WinXound Help

WinXound is a free and open-source Front-End GUI Editor for
CSound 5, CSoundAV and CSoundAC, with Python and Lua support,
developed by Stefano Bonetti.

Special thanks for the OsX version go to Giuseppe Silvi
for the debugging help and other useful suggestions.

Supported operating systems:

- Microsoft Windows (Xp or major)
- Mac OsX (10.5 or major)
- Linux

CSound compiler requirements:

- WinXound is optimized to work with the new CSound 5 compiler (older versions may be incompatible).

Main features:

- Edit Csound, Python and Lua files (csd,orc,sco,py,lua) with Syntax Highlight and Rectangular Selection;
- Run CSound, CSoundAV, CSoundAC, Python and Lua compilers;
- Run external language tools (QuteCSound, Idle, or other GUI Editors);
- CSound analysis user friendly GUI;
- Integrated CSound manual help;
- Possibilities to set personal colors for the syntax highlighter;
- Convert orc/sco to csd or csd to orc/sco;
- Split the code in two windows horizontally or vertically;
- CSound csd explorer (File structure for Tags and Instruments)
- Line numbers;
- Bookmarks;
- Csound opcodes autocompletion;
- And much more...

Note:
Starting from version 3.0.0, Orc and Sco documents are automatically converted into the CSD format.

The main web site of WinXound is: winxound.codeplex.com
Please visit it to download newer versions.

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1. Installation

The installation is simple: decompress the .zip file and drag WinXound to your Applications folder. Launch it from there. If you want to associate .csd, .orc and .sco files to WinXound, right-click on file's icon and "Get Info" (cmd + i), then "Open with" and choose WinXound.app, then click "Change All". To create a WinXound link to your Dock drag the application icon on the Dock or, after WinXound launched, right-click on it and select "Keep in Dock".

2. StartUp Window

After WinXound launched the first thing that appear is the StartUp Window. This panel opens at application launch and from menu File ⇒ New (cmd + N). In this panel you can create new file for CSound (C), Python (P) and Lua (L). There is a Recent Files list, with a Clear List button. It's possible to open multiple files by selecting them and press Open Recent(s). The last one button is to Open Other file.

3. Preferences

The WinXound Preferences panel is under the menu WinXound ⇒ Preferences... (cmd + ,). **In order to work correctly, the first time you launch WinXound, it's recommended to check/fill some fields into the Preferences panel.**

3.1 General

You can select the startup action between: WinXound Startup Window, New CSound Document, New Python Document, New Lua Document.
Inside the Document Templates you can write the default code for every new created file.
You can also set the "Document window startup size" expressed in pixel size.

3.2 Directories

If you have already installed CSound 5 (and/or Python and Lua), you can press the Auto Search Paths button to retrieve automatically the correct paths of the CSound executables. Otherwise you must select all paths manually with the Browse buttons.

- CSound 5 Compiler: set your CSound Unix Executable File. This field is required in order to compile your csound files.
- CSound 5 Help: browse and specify the path of index.html of CSound 5 Html Manual. This field is required to visualize the CSound manual inside WinXound.
- CSound 5 GUI: browse and specify the path of the external CSound Gui Editor (for example QuteCSound).
- Wave Editor: Specify your preferred wave editor application (for example Audacity).
- Python Compiler: browse and specify your Python Unix Executable File.
- Python External GUI: browse and specify your Python Gui path.
- Lua Compiler: browse and specify your Lua Unix Executable File.

- Lua External GUI: browse and specify your Lua Gui path.

3.3 Environment Variables

Click on the various Browse buttons to set CSound Environment Variables paths.
“SFDIR” checkbox behaviour:
when you compile for example -otest.wav you will find it in three ways:

1. If you haven't specified the SFDIR in your WinXound settings, it will be in your .csd file path;
2. If you have specified the SFDIR you will find it in your SFDIR path;
3. If you have specified SFDIR but you have unchecked the checkbox on the left side of SFDIR field (in your WinXound settings) you will find it in your .csd file path (the checkbox enable or disable SFDIR output)

3.4 Compiler settings

Set the default font name and size of the compiler output window. Set the preferred CSound, Python and Lua compilers options or click Default to restore the original WinXound settings. After CSound has compiled the soundfile, you can open it with the media player (ex. Quicktime) or with your preferred wave editor (the same specified at Preferences->Directories).

3.5 Text and Syntax

Set the default font name, size and tab indent, syntax highlight colors and other properties of the text editor. For Python syntax you can also choose between Mixed mode (inside the triple quoted strings ''' WinXound will use the CSound syntax highlighter) and Pure Mode (Python only).

3.6 Explorer

Here you can choose which elements of the code should be displayed in the explorer view (Options, Macros, Opcodes, Instruments, Functions and Sections) and also the default Font size (Small, Medium or Large).

