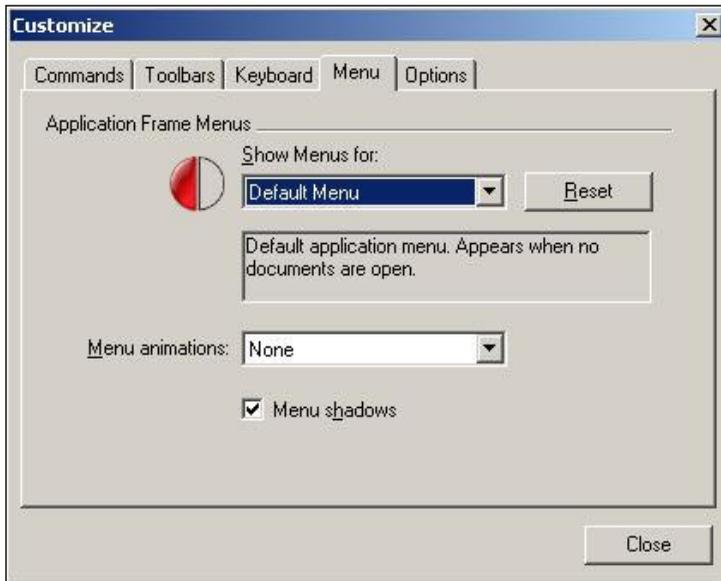
Show Menus for - allows to choose menu sets for different views of ConceptDraw (document view, ConceptDraw Basic editor window, group edit window).
Reset - resets all commands of the selected menu to its default state.
Menu animations - specifies visual effects for appearance / disappearance of the menu.
Menu shadows - enables/disables menu shadow.

The *Options* tab in Windows.

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Show ScreenTips on toolbars - enables tool tips for toolbar buttons.
Show shortcuts in ScreenTips - display keyboard shortcuts for toolbar button tool tips (for those commands, that have shortcuts assigned to them).
Large Icons - display large buttons on toolbars.
Look 2000 - display toolbars in the MS Office 2000 style.

The *Commands* tab in Mac OS X.
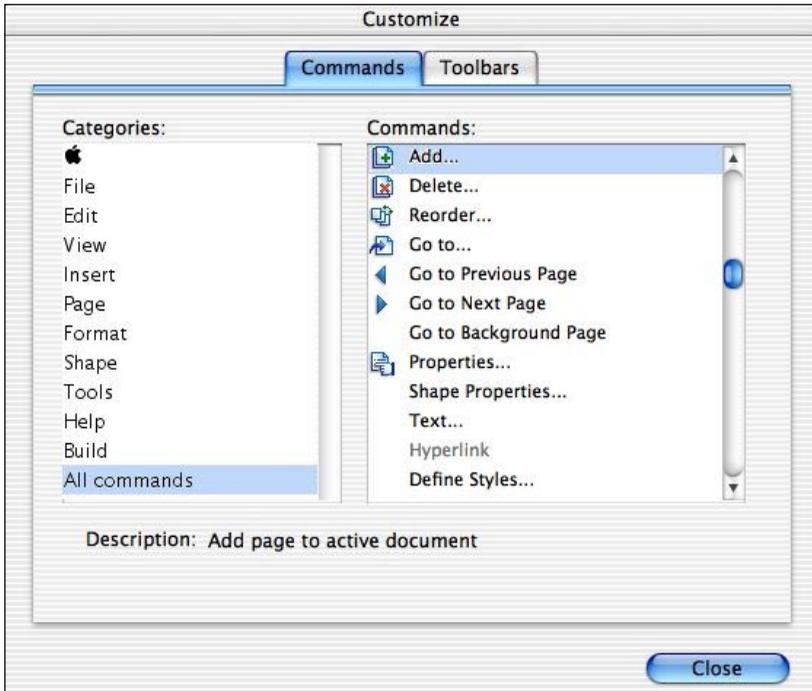
Categories - represents a list of categories. The commands of the selected category are displayed in the *Commands* area.
Commands - a set of commands.
Description - the description of the selected command.

You can draw commands from the *Commands* list to any toolbar or menu with the mouse. On releasing the mouse button the command will be inserted in the menu or toolbar in the cursor position.

To delete a command from a menu or a toolbar, grab it with the mouse and drag back onto the dialog window.

> *You can reposition commands between toolbars and menus without using this dialog - simply drag a command holding down the **Option** key.*

The *Toolbars* tab in Mac OS X.
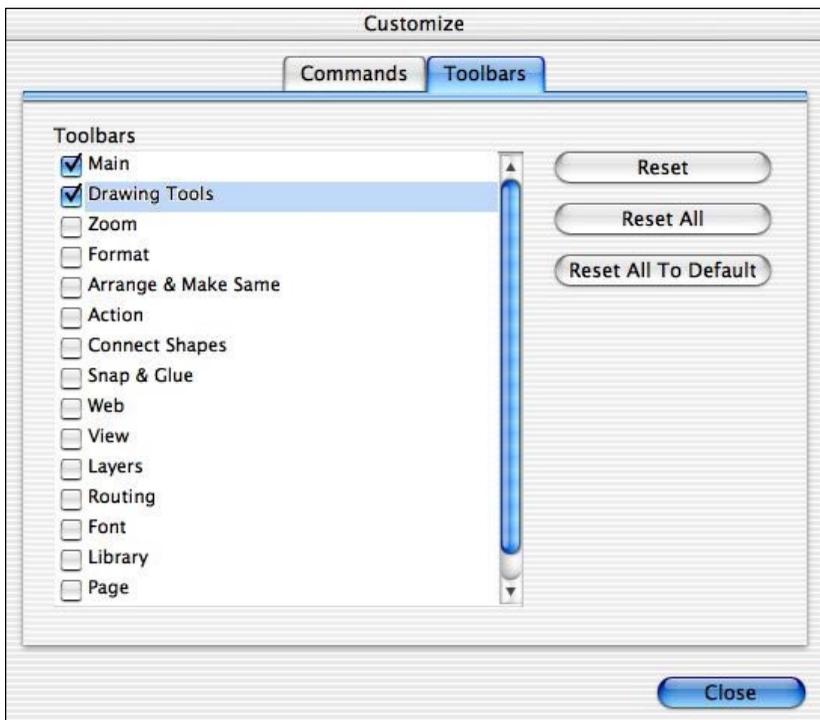
Toolbars lists the toolbars, available in the program. Enabled toolbars have a check mark near the name. To disable or enable a toolbar, click on the corresponding box.

Reset - shows all buttons, associated with this toolbar.

Reset All - shows all buttons on all toolbars.

Reset All To Default - resets all toolbars to their default state.

Floating Dialogs

These dialog serve for the same purpose as modal dialogs, however, they don't have buttons such as *OK, Apply, Cancel*. The changes you make in such dialogs are applied immediately. The dialogs behave as toolbars - they are always open and in the Windows version can be docked on the sides of the main window. Besides, you can group dialogs turning them into tabs of one dialog. This helps to save screen space. As a rule, the functionality in floating dialogs is doubled in the corresponding modal dialog, so the user is free to choose which way is more convenient.

ConceptDraw

"Line" Floating Dialog

This dialog is used for working with line properties of shapes: color, pattern, weight, arrowhead type and size, corner rounding.

If there are no shapes selected, the dialog displays the settings that will be applied to new shapes. If there are shapes selected, it will display the attributes of the selected shapes.

The *Line* dialog in Windows.

Color - allows to choose a line color from the list. The color scheme is indicated to the left from the color - the index in the color palette, **RGB** or **CMYK**. You can choose the main 32 colors from the list; for more colors choose *Custom* at the bottom of the list. The **Color** dialog will come up where you can select the needed color.

Pattern - sets the line pattern (solid or dotted). The index may be in the 0 - 15 range. The 0 value means the line is not displayed (*No Line*).

Weight - sets the line weight. There are 10 pre-defined values in the list: No Line, 0, 1, 4, 8, 12, 16, 20, 24, 28. The line weight is specified in *units*. The last item in the list, Custom, is used to call the **Custom Line Weight** dialog, where you can set any other line weight. The 0 value means that the line will always look as if it had the 1 weight, regardless of the zoom level.

Corner Rounding - sets the radius used for corner rounding.

The *Line Ends* specifies the parameters of the line ends.

Begin - allows to choose an arrowhead for the beginning of the line. You can choose an arrowhead within the 1 - 60 range. The *No Arrows* item denotes no arrowhead.

End - allows to choose an arrowhead for the end of the line. You can choose an arrowhead within the 1 - 60 range. The *No Arrows* item denotes no arrowhead.

Size - sets the arrowhead size. The following sizes are offered: Tiny, Small, Medium, Large, Huge.

"Fill & Shadow" Floating Dialog

This dialog is used for working with fill and shadow properties of shapes: color, pattern, background.

The dialog displays the parameters of the selected shape (if there's more than one shape selected - the parameters of the primary selected shape). If there's no selected shape, it displays the default fill and shadow settings of the document (those applied to new shapes).

The *Fill & Shadow* dialog in Windows.

The *Fill* section contains the fill attributes of the shape.

Color - sets the fill color. The color scheme is indicated to the left from the color - the index in the color palette, **RGB** or **CMYK**. You can choose the main 32 colors from the list; for more colors choose *Custom* at the bottom of the list. The **Color** dialog will come up where you can select the needed color.

Pattern - sets the fill pattern. The index may be in the 0 to 38 and 50 to 69 range. The 0 value means the shape is not filled, the 1 value indicates a plain fill, values from 2 to 38 denote various fill patterns, 50 - 69 are for gradient fills.

ConceptDraw

Pattern Color - sets the pattern color (the color of pattern elements, or background color for a gradient fill). The color scheme is indicated to the left from the color - the index in the color palette, **RGB** or **CMYK**. You can choose the main 32 colors from the list; for more colors choose *Custom* at the bottom of the list. The **Color** dialog will come up where you can select the needed color.

The *Shadow* section is used to set the shadow fill and pattern. It contains the same fields as the *Fill* section.

"Protection" Floating Dialog

This dialog is used to protect various properties of shapes against modifying.

The dialog displays the parameters of the selected shape (if there's more than one shape selected - the parameters of the primary selected shape). If there's no selected shape, the controls in the dialog are disabled.

The *Protection* dialog in Mac OS X.
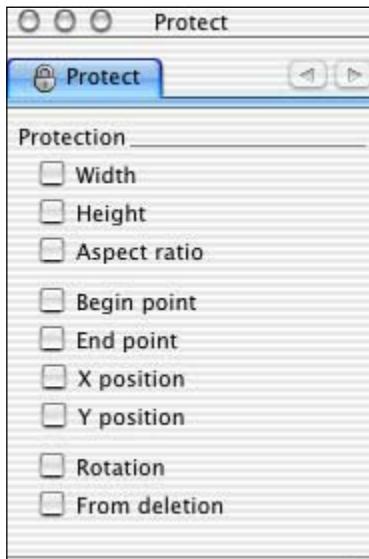
Width - locks/unlocks the shape's width against resizing.
Height - locks/unlocks the shape's height against resizing.
Aspect ratio - if on, the ratio between the width and height is always preserved when the shape is resized.

Begin point - for 1D shapes, locks/unlocks the begin point against repositioning.

End point - for 1D shapes, locks/unlocks the end point against repositioning.
X position - locks/unlocks the horizontal (X) position of the shape.
Y position - locks/unlocks the vertical (Y) position of the shape.

Rotation - locks/unlocks the shape against rotation.
Deletion - locks/unlocks the shape or its vertices against deleting.

Show text - sets whether to display the shape's text.
Don't print -sets whether the shape can be printed.

"Behavior" Floating Dialog

This dialog is used to change the way shapes behave and interact with other shapes.

The dialog displays the parameters of the selected shape (if there's more than one shape selected - the parameters of the primary selected shape). If there's no selected shape, the controls in the dialog are disabled.

The *Behavior* dialog in Windows.

The *Interaction Style* section determines whether the shape is a connector or not, and lets you turn any shape into a connector if necessary:
> *Line(1-D)* - the shape behaves as a line - it has a begin and end point (is a *1D-shape).* Such shape can be used as a connector.
> *Box(2-D)* - the shape behaves as a *2D-shape*, that is, it has width and height.

The *Selection Highlighting* section describes how the shape is displayed when selected. The following options are available:

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Show shape handles - display or hide the handles on the shape's alignment box. This option is on by default.

Show control handles - display or hide the *control handles* of the shape. This option is on by default.

Show alignment box - display or hide the shape's alignment box. This option is on by default.

The *Resize Behavior* section describes how the shape behaves within a group when the group is resized:

Scale with group - always resize the shape as the group is resized. This option is set by default.

Reposition only - simply move the shape without changing its size.

Use group's settings - the shape uses the behavior settings of the group to which it belongs.

"Double-Click" Floating Dialog

This dialog is used to change the double-click action of the shape.

The dialog displays the parameters of the selected shape (if there's more than one shape selected - the parameters of the primary selected shape). If there's no selected shape, the controls in the dialog are disabled.

The *Double-Click* dialog in Windows.
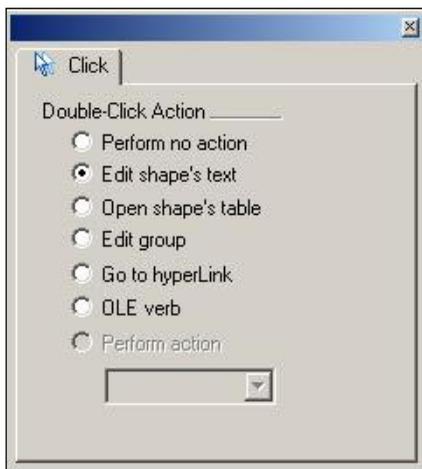
The *Double-Click Action* setting specifies the action which is taken when the shape is double-clicked:

Perform no action - nothing happens.

Edit shape's text - turn on the text editing mode.

Edit shape's table - display the shape parameter table.

Open group in new window - open the Edit Group window, where you can edit the shapes inside the group (this option is only available for groups).

Go to hyperlink - open the hyperlink (available if the shape has a hyperlink).

OLE Verb - perform the OLE action (available only for the *OLE paint* type shapes).

Custom action - perform a user-defined *action*. Two modes are available: you can choose an action from the list, or choose the *Action Loop* option - in this case each time the shape is double-clicked the next action from the list is performed.

"Information" Floating Dialog

The dialog displays basic information about the selected shape (if there's more than one shape selected - the information for primary selected shape). If there's no selected shape, the controls in the dialog are disabled.

The *Information* dialog in Mac OS X.
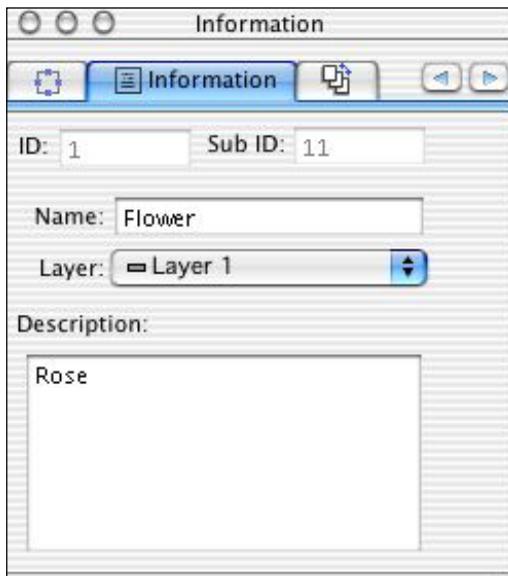
ID - indicates the unique number of the shape in the current document.

Sub ID - indicates the number of the shape in its parent group. It's used for referring to shapes inside a group.

Name - in this field you can type the name you want to assign to the shape.

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Description - in this field you can provide a description of the shape.

