Preferences
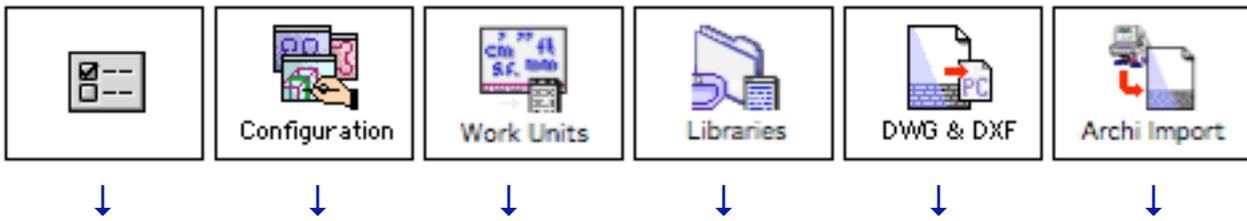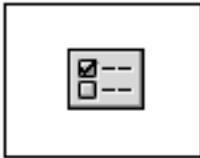
Software Preferences ↑

Under the name Software Preferences are grouped the managers allowing to set the BoA work parameters regarding all files. The preferences managers do not deal with parameters changing from a file to another.
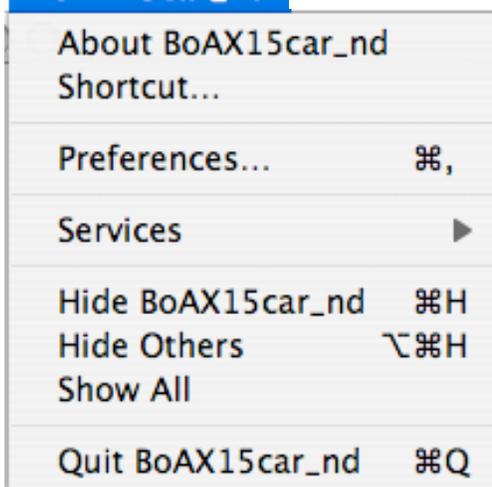
Call of the preferences managers

BoAX15car_nd

About BoAX15car_nd
Shortcut...

Preferences...   ⌘,

Services   ▶

Hide BoAX15car_nd   ⌘H
Hide Others   ⌥⌘H
Show All

Quit BoAX15car_nd   ⌘Q

Acces to "Preferences" is throught the item in the "BoA"menu.

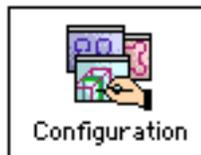(or "Windows" menu in OS 9)

Access can also be made from some tools palettes and from the main palette by clicking on the icon:
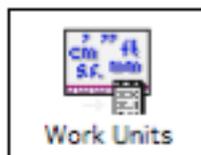
Recall of previous preference manager

Manager types

There are 5 preferences managers:
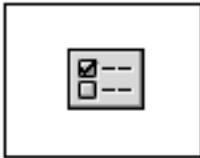
Configuration

"Configuration" sets the software general presentation preferences.

Work Units

"Units" is a list manager.

Libraries   DWG & DXF   Archi Import
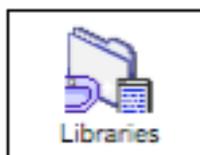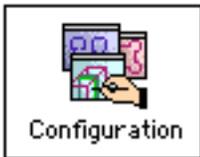
"Libraries", "DWG & DXF" and "Archi Import" manage different file types.

Software preferences

Preference managers list

General configuration options of BoA software. This manager allow to configure the color and the behavior of the main tools.
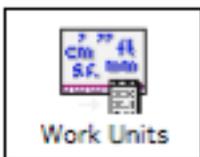
Linear and area-volumne units definition.
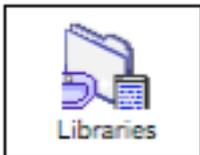
Management of the accessories libraries, frames in 3D files, accessories and 3D projects in layout files. This manager allow to choose the default positionof these differents types of files.

DXF and DWG files import and export option.
This manager allow to choose the scale factor of imported files and the unit type of exported files.

Architrion files import options. This manager allow to choose the scale factor of the imported files, the imported or left behind object types and the font for the texts and dimensions.

Configuration   ↑

This manager allow to choose the general options of BoA.

Configuration informations

Each BoA file holds a set of configuration informations. When opening a new file, these informations are read back in from the configuration manager. The configuration manager allow to modify the current options. Once modified, save them with the keyboard command F. To load these informations back in the current file, use   the command ⌥ F; this command updates the configuration informations.
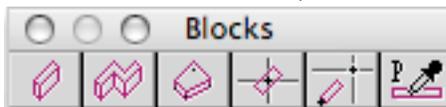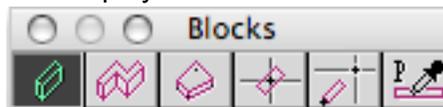
F   Save the parameters

⌥ F Load the parameters

The manager options

☑ Icon Highlighting

When this checkbox is ticked, the actives icons are displayed in reverse video.

     no highlighting   with highlighting

☐ Palette Autofocus

When working with a palette holding many numeric parameters, the Tab key allow to browse throught them.
If the checkbox "Palette autofocus" is ticked, at palette opening, the first parameter is directly selected.

☐ Beep when selection

When this checkbox is ticked, the objects selection fonctions are emphasised by a bip sound each time a valid selection is effectively made. If the fonction do not select anything, whatever the reason, the bip is not heard. Reciprocally, when un object is selected, even when invisible, the bip is heard. This option allow. for instance, to know when a slab is selected even if, because of a close up zoom, the slab limits are outside the work pane.

☐ Beep when selection

If this checkbox is ticked, the Alt fonctions are inverted. The underlying fonctions of the tools palettes become apparent, the fonctions normaly visible become hidden, and thus accessible by pressing the Alt key.