4. Menu

4.1 File

New – Open the StartUp Window. In this panel you can create a new file for CSound (C), Python (P) and Lua (L).
Open – Open a CSound file (when you open an .orc or .sco files they will be automatically converted in a New Untitled .csd document).
Open Recent – PopUp menu with the recent used files.
Close – Close current document.
Close All – Close all documents.
Save – Save the document.
SaveAs... – Save the document with a new name.

Save All – Save all opened documents.
Revert to Saved – Revert the document to the last saved version.
Import – PopUp menu with Orc and Sco. Orc imports a .orc file into the <CsInstruments> section. Sco Imports a .sco file into the <CsScore> section.
Export – PopUp menu with Orc/Sco, Orc and Sco. Orc/Sco exports .csd file to two separated .orc and .sco files with the same name. Orc exports only the <CsInstruments> section to a .orc file. Sco exports only the <CsScore> section to a .sco file.
Print... – Print the Code.

4.2 Edit

Undo – Undo text modifications.
Redo – Redo text modifications.
Cut – Cut selected text.
Copy – Copy selected text.
Paste – Paste text.
Delete – Delete selected text.
Select All – Select all text in the document.
Find and Replace – Find some text or/and Replace text.
Find Line number – Find a line number in the text.
Comments – Comment or uncomment a line or a selection of text (with ";" for CSound, "#" for Python and "--" for Lua).
Bookmarks – Insert or remove bookmarks (they are signaled by a blue triangle on the left of the line). Go to next or previous Bookmark.
Code formatting – Format the code (aka organize the code visually with indentation); you could also select a line or a single portion of text to format.
Format code options (to set the code elements to organize).
Code Repository – "Show Window" calls the repository code window (for the User Defined Opcodes or for other personal code).
To store some text from your code, select it and press Ctrl+Shift+I.
Autocompletion - CSound Opcodes Repository" calls the opcodes repository window (with a treeview list of all CSound opcodes). "List Opcodes" (or Ctrl + J) popup an autocompletion list of the csound opcodes.
Line Endings – Convert the line endings of the text (CrLf, Cr, Lf).
Reset Text Zoom – Reset the text zoom.
SpecialCharacters... – Open the SpecialCharacters Panel.

4.3 View

Show Line Numbers – Hide or Show the line numbers in the text view.
Show Explorer – Hide or Show the left panel (Structure, Bookmarks and User Code).
Show Opcodes Help – Hide or Show the bottom opcodes help window.
Show Toolbar – Hide or Show the toolbar (document view)
Show All Tools – Show all:Line Numbers, Explorer, Opcodes Help and the Toolbar.
Hide All Tools – Hide all: Line Numbers, Explorer, Opcodes Help and the Toolbar.
Show Full Code – Show the full code view.
Split Horizontal – Split the code view in two horizontal windows.
Split Horizontal (Orc/Sco) – Split the code view in two horizontal windows and show in the first one the <CsInstruments> section and in the second one the <CsScore> section.
Split Vertical – Split the code view in two vertical windows.
Split Vertical (Orc/Sco) – Split the code view in two vertical windows and show in the first one the <CsInstruments> section and in the second one the <CsScore> section.
Show Code – Show the code window.
Show Compiler – Show the compiler output window.
Show Help – Show the CSound help window.

Show/Hide White Spaces – Show or Hide the white spaces on the text editor.
Show/Hide Line Endings – Show or Hide the line end markers.
Go Forward – Navigate forward through the last ten cursor positions.
Go Back – Navigate Backward through last ten cursor positions.
Set caret on Primary View – Move the cursor on the primary view when you have split the code view.
Set caret on Secondary View – Move the cursor on secondary view when you have split view.

4.4 Tools

Compile – Run CSound, Python or Lua compiler (depends from the file extension).
Compile (external shell) – Run CSound, Python or Lua compiler in an external terminal window.
Use WinXound Flags – when checked WinXound will use the default compiler settings (look at WinXound ⇒ Preferences ⇒ Compiler Settings) plus the flags present inside <CsOptions> tags; when unchecked WinXound will only use the flags present inside the <CsOptions> tags.
Run External GUI – Call an External GUI interface and pass the current document to it (ready to edit or compile).
CSound Analysis – Show the CSound Utilities window.
QuickTime Player – Run the QuickTime Player.
External Wave Player – Run your preferred wave editor.
Calculator – Run the Calculator.
Command Line Shell – Open the command line window.
WinXound Test – Creates and opens a new “WinXound TEST.csd” file on your Desktop (a simple oscillator example ready to test).

4.5 Window

In this menu there are the standard commands of Mac-OsX to control all opened window.

4.6 Help

WinXound Help – Open this manual.
Opcode Help – Open the reference manual for the opcode under the caret.
CSound Help – Open the CSound Html Manual.
CSound Opcodes Help – Open the CSound Opcodes manual.
CSound Flags Help – Open the CSound Command line flags manual.
CSound Tutorials – This is a link to the CSound tutorials at csound.com website.
CSound Manual – This is a link to the CSound manual at FlossManuals.net website.