Layer - assigns the shape to a layer. Unlike other fields of the dialog, changing layer applies to all selected shapes, not only to the primary one.

"Layers" Floating Dialog

This dialog is used for working with layers. It contains the list of existing layers and their properties.

The *Layers* dialog in Windows.
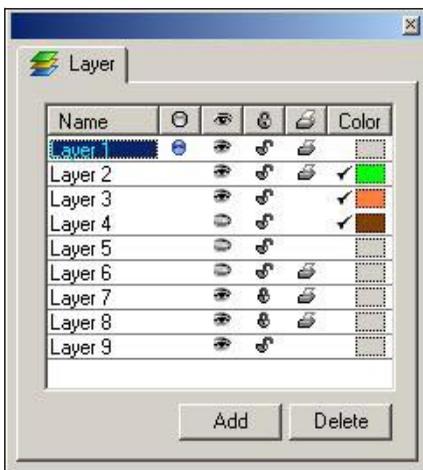
The table contains six columns: *Name*, *Active*(⊖), *Visible*(👁), *Lock*(🔒), *Printable*(🖨) and *Color.*

Name - indicates the name of the layer. The active layer is displayed in blue, the selected layer (which is being edited) is highlighted. To select another layer, click on its name with the mouse. Double-clicking on the name (or pressing F2) let you edit the name of the layer.

Active - specifies whether the layer is active. The active layer is the layer on which new shapes are placed. The active layer is marked with the 🔵 sign. Only one layer can be active at a time.

Visible - specifies whether the layer is visible. The eye sign 👁(👁), indicates that the layer is visible (invisible), that is, the shapes on the layer are visible (invisible).

Lock - specifies whether the layer is locked against changes. The padlock sign 🔒 (🔓) indicates that the layer is locked (unlocked). You can't edit shapes on a locked layer.

Printable - specifies whether the layer is printable. The printer sign 🖨 indicates that the layer is printable and the shapes on it will be printed.

Color - specifies the color of the shapes on the layer. If the check mark ✓ is set, the line color of all shapes on the layer will be the same as the color of the color box near the check mark. Otherwise the shapes have their original line color.

Add - adds a new layer to the document. The new layer gets default settings: not active, visible, unlocked, printable, without color.

Delete - deletes the selected layer. All shapes that are on the deleted layer are automatically placed on the active layer. You can delete the active layer, and there's always at least one layer in the document.

"Page Navigator" Floating Dialog

This dialog allows to manipulate and edit document pages (navigate, add and remove, reorder).

The *Page Navigator* dialog in Mac OS X.
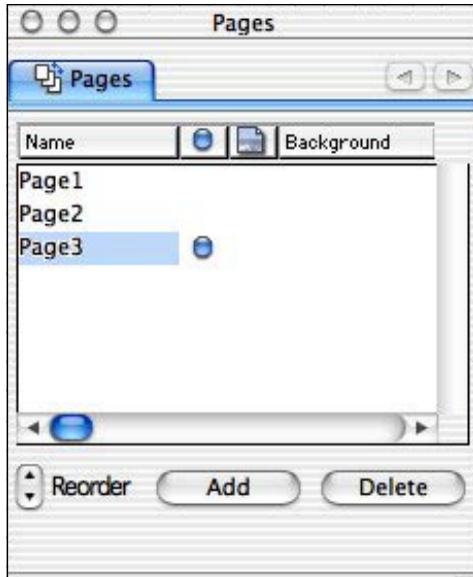
The page list contains four columns: *Name*, *Active*, *Is Background*, *Background*.

> *Name* - the name of the page. By double-clicking the name you can edit it.

Active - denotes the active page. The active page is marked with the sign in the list. Only one page at a time can be active.

Is Background - specifies whether the page is a background page. If there's a mark in that column, the page can serve as a background page for other pages.

Background - the name of the background page for this page. If the page has a background page, it's name is displayed in this column. The drop-down list with the names of background pages allows to choose another background page, or disable the current one.

Reorder - you can use the buttons to move the page up or down in the list. The order of pages in the document will change accordingly.

Insert - adds a new page.

Delete - removes the selected page.

"Geometry" Floating Dialog

This dialog is used for viewing and changing the following properties of shapes: *Width, Height, Angle, Spline Smoothness, GPin, LocPin, Begin, End*. This dialog can work in one of the following modes: *Dimensions*, *Position*, *End Points.*

The mode determines the set of properties, available for viewing and editing. *Angle* and *Spline Smoothness* don't depend on the chosen mode.

Dimensions

In this mode you can change the following properties:*Width, Height, Angle, Spline Smoothness.*

The *Geometry* dialog in Windows.
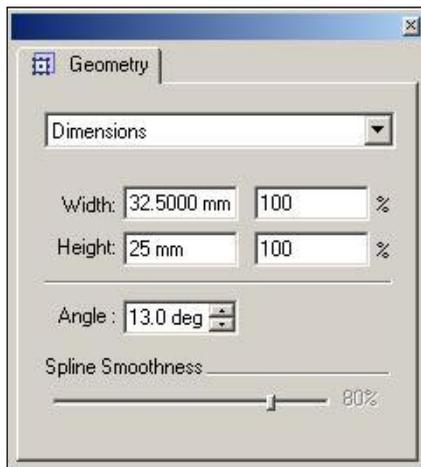
Width - the shape's width. The first field shows the absolute value in the current units of measure. The second field shows percent value, relative to the current width.

Height - the shape's height. The first field shows the absolute value in the current units of measure. The second field shows percent value, relative to the current height.

Angle - the angle of the shape.

Spline Smoothness - the smoothness of the spline segments. You can change this settings only when you create a spline, it can't be changed later.

Position

This dialog in Mac OS X.
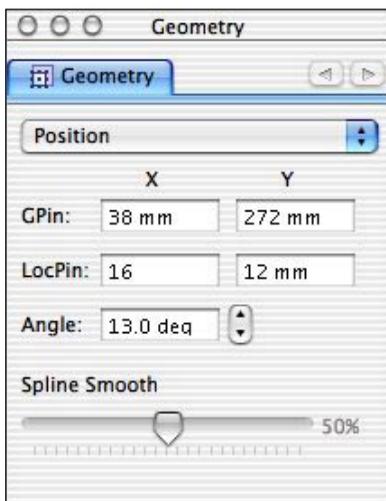
GPin - the *GPinX* and *GPinY* values of the shape.

LocPin - the *LocPinX* and *LocPinY* values of the shape.

For more information see **Shape Parameter Table.**

End Points
This mode is available for *1D shapes* only.

Begin - the *BeginX* and *BeginY* values of the shape.

End - the *EndX* and *EndY* values of the shape.

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This dialog in Windows.
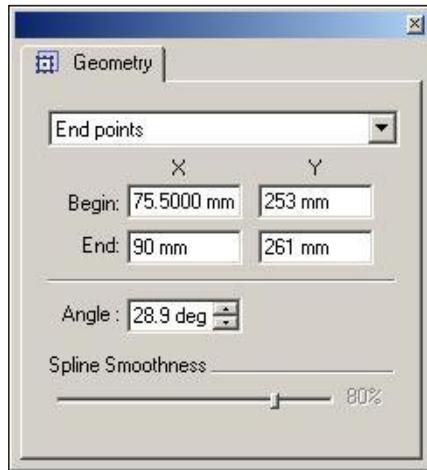
Chapter 13. Toolbars

Main	Main commands for working with files and Clipboard.
Drawing Tools	Drawing tools.
Zoom	Zoom level and scrolling.
Views	Allows to display/hide the grid, rulers, guide lines, page breaks, etc.
Formatting	Style and color of lines, fills and shadows.
Connect Shapes	Tools for connecting shapes.
Text	Text formatting properties.
Arrange & Make Same	Aligns selected shapes and copies properties of shapes.
Action	Flipping, rotating and grouping shapes.
Layers	Specifies active layers.
Libraries	Commands for working with libraries (opening, saving, working with the Clipboard).
Pages	Deletes, adds pages, allows to navigate between pages.
Routing	Determines how connectors behave.
Snap & Glue	Controls Snap and Glue settings.
Basic	Runs, stops and pauses ConceptDraw Basic scripts.
Web	Opens hyperlinks and searches the Internet.

"Main" Toolbar

This toolbar contains tools for working with files and the Clipboard.

ConceptDraw

Creates a new document.

Opens a file.

Saves the document.

Prints the document.
For more information see **Document** - *Printing a Document*.

Allows to preview the results before printing.
For more information see **Document** - *Printing a Document*.

Cuts selected text or shapes and copies them onto the Clipboard.
For more information see **Shapes** - Operations on Shapes - *Copying and Pasting*.

Copies selected shapes or text onto the Clipboard.
For more information see **Shapes** - Operations on Shapes - *Copying and Pasting*.

Inserts the contents of the Clipboard into the document.
For more information see **Shapes** - Operations on Shapes - *Copying and Pasting*.

Cancels the most recent action. The name of the last action is displayed in the menu item.
For more information see **Shapes** - Operations on Shapes - *Undo and Redo*.

Cancels the last Undo operation. The name of the last action is displayed in the menu item.
For more information see **Shapes** - Operations on Shapes - *Undo and Redo*.

Opens a library.
For more information see **Libraries** - *Using Libraries and Library Shapes*.

"Drawing Tools" Toolbar

This toolbar contains the main drawing tools.

Activates the **Select** tool mode.
For more information see **Shapes** - Operations on Shapes -
Selecting and **Shapes** - Operations on Shapes - *Moving*.

Activates the **Rotate** tool mode and lets you rotate shapes.
For more information see **Shapes** - Operations on Shapes - *Rotating and Flipping*.

Activates the **Line** tool mode and lets you draw lines and manipulate vertices of shapes.
For more information see **Shapes** - *Drawing a Shape with Drawing Tools*.

Activates the **Sector** tool mode and lets you draw circular sectors, manipulate vertices of shapes, and change the curvature of segments.
For more information see **Shapes** - *Drawing a Shape with Drawing Tools*.

Activates the **Arc** tool mode and lets you draw elliptic arc segments, manipulate vertices of shapes and change the curvature of segments.
For more information see **Shapes** - *Drawing a Shape with Drawing Tools*.

Activates the **Spline** tool mode and lets you draw smooth curves (splines), and also manipulate vertices of shapes and change the curvature of spline segments.
For more information see **Shapes** - *Drawing a Shape with Drawing Tools*.

Activates the **Rectangle** tool mode and lets you draw rectangle boxes, and also move and resize shapes.
For more information see **Shapes** - *Drawing a Shape with Drawing Tools*.

Activates the **Ellipse** tool mode and lets you draw ellipses, and also move and resize shapes.
For more information see **Shapes** - *Drawing a Shape with Drawing Tools*.

Activates the **Insert Vertex** tool which lets you insert and manipulate the vertices of shapes.
For more information see **Shapes** - Operations on Shapes - *Reshaping*.

Activates the **Smart Connector** tool mode and lets you draw smart connectors.
For more information see **Shapes** - Connecting Shapes - *Connectors*.

Activates the **Direct Connector** tool mode and lets you draw direct connectors.
For more information see **Shapes** - Connecting Shapes - *Connectors*.

Activates the **Connection Point** tool mode which lets you insert and manipulate connection points of shapes.
For more information see **Shapes** - Connecting Shapes - *Connection Points*.

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Activates the **Stamp** tool: if there is a shape selected in the document or in the library, you can insert this shape into the document by a single click on the page.

For more information read **Shapes** - Operations on Shapes - *Duplicating*, **Libraries** - *Using Libraries and Library Shapes*.

Activates the **Edit Text** tool mode which lets you edit the text of the shape, and also create new "Text" shapes.

For more information see **Shapes** - *Drawing a Shape with Drawing Tools*.

Activates the **Text Box** tool mode which lets you reposition the text with respect to the shape to which this text is assigned.

For more information see **Text** - *Repositioning Text*.

"Zoom" Toolbar

This toolbar controls the magnification level of the document and allows to scroll through the document using the Scroll Hand tool.

This toolbar may look different in Windows and Mac OS X.

After the first launch of the program it looks as follows:

This is the default view.

If on the **Toolbars** tab of the **Customize** dialog you choose the **Zoom** toolbar and click the **Reset** button, the **Zoom** toolbar will look as follows:
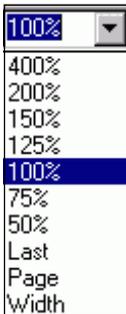
The **Zoom** drop-down list is used to set the magnification level. You can choose a value from the list, or type a custom value within the 1% - 2500 % range.

Last - restores the last zoom level,

Page - shows the whole page,

Width -sets the zoom level so that the page width fits in the document window.

Increases magnification.

Decreases magnification.

Activates the Zoom Box mode letting you zoom in or out on the needed part of the page.

The Scroll Hand tool is used for scrolling the document.

For more information see **Document - Working with a Document - _Zooming_**, **Document - Working with a Document - _Scrolling_**, about the **Customize** dialog see **Dialogs - Modal Dialogs - _Customize_**.

"View" Toolbar

This toolbar controls how the document is displayed.

Shows/hides the rulers.
For more information see **Document - Working with a Document - _Rulers and Grid_**.

Shows/hides the grid.
For more information see **Document - Working with a Document - _Rulers and Grid_**.

Shows/hides the guide lines.
For more information see **Document - Working with a Document - _Guide Lines and Gluing_**.

Lets you choose to show/hide the page breaks for the documents.
For more information see **Document - _Printing a Document_**.

Shows/hides the connection points of shapes.
For more information see **Shapes - Connecting Shapes - _Connection Points_**.

Shows/hides the **Layers** floating dialog.
For more information see **Dialogs - Floating Dialogs - _Layers_**, **Document - _Layers_**.

"Formatting" Toolbar

The **Formatting** toolbar is used to change line color, weight, type, fill and shadow color of shapes and more.

No Style

ConceptDraw

This drop-down list contains the user-defined named styles. You can use the styles to quickly change various attributes for the selected shapes.

For more information about the named styles see **Shapes - *Defining and Using Named Styles***.

The **Line Color** tool is used to set the line color.

You can choose one of the colors in the button menu, or select the **More Colors...** item to get the **Color** dialog with more colors.

For more information see **Shapes - Shape Properties - *Line Properties***. For more information about the **Color** dialog see **Dialogs - Modal Dialogs - *Color***.

The **Line Weight** tool is used to set the line weight.

You can choose one of the values in the button menu, or select the **More Line Weights...** item and select the desired line weight on the **Line** tab of the **Shape Properties** dialog.

For more information see **Shapes - Shape Properties - *Line Properties***, **Dialogs - Modal Dialogs - *Shape Properties***.

The **Line Style** tool is used to set the line style. You can choose one of the styles in the button menu, or select **More Line Patterns...** and choose the desired line style on the **Line** tab of the **Shape Properties** dialog.

For more information see **Shapes - Shape Properties - *Line Properties***, **Dialogs - Modal Dialogs - *Shape Properties***.

The **Line Ends Style** tool is used to set the arrowhead style. You can choose of the styles in the button menu, or select **More Arrow Styles...** and choose the desired arrowhead style on the **Line** tab of the **Shape Properties** dialog.

For more information see **Shapes - Shape Properties - *Line Properties***, **Dialogs - Modal Dialogs - *Shape Properties***.

The **Fill Color** tool is used to set the fill color. You can choose one of the colors in the button menu, or select the **More Colors...** item to get the **Color** dialog with more colors.

For more information see **Shapes - Shape Properties - *Fill Color and Pattern***, **Dialogs - Modal Dialogs - *Color***.

The **Fill Pattern** tool is used to set the fill pattern. You can choose a pattern from the button menu, or select the **More Patterns...** item and change the fill pattern on the **Fill & Shadow** tab of the **Shape Properties** dialog.