☑ Automatic Open Palette

When this option is chosen, the location of the tools palettes and their display state (on screen/hidden) are recorded with each file save. Upon the file re-opening, the previously opened tools palettes, automatically open at their recorded location.

☑ Indicate WP Orientation

When displaying the grid, the reference center can be seen as a vertical arrow when the checkbox is ticked.

| with orientation | without orientation |
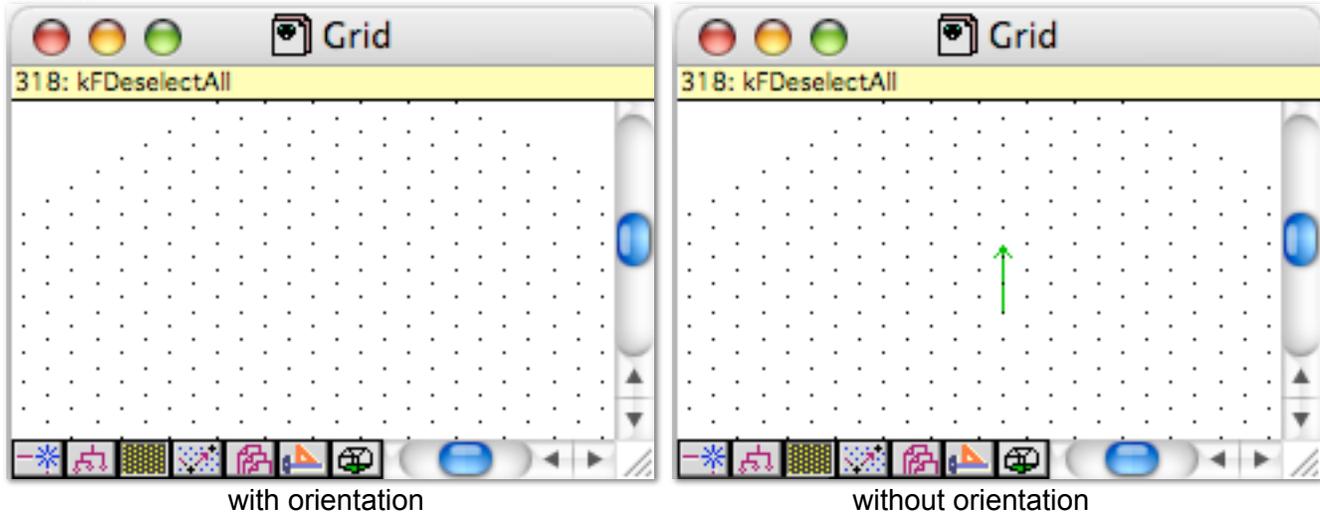
☑ Ignore Double Click on WP Palette

The WorkPlane palette being a very often used tool, a double-click can sometimes occur on the palette, instead of a simple one, to select a command. This can happen for various reasons: very sensitive mouse, user too fast clicks. This checkbox allow to prevent double-clicks on the WorkPlane palette.

☐ Compact Saving

When this checkbox is ticked, the files are saved in compact mode.
The configuration parameters are not saved.
The overall file size reduction is rather small: from 4 kb to 20 kb. So it is useless for an architecture project. The option is of interest when building a library of objects, for instance, a library of openings, doors, furniture, symbols, etc. Each element of the library is of rather small size by itself, a few kb or tens of kb. The compact saving of these files allow to reduce the library size and thus make it more easy to share. The elements making up the library will also be faster to load in memory upon their use.

☑ Use Navigation Services

When opening a file, the system file opening dialog is used. Wheter or not the checkbox is ticked, the simplified or the advanced opening file dialog is used. This option takes effect only on Macintosh, under system 9 (classic or native)

[2] Workplane

This box pops the color swatch up to choose the color of the WP. Preferably keep it green since it is the color used on the icons of the tools palettes to symbolize the WP. On some occasions, it can be best to change the WP color, particularly if the project contains many green objects ;-).

[19] Selections

This box pops the color swatch up to choose the color of selected elements. When calculating opaque views or opaque cuts, the selected objects are displayed with the selection color.

| 15 | Background |

This box pops the color swatch up to choose the workpane background. Can be very usefull when the objects are not very visible because of their color. For instance, black background if objects are white.

Notice: DXF and DWG files background
The DXF and DWG files often contain white or pale colored objects. So importing such files generates a file with a black background for convenience.

| 5 | Installation Vol. |

This box pops the color swatch up to choose the color of the installation volume (when the project is intended to serve as accessory or frame).

| 0 | Reticule |

This option is effective under Macintosh OS X system. It has no effect under Macintosh OS 9 system. The box pops the color swatch up to choose a color for the crosshair.

| Refresh Screen Every | 1.000000 | Second(s) |

The screen display is done in two steps. The software draws the current view in a virtual window. When the drawing is over, the virtual window is copied in the current window. For a file holding many objects, ithe display can take a bit of time. So the virtual window can be periodically copied to the current window, without waiting for the redraw to complete. The "Refresh screen" option allow to adjust the time lap between the periodic redraws.

| Check for Stop Request Every | 0.100000 | Second(s) |

The opaque view calculations (perspective, cut) can take a lot of time if working on a big project. Such a calculation can be stopped by pressing the sur the Esc key. The calculation will then stop after a user defined time lap. It is best not to choose a too short lap, since the stop request checks slow the opaque calculations down.

