

# Web Maple 2: 3D Graphics over the Web

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<http://www.math.fsu.edu/~bellenot/talks/vsu02.02/>

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# Web Maple 1.0

- Allow students to have home access to Maple.

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# Web Maple 1.0

- Allow students to have home access to Maple.
- PDF Works well for assignments with exactly 1 plot

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# Web Maple 1.0

- Allow students to have home access to Maple.
- PDF Works well for assignments with exactly 1 plot
- But no 3D interaction

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# Web Maple 1.0

- Allow students to have home access to Maple.
- PDF Works well for assignments with exactly 1 plot
- But no 3D interaction
- Some rotation using orientation= $[\Phi, \Psi]$ .

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# The 3D Choices

- X3D

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# The 3D Choices

- X3D
- JavaView – windows only

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# The 3D Choices

- X3D
- JavaView – windows only
- DXF

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# The 3D Choices

- X3D
- JavaView – windows only
- DXF
- VRML

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# The 3D Choices

- X3D
- JavaView – windows only
- DXF
- VRML
- Java3D

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# DXF

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# DXF

- CAD File format

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# DXF

- CAD File format
- Free Java Viewer 'dxfview'

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# DXF

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- CAD File format

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- Free Java Viewer 'dxfview'

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- Black and White Grid only and doesn't scale

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# DXF

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- CAD File format

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- Free Java Viewer 'dxfview'

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- Black and White Grid only and doesn't scale

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

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# DXF

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- CAD File format

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- Free Java Viewer 'dxfview'

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- Black and White Grid only and doesn't scale

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

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- <http://www.escape.de/users/quincunx/dxfviewer/>



# VRML

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# VRML

- `vrml` is in `maple with(plots)`

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# VRML

- `vrml` is in `maple with(plots)`
- Not as safe, as `vrml` uses `fopen` hence no `-z`

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# VRML

- `vrml` is in `maple with(plots)`
- Not as safe, as `vrml` uses `fopen` hence no `-z`
- VRML readers are wildly available

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# VRML

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- Not as safe, as `vrml` uses `fopen` hence no `-z`
- VRML readers are wildly available
- VRML readers don't scale

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# VRML

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- `vrml` is in `maple with(plots)`
- Not as safe, as `vrml` uses `fopen` hence no `-z`
- VRML readers are wildly available
- VRML readers don't scale
- And many don't work.

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# Issues

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# Issues

- I.Exploder Default VRML plugin shows nothing

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# Issues

- I.Exploder Default VRML plugin shows nothing
- Students are less than excited, it sounds too complex.

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# Test Drive

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

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