For more information see **Shapes - Shape Properties - *Fill Color and Pattern***, **Dialogs - Modal Dialogs - *Shape Properties***.

 The **Shadow Color** dialog is used to set the shadow color. You can choose one of the colors in the button menu, or select the **More Colors...** item to get the **Color** dialog with more colors.

For more information see **Shapes - Shape Properties - *Shadow***, **Dialogs - Modal Dialogs - *Color***.

"Connect Shapes" Toolbar

This toolbar is used for connecting shapes.

 Connects the selected shapes to the primary selected shape, using the smart connectors.

For more information see **Shapes - Connecting Shapes - *Smart Connector***, **Shapes - Connecting Shapes - *Connecting Multiple Shapes***.

 Connects the selected shapes to the primary selected shape, using the direct connectors.

For more information see **Shapes - Connecting Shapes - *Direct Connector***, **Shapes - Connecting Shapes - *Connecting Multiple Shapes***.

 Activates the **Smart Connection** mode in which every new shape gets connected automatically to the previously selected shape with a smart connector.

For more information see **Shapes - Connecting Shapes - *Smart Connector***, **Shapes - Connecting Shapes - *Auto-Connection Modes***.

 Activates the **Direct Connection** mode in which every new shape gets connected automatically to the previously selected shape with a direct connector.

For more information see **Shapes - Connecting Shapes - *Connection.htm - SmartConnDirect Connector***, **Shapes - Connecting Shapes - *Auto-Connection Modes***.

 Selects all shapes, connected to the selected shape with connectors. If the shapes, connected to the selected shape also have shapes, connected to them, these shapes are selected as well.

For more information see **Shapes - Operations on Shapes - *Selecting***.

ConceptDraw

"Text" Toolbar

This toolbar is used for formatting text, associated with shapes or inserted in the document.

| Arial | ▼ | 10 | ▼ | $A^\uparrow$ $A^\downarrow$ $A^{\diamond}$ ▸ $A^{\diamond}$ ▸ |

| **B** | *I* | U̲ | A^2 | A_2 | ☰ | ☰ | ☰ | ☰ | ☰ | ☰ | A |
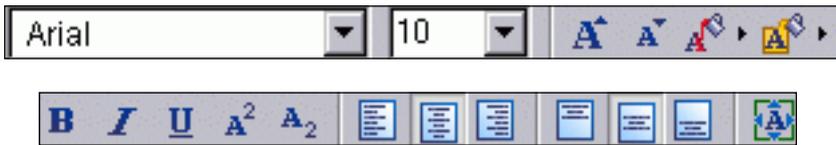
The toolbar contains two drop-down lists and a number of buttons for changing text attributes.

| Ŧ Arial ▼ | In this drop-down list you can choose the font you need. |

| 14 ▼ | In this drop-down list you can choose a font size, or specify a custom font size. |

| $A^\uparrow$ | The **Increase Font Size** tool increases the font size of the text of selected shapes. |

| $A^\downarrow$ | The **Decrease Font Size** tool decreases the font size of the text of selected shapes. |

| $A^{\diamond}$ | The **Text Color** tool allows to select a text color from the button menu, or you can select the **More Colors...** item and choose a color from the **Color** dialog. |

| $A^{\diamond}$ | The **Text Background Color** tool allows to select a text background color from the button menu, or you can select the **More Colors...** item and choose a color from the **Color** dialog. |

| **B** | Applies the Bold style to selected text, or to the text of selected shape. |

| *I* | Applies the Italic style to selected text, or to the text of selected shape. |

| U̲ | Applies the Underline style to selected text, or to the text of selected shape. |

| A^2 | Sets the **Superscript** style. |

| A_2 | Sets the **Subscript** style. |

| ☰ | Aligns the paragraph to the left. |

 Aligns the paragraph to the center.

 Aligns the paragraph to the right.

 Aligns the text block to the top.

 Aligns the text block to the center.

 Aligns the text block to the bottom.

 Activates the **Text Auto Expand** mode in which any shape is resized automatically when you add text to it.

For more information see *Text*, for details about the **Color** dialog see **Dialogs - Modal Dialogs - *Color***.

"Arrange & Make Same" Toolbar

This toolbar is used for aligning selected shapes, and copying attributes of shapes. It's used for working with two or more selected shapes.

For the first three tools, click and hold the mouse button on the menu; a submenu with the set of tools will appear.

Then when you release the mouse button on one of the tools, the corresponding operation will be performed.

Tools for aligning shapes

These tools are used to align several selected shapes (two or more) with respect to the primary selected shape.
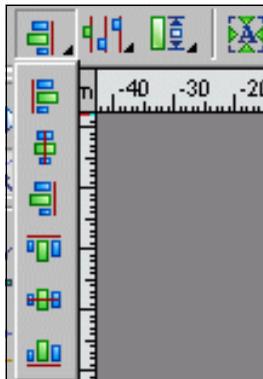
ConceptDraw

 Aligns selected shapes on the left sides relative to the primary selected shape.

 Aligns selected shapes horizontally on the centers relative to the primary selected shape.

 Aligns selected shapes on the right sides relative to the primary selected shape.

 Aligns selected shapes on the top sides relative to the primary selected shape.

 Aligns selected shapes vertically on the centers relative to the primary selected shape.

 Aligns selected shapes on the bottom sides relative to the primary selected shape.

For more information see **Shapes - Operations on Shapes - *Aligning Shapes*.**

Tools for distributing shapes

These tools are used to create equal spacing between three or more selected shapes.

 Creates uniform horizontal spacing between the alignment boxes of the selected shapes.

 Creates uniform spacing between the left edges of the alignment boxes of the selected shapes.

 Creates uniform horizontal spacing between the centers of the alignment boxes of the selected shapes.

 Creates uniform spacing between the right edges of the alignment boxes of the selected shapes.

 Creates uniform vertical spacing between the alignment boxes of the selected shapes.

 Creates uniform spacing between the top edges of the alignment boxes of the selected shapes.

 Creates uniform vertical spacing between the centers of the alignment boxes of the selected shapes.

 Creates uniform spacing between the bottom edges of the alignment boxes of the selected shapes.

For more information see **Shapes - Operations on Shapes - *Distributing Shapes***.

Tools for copying properties of shapes

These tools are used to make some attributes of shapes the same as the attributes of the primary selected shape. At least two shapes must be selected.
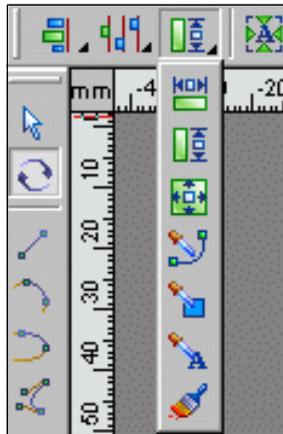
 Makes the selected shapes the same width as the primary selected shape.

 Makes the selected shapes the same height as the primary selected shape.

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Makes the selected shapes the same size as the primary selected shape.

Makes the selected shapes the same line properties as the primary selected shape.

Makes the selected shapes the same fill properties as the primary selected shape.

Makes the selected shapes the same text properties as the primary selected shape.

Copies visual attributes of the primary selected shape to other selected shapes.

For more information see **Shapes - Operations on Shapes -** *Copying Shape's Visual Attributes***.**

The Fit To Text tool

This tool resizes the selected shapes according to the dimensions of the text they contain.

For more information see **Text -** *Adjusting a Shape's Size to Fit Its Text*.

"Action" Toolbar

This menu contains various commands for manipulating shapes (flipping, rotating, grouping).

Replaces the selected shape with its horizontally mirrored copy.
For more information see **Shapes - Operations on Shapes -** *Rotating and Flipping***.**

Replaces the selected shape with its vertically mirrored copy.
For more information see **Shapes - Operations on Shapes -** *Rotating and Flipping***.**

Rotates selected shapes by 90° clockwise.
For more information see **Shapes - Operations on Shapes -** *Rotating and Flipping***.**

Rotates selected shapes by 90° counterclockwise.
For more information see **Shapes - Operations on Shapes -** *Rotating and Flipping***.**

Puts the selected shapes above all other shapes.
For more information see **Shapes - Operations on Shapes - *Changing the Front-to-Back Order***.

Puts the selected shapes behind all other shapes.
For more information see **Shapes - Operations on Shapes - *Changing the Front-to-Back Order***.

Groups selected shapes.
For more information see **Shapes - Operations on Shapes - *Grouping and Ungrouping***.

Ungroups selected shapes.
For more information see **Shapes - Operations on Shapes - *Grouping and Ungrouping***.

"Layers" Toolbar

This toolbar is used for working with layers. It contains only the drop-down list, from where you can choose the active layer - the layer, on which the shapes you draw are located.
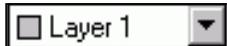
For more information see **Document - *Layers***.

"Libraries" Toolbar

This toolbar is used for working with libraries.

It contains a set of commands for working with libraries and library shapes.

Creates a new library.

Opens a library.

Saves the active library.

Closes the active library.

Cuts the selected library shape and copies it onto the Clipboard.

Copies the selected library shape onto the Clipboard.

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Inserts the shape on the Clipboard into the library.

Edits the properties of the library shape.

Removes the shape from the library.

Shows shapes in the library window as icons.

Shows only the names of the shapes in the library window.

Shows both the names and the icons of the shapes in the library window.

For more information see *Libraries*, **Windows - *Library***.

"Pages" Toolbar

The **Pages** toolbar is used to navigate between pages, add and delete pages.

Adds a page to the active document.
For more information see **Document - Working with Pages - *Adding a Page***.

Deletes the selected page from the document.
For more information see **Document - Working with Pages - *Deleting a Page***.

Allows to change the page properties in the **Page Properties** dialog (change name, make background, assign a background page).
For more information about the **Page Properties** dialog see **Dialogs - Modal Dialogs - *Add Page/Page Properties***.

Changes the order of pages in the active document.
For more information see **Document - Working with Pages - *Reordering Pages***.

Goes to the specified page.
For more information see **Document - Working with Pages - *Going to Another Page***.

Goes to the first page.
For more information see **Document - Working with Pages - *Going to Another Page***.

Goes to the previous page.
For more information see **Document - Working with Pages -** *Going to Another Page*.

Goes to the next page.
For more information see **Document - Working with Pages -** *Going to Another Page*.

Goes to the last page.
For more information see **Document - Working with Pages -** *Going to Another Page*.

"Routing" Toolbar

The **Routing** toolbar is used for working with connectors (it determines how the line jumps should look, and how connectors behave when they meet shapes on their way).

For the first two tools, click and hold the mouse button on the menu; a submenu with the set of tools will appear.

Then when you release the mouse button on one of the tools, the corresponding action will be performed.

Tools, determining the line jump type

Specify how the points in which smart connectors cross look like.
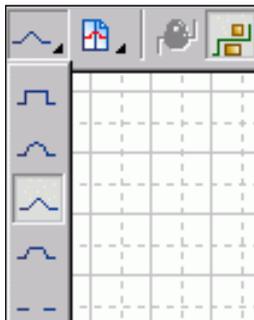
  Displays a square crossing.

  Displays an arc crossing.

 Displays a crossing made up of two lines.

 Displays a crossing made up of three lines.

 Displays a gap on crossing.

For more information see **Shapes - Connecting Shapes - *Smart Connector***.

Tools, determining the line jump orientation

Specify the orientation of line crossings.
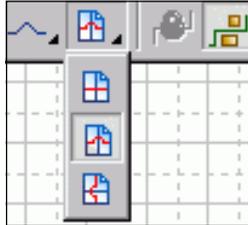
 The line crossings will be displayed on the horizontal lines.

 The line crossings will be displayed on the vertical lines.

 No line jumps are displayed.

For more information see **Shapes - Connecting Shapes - *Smart Connector***.

Tools, determining the behavior of the smart connector

 Enables/disables automatic routing for the smart connector.

 Specifies whether smart connectors can flow around shapes on their way.

For more information see **Shapes - Connecting Shapes - *Smart Connector***.

"Snap & Glue" Toolbar

This toolbar is used for enabling/disabling the Glue and Snap modes.
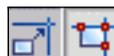
It contains two tools:

Enables/disables the Snap mode.
For more information see **Document - Working with a Document - *Rulers and Grid***.

Enables/disables the Glue mode (used for gluing shapes to guide lines).
For more information see **Document - Working with a Document - *Guide Lines and Gluing Shapes***.

"CD Basic" Toolbar

This toolbar is used for working with ConceptDraw Basic.

It contains buttons for running, suspending and stopping the script.

Compile and run a ConceptDraw Basic script.

Suspend/resume executing a script.

Stop executing a script.

For more information see ***ConceptDraw Basic***.

"Web" Toolbar

This toolbar is used for working with the Internet.

It contains two tools.

Opens the selected shape's hyperlink.

Opens a search engine page in the Internet.

For more information see ***Internet***.

ConceptDraw

Chapter 14. Menus

ConceptDraw has the main menu and a number of context menus, which depend on what the user is doing at the moment, and in which window the user is working - in the document window, or ConceptDraw Basic editor window, etc. The main menu also looks differently in different views.

Document View Menus

When working with the document window, the main menu bar looks as follows:
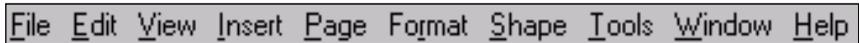
File Edit View Insert Page Format Shape Tools Window Help

File menu

The **File** menu contains commands for working with files - opening, closing and saving files.

New Document
Creates a new ConceptDraw document.

Template Gallery...
Opens the *Template Gallery* dialog where you can choose a template to base a new document on.
For more information read **Dialogs *- Modal dialogs - Template Gallery***.

Open
Opens a file.

Open From FTP Server...
Opens a file from an FTP server.
For more information see **Internet** - *Working with Documents on a Remote FTP-Server*.

Close
Closes the active document.

Save
Saves the document.
For more information see **Document** - *Saving a Document*.

Save As...
Saves the document under a new name.
For more information see **Document** - *Saving a Document*.

Save Copy As...
Saves a copy of the document under a new name.
For more information see **Document** - *Saving a Document*.

Save As Template...
Saves or creates a template file.
For more information see **Document** - *Saving a Document*.

Save Workspace...

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Saves or creates a workspace file.
For more information see **Document - *Saving a Document***.

Save to FTP Server...
Saves a file to an FTP Server.
For more information see **Internet - *Working with Documents on a Remote FTP-Server***.

Import
Opens a file in a format, other than ConceptDraw.

Import ➤ Graphic File...
Opens a graphic file (picture).
For more information see **Document - *Importing Files***.

Import ➤ Microsoft PowerPoint...
Opens a presentation file in Microsoft PowerPoint format.
For more information see **Document - *Importing Files***.

Import ➤ Text Data
In this menu you can choose one of two possible text data formats to import in ConceptDraw.

Import ➤ Text Data ➤ Flow Data Format...
Imports text data in the *Flow Data* format.
For more information see **Document - *Importing Files***.

Import ➤ Text Data ➤ Outline Format...
Imports text data in the *Outline* format.
For more information see **Document - *Importing Files***.

Import ➤ ConceptDraw XML...
Imports a file in the XML for ConceptDraw format.
For more information see **Document - *Importing Files***.

Export
The file export menu.

Export ➤ Graphic File...
Saves the document in a graphic file.
For more information see **Document - Exporting a Document - *To graphic formats***.

Export ➤ HTML...
Saves the document as HTML files. You can choose the image type and other export parameters.
For more information see **Document - Exporting a Document - *To HTML - for publishing on the Web***.

Export ➤ PDF...
Saves the document in the PDF format.
For more information see **Document - Exporting a Document - *To PDF - for cross-platform viewing and printing***.

Export ➤ Microsoft PowerPoint...
Saves the document in the MS PowerPoint format.
For more information see **Document - Exporting a Document - *To PowerPoint - for creating presentations***.