Configuration

Preferences

Configuration

Configuration (dropdown)

Configuration (selected)

Work Units

DWG & DXF

- ☑ Icon Highlighting — Icons display when the Alt key is pressed
- ☐ Palette Autofocus — Input option of numeric values
- ☐ Beep when selection — Bip confirmation upon objects selection
- ☐ Invert Option Key — Alt key action mode
- ☑ Automatic Open Palette — Tools palettes location recording
- ☑ Indicate WP Orientation — Arrow display option when grid active
- ☑ Ignore Double Click on WP Palette — WP palette behavior
- ☐ Compact Saving — Save option for libraries
- ☑ Use Navigation Services — Browswe mode for opening files under Mac OS 9

Color of...

2	Workplane	... objects cut by the WP
19	Selections	... selected objects
15	Background	... screen background
5	Installation Vol.	... accessories and frames volume
0	Reticule	... crosshair, under Mac OS X

Refresh Screen Every   **1.000000**   Second(s)

Check for Stop Request Every   **0.100000**   Second(s)

Partial display time lap for redraws of big size files

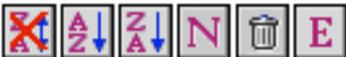Stop request time lap (ESC key) for perspectives calculations
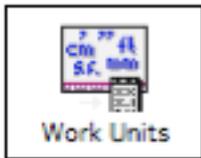
Work Units

This manager allow to choose, modify and create a mesure unit. Once the unit is chosen, it will be used in the dialogs, in the numeric control, to display the cursor coordinates, the dimensions and in the mini quantifier.

The list manager fonctions

Display the list in creation order
Click this icon to display the units list in the order of their creation. If the units have been created one after the other, this exact creation order will be shown. If units are deleted from the list, they leave an empty spot fot the next unit to be defined. The creation order is then disturbed since new units occupy the empty spots before being addeed to the end of the list.

Display the list in alphabetical order
The units list is displayed in alphabetical order.

Display the list in reverse alphabetical order
The units list is displayed in reverse alphabetical order.

New unit
When clicking on this icon, a dialog appears allowing to create a new unit. (see further)

Delete unit
This fonction deletes the selected unit. Only one unit can be selected at the time and deleted.

Edit unit
This fonction edits the selected unit. When clicking on this icon, a dialog appears, the same as for the creation of a new unit. The dialog allow to modify the definition of the unit. This fonction is also called up when double-clicking a unit in the list.

Area and volume units

The area units are used for the display of the room mesurements in the quantifier and in exports to mini quantifier. For the volume unit, there is a correspondence between the area units and the volume units.

Three area units and volume units are available:

Type	area units	volume units
m2 (Square meter)	m2	m3
SF (Square Feet)	SF	CF
SY (Square Yard)	SY	CY

Lenght unit definition

Edit unit

New unit

The Edit unit and New unit fonctions call a dialog up allowing to define (or modify) a unit.

The name of the unit, as it will show in the units manager list.

The abreviated names of the sub-units as they will show in the numeric values expression. These abreviations cannot have more than 2 characters.

SU Superior Unit
RU Reference Unit
FU Fractional Unit

These boxes allow to display fractional units.

SU [   ] RU [   ] FU [   ]

Show if 0   ☑   ☑

The checkboxes "Show if 0" indicate to display the units even when their value is zero.

Show Leading 0   ☐   ☑

The checkboxes "Show leading 0" indicate to display the non-significant zero for sub-units values.

☐ Show FU

This checkbox indicates to show fractional units.

SU= [0   ] RU RU= [1000   ] FU FU= [0.010000] mm

Defining the relations between the sub-units.
The FU unit is the base unit. It is defined in mm.
Then the RU sub-unit is defined relative to the FU sub-unit.
Then the SU sub-unit is defined relative to the RU sub-unit.

[100   ] (Preview)

Input a keyboard numeric value in the Preview checkbox. Then click on the "Preview" button, the numeric value is displayed in the units being defined in the dialog.

(Cancel)

Quit the dialog without defining any new unit.

(Ok)

Quit the dialog and record the new unit in the list.

Examples of unit definition

Length Presentation

Name [X cm   ]

                                    Fraction
SU [   ] RU [   ] FU [   ] [0   ] [   ]

Show if 0   ☑   ☑
                              ☐ Show FU
Show Leading 0   ☐   ☑

SU= [0   ] RU RU= [1000   ] FU FU= [0.010000] mm

[100   ] (Preview)

(Cancel) (Ok)

cm
Only one unit: cm

Length Presentation

Name   X,XX m

Fraction

SU [   ] RU [,] FU [   ] [0] [   ]

Show if 0   ☑   ☑   ☑ Show FU

Show Leading 0   ☐   ☑

SU= [0] RU RU= [100] FU FU= [10.000000] mm

[1,00]   (Preview)

(Cancel)   (Ok)

m - 1/100
Two units: m and cm, the cm are displayed as fractions of m.

Length Presentation

Name   X cm 1/2

Fraction

SU [   ] RU [   ] FU [/] [2] [   ]

Show if 0   ☐   ☐

Show Leading 0   ☐   ☐

SU= [0] RU RU= [2] FU FU= [5.0000] mm

[100]   (Preview)

(Cancel)   (Ok)

cm - 1/2
Two units cm and half cm. The 1/2 cm are displayed as fractions.

Length Presentation

Name X,XX'¡

SU		RU	,	FU	"	Fraction 0	

Show if 0 ☑ ☑ ☑ Show FU

Show Leading 0 ☐ ☑

SU= 0 RU RU= 100 FU FU= 0.254000 mm

39,37" Preview

Cancel Ok

Inches - 1/100
Two units: inches and hundredth of inch. The hundredth of inches are displayed as decimal.

Length Presentation

Name X' X X/4"

SU	'	RU		FU	/	Fraction 4	"

Show if 0 ☐ ☐

Show Leading 0 ☐ ☐

SU= 12 RU RU= 4 FU FU= 6.350000 mm

3' 3 1/4" Preview

Cancel Ok

Feet - Inches - 1/4
Three units: feet, inches and quarter of inches. The quarter of inches are displayed as fractions.