5. Editor View

5.1 Left Panel

Explorer – Here you will find the global csd structure (with the tags, instruments, macros, functions, ...) found in your document. If you click on it you will be redirected to the corresponding line position of the code.

Bookmarks – Here you will find your selected bookmarks. Click on them and you will be redirected to the corresponding line of the code.

5.2 Text Editor

Write your opcode and see the real time help. You can also press cmd + backspace to directly open the CSound Manual reference for the selected opcode.
Starting from 3.0.0 version, thanks to Scintilla Editor, you can do a rectangular selection of the text using the Alt key.
When you close the Find and Replace panel, WinXound memorizes your last searched word so you can Find Next by clicking cmd+G and Find Previous by clicking Shift + cmd + G.
By clicking on the text window with the right mouse button a popup menu will appear with some useful tools:
- Cut, Copy and Paste;
- Insert Comments and Bookmarks;
- Go to a definition of ... and Go to reference of … (go to the declaration and reference of your g, i, k variable)
- Open file (try to open the file contained inside the quoted strings);
- Opcode(s) Help.

5.3 Compiler Output Panel

This is the lower section of the document window where the CSound, Python and Lua compilers output all the compiling informations and errors.
Click on Stop Compiler button (or press Esc key) to stop the compiler.
Click on Pause/Resume button to pause or resume the compiler.

5.4 Font Zoom

At the bottom of the Editor Window there are three buttons to zoom the editor font.
+ (Zoom IN), − (Zoom OUT) and Reset (Reset Font to default values).
Use ctrl+cmd keys on your keyboard in addition to the Mouse Wheel to Zoom IN/OUT freely.

6. Autocompletion

By pressing "Ctrl+Enter" keys WinXound will popup an autocompletion menu with a list of the CSound opcodes...
Keys and behaviour:

- Enter: insert the opcode name.
- Shift+Enter: insert the opcode synopsis.
- Space: insert the opcode name with a final space.
- Tab: insert the opcode name with a final tab.

  If you are at the start of a word, Autocompletion will **insert** the opcode.
  If you are inside or at the end of a word, Autocompletion will **substitute** the entire word.

7. CSound Opcodes Repository

This window contains a Tree View database of the CSound opcodes.
Navigate into it with the arrow keys (left and right will expand/unexpand the selected node).
Press Enter to insert the opcode name at the current caret position.
Press Shift+Enter to insert the opcode synopsis.

8. Tips

- **Drag'n Drop:**
  If you drag a file using the left mouse button, WinXound will drop in your code the complete file path surrounded by double quotes.
- **Cmd+Click inside quoted strings:**
  WinXound will try to open the path included inside your quoted strings.
- **Cmd+Alt+Click inside strings:**
  WinXound will select the entire string including also the ' or " chars.

9. Shortcut Table

Cmd ,	Preferences …
Cmd H	Hide WinXound
Opt Cmd H	Hide Others
Cmd Q	Quit WinXound
Cmd N	New
Cmd O	Open
Cmd W	Close
Cmd S	Save
Shift Cmd S	Save As …
Cmd P	Print
Cmd Z	Undo
Shift Cmd Z	Redo
Cmd X	Cut
Cmd C	Copy
Cmd V	Paste
Cmd A	Select All
Cmd F	Find & Replace
Cmd G	Find Next
Shift Cmd G	Find Previous
Cmd E	Use Selection for Find
Cmd J	Jump to Selection
Cmd 1	Show Line Numbers
Cmd 2	Show Explorer
Cmd 3	Show Opcodes Help
Cmd 5	Show All Tools
Cmd 6	Hide All Tools
Opt Cmd 1	Show Full Code
Opt Cmd 2	Split Horizontal
Opt Cmd 3	Split Horizontal (Orc/Sco)
Opt Cmd 4	Split Vertical
Opt Cmd 5	Split Vertical (Orc/Sco)
Cmd 8	Show Code
Cmd 9	Show Compiler
Cmd 0	Show Help window
Ctrl Q	Show/Hide White Spaces
Ctrl H	Show/Hide Line Endings
Opt Cmd →	Go Forward
Opt Cmd ←	Go Back
Opt Cmd ↑	Set Caret on Primary View
Opt Cmd ↓	Set Caret on Secondary View
Cmd ↵	Compile
Opt Cmd ↵	Compile (External shell)

Cmd U	Use WinXound Flags
Shift Cmd ↵	Run External GUI
Shift Cmd A	Csound Analysis Tools
Cmd M	Minimize
Cmd ?	WinXound Help
Cmd Backspace	Opcode Help
Ctrl ?	Csound Help
Ctrl ↵	Popup autocompletion menu
Cmd K	Format Line/Selection (Indentation)
Shift Cmd K	Format All lines
Opt Cmd K	Popup the Format Code Window (Options)

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