Export ➤ Macromedia Flash (SWF)...
Saves the document in the Macromedia Flash format.
For more information see **Document - *Exporting a Document***.

Export ➤ Encapsulated Postscript...
Saves the document in the Encapsulated Postscript (EPS) format.
For more information see **Document - *Exporting a Document***.

Export ➤ Text Data
The menu for exporting to a text file.

Export ➤ Text Data ➤ Flow Data Format...
Saves the document in the Flow Data format.
For more information see **Document - *Exporting a Document***.

Export ➤ Text Data ➤ Outline format...
Saves the document in the Outline format.
For more information see **Document - *Exporting a Document***.

Export ➤ ConceptDraw XML...
Saves the document in the XML for ConceptDraw format.
For more information see **Document - *Exporting a Document***.

ConceptDraw-Visio Converter...
Opens the Web page of the ConceptDraw-Visio conversion service.
For more information see **Document - *Exporting a Document***.

Library
The menu for working with libraries.

Library ➤ New...
Creates a new library.
For more information see **Libraries - *Creating and Editing Libraries***.

Library ➤ Open...
Opens a library.
For more information see **Libraries - *Using Libraries and Library Shapes***.

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Library ➤ Close
Closes the active library.
For more information see **Libraries** - *Using Libraries and Library Shapes*.

Library ➤ Close All
Closes all open libraries.
For more information see **Libraries** - *Using Libraries and Library Shapes*.

Library ➤ Save
Saves the active library.
For more information see **Libraries -** *Creating and Editing Libraries*.

Library ➤ Save as...
Saves the active library under a new name.
For more information see **Libraries -** *Creating and Editing Libraries*.

Library ➤ Properties...
Changes the properties of the library in the **Library Properties** dialog.
For more information see **Libraries -** *Creating and Editing Libraries*.

Print Page Setup...
Allows to set the printer page parameters in the **Page Setup** dialog.
For more information see **Document -** *Printing a Document*.

Print Preview...
Allows to preview the results before printing.
For more information see **Document -** *Printing a Document*.

Print...
Prints the document.
For more information see **Document -** *Printing a Document*.

Send via E-mail
Sends a document by e-mail.
For more information see **Internet -** *Sending a Document by E-Mail*.

Open Recent

Displays a list of the most recently opened documents. When you choose a document from the list, the program will open it unless it was deleted or renamed.

The Open Recent submenu contains a list of the most recently opened documents. When you choose a document from the list, the program will open it unless it was deleted or renamed.

Exit (only 📇)
Exits ConceptDraw.

Edit menu

This menu contains various commands for editing documents.
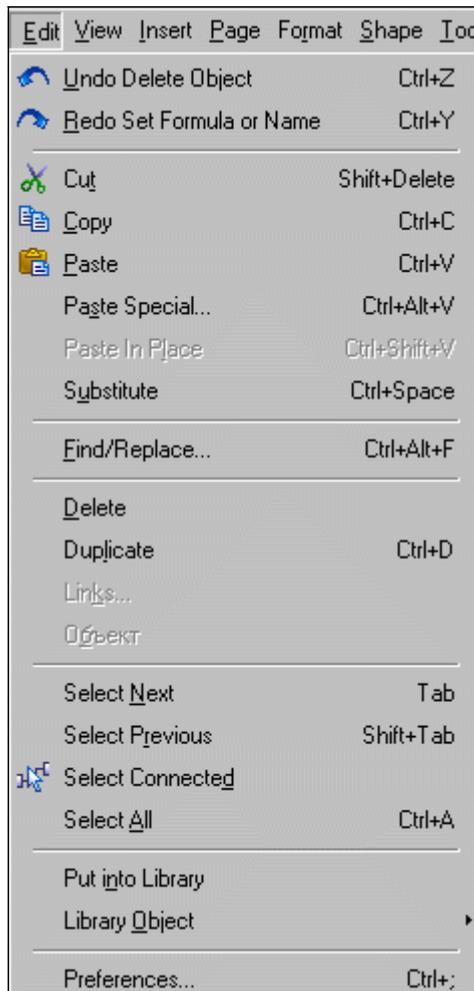
Undo
Cancels the most recent action. The name of the last action is displayed in the menu item.
For more information see **Shapes - Operations on Shapes - *Undo and Redo***.

Redo
Cancels the last Undo operation. The name of the last action is displayed in the menu item.

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For more information see **Shapes - Operations on Shapes -** *Undo and Redo*.

Cut
Cuts selected text or shapes and copies them onto the Clipboard.
For more information see **Shapes - Operations on Shapes -** *Copying and Pasting*.

Copy
Copies selected shapes or text onto the Clipboard.
For more information see **Shapes - Operations on Shapes -** *Copying and Pasting*.

Paste
Inserts the contents of the Clipboard into the document.
For more information see **Shapes - Operations on Shapes -** *Copying and Pasting*.

Paste Special
Inserts the contents of the Clipboard allowing to specify the format.
For more information see **Shapes - Operations on Shapes -** *Copying and Pasting*.

Paste In Place
Pastes the shape from the Clipboard into the same relative position on the page, as it was before being copied.
For more information see **Shapes - Operations on Shapes -** *Copying and Pasting*.

Substitute
Replaces one shape with another one.
For more information see **Shapes - Operations on Shapes -** *Substituting a Shape with Another Shape*.

Find/Replace
Searches / replaces text in the shapes in the document.
For more information see **Text -** *Searching and Replacing Text*.

Delete
Deletes selected shapes.
For more information see **Shapes - Operations on Shapes -** *Deleting*.

Duplicate
Creates a copy of the selected shape.
For more information see **Shapes - Operations on Shapes -** *Duplicating*.

Links (only 🖥)
Edits a linked OLE object.

Object (only)

If an OLE object is selected, the menu for editing an OLE object appears in place of this item.

For more information see ***OLE-objects***.

Select Next

Selects the next shape in the order they were created.

For more information see **Shapes - Operations on Shapes - *Selecting***.

Select Previous

Selects the previous shape in the order they were created.

For more information see **Shapes - Operations on Shapes - *Selecting***.

Select Connected

Selects all shapes, connected to the selected shape with connectors.

If the shapes, connected to the selected shape also have shapes, connected to them, these shapes are selected as well.

For more information see **Shapes - Operations on Shapes - *Selecting***.

Select All

Selects all shapes in the document.

For more information see **Shapes - Operations on Shapes - *Selecting***.

Put into Library

Puts selected shape(s) into the active library.

For more information see **Libraries - Creating and Editing Libraries - *Adding Shapes to a Library***.

Library Object

The menu for working with shapes in the active library. This menu is enabled when there is an open library.

Library Object ➤ Cut

Cuts the selected library shape and copies it onto the Clipboard.

For more information see ***Libraries***.

Library Object ➤ Copy

Copies the library shape onto the Clipboard.

For more information see ***Libraries***.

Library Object ➤ Paste

Pastes the shape from the Clipboard into the library.

For more information see ***Libraries***.

Library Object ➤ Remove

Removes a shape from the library.

For more information see ***Libraries***.

ConceptDraw

Library Object ➤ Replace
Replaces the selected shape in the library with the selected shape in the document without changing the icon.
For more information see *Libraries*.

Library Object ➤ Change Icon
Changes the icon of a library shape.
For more information see *Libraries*.

Library Object ➤ Properties
Edits properties of the library shape.
For more information see *Libraries*.

Preferences (only 🏛)
Calls the **Preferences** dialog, where you can set parameters of the application.
🖥 In **Mac OS X** this item is located in the application menu.
For more information see **Dialogs - Modal dialogs - *Preferences*** and **Customizing the Working Environment - *Application Settings***.

View menu

This menu controls how the document is displayed, whether to show toolbars, floating dialogs and more.

Zoom In
Increases magnification.
For more information see **Document - Working with a Document - *Zooming***.

Zoom Out
Decreases magnification.
For more information see **Document - Working with a Document - *Zooming***.

Zoom Box
Activates the Zoom Box mode letting you zoom in or out on the needed part of the page.
For more information see **Document - Working with a Document - *Zooming***.

Zoom
Lets you choose various zoom settings.

Zoom ➤ 400%

Zoom ➤ 200%

Zoom ➤ 150%

Zoom ➤ 125%
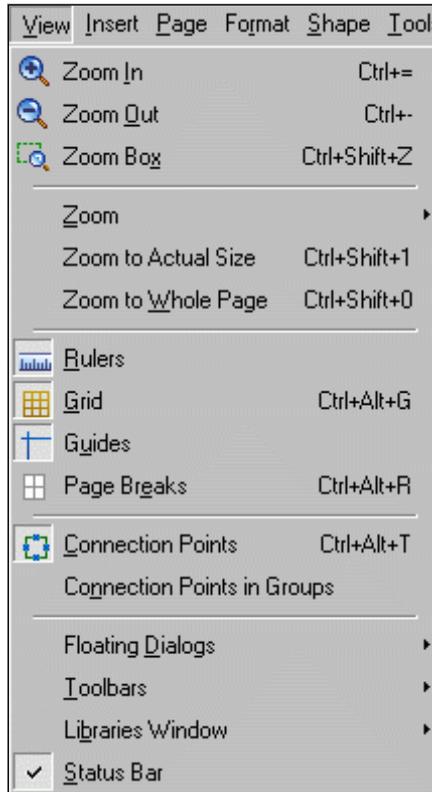
Zoom ➤ 100%

Zoom ➤ 75%

Zoom ➤ 50%

Sets the specified zoom level for the active document window.

For more information see **Document - Working with a Document - *Zooming*.**

Zoom ➤ Last

Sets the previous zoom level.

For more information see **Document - Working with a Document - *Zooming*.**

Zoom ➤ To Page Width

Sets the zoom level so that the page width fits in the document window.

For more information see **Document - Working with a Document - *Zooming*.**

Zoom ➤ To All Objects

Sets the zoom level so that the all the shapes on the page fit in the document window.

ConceptDraw

For more information see **Document - Working with a Document - *Zooming***.

Zoom To Actual Size
Displays the document at its actual size (100 % zoom).
For more information see **Document - Working with a Document - *Zooming***.

Zoom To Whole Page
Sets the zoom level so that the entire page fits in the window.
For more information see **Document - Working with a Document - *Zooming***.

Rulers
Shows/hides the rulers.
For more information see **Document - Working with a Document - *Rulers and Grid***.

Grid
Shows/hides the grid.
For more information see **Document - Working with a Document - *Rulers and Grid***.

Guides
Shows/hides the guide lines.
For more information see **Document - Working with a Document - *Guide Lines and Gluing***.

Page Breaks
Lets you choose to show/hide the page breaks for the documents. (Page breaks are gray lines which mark the non-printable areas and show the borders of the print pages).
For more information see **Document - *Printing a Document***.

Connection Points
Shows/hides the connection points of shapes (they remain active even when hidden).
For more information see **Shapes - Connecting Shapes - *Connection Points***.

Connection Points in Groups
Shows/hides the connection points of shapes in groups.
For more information see **Shapes - Connecting Shapes - *Connection Points*, Shapes - Operations on Shapes - *Grouping and Ungrouping***.

Floating Dialogs
This menu controls which floating dialogs are displayed.
The check mark ✓ besides the menu items indicates that the floating dialog is active and is displayed either as a floating window, or as a tab in one of the floating windows. Clicking on a menu item displays the dialog if it was hidden, or hides it if it was visible.

Floating Dialogs ➤ Line
Shows/hides the **Line** floating dialog.
For more information see **Dialogs - Floating Dialogs -** *Line*.

Floating Dialogs ➤ Fill & Shadow
Shows/hides the **Fill & Shadow** floating dialog.
For more information see **Dialogs - Floating Dialogs -** *Fill & Shadow*.

Floating Dialogs ➤ Protection
Shows/hides the **Protection** floating dialog.
For more information see **Dialogs - Floating Dialogs -** *Protection*.

Floating Dialogs ➤ Behavior
Shows/hides the **Behavior** floating dialog.
For more information see **Dialogs - Floating Dialogs -** *Behavior*.

Floating Dialogs ➤ Double-Click
Shows/hides the **Double-Click** floating dialog.
For more information see **Dialogs - Floating Dialogs -** *Double-Click*.

Floating Dialogs ➤ Information
Shows/hides the **Information** floating dialog.
For more information see **Dialogs - Floating Dialogs -** *Information*.

Floating Dialogs ➤ Layers
Shows/hides the **Layers** floating dialog.
For more information see **Dialogs - Floating Dialogs -** *Layers*.

Floating Dialogs ➤ Pages
Shows/hides the **Pages** floating dialog.
For more information see **Dialogs - Floating Dialogs -** *Pages*.

Floating Dialogs ➤ Geometry
Shows/hides the **Geometry** floating dialog.
For more information see **Dialogs - Floating Dialogs -** *Geometry*.

Floating Dialogs ➤ Show/Hide
Shows/hides all active floating dialogs.

Toolbars
This menu controls which toolbars are displayed. The check mark ✔ besides
the menu items indicates that the toolbar is displayed.
For more information see *Toolbars*.

Toolbars ➤ Main
Shows/hides the **Main** toolbar.
For more information see **Toolbars -** *Main*.

ConceptDraw

Toolbars ➤ Drawing Tools
Shows/hides the **Drawing Tools** toolbar.
For more information see **Toolbars - *Drawing Tools***.

Toolbars ➤ Formatting
Shows/hides the **Formatting** toolbar.
For more information see **Toolbars - *Formatting***.

Toolbars ➤ Text
Shows/hides the **Text** toolbar.
For more information see **Toolbars - *Text***.

Toolbars ➤ Arrange & Make Same
Shows/hides the **Arrange & Make Same** toolbar.
For more information see **Toolbars - *Arrange & Make Same***.

Toolbars ➤ Action
Shows/hides the **Action** toolbar.
For more information see **Toolbars - *Action***.

Toolbars ➤ Connect Shapes
Shows/hides the **Connect Shapes** toolbar.
For more information see **Toolbars - *Connect Shapes*.**

Toolbars ➤ Snap & Glue
Shows/hides the **Snap & Glue** toolbar.
For more information see **Toolbars - *TBConnecting.htmSnap & Glue***.

Toolbars ➤ Zoom
Shows/hides the **Zoom** toolbar.
For more information see **Toolbars - *Zoom***.

Toolbars ➤ View
Shows/hides the **View** toolbar.
For more information see **Toolbars - *View***.

Toolbars ➤ Libraries
Shows/hides the **Libraries** toolbar.
For more information see **Toolbars - *Libraries***.

Toolbars ➤ Pages
Shows/hides the **Pages** toolbar.
For more information see **Toolbars - *Pages***.

Toolbars ➤ Layers
Shows/hides the **Layers** toolbar.
For more information see **Toolbars - *Layers***.

Toolbars ➤ **Routing**
Shows/hides the **Routing** toolbar.
For more information see **Toolbars -** *Routing*.

Toolbars ➤ **CD Basic**
Shows/hides the **CD Basic** toolbar.
For more information see **Toolbars -** *Basic*.

Toolbars ➤ **Web**
Shows/hides the **Web** toolbar.
For more information see **Toolbars -** *Web*.

Toolbars ➤ **Customize**
Calls the **Customize** dialog where you can set the view of toolbars.
For more information see **Dialogs - Modal dialogs -** *Customize*.

Libraries Window
This menu is used to display, hide and change the appearance of the library window.

Libraries Window ➤ **Show**
Shows/hides the library window.
For more information see *Libraries*, **Windows -** *Library*.

Libraries Window ➤ **View as Icons**
Shows shapes in the library window as icons.
For more information see *Libraries*, **Windows -** *Library*.

Libraries Window ➤ **View as Text**
Shows only the names of the shapes in the library window.
For more information see *Libraries*, **Windows -** *Library*.