 Units

Preferences

Configuration

Configuration

Work Units

Libraries

DWG & DXF

Works Units

Display the list sorted in ...

... reverse alphabetical

... alphabetical   New unit

... creation   Delete unit

Edit unit

X,X cm
X mm
X cm
X,XX mm
X,XX m
√ X,XXX m
X X/2 cm
X' X X/2"
X' X X/4"

Units used in the current file

List of units

Area Unit   ○ m2 ● SF ○ SY

Choice of area and volume units
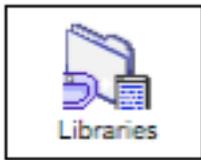
Libraries   ↑

This manager allow to choose the location of the libraries elements
Accessoiry files
Frame files
3D files uses in the layout sheet viewports

Libraries elements types

A BoA file mainly holds 2D and 3D objects, but it can also contain references to files defining specific elements. These can be frames, accessories or project files.

Frames
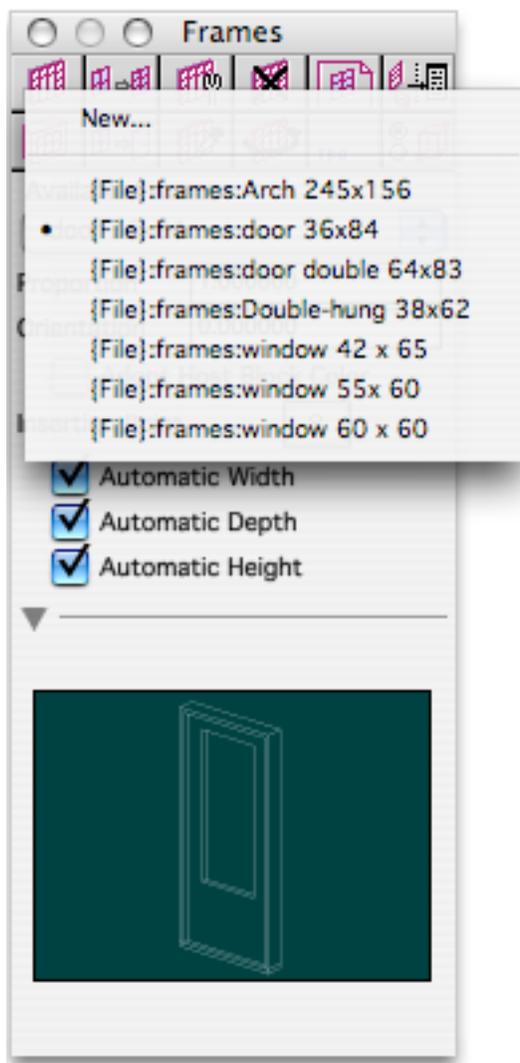
It is a 3D file to be put in an opening. The frame will be streched so that it's installation volume matches the geometry of the opening. A frame is thus always linked to an opening. The frames list is in the "Available Frames"menu in the "Frames"palette.

Accessory
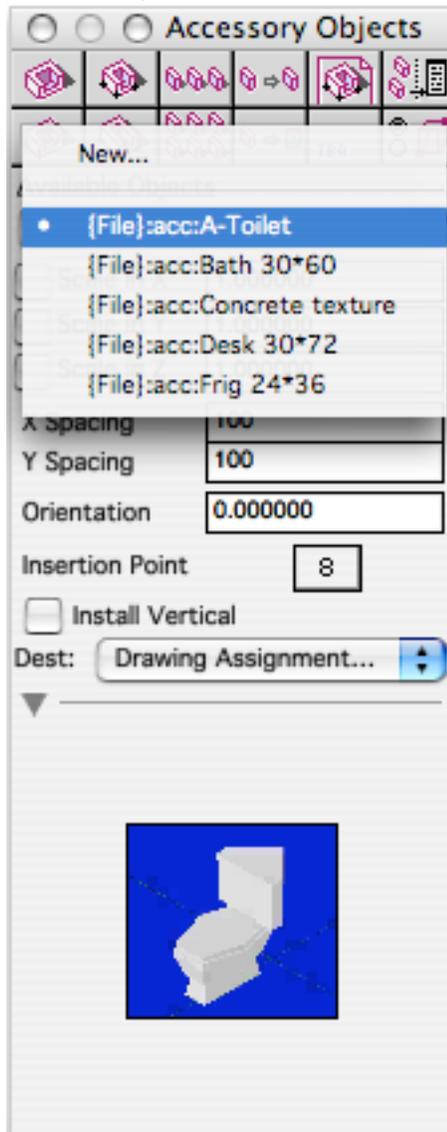
It is a 3D file to be put in 3D space at a user defined location. The corresponding 3D object will be added to the project with an X, Y, Z scale factor given by the user. An accessory is an independant object, except when linked by a geometric dependancy, as for any other object. The accessories list is in the "Available Objects"menu of the "Accessory Objects"palette.

Project File
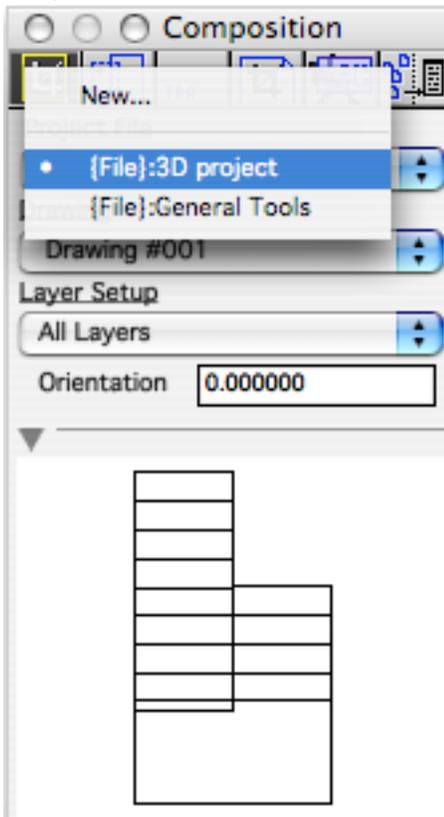
It is a 3D file to be visualised in a layout viewport. The viewport shows one of the drawings defined in the project file (see Drawings manager). The viewports can only be used in a layout sheet. Such a 3D file is always used in relation to a viewport. The project files list of a layout sheet is in the menu "Project File" of the "Composition"palette.

