

Change Log

You will find in this file the accumulated list of changes from version to version, starting at v0.9.2.3

To find a specific version, just search for the version number.

Version 0.9.4

A version that, I hope, begins to be really use-able.

Transpiler

- **Default Filesystem folder.**

The transpiler now supports a default filesystem folder, located in the binary directory of AOZ Studio (located in \appdata\roaming\default resources\filesystem).

Any folder located in the root of this directory represents a "possible" drive in the transpiled application. During transpilation, the transpiler locates the instruction that need a file, like "load", "load iff", "load image", "open", etc. If the parameter this instruction in the code is a constant string, then the path applied to the folders inside of the default filesystem directories, and if the file is located, it is included in the transpiled application.

You will find in this folder in the current version the original AMOSPro discs, like the AMOSPro_Examples disc, meaning that all examples will work without you having to care about the files.

- **Manifest is gone!**

The transpiler can now work without the presence of a manifest.hjson file inside of the application directory.

- No manifest or tag: "PC" mode
- A manifest file is present: it is loaded
- A tag is present in the source code of the application,
#manifest:"pc" or
#manifest:"amiga"

then the relevant manifest is loaded, from the AOZ Studio Beta/Default folder (in the binary folder of AOZ Studio)>

- **Tags in source code.**

You can now use tags at the beginning of the source code, to quickly indicate compilation options and/or runtime options. List of tags:

```
#manifest:"pc" / "amiga" -> transpilation mode

#speed:"fast" / "safe" / "graphics" -> if your application hangs the browser
in "fast", use "safe" (or put wait vbl in the main loop! ;)

#tvStandard:"PAL" / "NTSC" -> Amiga screen emulation

#displaywidth:NUMBER -> width of the canvas in the browser in pixels
```

`#displayHeight:NUMBER` -> height of the canvas in the browser in pixels

`#fullPage:true / false` -> full page mode at start of application

`#fullScreen:true / false` -> full screen mode at start of application

`#keepProportions:true / false` -> in full screen, use black side bars to keep proportions

`#fps::true / false` -> display FPS indicator

`#googleFont:"font name"` -> adds a font to the list of Google Fonts.

`#amigaFont:"font name"` -> add a font to the list of Amiga fonts.

`#splashScreen:true / false` -> display a splash screen at start of the transpiled application.

`#splashWaitSounds:true / false` -> if the application contains sounds and if a splash screen is used, then this splash screen will ask for the user to click to start the application, ensuring that the sounds can be heard in the browser.

`#sendCrashReport:true / false` -> automatically send a crash report to AOZMine bug report system if the runtime application crashes.

`#rainbowMode:"fast" / "slow"` -> in slow mode, rainbows are created by remapping the display canvas before display, and can slow down the application for large ones. In "fast" mode, a canvas is a screen, with less possible use (working on that).

`#saveTo:PATH_TO_FOLDER` -> indicates where to put the HTML folder

`#clean:true / false` -> erases the HTML folder of the application at start, enforcing its complete re-transpilation. Useful to remove garbage from the folder at the end of development.

`#cleanExtensions:true / false` -> erases the HTML folder of all extensions at start, enforcing their re-transpilation.

`#cleanModules:true / false` -> same option for language modules

`#log:true / false` -> forces the transpiler to log all output mode

`#logTo:PATH` -> path to the transpiler log

`#basicRemarks:true / false` -> true: allow ' as indicator of remarks, you cannot use it in strings. False, ' cannot be used as remark and you can have `A$ = 'a string "like this" with brackets in it, "as in Javascript"!'`

`#tabwidth:NUMBER` -> width of the tabulation in the source code produced by the transpiler

`#nowarning:"name_of_the_warning"` -> allows to you remove the warnings generated by the transpiler. List of warnings:

- `'font_not_found'`
- `'garbage_found_in_folder'`
- `'font_not_supported'`

```
'file_at_root_of_filesystem'  
'screen_not_multiple_of_font_size'  
'missing_folder'  
'missing_resources_folder'  
'creating_directory'  
'cannot_set_permissions'  
'illegal_bank_element_filename'  
'file_to_include'  
'transpiler_manifest_not_found'  
'illegal_transpiler_manifest'  
'bad_version_of_transpiler_manifest'  
'copying_file_to_filesystem'  
'variable_not_declared'  
'instruction_not_implemented'
```

- .HJSON system files are now hidden, located in a folder of the AOZ Studio Beta binary folder.

Bugs

List of bugs marked as "resolved" in this version. Please confirm by marking them as "closed" in the AOZMine system...