Libraries Window ➤ **View as Icons and Text**
Shows both the names and the icons of the shapes in the library window.
For more information see *Libraries*, **Windows -** *Library*.
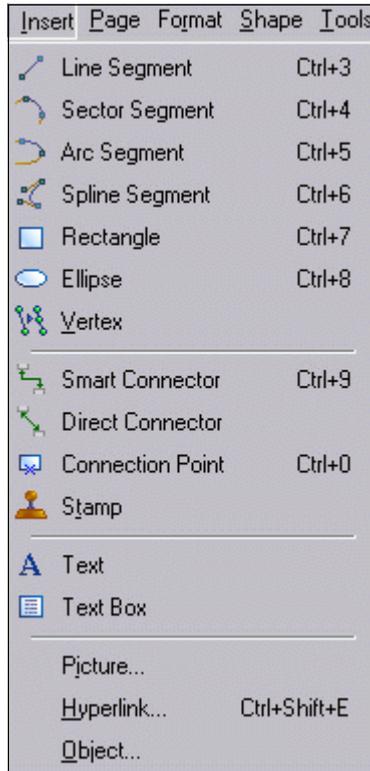
Status Bar
Displays/hides the status bar. If the check mark ✓ besides the menu item is enabled, the status bar is visible.

Insert menu

In this menu you can choose drawing tools, insert picture, hyperlinks and OLE objects (Windows version only).

Line Segment
Activates the **Line** tool mode and lets you draw lines and manipulate vertices of shapes.

ConceptDraw

Insert	Page	Format	Shape	Tools

	Line Segment	Ctrl+3
	Sector Segment	Ctrl+4
	Arc Segment	Ctrl+5
	Spline Segment	Ctrl+6
	Rectangle	Ctrl+7
	Ellipse	Ctrl+8
	Vertex	
	Smart Connector	Ctrl+9
	Direct Connector	
	Connection Point	Ctrl+0
	Stamp	
	Text	
	Text Box	
	Picture...	
	Hyperlink...	Ctrl+Shift+E
	Object...	

For more information see **Shapes -** *Drawing a Shape with Drawing Tools*.

Sector Segment
Activates the **Sector** tool mode and lets you draw circular sectors, manipulate vertices of shapes, and change the curvature of segments.
For more information see **Shapes -** *Drawing a Shape with Drawing Tools*.

Arc Segment
Activates the **Arc** tool mode and lets you draw elliptic arc segments, manipulate vertices of shapes and change the curvature of segments.
For more information see **Shapes -** *Drawing a Shape with Drawing Tools*.

Spline Segment
Activates the **Spline** tool mode and lets you draw smooth curves (splines), and also manipulate vertices of shapes and change the curvature of spline segments.
For more information see **Shapes -** *Drawing a Shape with Drawing Tools*.

Rectangle
Activates the **Rectangle** tool mode and lets you draw rectangle boxes, and also move and resize shapes.
For more information see **Shapes -** *Drawing a Shape with Drawing Tools*.

Ellipse
Activates the **Ellipse** tool mode and lets you draw ellipses, and also move and resize shapes.
For more information see **Shapes -** *Drawing a Shape with Drawing Tools*.

Vertex
Activates the **Insert Vertex** tool which lets you insert and manipulate the vertices of shapes.
For more information see **Shapes - Operations on Shapes -** *Reshaping*.

Smart Connector
Activates the **Smart Connector** tool mode and lets you draw smart connectors.
For more information see **Shapes - Connecting Shapes -** *Connectors*.

Direct Connector
Activates the **Direct Connector** tool mode and lets you draw direct connectors.
For more information see **Shapes - Connecting Shapes -** *Connectors*.

Connection Point
Activates the **Connection Point** tool mode which lets you insert and manipulate connection points of shapes.
For more information see **Shapes - Connecting Shapes -** *Connection Points*.

Stamp
Activates the **Stamp** tool: if there is a shape selected in the document or in the library, you can insert this shape into the document by a single click on the page.
For more information read **Shapes - Operations on Shapes -** *Duplicating*, **Libraries -** *Using Libraries and Library Shapes*.

Text
Activates the **Edit Text** tool mode which lets you edit the text of the shape, and also create new "Text" shapes.
For more information see **Shapes -** *Drawing a Shape with Drawing Tools*.

Text Box
Activates the **Text Box** tool mode which lets you reposition the text with respect to the shape to which this text is assigned.
For more information see **Text -** *Repositioning Text*.

Picture...

ConceptDraw

Inserts a picture into the document.
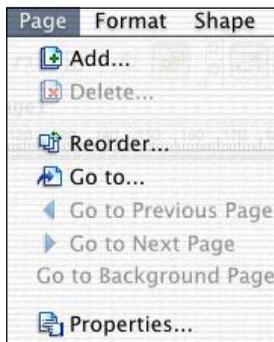For more information see **Shapes -** *Pictures*.

Hyperlink...
Lets you assign a hyperlink to the selected shape.
For more information see **Internet -** *Using Hyperlinks*.

Object... (only 🔳)
Inserts an OLE-object.
For more information see *OLE-Objects*.

Page menu

This menu is used to work with pages of the document.

Add
Adds a page to the active document.
For more information see **Document - Working with Pages -** *Adding a Page*.

Delete
Deletes the selected page from the document.
For more information see **Document - Working with Pages -** *Deleting a Page*.

Reorder
Changes the order of pages in the active document.
For more information see **Document - Working with Pages -** *Reordering Pages*.

Go to...
Goes to the specified page.
For more information see **Document - Working with Pages -** *Going to Another Page*.

Go to Previous Page
Goes to the previous page.

For more information see **Document - Working with Pages -** *Going to Another Page*.

Go to Next Page
Goes to the next page.
For more information see **Document - Working with Pages -** *Going to Another Page*.

Go to Background Page
Goes to the background page.
For more information see **Document - Working with Pages -** *Background Pages*.

Properties...
Allows to change the page properties in the **Page Properties** dialog (change name, make background, assign a background page).
For more information about the **Page Properties** dialog see **Dialogs - Modal Dialogs -** *Add Page/Page Properties*.

Format menu

This menu is used to change various parameters of shapes (line style, fill, shadow, text).
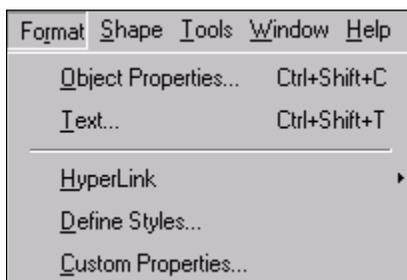
Shape Properties
Calls the **Shape Properties** dialog where you can change various properties of shapes.
For more information see **Shapes -** *Shape Properties*, **Dialogs - Modal Dialogs -** *Shape Properties*.

Text...
Calls the **Text Properties** dialog for formatting text.
For more information see **Text -** *Formatting Text*.

Hyperlink
The menu for working with hyperlinks.

ConceptDraw

Hyperlink ➤ Open
Opens the hyperlink. Depending on the hyperlink type, this command may open another document page, open another document, launch another application or open a Web page in the Web browser.
For more information see **Internet - *Using Hyperlinks***.

Hyperlink ➤ Edit...
Edits hyperlink in the **Hyperlink** dialog.
For more information see **Internet - *Using Hyperlinks***, **Dialogs - Modal Dialogs - *Hyperlink***.

Hyperlink ➤ Remove
Removes the selected shape's hyperlink.
For more information see **Internet - *Using Hyperlinks***.

Define Styles...
Calls a dialog where you can define named styles.
For more information see **Shapes - *Defining and Using Named Styles***.

Custom Properties...
Allows to set custom properties to the shape.
For more information see **Shapes - *Custom Properties***.

Shape menu

The commands in this menu allow you to group shapes, change their display order and make various operations on them.

Display Order
This menu determines the display order of shapes in the document.

Display Order ➤ Send to Back
Puts the selected shapes behind all other shapes.
For more information see **Shapes - Operations on Shapes - *Changing the Front-to-Back Order***.

Display Order ➤ Bring to Front
Puts the selected shapes above all other shapes.
For more information see **Shapes - Operations on Shapes - *Changing the Front-to-Back Order***.

Display Order ➤ Send Backward
Positions selected shapes one step lower in the order list.
For more information see **Shapes - Operations on Shapes - *Changing the Front-to-Back Order***.

Display Order ➤ Bring Forward

Positions selected shapes one step higher in the order list.
For more information see **Shapes - Operations on Shapes - *Changing the Front-to-Back Order*.**

Rotate and Flip
This menu contains commands for rotating and flipping shapes.

Rotate and Flip ➤ Rotate Left(90°)
Rotates selected shapes by 90° counterclockwise.
For more information see **Shapes - Operations on Shapes - *Rotating and Flipping*.**

Rotate and Flip ➤ Rotate Right(90°)
Rotates selected shapes by 90° clockwise.
For more information see **Shapes - Operations on Shapes - *Rotating and Flipping*.**

Rotate and Flip ➤ Flip Vertical
Replaces the selected shape with its vertically mirrored copy.
For more information see **Shapes - Operations on Shapes - *Rotating and Flipping*.**

Rotate and Flip ➤ Flip Horizontal
Replaces the selected shape with its horizontally mirrored copy.
For more information see **Shapes - Operations on Shapes - *Rotating and Flipping*.**

ConceptDraw

Group

Groups selected shapes.

For more information see **Shapes - Operations on Shapes - *Grouping and Ungrouping***.

Ungroup

Ungroups selected shapes.

For more information see **Shapes - Operations on Shapes - *Grouping and Ungrouping***.

Edit Group

Opens a new window in which you can edit shapes inside a group without ungrouping it.

For more information see **Shapes - Operations on Shapes - *Grouping and Ungrouping***.

Connector

This menu contains commands for working with connectors.

Connector ➤ Reverse Link

Changes the direction of the connector (exchanges its begin and end points).

For more information see **Shapes - *Connecting Shapes***.

Connector ➤ Disable Auto-Routing

Enables/disables automatic routing for the smart connector.

For more information see **Shapes - Connecting Shapes - *Smart Connector***.

Connector ➤ Flow Around Objects

Specifies whether smart connectors can flow around shapes on their way.

For more information see **Shapes - Connecting Shapes - *Smart Connector***.

Edit Text

Edits text of the selected shape.

For more information see **Text - *Adding Text to a Shape***.

Show Table

Displays the shape parameter table.

For more information see *Shape Parameter Table*.

Distribute

This menu allows you to create equal spacing between selected shapes.

Distribute ➤ Horizontal Spacing

Creates uniform horizontal spacing between the alignment boxes of the selected shapes.

For more information see **Shapes - Operations on Shapes - *Distributing Shapes***.

Distribute ➤ Left Edges

Creates uniform spacing between the left edges of the alignment boxes of the selected shapes.

For more information see **Shapes - Operations on Shapes -** *Distributing Shapes*.

Distribute ➤ Centers

Creates uniform horizontal spacing between the centers of the alignment boxes of the selected shapes.

For more information see **Shapes - Operations on Shapes -** *Distributing Shapes*.

Distribute ➤ Right Edges

Creates uniform spacing between the right edges of the alignment boxes of the selected shapes.

For more information see **Shapes - Operations on Shapes -** *Distributing Shapes*.

Distribute ➤ Vertical Spacing

Creates uniform vertical spacing between the alignment boxes of the selected shapes.

For more information see **Shapes - Operations on Shapes -** *Distributing Shapes*.

Distribute ➤ Top Edges

Creates uniform spacing between the top edges of the alignment boxes of the selected shapes.

For more information see **Shapes - Operations on Shapes -** *Distributing Shapes*.

Distribute ➤ Middle

Creates uniform vertical spacing between the centers of the alignment boxes of the selected shapes.

For more information see **Shapes - Operations on Shapes -** *Distributing Shapes*.

Distribute ➤ Bottom Edges

Creates uniform spacing between the bottom edges of the alignment boxes of the selected shapes.

For more information see **Shapes - Operations on Shapes -** *Distributing Shapes*.

Align

This menu contains commands for aligning two or more selected shapes.

Align ➤ Left

Aligns selected shapes on the left sides relative to the primary selected shape.

ConceptDraw

For more information see **Shapes - Operations on Shapes - *Aligning Shapes***.

Align ➤ Center
Aligns selected shapes horizontally on the centers relative to the primary selected shape.
For more information see **Shapes - Operations on Shapes - *Aligning Shapes***.

Align ➤ Right
Aligns selected shapes on the right sides relative to the primary selected shape.
For more information see **Shapes - Operations on Shapes - *Aligning Shapes***.

Align ➤ Top
Aligns selected shapes on the top sides relative to the primary selected shape.
For more information see **Shapes - Operations on Shapes - *Aligning Shapes***.

Align ➤ Middle
Aligns selected shapes vertically on the centers relative to the primary selected shape.
For more information see **Shapes - Operations on Shapes - *Aligning Shapes***.

Align ➤ Bottom
Aligns selected shapes on the bottom sides relative to the primary selected shape.
For more information see **Shapes - Operations on Shapes - *Aligning Shapes***.

Move To
This menu lets you center selected shapes on the page.

Move To ➤ Center Page
Positions the selected shape(s) in the center of the document page.

Move To ➤ Center Vertically
Changes the vertical position of the selected shapes moving them to the center of the page.

Move To ➤ Center Horizontally
Changes the horizontal position of the selected shapes moving them to the center of the page.

Make Same
Makes some attributes of shapes the same as the attributes of the primary selected shape.

Make Same ➤ Style
Copies visual attributes of the primary selected shape to other selected shapes.

For more information see **Shapes - Operations on Shapes -** *Copying Shape's Visual Attributes*.

Make Same ➤ Width
Makes the selected shapes the same width as the primary selected shape.
For more information see **Shapes - Operations on Shapes -** *Copying Shape's Visual Attributes*.

Make Same ➤ Height
Makes the selected shapes the same height as the primary selected shape.
For more information see **Shapes - Operations on Shapes -** *Copying Shape's Visual Attributes*.

Make Same ➤ Size
Makes the selected shapes the same size as the primary selected shape.
For more information see **Shapes - Operations on Shapes -** *Copying Shape's Visual Attributes*.

Operations
The commands from this menu allow you to combine several shapes in one or separate shapes to individual segments.

Operations ➤ Combine
Combines several selected shapes into one.
For more information see **Shapes - Operations on Shapes -** *The Join, Combine and Separate Operations*.

Operations ➤ Join
Joins several selected shapes so that they form a single geometry.
For more information see **Shapes - Operations on Shapes -** *The Join, Combine and Separate Operations*.

Operations ➤ Separate
Splits the selected complex shape into separate geometries, so that each geometry becomes a separate shape.
For more information see **Shapes - Operations on Shapes -** *The Join, Combine and Separate Operations*.

Convert
Converts selected shapes to the Vector Picture format and vice versa.

Convert ➤ To Vector Picture
Converts selected shapes or groups into a vector picture.
For more information see **Shapes - Pictures -** *Vector Pictures*.

Convert ➤ To Group
Converts a vector picture into a group of ConceptDraw shapes.
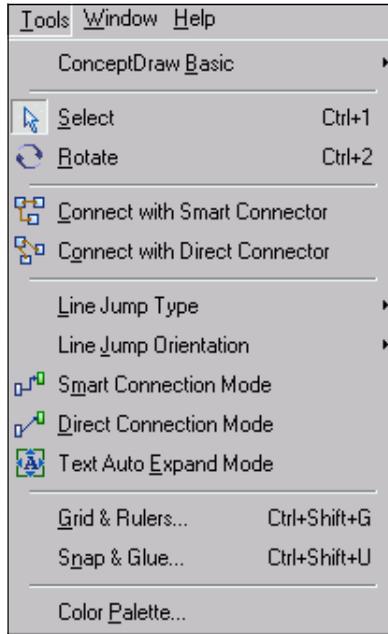For more information see **Shapes - Pictures -** *Vector Pictures*.

