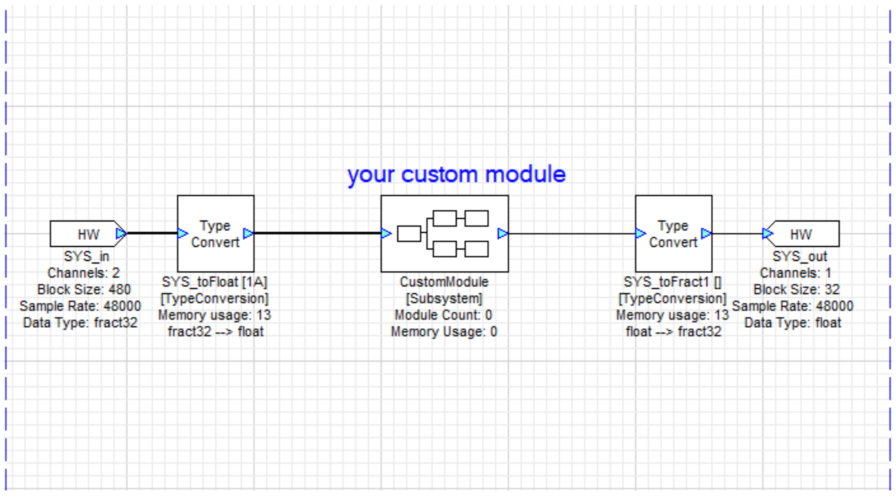
Interpreted Modules



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Change Log

Version	**Date**	**Description**
1.0	22 Dec. 2022	Initial Draft or major changes

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1 About This Guide

The interpreted modules guide contains instructions for enabling a custom module to be imported into Standard and Pro versions of Audio Weaver and found in the 3rd party tab of the module browser.

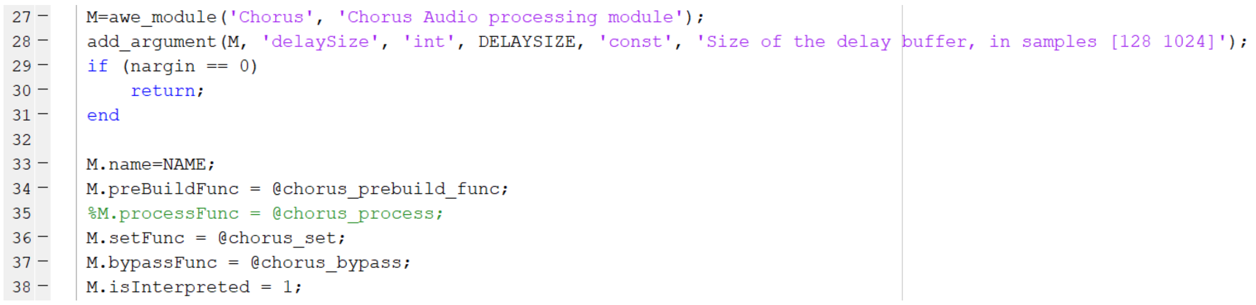
2 Steps for enabling custom module as “interpreted”

2.1 MATLAB

Do the following steps to edit the MATLAB files of the module

1. Add the line "isinterpreted = 1;" to the *<modulename>_module.m* file (found in the “matlab” folder of your custom module) anywhere after the “M = awe_module(…” assignment in the “matlab/” directory of your custom module.

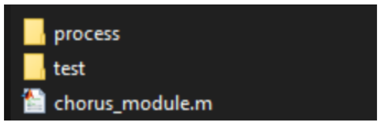
2. Add spaces around equals signs for assignment functions (see lines 34-37 in Figure 1)



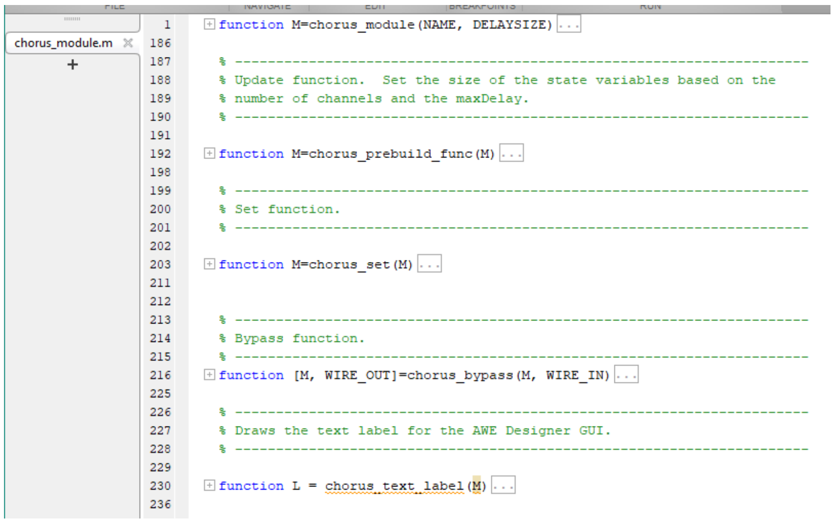
```
27 - M=awe_module('Chorus', 'Chorus Audio processing module');
28 - add_argument(M, 'delaySize', 'int', DELAYSIZE, 'const', 'Size of the delay buffer, in samples [128 1024]');
29 - if (nargin == 0)
30 -     return;
31 - end
32
33 - M.name=NAME;
34 - M.preBuildFunc = @chorus_prebuild_func;
35   %M.processFunc = @chorus_process;
36 - M.setFunc = @chorus_set;
37 - M.bypassFunc = @chorus_bypass;
38 - M.isInterpreted = 1;
```

