Vector vs Raster Graphics

Vector Graphics

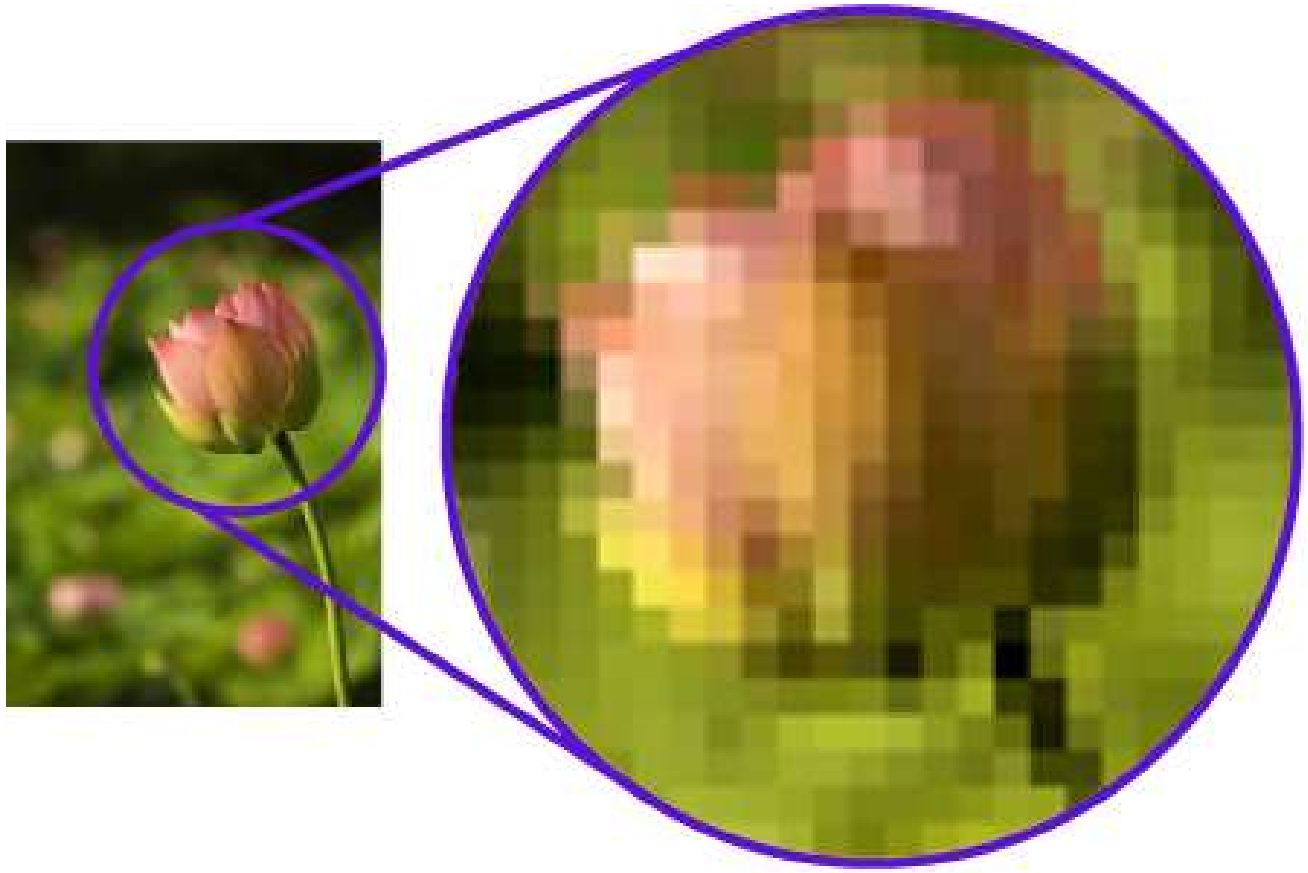
Raster Graphics

Vector Graphics

= Geometrical (mathematical) representation

Raster Graphics

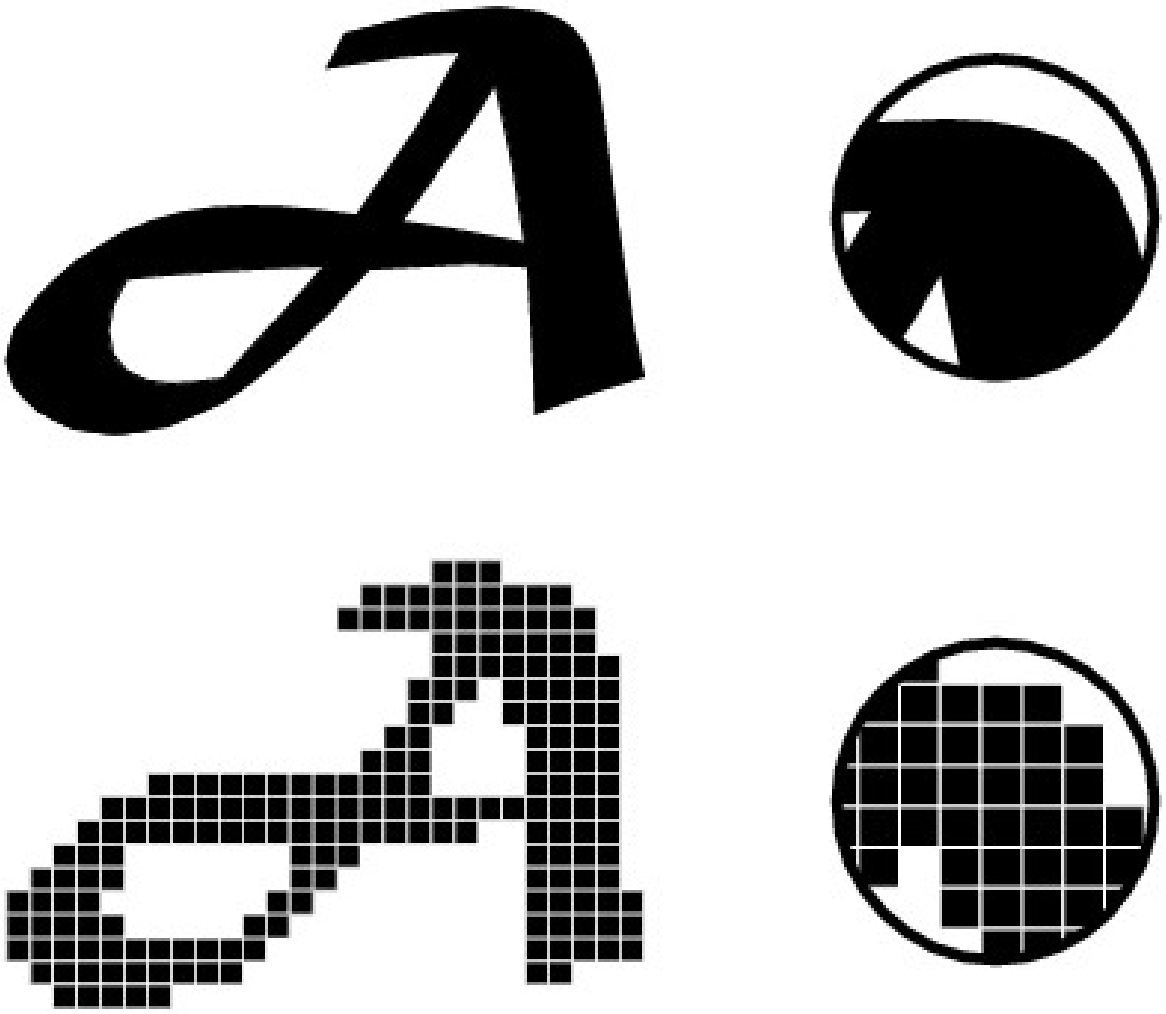
= Rectangular grid of colored elements




VECTOR VS RASTER

Style

Zoom