ConceptDraw

Fit to Text
Resizes the selected shapes according to the dimensions of the text they contain.
For more information see **Text -** *Adjusting a Shape's Size to Fit Its Text*.

Tools menu

This menu contains various tools.

ConceptDraw Basic
Contains commands for editing **ConceptDraw Basic** scripts.

ConceptDraw Basic ➤ Application Script
For application-level scripts.

ConceptDraw Basic ➤ Application Script ➤ Edit
Edits an application-level script.
For more information see *ConceptDraw Basic*.

ConceptDraw Basic ➤ Application Script ➤ Remove
Removes an application-level script.
For more information see *ConceptDraw Basic*.

ConceptDraw Basic ➤ Document Script
For document-level scripts.

ConceptDraw Basic ➤ Document Script ➤ Edit
Edits a document-level script.
For more information see *ConceptDraw Basic*.

ConceptDraw Basic ➤ Document Script ➤ Remove
Removes a document-level script.
For more information see *ConceptDraw Basic*.

ConceptDraw Basic ➤ Page Script
For page-level scripts.

ConceptDraw Basic ➤ Page Script ➤ Edit
Edits a page-level script.
For more information see *ConceptDraw Basic*.

ConceptDraw Basic ➤ Page Script ➤ Remove
Removes a page-level script.
For more information see *ConceptDraw Basic*.

ConceptDraw Basic ➤ Shape Script
For shape-level scripts.

ConceptDraw Basic ➤ Shape Script ➤ Edit
Edits a shape-level script.
For more information see *ConceptDraw Basic*.

ConceptDraw Basic ➤ Shape Script ➤ Remove
Removes a shape-level script.
For more information see *ConceptDraw Basic*.

Select
Activates the **Select** tool mode.
For more information see **Shapes - Operations on Shapes - *Selecting***
and **Shapes - Operations on Shapes - *Moving***.

Rotate
Activates the **Rotate** tool mode and lets you rotate shapes.
For more information see **Shapes - Operations on Shapes - *Rotating and Flipping***.

Connect with Smart Connector
Connects the selected shapes to the primary selected shape, using the smart connectors.
For more information see **Shapes - Connecting Shapes - *Smart Connector***, **Shapes - Connecting Shapes - *Connecting Multiple Shapes***.

ConceptDraw

Connect with Direct Connector
Connects the selected shapes to the primary selected shape, using the direct connectors.
For more information see **Shapes - Connecting Shapes - *Direct Connector***, **Shapes - Connecting Shapes - *Connecting Multiple Shapes*.**

Line Jump Type
This menu specifies how the points in which smart connectors cross look like.

Line Jump Type ➤ **Square**
Displays a square crossing.
For more information see **Shapes - Connecting Shapes - *Smart Connector***.

Line Jump Type ➤ **Arc**
Displays an arc crossing.
For more information see **Shapes - Connecting Shapes - *Smart Connector***.

Line Jump Type ➤ **2 Sides**
Displays a crossing made up of two lines.
For more information see **Shapes - Connecting Shapes - *Smart Connector***.

Line Jump Type ➤ **3 Sides**
Displays a crossing made up of three lines.
For more information see **Shapes - Connecting Shapes - *Smart Connector***.

Line Jump Type ➤ **Gap**
Displays a gap on crossing.
For more information see **Shapes - Connecting Shapes - *Smart Connector***.

Line Jump Orientation
Specifies the orientation of line crossings.

Line Jump Orientation ➤ **Horizontal Jumps**
The line crossings will be displayed on the horizontal lines.
For more information see **Shapes - Connecting Shapes - *Smart Connector***.

Line Jump Orientation ➤ **Vertical Jumps**
The line crossings will be displayed on the vertical lines.
For more information see **Shapes - Connecting Shapes - *Smart Connector***.

Line Jump Orientation ➤ **No Jumps**
No line jumps are displayed.
For more information see **Shapes - Connecting Shapes - *Smart Connector***.

Smart Connection Mode
Activates the **Smart Connection** mode in which every new shape gets connected automatically to the previously selected shape with a smart connector.

For more information see **Shapes - Connecting Shapes - *Smart Connector***, **Shapes - Connecting Shapes - *Auto-Connection Modes***.

Direct Connection Mode

Activates the **Direct Connection** mode in which every new shape gets connected automatically to the previously selected shape with a direct connector.

For more information see **Shapes - Connecting Shapes - *Direct Connector***, **Shapes - Connecting Shapes - *Auto-Connection Modes***.

Text Auto Expand Mode

Activates the **Text Auto Expand** mode in which any shape is resized automatically when you add text to it.

For more information see **Text - *Text Auto-Expand Mode***.

Grid & Rules

Calls the **Grid & Rulers** dialog, where you can change the parameters for the grid and rulers.

For more information see **Dialogs - Modal Dialogs - *Grid & Rulers***.

Snap & Glue

Allows to modify snapping and gluing parameters for shapes.

For more information see **Dialogs - Modal Dialogs - *Snap & Glue***, **Document - Working with a Document - *Guide Lines and Gluing***.

Color Palette

Calls the **Palette** dialog, where you can save or load the 256-color palette for the document.

For more information see **Dialogs - Modal Dialogs** - *Palette*.

Window menu

This menu contains commands for manipulating windows, and shows the list of open windows.

For more information see **Customizing the Working Environment - *Working with Windows***.

New Window

Opens the active document in a new window.

For more information see **Customizing the Working Environment - *Working with Windows***.
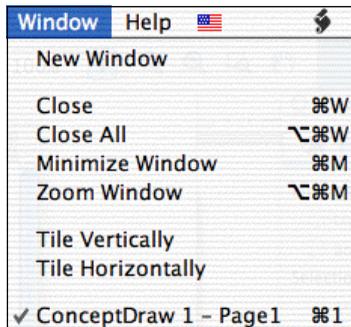
Cascade (only 🪟)

Arranges all the open windows so that each next window appears slightly down and to the right from the previous one.

For more information see **Customizing the Working Environment - *Working with Windows***.

ConceptDraw

Windows

Mac OS

Tile Horizontally
Arranges all the open windows horizontally as non-overlapping tiles.
For more information see **Customizing the Working Environment -**
Working with Windows.

Tile Vertically
Arranges all the open windows vertically as non-overlapping tiles.
For more information see **Customizing the Working Environment -**
Working with Windows.

Close Window
Closes the active window.
For more information see **Customizing the Working Environment -**
Working with Windows.

Close All
Closes all open windows in the program.

For more information see **Customizing the Working Environment - *Working with Windows***.

Minimize Window (only)
Minimizes the active window.
For more information see **Customizing the Working Environment - *Working with Windows***.
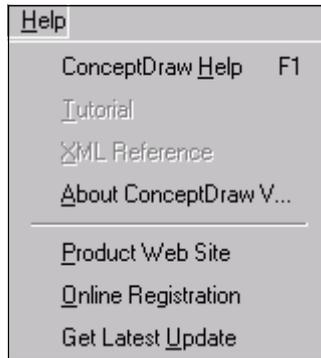
Zoom Window (only)
Maximizes the active window to full screen.
For more information see **Customizing the Working Environment - *Working with Windows***.

Help menu

From this menu you can get reference information.

ConceptDraw Help
Calls ConceptDraw help system.

Tutorial
Opens brief tutorial about ConceptDraw.

XML Reference
Calls reference information about XML for ConceptDraw.

About ConceptDraw V... (only)
Displays a window with information about the program and its developers.

Product Web Site
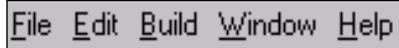Opens ConceptDraw web site in the Web browser.

Online Registration
Goes to the online registration page.

Get Latest Update
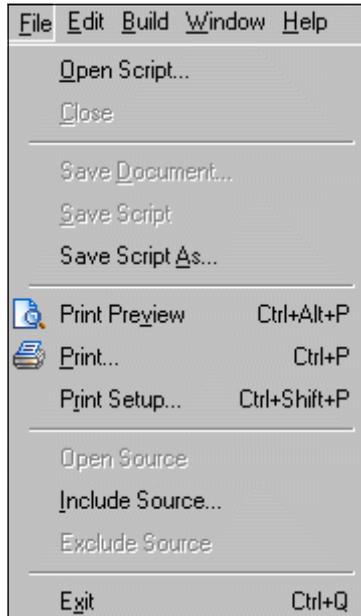Goes to the Updates page of the Web site.

ConceptDraw

Basic Editor Menu

When working with the ConceptDraw Basic editor, the main menu will look as follows:

File Edit Build Window Help

File menu

The **File** menu contains commands for working with files - opening, closing and saving files.

Open Script
Open a ConceptDraw Basic script file.

Close
Close the script.

Save Document
Save the document, which script is being edited.

Save Script
Save the script to a file.

Save Script As
Save the script under a new name.

Print Preview
Preview the results before printing.

Print
Print the script.

Print Setup
Print settings.

Open Source
Open the included source file.

Include Source
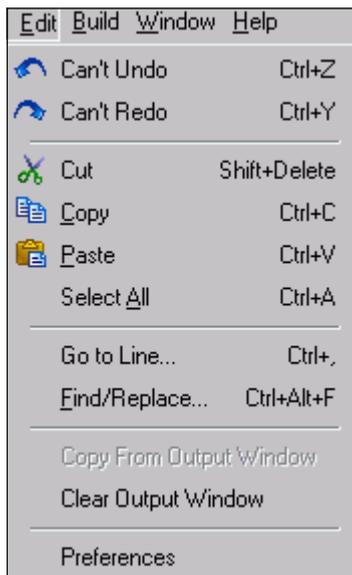Include a ConceptDraw Basic file in the script.

Exclude Source
Exclude the included file from the document.

Exit
Exit ConceptDraw.

Edit menu

This menu contains various commands for editing the file.

Undo
Cancels the last action.

ConceptDraw

Redo
Cancels the last Undo operation.

Cut
Cuts selected text and copies it onto the Clipboard.

Copy
Copies selected text onto the Clipboard.

Paste
Pastes selected text from the Clipboard.

Select All
Select all.

Go to Line...
Go to the line with the specified number.
For more information see **Dialogs - Modal dialogs - *Line Number***.

Find / Replace
Searches and replaces text in the document.
For more information see **Dialogs - Modal dialogs - *Find/Replace***.

Copy From Output Window
Copies the selected text from the CD Basic Output window onto the Clipboard.

Clear Output Window
Clears ConceptDraw Basic Output window.

Preferences
Calls the **Preferences** dialog where you can set parameters of the application.
For more information see **Dialogs - Modal dialogs - *Preferences*** and **Customizing the Working Environment - *Application Preferences***.

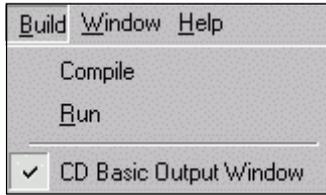## Build menu

From this menu you can compile, run or stop executing a script.

When a script is running, the menu looks as follows:

If no script is running, the menu looks like this:

Compile
Compiles the program and checks it for errors.

Run
Compiles and runs the program.

Stop
Stops running program.

Window menu

This menu is used to control windows. For more information about the Window menu see **Menus - Document View Menus - *Window***.

Help menu

From this menu you can get reference information.

ConceptDraw Help
Calls ConceptDraw help system.

ConceptDraw Basic Reference
Calls reference information about ConceptDraw Basic.

ConceptDraw

Tutorial
Opens brief tutorial about ConceptDraw.

XML Reference
Calls reference information about XML for ConceptDraw.

About ConceptDraw V... (only 🖼️)
Displays a window with information about the program and its developers.

Product Web Site
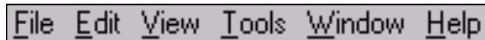Opens ConceptDraw web site in the Web browser.

Online Registration
Goes to the online registration page.

Get Latest Update
Goes to the Updates page of the Web site.

Shape Table View Menus

When working with the shape parameter table, the main menu bar looks as follows:

File Edit View Tools Window Help

File menu

The **File** menu contains commands for working with files.

New Document
Creates a new ConceptDraw document.

Template Gallery...
Opens the **Template Gallery** dialog where you can choose a template to base a new document on.
For more information read **Dialogs - Modal dialogs** - *Template Gallery*.

Open
Opens a file.
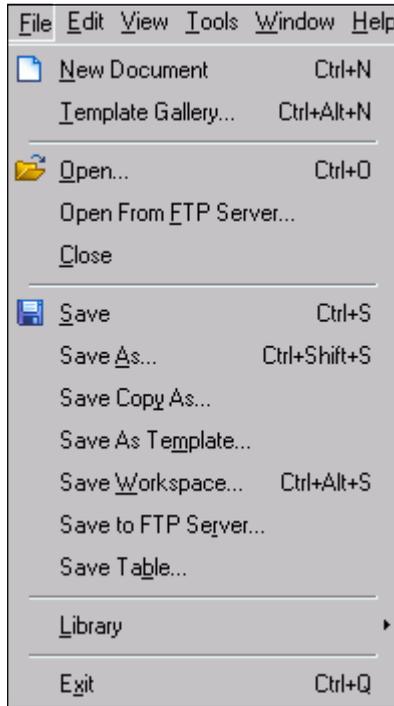
Open From FTP Server...
Opens a file from an FTP server.
For more information see **Internet** - *Working with Documents on a Remote FTP-Server*.

Close
Closes the active document.

Save
Saves the document.
For more information see **Document** - *Saving a Document*.

Save As...
Saves the document under a new name.
For more information see **Document -** *Saving a Document*.

Save Copy As...
Saves a copy of the document under a new name.
For more information see **Document -** *Saving a Document*.

Save As Template...
Saves or creates a template file.
For more information see **Document -** *Saving a Document*.

Save Workspace...
Saves or creates a workspace file.
For more information see **Document -** *Saving a Document*.

Save to FTP Server...
Saves a file to an FTP Server.

ConceptDraw

For more information see **Internet - *Working with Documents on a Remote FTP-Server***.

Save Table
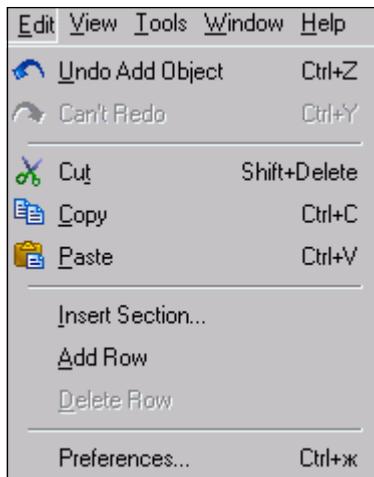Saves the shape parameter table in a text file.

Library
The menu for working with libraries. For more information see **Menus - Document View Menus - *File menu***.

Exit (only ![icon]( ))
Exits ConceptDraw.

Edit menu

Undo
Cancels the most recent action. The name of the last action is displayed in the menu item.
For more information see **Shapes - Operations on Shapes - *Undo and Redo***.

Redo
Cancels the last Undo operation. The name of the last action is displayed in the menu item.

Cut
Cuts selected text and copies it onto the Clipboard.

Copy
Copies selected text onto the Clipboard.

Paste
Inserts the contents of the Clipboard into the document.

Insert Section
Inserts a new section in the parameter table.
For more information see **Shape Parameter Table - *The Table's Sections***.

Add Row
Adds a new row to the active section of the table.
For more information see **Shape Parameter Table - *The Table's Sections***.