Library elements location

The library elements differ by their usage: accessory, frame, project file. They can also difer by their type: BoA, Architrion, DXF, DWG. Whichever, BoA keeps track of it's location in memory.
One can specify the location of a file relative to hard disk, to the location of the BoA application or to the referencing file.
Following the specified location reference, the files are displayed in the menu with a different prefix:

Prefix	File location relative to ...
{BoA}	... BoA application
{File}	... referencing file
No prefix	... the files hierarchy on the computer
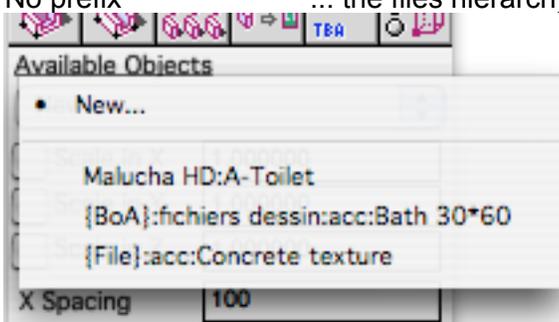
Notice: Snap points File
The snap points files are always defined relative to hard disk.

Use of the different location reference types

When working with many BoA files (projects, accessories libraries, etc.) it is recommended to order them logically on the hard disk.

Depending on the intended use of a file, the right type of location reference will facilitate the usage of the file.

When a project holds many files (main file, site plan, sub-elements, library elements, custom accessories or frames, etc.) the different elements will preferably be put in a common folder. This is not compulsory thought, in particular:

- The folder can withold sub-folders for the custom library elements.
- The standard library elements can stay in a library defined in the BoALib folder.
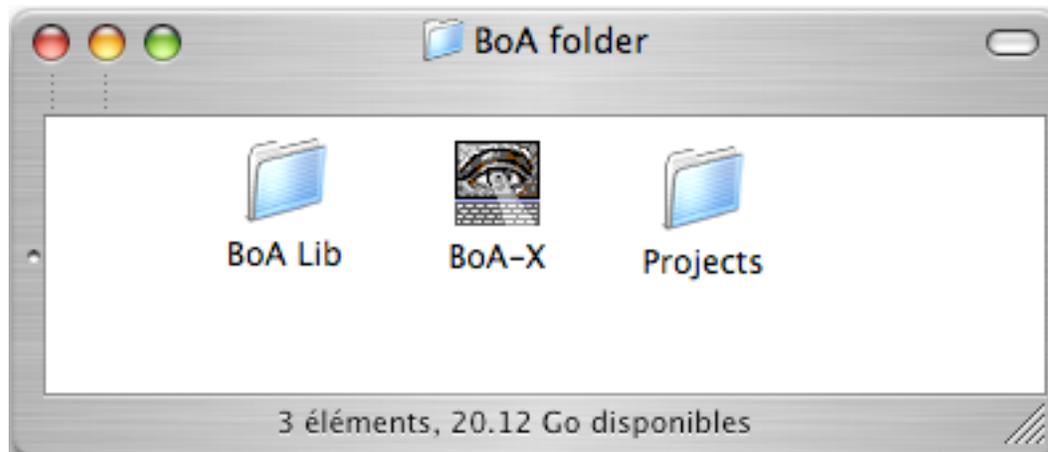
It is by far preferable to define a library to hold the standard elements: frames, opening shapes, furniture, construction elements, symbol sets, etc. Defining the same library for all users facilitates file sharing. The recommended method is to create a BoALib folder beside the BoA application.

This BoALib folder will hold the libraries of predefined elements. BoA software comes with a library named "France" to be put in the BoALib folder. It is recommended for each user to createanother