Proc CHANGE[M] fails to compile.
Right\$()=, Left\$()= and Mid\$()= Causing compiler to hang, leaving process running.
Rol.b and Ror.b cause syntax errors.
filesystem Drive not found errors
RAINBOW only affecting the border
Min and Max doesn't work with strings - Type mismatch error
Rainbow commands cause Chrome, VSCode, and Windows to become unstable and unresponsive.
Requist Wb and Request On cause syntax errors.
Get Icon: Instruction not implemented.
Dir\$ not used when opening files that don't specify a drive/volume.
Field statement fails on Random file.
Flash fails to compile with type mismatch
Converter is not converting Icon Bank correctly
Rainbow Colours
Calling Shoot or Boom too quickly in succession causes Internal error
Fonts in 'Brown fox over lazy dog" demo
Val function only converts integer portion of string.
Sam Play not working
New AOZ Application button creates an application with a bad manifest.
System variable 'Screen' not working
Can't get Bload to work.
LOCATE not compatible with manifest PC+Fullscreen
Talk, Say, and Mouth commands produce syntax errors.
Get Fonts causes Internal error.
filesystem Drive not found errors again.
Help_65 from the AmosPro Examples : browser memory overflow
Help_16 : Illegal text window parameter at line: 90
Sam Stop - internal error
Sin, Cos, Tan, HSin, HCos, HTan - Black screen
Fast Free and Chip Free compile, but return Internal errors.

Missing ")" on line 103 of V1_0_Sprites.js
Splash screen
Syntax error and line number not reported
Clicking "New AOZ Application" button fails. (Previously worked.)
Wind size not working

Editor

- new "Load AOZ Application" and "Save AOZ Application" buttons, saving and loading an '.AOZIP' file with the folder of the application.
- many bugs corrected in the buttons, they should always work now
- "Import AMOS Application" now converts the icons properly

Version 0.9.3.1

A lot of bugs removed in this version. I had to re-write the whole expression evaluation system in the transpiler, the code was not good enough. It is now a a sexy part of recursive code, and this has solved many problems. This explains the delay for this version (sorry guys, doing what I can! ;)

You will find all the examples converted in the "Examples" folder. Please note that I have only tested up to #25, do not waist time on testing and reporting bugs on them, I will see them tomorrow (the bugs!).

Altogether, this version should report a lot less compilation errors and runtime crashes. Finger crossed!

See you in the next one! Francois

Transpiler

- Cleanup of transpiler crashing: protection against endless loops, and proper error report
- X Mouse = INTEGER , Y Mouse = INTEGER not working, causing Syntax Error
- Rol.b and Ror.b cause syntax errors.
- Right\$()=, Left\$()= and Mid\$()= Causing compiler to hang, leaving process running.
- Restore VARIABLE reports a syntax error
- Restore to expression not implemented.
- Proc CHANGE[M] fails to compile.
- Print At fails when 2nd parameter omitted.
- Limit Bob causes the compiler to hang on the second pass.
- LABELS FOLLOWING PROCEDURES CAUSING INTERNAL ERROR AND CALL CAUSES SYNTAX
- If X Bob(1)>X Bob(2)
- if Amreg(13) < 0
- Gosub using variable fails

- filesystem Drive not found errors
- error subtract X Bob(1)-X Bob(2))
- Adding hex value to int SUM = 318+\$8000,
- Labels as numbers did not work

Runtime

- Memorize X/Y - Remember X/Y did not work
- HScroll used to crash
- Get Palette crashed at runtime
- Labels located after a End Proc were not compiled
- Text Windows Writing crashed
- Wind Size not working.
- The demo program you made for my web Amos2 IDE does not work anymore
- Patterns have reversed colours
- Input command - missing ? when using a string
- Get Sprite returns Internal Error
- Get Palette 0 returns Internal error.
- Free returns undefined
- Default causes Internal Error
- Cursor commands broken (cdown\$, etc)
- Centre command
- Can't use At more than once in a line.

Version 0.9.2.6

Rainbows! :) ... and bugs. Please note that rainbows have two modes, 'slow' and 'fast'. Fast is only implemented now (only 1/4 left, for next version the code is nearly ready). In FAST mode, the rainbows are rendered in a hidden screen, and simply pasted before everything. Good for rainbows on color #0... 'Slow' mode does a re recalculation of the colors and a remap. It will work for the next version.

But the programs using this instruction WILL compile. :)

Transpiler

- Bug#1 If Amreg(X) used to report a syntax error when transpiling
- Bug#3: Restore VARIABLE reported a syntax error
- Bug#4 Right\$() =, Left\$() =, Mid\$() = hanged the transpiler

Runtime

- Bug#2: Mouse Click did not report middle and right buttons

Version 0.9.2.5

Big work on memory banks related to the system of contexts. Memory banks should now work. And some annoying bugs related to Global and Shared.

Transpiler

- Cleaning of transpiler error messages, all should be correct now
- The transpiler now only creates the necessary folders in the html/resources folder

- Complete cleaning of all bank management system
- Correction of importation of AMOS application, does not crash anymore, Crunchman is properly converted (still does not work in this version-> for tomorrow)
- You can also specify the number of a bank, in the resource directory, just prefix it with the number and a dot, and then the name of the bank...