Delete Row
Adds the current row from the section of the table.
For more information see **Shape Parameter Table - *The Table's Sections***.
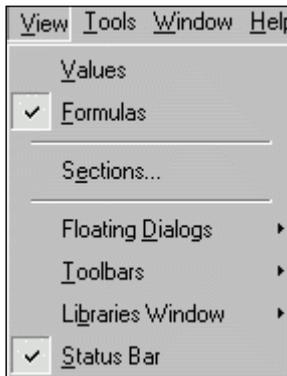
Preferences (only 📇)
Calls the **Preferences** dialog, where you can set parameters of the application.
🖼 In **Mac OS X** this item is located in the application menu.
For more information see **Dialogs - Modal dialogs - *Preferences*** and **Customizing the Working Environment - *Application Settings***.

View menu

This menu lets the user to set the view of the shape parameter table.

Values
Shows values in the cells.

Formulas
Shows formulas in the cells.

Sections
Calls the **View Sections** dialog, where you can choose, which of the table sections to display.

ConceptDraw

For information about the **Floating Dialogs**, **Toolbars**, **Libraries Window** submenus and the **Status Bar** item see **Menus - Document View Menus - *View menu***.

Tools menu

This menu contains only one item - the ConceptDraw Basic submenu, which is described in **Menus - Document View Menus** - *Tools menu*.

Window menu

This Window menu is a standard menu and is described in **Menus - Document View Menus** - *Window menu*.
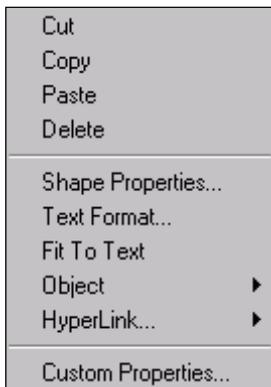
Help menu

From this menu you can get reference information.
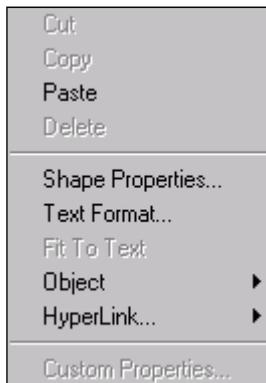This Help menu is described in **Menus - Document View Menus** - *Help menu*.

Document View Context Menu

The appearance of the context menu of the document may vary depending on where you call it - on a shape, or on an empty area in the document window.

When you right-click on a shape, the context menu will look as follows:

When you right-click on an empty area, the context menu will look as follows:

| Cut |
| Copy |
| Paste |
| Delete |
| Shape Properties... |
| Text Format... |
| Fit To Text |
| Object ▶ |
| HyperLink... ▶ |
| Custom Properties... |

| Cut |
| Copy |
| Paste |
| Delete |
| Shape Properties... |
| Text Format... |
| Fit To Text |
| Object ▶ |
| HyperLink... ▶ |
| Custom Properties... |

Cut
Cuts selected text or shapes and copies them onto the Clipboard.
For more information see **Shapes - Operations on Shapes -** *Copying and Pasting*.

Copy

Copies selected shapes or text onto the Clipboard.

For more information see **Shapes - Operations on Shapes - *Copying and Pasting***.

Paste

Inserts the contents of the Clipboard into the document.

For more information see **Shapes - Operations on Shapes - *Copying and Pasting***.

Delete

Deletes selected shapes.

For more information see **Shapes - Operations on Shapes - *Deleting***.

Shape Properties

Calls the **Shape Properties** dialog where you can change various properties of shapes.

For more information see **Shapes - *Shape Properties***, **Dialogs - Modal Dialogs - *Shape Properties***.

Text Format

Calls the **Text Properties** dialog for formatting text.

For more information see **Text - *Formatting Text***.

Fit To Text

Resizes the selected shapes according to the dimensions of the text they contain.

For more information see **Text - *Adjusting a Shape's Size to Fit Its Text***.

Object

This menu is used to change position of shapes in the document.

Object ➤ Send To Back

Puts the selected shapes behind all other shapes.

For more information see **Shapes - Operations on Shapes - *Changing the Front-to-Back Order***.

Object ➤ Bring To Front

Puts the selected shapes above all other shapes.

For more information see **Shapes - Operations on Shapes - *Changing the Front-to-Back Order***.

Object ➤ Rotate Left (90°)

Rotates selected shapes by 90° counterclockwise.

For more information see **Shapes - Operations on Shapes - *Rotating and Flipping***.

ConceptDraw

Object ➤ Rotate Right (90°)
Rotates selected shapes by 90° clockwise.
For more information see **Shapes - Operations on Shapes -** *Rotating and Flipping***.**

Object ➤ Flip Horizontal
Replaces the selected shape with its horizontally mirrored copy.
For more information see **Shapes - Operations on Shapes -** *Rotating and Flipping***.**

Object ➤ Flip Vertical
Replaces the selected shape with its vertically mirrored copy.
For more information see **Shapes - Operations on Shapes -** *Rotating and Flipping***.**

Object ➤ Edit Text
Edits text of the selected shape.
For more information see **Text -** *Adding Text to a Shape*.

Object ➤ Group
Groups selected shapes.
For more information see **Shapes - Operations on Shapes -** *Grouping and Ungrouping*.

Object ➤ Ungroup
Ungroups selected shapes.
For more information see **Shapes - Operations on Shapes -** *Grouping and Ungrouping*.

Hyperlink
This menu is used for working with hyperlinks.

Hyperlink ➤ Open
Opens the hyperlink. Depending on the hyperlink type, this command may open another document page, open another document, launch another application or open a Web page in the Web browser.
For more information see **Internet -** *Using Hyperlinks*.

Hyperlink ➤ Edit...
Edits hyperlink in the **Hyperlink** dialog.
For more information see **Internet -** *Using Hyperlinks*, **Dialogs - Modal Dialogs -** *Hyperlink*.

Hyperlink ➤ Remove
Removes the selected shape's hyperlink.
For more information see **Internet -** *Using Hyperlinks*.

Custom Properties...
Allows to set custom properties to the shape.
For more information see **Shapes -** *Custom Properties*.

Library Context Menu

This menu appears when you right-click on a title bar of one of the open libraries in the library window.

New
Creates a new library.
For more information see **Libraries -** *Creating and Editing Libraries*.

Open...
Opens a library.
For more information see **Libraries** - *Using Libraries and Library Shapes*.

Close
Closes the active library.
For more information see **Libraries** - *Using Libraries and Library Shapes*.

Close All
Closes all open libraries.
For more information see **Libraries** - *Using Libraries and Library Shapes*.

Save
Saves the active library.
For more information see **Libraries -** *Creating and Editing Libraries*.

Save As...
Saves the active library under a new name.
For more information see **Libraries -** *Creating and Editing Libraries*.

Properties...
Changes the properties of the library in the **Library Properties** dialog.
For more information see **Libraries -** *Creating and Editing Libraries*.

View as Icons
Shows shapes in the library window as icons.
For more information see *Libraries*, **Windows -** *Library*.

View as Text
Shows only the names of the shapes in the library window.
For more information see *Libraries*, **Windows -** *Library*.

View as Icons and Text
Shows both the names and the icons of the shapes in the library window.
For more information see *Libraries*, **Windows -** *Library*.

Library Item Context Menu

This menu appears when you right-click on a shape in the library window.

Cut
Cuts the selected library shape and copies it onto the Clipboard.
For more information see *Libraries*.

Copy
Copies the library shape onto the Clipboard.
For more information see *Libraries*.

Paste
Pastes the shape from the Clipboard into the library.
For more information see *Libraries*.

Delete
Removes a shape from the library.
For more information see *Libraries*.

Replace
Replaces the selected shape in the library with the selected shape in the document without changing the icon.
For more information see *Libraries*.

Change Icon
Changes the icon of a library shape.
For more information see *Libraries*.

Properties
Edits properties of the library shape.
For more information see *Libraries*.

View as Icons
Shows shapes in the library window as icons.
For more information see *Libraries*, **Windows - *Library***.

View as Text
Shows only the names of the shapes in the library window.
For more information see *Libraries*, **Windows - *Library***.

View as Icons and Text
Shows both the names and the icons of the shapes in the library window.
For more information see *Libraries*, **Windows - *Library***.

Basic Editor Context Menu

This menu appear if you right-click on a line in the file you edit in the ConceptDraw Basic editor.

Cut	Ctrl+X
Copy	Ctrl+C
Paste	Ctrl+V
Open Source	
Include Source...	
Exclude Source	
Find/Replace...	Ctrl+F

Cut
Cuts selected text and copies it onto the Clipboard.

　　　　　　　　　　　　　　　　　　　　ConceptDraw

Copy
Cuts selected text and from the Clipboard.

Paste
Pastes selected text from the Clipboard.

Open Source
Opens included source.

Include Source...
Includes the source into the CD Basic file.

Exclude Source
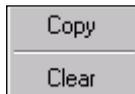Exclude the included file from the document.

Find/Replace
Searches and replaces text in the document.
For more information see **Dialogs - Modal Dialogs - *Find/Replace***.

Basic Output View Context Menu

This menu appears when you right-click somewhere in the ConceptDraw Basic Output Window.
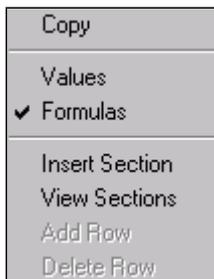

Copy
Copies selected text onto the Clipboard.

Clear
Clears the Output Window.

Table View Context Menu

This menu appears when you right-click somewhere in the shape parameter table window.

Copy
Copies selected text onto the Clipboard.

Values
Shows values in the cells.

Formulas
Shows formulas in the cells.

Insert Section
Inserts a new section in the parameter table.
For more information see **Shape Parameter Table - *The Table's Sections***.

View Sections
Calls the **View Sections** dialog, where you can choose, which of the table sections to display.

Add Row
Adds a new row to the active section of the table.
For more information see **Shape Parameter Table - *The Table's Sections***.

Delete Row
Adds the current row from the section of the table.
For more information see **Shape Parameter Table - *The Table's Sections***.

Text Edit Context Menu

This menu appears when you right-click on a shape's text in the text editing mode.

Cut
Cuts selected text and copies it onto the Clipboard.

Copy
Copies selected text onto the Clipboard.

ConceptDraw

Paste
Inserts the text on the Clipboard into the document.

Select All
Selects all text in the shape.

Bold
Makes selected text Bold.
For more information see **Text - *Formatting Text***.

Italic
Makes selected text Italic.
For more information see **Text - *Formatting Text***.

Underline
Makes selected text Underlined.
For more information see **Text - *Formatting Text***.

Text Format...
Calls the **Text Properties** dialog for formatting text.
For more information see **Text - *Formatting Text***.

Hyperlink...
The menu for working with hyperlinks.

Hyperlink ⟶ Open
Opens the hyperlink in text.
For more information see **Internet - *Using Hyperlinks***.

Hyperlink ⟶ Edit...
Edits hyperlink in the **Hyperlink** dialog.
For more information see **Internet - *Using Hyperlinks***, **Dialogs - Modal Dialogs - *Hyperlink***.

Chapter 15. Windows

ConceptDraw includes a lot of modal and floating dialog windows. However, there are also the document window, edit group window, library window, CD Basic editor window, CD Basic output window.

Document view. Page / Edit Group

This window is used for working with the document, or editing shapes inside a group (called from **Shape / Edit Group** menu).

Normally this window looks as follows:
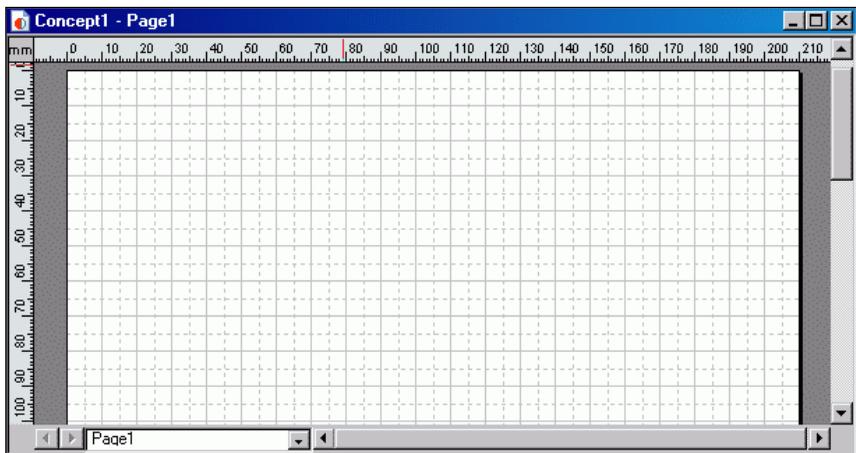
On the left and top sides of the window you can see the rulers. The grid helps to position shapes more precisely.

To get a horizontal or vertical guide line, drag it out of the corresponding ruler.

ConceptDraw

For more information about the guide lines see **Document - Working with a Document -** *Guide Lines and Gluing Shapes*.

On the right and bottom sides you can see the scroll bars. They are used for navigating through the document. To scroll beyond the drawing page, click and hold the mouse button on the arrows near the scroll bars.
For more information see **Document - Working with a Document -** *Scrolling*.

In the left bottom corner of the window there's a drop-down list with the names of the pages, which is used to switch between the pages. To go to the next and previous pages you can use the arrows besides the list.
For more information see **Document -** *Working with Pages*.

> *This drop-down list is not displayed in the Edit Group mode, because a group can't be located on more than one pages.*

You can change the appearance of the document window.
You can display or hide the grid and rulers.
The grid and rulers parameters are set in the **Grid & Rulers** dialog, which you can call from the **Tools / Grid & Rulers** menu.
For more information see **Document - Working with a Document-** *Rulers and Grid*.

To display/hide the rulers, the guide lines and the grid, use the **View** menu or the **View** toolbar.
To show/hide the rulers, use the **View / Rulers** menu; to show/hide the grid use the **View / Grid** menu, to show/hide the guide lines use the **View / Guides** menu.
Sometimes a document can be larger than one printer page. In this case the program will break the document down and arrange it on several printer pages. To view the page breaks, enable the **Page Breaks** option in the **View** menu.
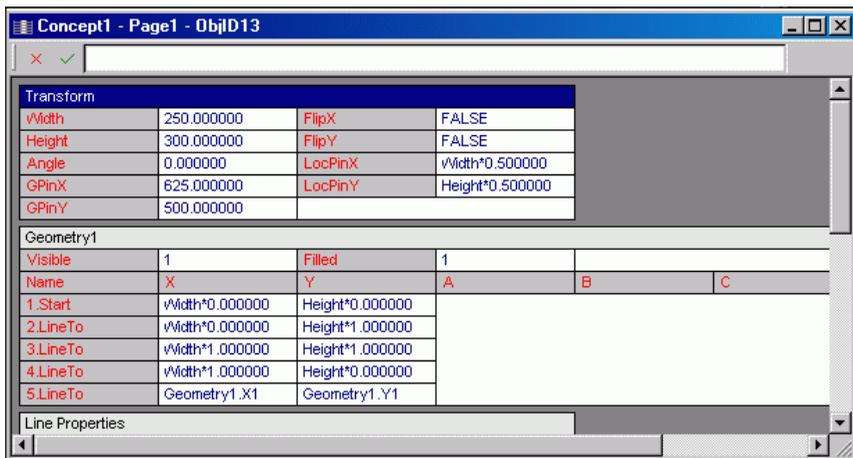
For more comfortable editing you can zoom in or out on the document by using the **View / Zoom** menu, or the **Zoom** toolbar.
For more information see **Document - Working with a Document -** *Zooming*, **Toolbars -** *Zoom*.

When you right-click somewhere in the window, the context menu appears. It contains various commands for working with shapes. For more information about this menu see **Menus -** *Document View Context Menu*.

Shape Table

The table view appears when you open the shape parameter table for the selected shape by pressing the **F3** key, or from the **Shape / Show Table** menu.

