

Web Maple: An Evolution

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<http://www.math.fsu.edu/~bellenot/talks/vsu02.01/>

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Goals

- Allow students to have home access to Maple.

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Goals

- Allow students to have home access to Maple.
- Quality should be good enough for assignments.

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Goals

- Allow students to have home access to Maple.
- Quality should be good enough for assignments.
- Zero cost and Zero administration.

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Goals

- Allow students to have home access to Maple.
- Quality should be good enough for assignments.
- Zero cost and Zero administration.
- Not get sued (licenses).

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The Pieces

- Oldish Solaris Machine – Apache Web server

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The Pieces

- Oldish Solaris Machine – Apache Web server
- A java servlet – WebMaple.java

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The Pieces

- Oldish Solaris Machine – Apache Web server
- A java servlet – WebMaple.java
- Maple 6

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The Pieces

- Oldish Solaris Machine – Apache Web server
- A java servlet – WebMaple.java
- Maple 6
- An html form page

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The Pieces

- Oldish Solaris Machine – Apache Web server
- A java servlet – WebMaple.java
- Maple 6
- An html form page
- Later: Password – Pdf output

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Gif version WebMaple.java

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Gif version WebMaple.java

- `plotsetup(gif,plotoutput="foo.gif",.. . .`

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Gif version WebMaple.java

- `plotsetup(gif,plotoutput="foo.gif",...`
- Converts web input to Maple input file.

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Gif version WebMaple.java

- `plotsetup(gif,plotoutput="foo.gif",.. . .`
- Converts web input to Maple input file.
- Runs `maple -s -e0 -z < input > output.`

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Gif version WebMaple.java

- `plotsetup(gif,plotoutput="foo.gif",.. . .`
- Converts web input to Maple input file.
- Runs `maple -s -e0 -z < input > output.`
- If `foo.gif` is created it is returned

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Gif version WebMaple.java

- `plotsetup(gif,plotoutput="foo.gif",.. . .`
- Converts web input to Maple input file.
- Runs `maple -s -e0 -z < input > output.`
- If `foo.gif` is created it is returned
- later: If no gif, then returns text output (debugging).

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Pdf version WebMaple.java

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Pdf version WebMaple.java

- `plotsetup(cps,plotoutput="foo.ps",. . .`

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Pdf version WebMaple.java

- `plotsetup(cps,plotoutput="foo.ps",. . .`
- Maple as before, shell script `webmaple2pdf`

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Pdf version WebMaple.java

- `plotsetup(cps,plotoutput="foo.ps",. . .`
- Maple as before, shell script `webmaple2pdf`
- `/usr/openwin/bin/mp` to combine ps and text

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Pdf version WebMaple.java

- `plotsetup(cps,plotoutput="foo.ps",...`
- Maple as before, shell script `webmaple2pdf`
- `/usr/openwin/bin/mp` to combine ps and text
- Adobe Acrobat/Ghostscript to convert ps to pdf

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Mathematical Issues

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Mathematical Issues

- No Three-D interaction, vrml? dxf?

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Mathematical Issues

- No Three-D interaction, vrml? dxf?
- Gif Animation only

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Mathematical Issues

- No Three-D interaction, vrml? dxf?
- Gif Animation only
- Only the last plot survives

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Mathematical Issues

- No Three-D interaction, vrml? dxf?
- Gif Animation only
- Only the last plot survives
- Pdf file is all the text and then the plot

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Mathematical Issues

- No Three-D interaction, vrml? dxf?
- Gif Animation only
- Only the last plot survives
- Pdf file is all the text and then the plot
- Is it worth it? VNC \$0, Xwindows \$25, Maple \$130

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Computer Administration Issues

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Computer Administration Issues

- Limitation to fsu.edu didn't work

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Computer Administration Issues

- Limitation to fsu.edu didn't work
- Htaccess password, but simple to bypass

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Computer Administration Issues

- Limitation to fsu.edu didn't work
- Htaccess password, but simple to bypass
- Maple has shell escapes, runs as nobody, "-z"

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Computer Administration Issues

- Limitation to fsu.edu didn't work
- Htaccess password, but simple to bypass
- Maple has shell escapes, runs as nobody, "-z"
- Machine load the day projects are due?

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Test Drive

- <http://www.math.fsu.edu/~bellenot/webmaple/>
- Temporary User: vsu Password mathtech

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Test Drive

- <http://www.math.fsu.edu/~bellenot/webmaple/>
- Temporary User: vsu Password mathtech
- Download
- <ftp://ftp.math.fsu.edu/pub/bellenot/webmaple-1.0.tar.gz>

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Test Drive

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- comments: <mailto:bellenot@math.fsu.edu>

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