For example:

```
resources
  1.images
  2.icons
  5.samples
  10.data
  11.tracker
  12.picpac
```

This allows you to have several image banks, for example:

```
resources
  1.images (the main bank)
  10.images (alternate bank)
```

Please note that Bank Swap has not been worked on, it certainly does not work in this version

- The same system of naming is also available to the elements included in a bank. For example, in the image bank, you can now name the images...

```
1.images
  1.hello.png
  2.ball.png
5.samples
  1.noise.wav
  2.wind.wav
  3.music.wav
```

And now, you can do: (not completely checked, may still report type mismatch, corrected for next version).

```
Bob 1, 100, 100, "ball"
Bob 1, 100, 100, 2
Sam Play "music"
Sam Play 3
```

If you do not name the file, then you will only be able to use their number. Same, if you only provide a name, you will only be able to use it by its name...

Runtime

- Global now works correctly
- Shared now works as in the original AMOS
- Complete cleaning of all bank management system
- Reserve / Erase / List bank / Start() / Length() now work
- Poke Doke Loke Peek Deek Leek etc. now work

Demos

- New demo in the demo folder: Gravity

Version 0.9.2.4

Many bugs removed. Thank you for your help.

Manifest

- new property: `fileSystem.caseInsensitive` ... indicates if the path within the application are sensitive to the case. If you use an old manifest, they will NOT be (emulates the Amiga).

Transpiler

- `Print At(x, y) + "hello"` reported a type mismatch error
- Binary numbers used to report syntax error

Runtime

- Restore did not restore at the correct position
- Bob Off number used to crash
- Dir displayed the name of files wrong
- Dir used to crash if you had files in the local storage
- Paste Block / Paste CBlock now works from screen to screen
- The application used to start before the first font was loaded, hence a "Font not defined" error if the program did a "Text" immediately after the beginning
- File-system is not case-insensitive, as on the Amiga, or not.
- Wind Open used to crash
- Wind Move used to crash
- Windows with borders were improperly positioned
- And some more that I have forgotten...

Thank you

- Neil
- Paul
- Jean Pierre
- Rafal
- Sorry for the ones I forget.

Version 0.9.2.3

A lot of problems have been removed since version 0.9.2.1. Thank you for your patience. Please note that there is no version 0.9.2.2, to avoid confusion after a mistake on the web-site...

Transpiler

- `X Screen(screen#, x) / Y Screen(screen#, y)`: parameter screen and coordinates used to be inverted

- Variables marked as 'Global' were not global anymore in a procedure called within another procedure
- The transpiler used to crash when working on an application where the "resources" folder was not defined. It now just generates a warning. (that bug was a cause of a lot of crashes in the demo and example folder).
- Missing brackets in expression could cause the transpiler to hang (and continuously eat memory)
- Error message on the same line at the same column are no longer repeated
- IF / THEN on the last line of a code, without carriage return, provoked a Syntax Error
- New compilation tag: #nobank:"bank_name". Include this tag in your code, and the content of the folder representing the memory bank will not be loaded automatically when the application starts. The bank will be converted to readable offline format... Example of use of this tag in the "amosball" demo.
- All extensions and language modules are now recompiled automatically at each new version of the transpiler, to ensure they work with the new code. Do not be surprised if the very first compilation of an AOZ application takes a little more time.
- Many transpilation errors were incorrectly reported (missing message), and/or generated illegal operations and internal crashes.
- ON xxx GOTO / GOSUB / PROC reported a syntax error
- EVERY xxx PROC reported a syntax error
- RESTORE reported a syntax error
- PRINT #x, "string" reported a syntax error
- An IF / THEN on the last line of a source code, without carriage return generated a compilation error
- Using an array without Dim before used to generate many inconsistent errors, it now generates one single "Array not defined" error.
- Using string in complex comparison expression (for example in IF / END IF) used to generate Type Mismatch errors
- Command line transpiler: warnings are now reported in StdOut and not anymore in StdErr

Runtime

- Most of the file-system instructions caused a crash at runtime (Open In, Open Out, Dir, etc.)
- Clip with parameters used to generate a syntax error
- Gr Writing now has an effect, only XOR works for the moment.
- An error when loading a file or image could hang the browser
- "Reserve" memory banks used to crash (still, now code in bank management has not been tested, please wait for further testing)
- A text instruction on the default screen immediately after loading reported a "Font not loaded" error
- PLOT function now responds to GR WRITING xor settings. Yet, if you port an Amiga application, the result on screen will be different, due to how graphics are handled in Javascript. This will be corrected once I implement true Amiga emulation on the graphical side.
- The width of the lines for all line drawing functions was improperly set, and was too thin for screens that are internally scaled
- Text Windows crashed as soon as you were printing past the last bottom line
- CMove used to crash
- Border\$ had no effect
- Paper and Pen colour were inverted when drawing Text Window borders

IDE

- "Build and Run" button now launches Chrome each time (it did not if the application was generating warnings)

Thank you!

Thank you to the following people for their help on this version:

- Paul Kitching
- ising4jesus
- Jason Wroe
- Neil John Yves
- David Baldwin
- Truls Osmundsen
- Tomas Stenstrom
- Alains Bauwens
- Gassman
- Richard Langley
- Neil Halliday
- Mike Carter
- Olivier Bori
- WilliamGolf18

Many thanks for your help... Please carry on testing!