library, also put in BoALib. This library is a user named folder. Beside the BoA provided library "France" and the user library, other BoA users' custom libraries can be added with which files are exchanged. Receprocally, in transmetting a file to another user, always include our custom library. It is not always necessary to transmit the whothe library content, mainly for file size concerns: a library can occupy tens of Mb. And also for privacy reasons: one may not want to distribute his custom elements library.
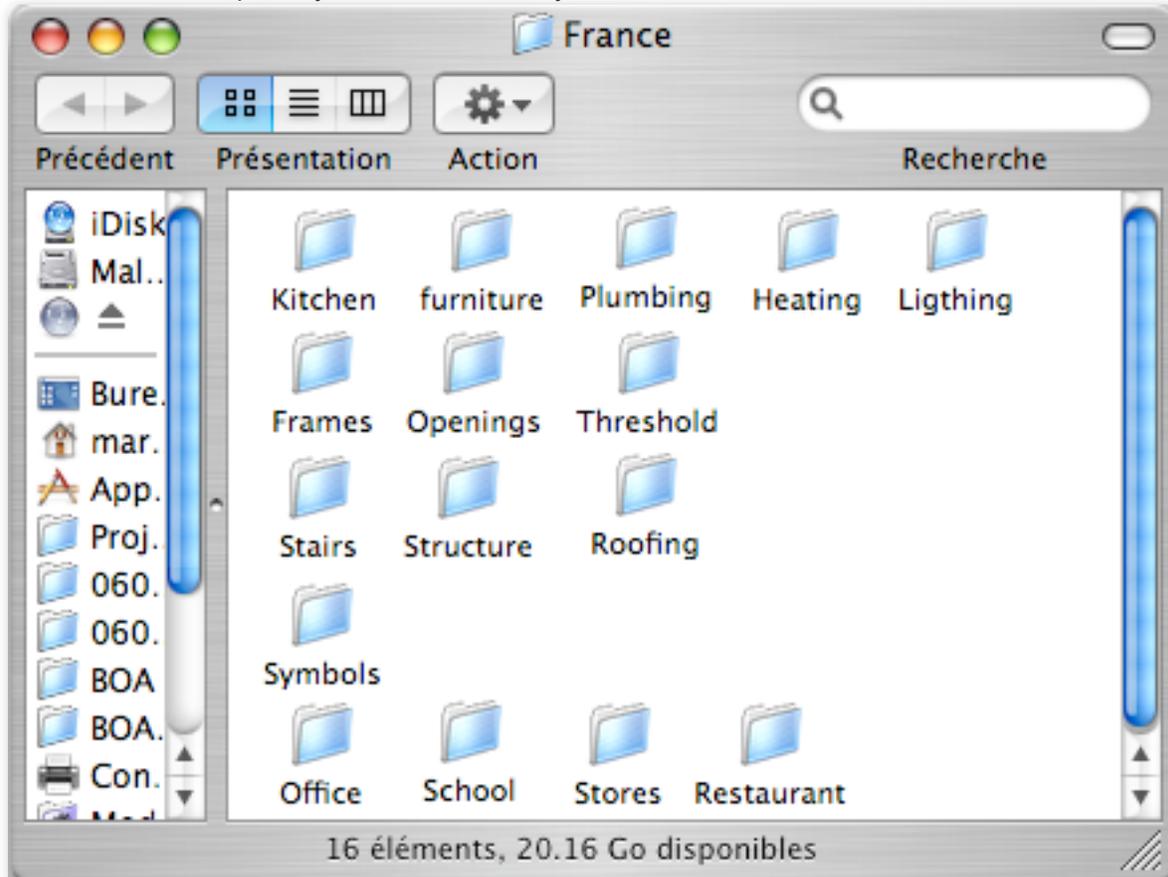
Inside a library folder, file organisation is loose, at start. However take care not to modify the files location and the sub-folders in the library folder. Once a sub-folder is defined in the library, this folder takes a fixed relative position. The same is true for the files in the library. If, nevertheless, the location of a file or a sub-folder is modified, all the projects referencing the moved file or one of the files in the moved folder will have to be updated in order to display the element. For more infos on the way to update a file holding an accessory, a frame or a project file, refer to the "Accessory objects", "Frames" and "Composition" palette documentation.

Exceptionnally, a library could be defined relative to the hard disk of the computer. This will be the checkbox, for instance, if putting a library on a partition of the hard disk.

If BoA is used on many work stations, the BoALib folder should be present on all stations, in each beside the BoA application. The complete BoALib structure: libraries, sub-folders and files, has to be identical on all the work stations. When adding files in BoALib of one of the work stations, the addition has to be done the same way on all the other work stations. In checkbox of differences between the BoALib folders of some work stations, accessories or frames could be untraceable when opening a project file. In this checkbox, the easyest solution is to quit the file, update BoALib on the work station, and then open the file again.

Keep in mind: Files location
In generale, to summerize:
- The files linked to a particular project (includind custom accessories and frames) will all be located in the same folder. When used, their location will be defined relative to the project file.
- The standard accessories and frames (provided with BoA, specific to the user or from another user) are put in BoALib. Their location defined relative to BoA.
- If BoA is used on many work stations, the BoALib folder should be identical on all work stations.

Manager settings

Record Location Relative to
○ BOA
○ Hard Drive
● Project File

These three buttons allow to choose the default relative location of the frames and accessories referenced in the 3D files.

Drawing Record Location Relative to
○ BOA
○ Hard Drive
● Project File

These three buttons allow to choose the default relative location of the project files and accessories referenced in the Layout sheet files.

When a new accessory, frame or file project is inserted, it's location is defined by the reference mode indicated in the manager. This reference can however be modified in the list of frames, accessories or project files; one file at the time.
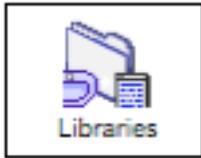
Libraries

Libraries

Sub-files location called by a BoA file:
- Accessories
- Fraames
- 3D Files in layout viewports

Libraries

Record Location Relative to

BOA — BoA application ⎤ Accessories and
Hard Drive — Absolute location ⎬ frames reference
Project File — Project folder ⎦ location

Libraries used in the 3D files (Accessories and Frames)

Drawing Record Location Relative to

BOA — Application BoA ⎤ 3D files reference
Hard Drive — Position absolue ⎬ location
Project File — Dossier project ⎦

Libraries used in the Layout files (3D files used in the drawing viewports)

DXF - DWG Files

This manager deals with AutoCAD files import and export.

