Creating Tables in Publish Mode

There does not seem to be an automated way to create tables in publish mode. However, you can use the Matlab file 'matrix2latex.m' which I have uploaded onto the Blackboard Site. To use it do the following:

```
matrix = [1.5 1.764 2.33; 3.523 0.2 1.34; 1 2 3];
rowLabels = {'row 1', 'row 2', 'row 3'};
columnLabels = {'col 1', 'col 2', 'col 3'};
matrix2latex(matrix, 'out.tex', 'rowLabels', rowLabels, ...
    'columnLabels', columnLabels, 'alignment', 'c', 'format', '%f');
```

For more information on the usage of matrix2latex, open the file in matlab and read the documentation.

This will create a file 'out.tex' in the same directory that you are in. The contents of the file are (without the '%' signs):

```
% \begin{tabular}{|l|c|c|c|}
% \hline
% &\textbf{col 1}&\textbf{col 2}&\textbf{col 3}\\\hline
% \textbf{row 1}&1.500000&1.764000&2.330000\\\hline
% \textbf{row 2}&3.523000&0.200000&1.340000\\\hline
% \textbf{row 3}&1.000000&2.000000&3.000000\\\hline
% \end{tabular}
```

To create the table in the Matlab published code, copy the above text from the file and do the following in the .m file you wish to publish (be sure to include the '%' symbols and the '$$' in the appropriate places.

```
%
% $$\begin{tabular}{|l|c|c|c|}
% \hline
% &\textbf{col 1}&\textbf{col 2}&\textbf{col 3}\\\hline
% \textbf{row 1}&1.500000&1.764000&2.330000\\\hline
% \textbf{row 2}&3.523000&0.200000&1.340000\\\hline
% \textbf{row 3}&1.000000&2.000000&3.000000\\\hline
% \end{tabular}$$
%
```

This will create the following table

	col 1	col 2	col 3
row 1	1.500000	1.764000	2.330000
row 2	3.523000	0.200000	1.340000
row 3	1.000000	2.000000	3.000000

Thus, you now have a way to convert any matrix to a table.

Published with MATLAB® 7.11