Figure 1 - see line 38

3. Separate out functions contained in the *<modulename>_module.m* file to individual *.m* files.

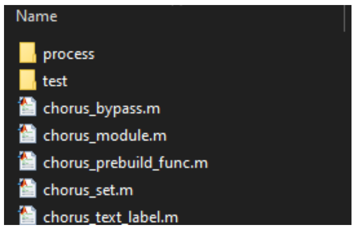


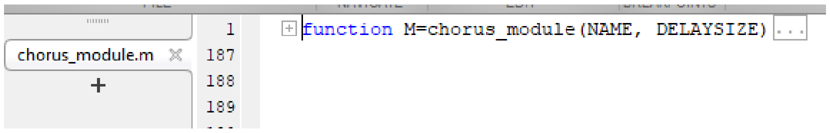
```
process
test
chorus_module.m
```



```
function M=chorus_module(NAME, DELAYSIZE) ...

  % -----------------------------------------------------------------------
  % Update function.  Set the size of the state variables based on the
  % number of channels and the maxDelay.
  % -----------------------------------------------------------------------

function M=chorus_prebuild_func(M) ...

  % -----------------------------------------------------------------------
  % Set function.
  % -----------------------------------------------------------------------

function M=chorus_set(M) ...


  % -----------------------------------------------------------------------
  % Bypass function.
  % -----------------------------------------------------------------------
function [M, WIRE_OUT]=chorus_bypass(M, WIRE_IN) ...

  % -----------------------------------------------------------------------
  % Draws the text label for the AWE Designer GUI.
  % -----------------------------------------------------------------------

function L = chorus_text_label(M) ...
```

Figure 2 - Before separating functions into unique .m files (Above, Right)

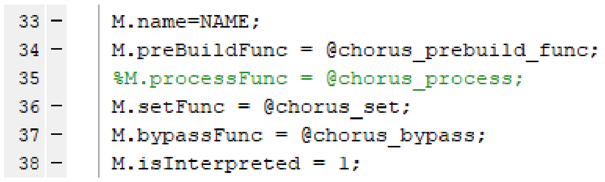




```
function M=chorus_module(NAME, DELAYSIZE) ...
```

Figure 3- After separating functions into unique .m files (Above)

4. Confirm there is a corresponding .m file for any function being defined, otherwise comment out the definition. For example, this module was failing because there was no corresponding "chorus_process.m" file. Commenting out line 35 fixed the issue.



```
33 -   M.name=NAME;
34 -   M.preBuildFunc = @chorus_prebuild_func;
35     %M.processFunc = @chorus_process;
36 -   M.setFunc = @chorus_set;
37 -   M.bypassFunc = @chorus_bypass;
38 -   M.isInterpreted = 1;
```

Figure 4 - Comment out any unused function definitions

5. Move any module function up to the same folder as the *<modulename>_module.m*

6. Run "make_<modulename>_pack(1)" to create the updated .c and .h files.

2.2 Building the module

Build the module, and before launching Designer, move or copy the created .dll file into the same directory containing *AWE_Server.exe* (typically located in *<install directory>/Bin/win32-vc142-rel/)*

2.3 Set Module Path in Designer

In Designer Standard, go *File-> Set Module Path*, then click *Add Folder,* select your custom module folder, and click *Select Folder*. Your module should now show in the modules tab and load into Designer.

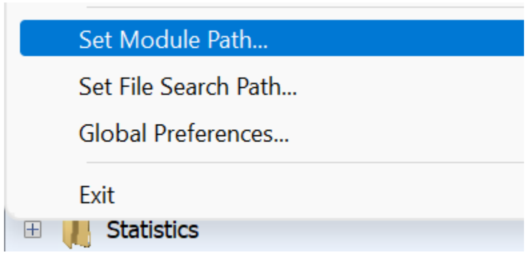
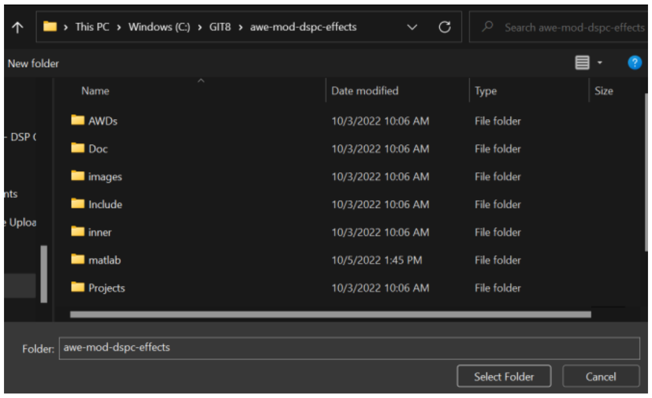


Figure 5- Add Module Path


This PC › Windows (C:) › GIT8 › awe-mod-dspc-effects
Search awe-mod-dspc-effects
New folder
Select Folder
Cancel

Name	Date modified	Type	Size
AWDs	10/3/2022 10:06 AM	File folder	
Doc	10/3/2022 10:06 AM	File folder	
images	10/3/2022 10:06 AM	File folder	
Include	10/3/2022 10:06 AM	File folder	
inner	10/3/2022 10:06 AM	File folder	
matlab	10/5/2022 1:45 PM	File folder	
Projects	10/3/2022 10:06 AM	File folder	

Folder: awe-mod-dspc-effects

Your module should now show in the modules tab and load into Designer.