There are two types of AutoCAD files:
DXF　Text coded informations
DWG Binairy coded informations
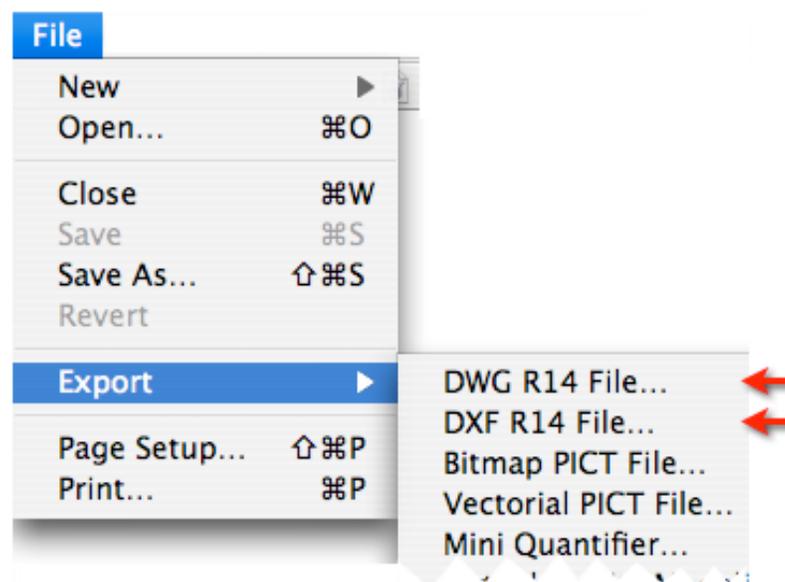BoA exports the files to DXF 14 and DWG 14 format and imports AutoCAD files up to DXF 2000 and DWG 2000.

Files import and export

There is no specific command to import DXF and DWG files.
Just use the "Open..." command in the "File"menu, BoA directly recognises the file type to be opened.
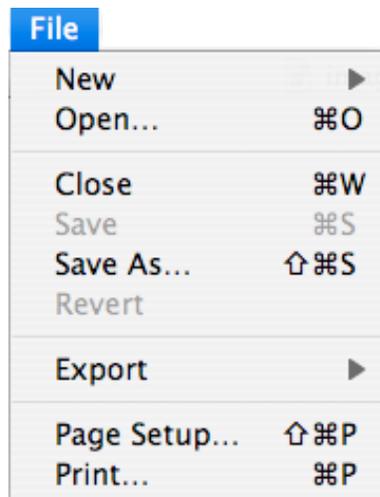
To export files, use the "Export" sub-menu commands in the "File" menu.

Export options

Objects in a BoA file holds data (points coordinates , circles radii, etc.) which are given in some mesure unit.

The mesure unit choice is done in the unit manager. When exporting a file to DXF or DWG format, it can be done while keeping the mesure unit or imposing a metric or imperial mesure unit.

Metric unit: cm, m, etc.

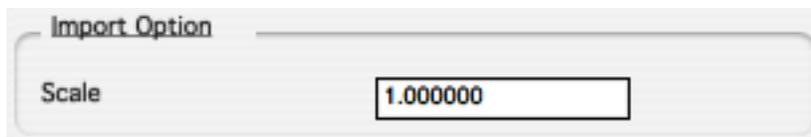Imperial unit: feet, inches, etc.

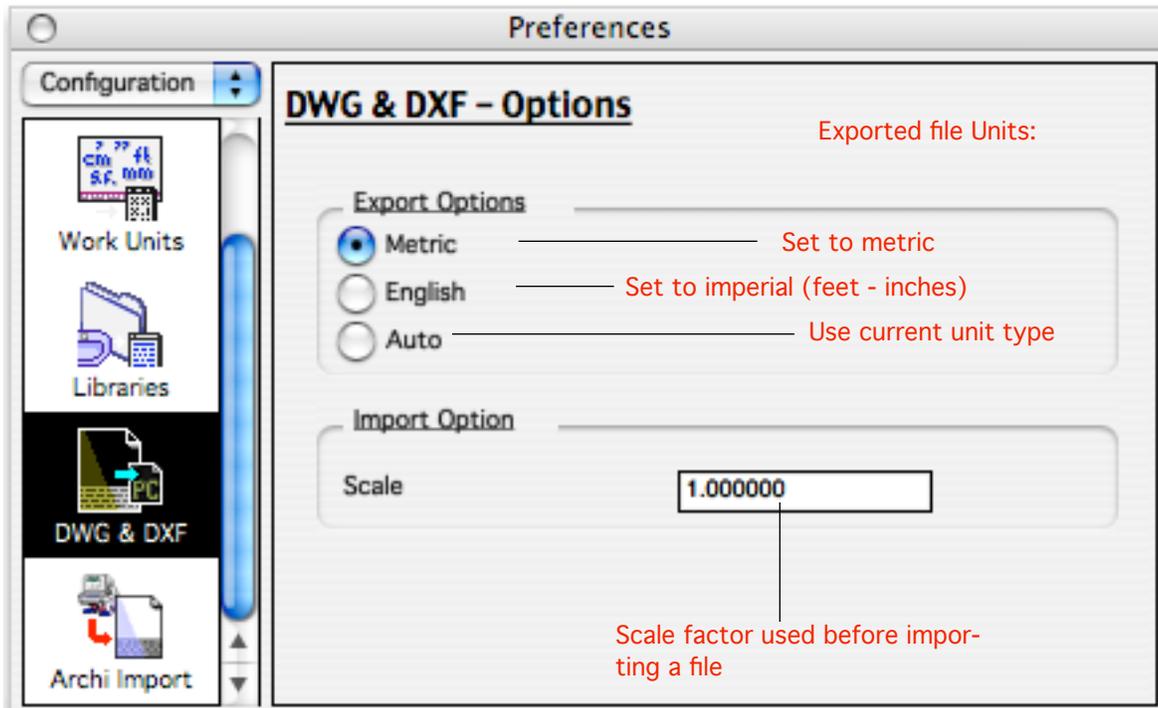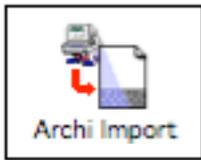| *Option*	*Effect*: The exported file will have...
Metric	... a metric unit type
English	... an imperial unit type
Auto	... the same unit type as the BoA file

Import options

When importing a file of DXF or DWG type, the unit used in the file might not correspond to the one we would like to use. The import scale factor allow to e modify the file to be imported.

