

About the TeX4ht Engine

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TeX4ht is a program by Eitan M. Gurari which uses a standard LaTeX source file as input, but outputs an html file. After Gurari died in 2009, other developers stepped up to maintain the program, and it is in very active development today.

The file TeX4ht.engine is an engine file for this project which works in TeXShop 5.00 and higher. To use it, drag TeX4ht.engine to the active area `~/Library/TeXShop/Engines`.

Using the engine is easy. Write a standard LaTeX source file. Select the TeX4ht engine in the pulldown menu next to the typeset button and then push the Typeset button or type command-T. The engine will call both pdf_latex and TeX4ht, creating both a pdf output file and an html output file. Then TeXShop will open the pdf file in a Preview window and the html file in an HTML window. This makes it easy to compare the standard pdf_latex results with the corresponding web page. The web page will be active, so links and other standard html features will work. You can modify the source and typeset again, and both views will update.

By adding the following magic line to the top of the source file, the TeX4ht engine will always be called and it is not necessary to use the pulldown menu:

```
% !TEX TS-program = TeX4ht
```

The folder containing this document also contains a short demonstration. Copy the folder named “Example” to your home directory or location for TeX source files, and typeset the document Sample.tex inside. Then compare the pdf and html outputs. Resize the windows and notice their different behavior. Add extra material and typeset again to verify that both views update. The sample file contains a web link. Click this in both the pdf and html windows and notice their different behavior.

Math4ht has many parameters controlling its operation. Originally it created a large number of small pictures for mathematical equations, and the web page displayed these pictures. It can also output MathML and many modern browsers can interpret these commands. An even nicer approach is to output html which is interpreted by MathJax. This is the approach recommended by the American Mathematical Society and produces

very acceptable typeset equations. Users will want to create their own engines to explore the advantages of these various approaches.

Two engines are provided in this folder. The engine TeX4ht uses MathJax. The engine TeX4ht-MathML uses MathML.