The bottom and right scroll bars are used to navigate through the table.
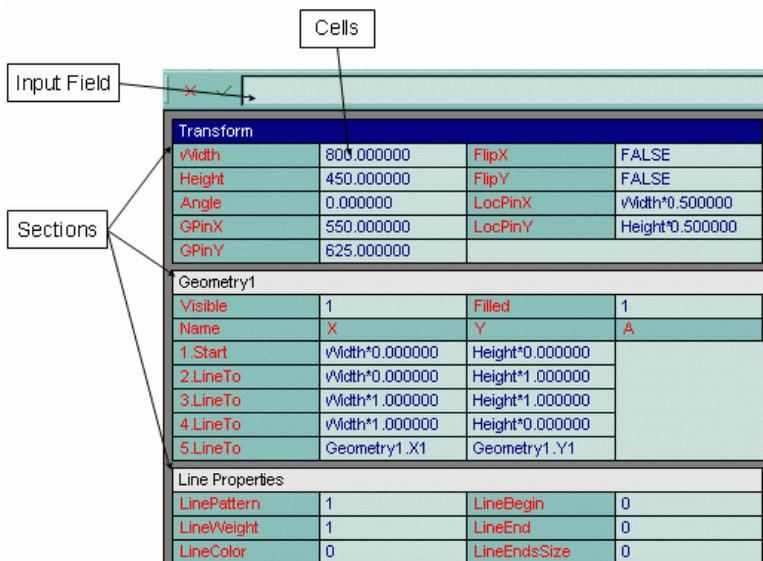
At the top of the table there's the input field where you can enter or alter the parameters in the cells.

ConceptDraw

All parameters are grouped in sections. By double-clicking a section title you can collapse it to one row. When you click a cell in a section, its contents is displayed in the input field where you can edit it.

For more information about the shape parameter table and the table's sections see *Shape Parameter Table*.

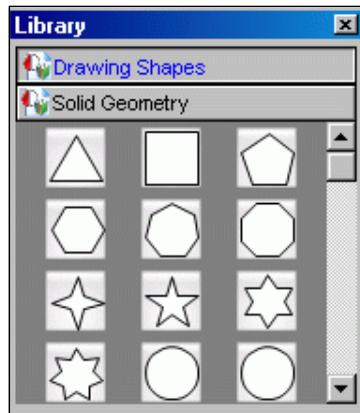# Library

The library window is a floating window.

 In the Windows version this window can be docked.

When you open libraries, the buttons with their titles are located in the upper part of the window. The library shapes are in the lower part.

By dragging a library title bar with the mouse you can display this library in a separated window. When you click on a library's title bar, it becomes active and the library shapes that it contains are displayed.

Library shapes can be displayed as icons, text or as both icons and text.

You can specify this in the context menu of the library and library shapes, or in the **View / Library Window** menu.

For more information see **Menus - *Library Context Menu***, and **Menus - *Library Item Context Menu***.
For more information about working with libraries and library shapes see **Shapes - *Inserting a Shape from a Library***, ***Libraries***.

Basic Script Editor

The ConceptDraw Basic Editor window is used for writing and debugging ConceptDraw Basic scripts.
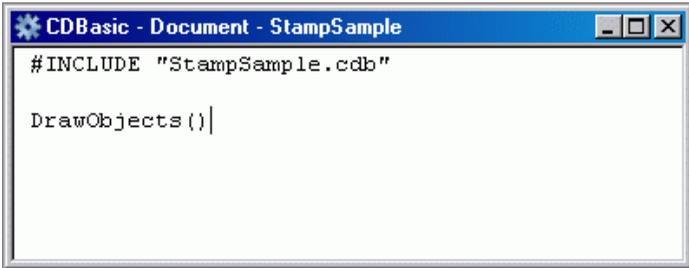
It represents a simple text editor that allows to copy and paste text. Additionally, it allows to include source codes into the scripts (by using the #include statement).

For more information see **Menus - *Basic Editor View Menus***, **Menus - *Basic Editor Context Menu***.

Basic Output

This window is used to display errors, warnings and other messages of ConceptDraw Basic.
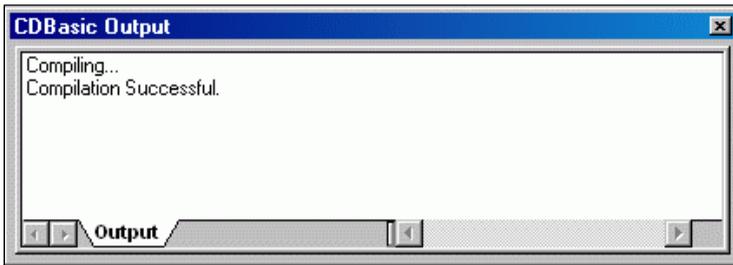
You can click on the lines to select them and copy the lines onto the Clipboard. You can also use the context menu to clear the output window.

This window is helpful for finding syntax errors in the source code. Just double-click on the error in the output window, and the program will open the editor window, with the cursor placed on the line which caused the error.

For more information about the ConceptDraw Basic Output Window see **Menus - *Basic Output View Context Menu***.

ConceptDraw

Print Preview

The print preview window is in the Windows version of the software.

🐱   In the Mac OS X version the system program Preview is used for this purpose.
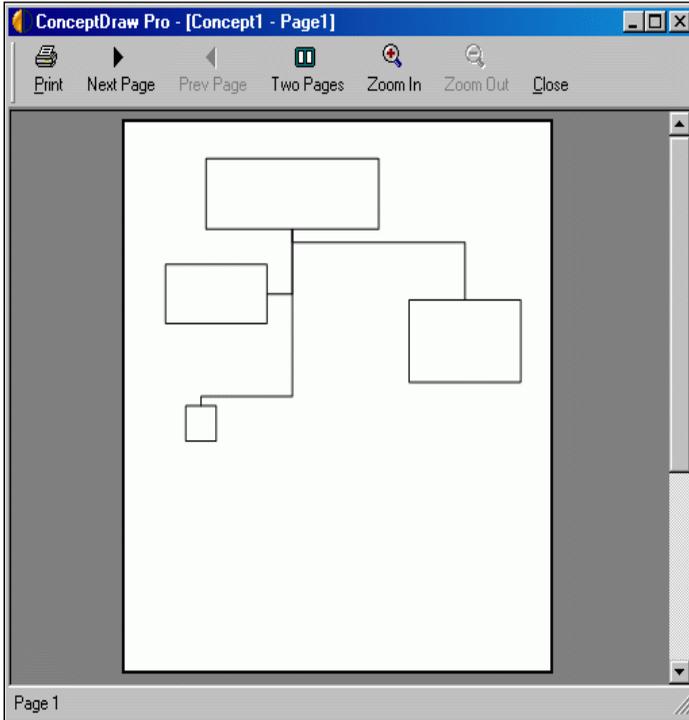
When you click the **Print** button, the **Print** dialog will appear, where you can choose which pages to print, on which printers, etc.
For more information see **Document - *Printing a Document***.

To switch between pages the **Next Page** and **Prev Page** buttons are used.
Next Page - goes to the next page.
Prev Page - goes to the previous page.

You can also change the way the document is displayed. Use the **One Page/Two Page** button to show one or two document pages at a time.
The **Zoom In** and **Zoom Out** buttons are used to increase/decrease the magnification.

To close the preview window, click the **Close** button.

Chapter 16. Keyboard Shortcuts

Working with Documents and Windows

🪟	🍎	*Operation*
Ctrl+N	**Cmd+N**	Create a new document
Ctrl+Alt+N	**Cmd+Opt+N**	Create a new document from a template
Ctrl+O	**Cmd+O**	Open a document / template / workspace file
Ctrl+S	**Cmd+S**	Save the active document
Ctrl+Shift+S	**Cmd+Shift+S**	Save the active document under a new filename
Ctrl+Alt+S	**Cmd+Opt+S**	Save Workspace file
Ctrl+P	**Cmd+P**	Print the active document
Ctrl+Alt+P	**Cmd+Opt+P**	Print Preview
Ctrl+Shift+P	**Cmd+Shift+P**	Page Setup
Ctrl+Shift+G	**Cmd+Shift+G**	Set Grid properties for the active document
Ctrl+Shift+U	**Cmd+Shift+U**	Set Snap&Glue options for the active document
Ctrl+F4	**Cmd+W**	Close the active window
Ctrl+Tab, Ctrl+F6	**-**	Activate the next window

ConceptDraw

![windows]	![mac]	*Operation*
-	**Cmd+**window number	Activate the window with the specified number
F3	**F3**	Open Shape Parameter Table
-	**Cmd+Opt+H**	Hide ConceptDraw
Alt+F4 **Ctrl+Q**	**Cmd+Q**	Quit ConceptDraw

Document View

![windows]	![mac]	*Operation*
Ctrl+"+"	**Cmd+"+"**, **Cmd+"["**	Zoom In
Ctrl+"-"	**Cmd+"-"**, **Cmd+"]"**	Zoom Out
Ctrl+Shift+Z	**Cmd+Shift+Z**	Activate the Zoom Box mode
Click in *Zoom Box* mode	***Click*** in *Zoom Box* mode	Zoom In
Click+**Alt** in *Zoom Box* mode	***Click***+**Option** in *Zoom Box* mode	Zoom Out
Ctrl+Shift+0	**Cmd+Shift+0**	Set zoom to Whole Page
Click in *Print Preview*	***Click*** in *Print Preview*	Change zoom level (in cycle)
PgUp	**PgUp**	Scroll one window space up
PgDn	**PgDn**	Scroll one window space down
Ctrl+Home	**Cmd+Home**	Go to the top-left corner of the page
Ctrl+End	**Cmd+End**	Go to the bottom-left corner of the page
Ctrl+PgUp	**Cmd+PgUp**	Go to the previous page
Ctrl+PgDn	**Cmd+PgDn**	Go to the next page

Selecting Shapes

![win]	![mac]	*Operation*
Select with **Shift**	*Select* with **Shift**	Allows to select several shapes
Ctrl+A	**Cmd+A**	Select all the shapes on page
Tab	**Tab**	Select the next shape according to the order in which they were created
Shift+Tab	**Shift+Tab**	Select the previous shape according to the order in which they were created
Ctrl, Ctrl+Shift for *Connection Point* or *Edit Text* tools	**Cmd, Cmd+Shift** for *Connection Point* or *Edit Text* tools	Select shapes without quitting the mode

Hyperlinks

![win]	![mac]	*Operation*
Ctrl+Shift+E	**Cmd+Shift+E**	Create / Edit hyperlink
Ctrl+Shift+H	**Cmd+Shift+H**	Open hyperlink

Libraries

![win]	![mac]	*Operation*
Ctrl+Shift+N	**Cmd+Shift+N**	Create a new library
Ctrl+Shift+O	**Cmd+Shift+O**	Open a library
F4	**F4**	Show / Hide Library Window
Ctrl+Shift+I	**Cmd+Shift+I**	Replace the selected shape in the library with the shape selected in the document, preserving the library shape's icon.

ConceptDraw

Editing

		Operation
Ctrl+Z,	**Cmd+Z**	Undo the last operation
Ctrl+Y	**Cmd+Y**	Redo what was reversed by Undo
Ctrl+X, **Shift+Del**	**Cmd+X**	Cut the selection to the Clipboard
Ctrl+C, **Ctrl+Ins**	**Cmd+C**	Copy the selection to the Clipboard
Ctrl+V, **Shift+Ins**	**Cmd+V**	Paste the content from the Clipboard
Ctrl+Alt+V	**-**	Paste Special
Ctrl+Shift+V	**Cmd+Shift+V**	Paste in Place
Del	**Del/Delete**	Delete the selected shape(s)
Ctrl+D, **Ctrl** for *dragging*	**Cmd+D**, **Option** for *dragging*	Duplicate the selected shape(s)
Insert Vertex with **Ctrl**	*Insert Vertex* with **Cmd**	Cut the line in this place
Ctrl in *drawing*	**Cmd** in *drawing*	Add the new segment to the currently selected figure

Formatting Shapes

		Operation
Ctrl+Shift+T	**Cmd+Shift+T**	Format Text

Operations on Shapes

🖼	🖼	*Operation*
Ctrl+B	**Cmd+B**	Send to Back
Ctrl+F	**Cmd+F**	Bring to Front
Ctrl+Shift+B	**Cmd+Shift+B**	Send to Backwards
Ctrl+Shift+F	**Cmd+Shift+F**	Bring to Forward
Ctrl+J	**Cmd+J**	Flip Vertical
Ctrl+H	**Cmd+Opt+H**	Flip Horizontal
Ctrl+L	**Cmd+L**	Rotate Left (90 degrees)
Ctrl+R	**Cmd+R**	Rotate Right (90 degrees)
Ctrl+Left/Right	**Cmd+Left/Right**	Rotate by 1 degree
Ctrl+Shift+Left/ Right Arrow	**Cmd+Shift+Left/ Right Arrow**	Rotate by 0.1 degree
Rotate with **Ctrl**	*Rotate* with **Ctrl**	Rotate around common rotation centre
Resize with **Shift**	*Resize* with **Shift**	Toggle between unproportional and proportional resizing
Arrows	**Arrows**	Move the selection one pixel at a keystroke
Shift+Arrows	**Shift+Arrows**	Move the selection few pixels at a keystroke
Ctrl+G	**Cmd+G**	Group the selected shapes into one
Ctrl+E	**Cmd+E**	Edit Group
Ctrl+U	**Cmd+U**	Ungroup

ConceptDraw

Switching between Modes

🖼️	🖼️	*Operation*
Ctrl+1	**Ctrl+1**	Activate Select tool
Ctrl+2	**Ctrl+2**	Activate Rotate tool
Ctrl+3	**Ctrl+3**	Activate Line tool
Ctrl+4	**Ctrl+4**	Activate Sector tool
Ctrl+5	**Ctrl+5**	Activate Arc tool
Ctrl+6	**Ctrl+6**	Activate Spline tool
Ctrl+7	**Ctrl+7**	Activate Rectangle tool
Ctrl+8	**Ctrl+8**	Activate Ellipse tool
Ctrl+9	**Ctrl+9**	Activate Connector tool
Ctrl+0	**Ctrl+0**	Activate Connection Point tool
F2	**F2**	Activate the Text Editing mode
Hold down Space	**Hold down Space**	Activate Scroll Hand tool
Shift in *drawing*	**Shift** in *drawing*	Constrained drawing mode (circle, square, etc.)
Click on the shape's *alignment box*	*Click* on the shape's *alignment box*	Switch between the Select and Rotate tools
Alt for *drawing* or *moving* shapes	**Cmd** for *drawing* or *moving* shapes	Invert (activate or disable) the Snap mode

Application

🖼️	🖼️	*Operation*
F1	**F1**	Call Help System
Ctrl+"*"	**Cmd+";"**	Preferences (Application Settings)

Text Formatting

		Operation
Ctrl+B	**Cmd+B**	Bold
Ctrl+I	**Cmd+I**	Italic
Ctrl+U	**Cmd+U**	Underline
Ctrl+L	**Cmd+L**	Align on the left
Ctrl+E	**Cmd+E**	Align in the center
Ctrl+R	**Cmd+R**	Align on the right
Ctrl+">"	**Cmd+">"**	Increase font
Ctrl+"<"	**Cmd+"<"**	Decrease font
Esc	**Esc**	Finish editing

Shape Parameter Table

		Operation
F2	**F2**	Start editing the selected cell
While *editing a cell*: **single click** on another cell	While *editing a cell*: **single click** on another cell	Inserts the **formula** from the cell you clicked into the input field
While *editing a cell*: **Ctrl** *+ click* on another cell	While *editing a cell*: **Ctrl** *+ click* on another cell	Inserts the numeric value of the cell into the input field
While *editing a cell*: **Alt** *+ click* on another cell	While *editing a cell*: **Alt** *+ click* on another cell	Inserts the cell title into the input field

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