This scale factor can be used to correct a unit error at DXF or DWG file creation time. Sometimes a metric unit file could have been recorded in imperial unit or vice versa. In this checkbox, a scale factor of 2,54 (1 inch = 2,54 cm) or 0,3937 (1 cm = 1/2,54 inches = 0,3937 inches) as to be applied to get the right unit back upon file import.
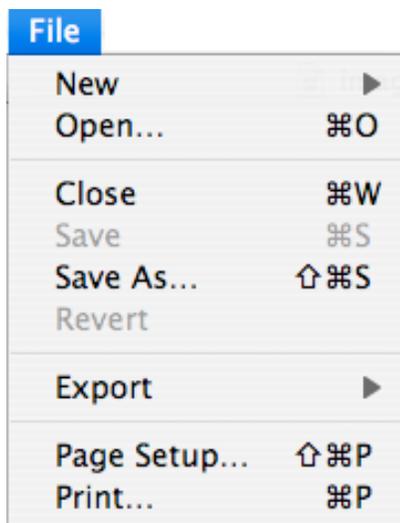
DXF - DWG Files

Preferences

DWG & DXF – Options

Configuration

Work Units

Libraries

DWG & DXF

Archi Import

Exported file Units:

Export Options

○ Metric ——————————— Set to metric

○ English ——————— Set to imperial (feet - inches)

○ Auto ——————————— Use current unit type

Import Option

Scale   1.000000

Scale factor used before impor-
ting a file

Architrion files Import

Management of Architrion files import.

Architrion files import

Importing an Architrion file is done with the "Open" command of the "File"menu. There are no specific import commands, BoA directly recognises Architrion files, 2D and 3D.

File	
New	▶
Open...	⌘O
Close	⌘W
Save	⌘S
Save As...	⇧⌘S
Revert	
Export	▶
Page Setup...	⇧⌘P
Print...	⌘P

Architrion files icons

Wether the Architrion and BoA softwares are installed or not on your computer, the Architrion files have different icons in the finder.

3D Architrion file if BoA is installed but Architrion is not

2D Architrion file if BoA is installed but Architrion is not

3D Architrion file when Architrion software is installed

2D Architrion file when Architrion software is installed

Notice: Automatic opening of Architrion files
If Architrion is not installed on a computer while BoA is, the Architrion files will open directly in BoA. Just double-click on the file icon du for it to open in BoA.

Length units

They are two types of Architrion files, 2D and 3D files.

2D files: the objects coordinates are given with high precision, meaning that the coordinates values are integers coded on 4 bytes. The 2D files contains 2D objects only. The characteristic points of these objects are two coordinates, X and Y. No Z coordinate. In BoA, the 2D objects can be located anywhere in space, the defining points thus have 3 coordinates, X, Y and Z. When importing a 2D object from an Architrion fithe, a coordinate Z=0 is added to each of the object points. Once imported, all the objects that where in a 2D Architrion file are thus put on a horizontal plan of altitude Z=0.

3D files: here, the objects coordinates are written in low precision, meaning that the coordinates values are integers coded on the 2 bytes. The 3D files contains blocks and openings.

Each unit of length in import file is equal	1.000000	cm

The Architrion files, 2D and 3D, do not have proper units. Meaning that the lenght units in which the objects coordinates are shown is a generic unit. So, at file import time, the file unit must be specified.

Object types to be imported

The Architrion import manager allow to choose the objects to be imported:
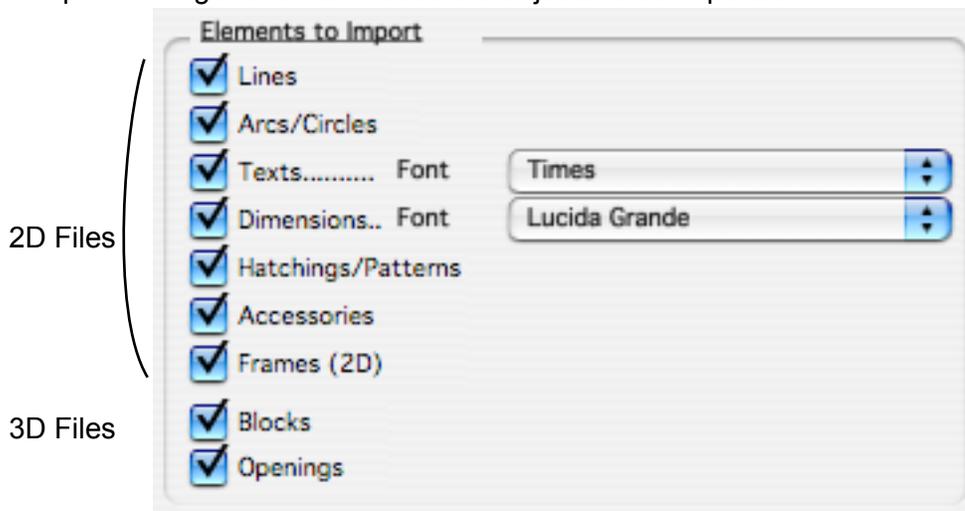
As for texts and dimensions, the font to be used for import in BoA can be specified.

Architrion files import

Architrion 5 Import

Each unit of length in import file is equal   `1.000000` cm

Imported files
scale factor

Elements to Import

☑ Lines
☑ Arcs/Circles
☑ Texts.......... Font   Times
☑ Dimensions.. Font   Lucida Grande
☑ Hatchings/Patterns
☑ Accessories
☑ Frames (2D)

☑ Blocks
☑ Openings

Architrion 2D objects
types to be imported

Font choice for texts
and dimensions

Architrion 3D objects
types to be imported

Configuration

Work Units
Libraries
DWG & DXF
Archi Import