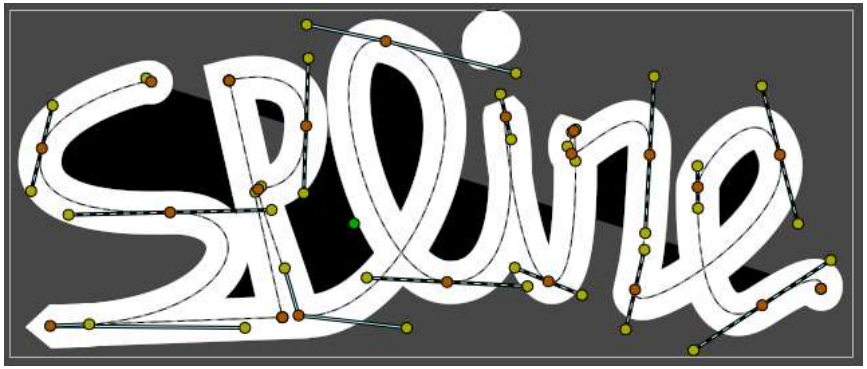


Arbitrary Content

- Vector graphics is hard to make
  - General
  - Fast on hardware
- Raster graphics is hard
  - To edit meaningufully
  - To store efficiently

Vector Graphics is used by Software

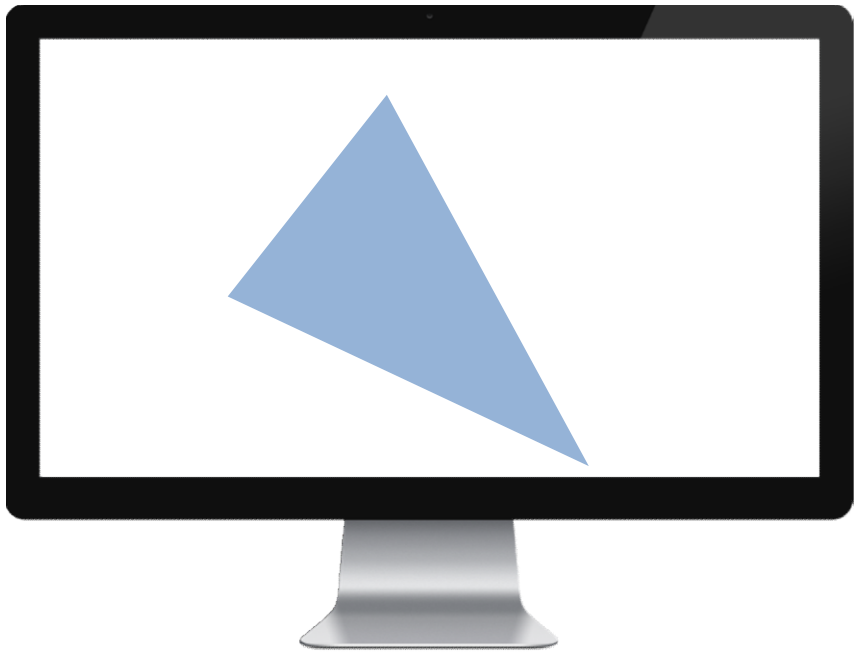
- True Type Fonts



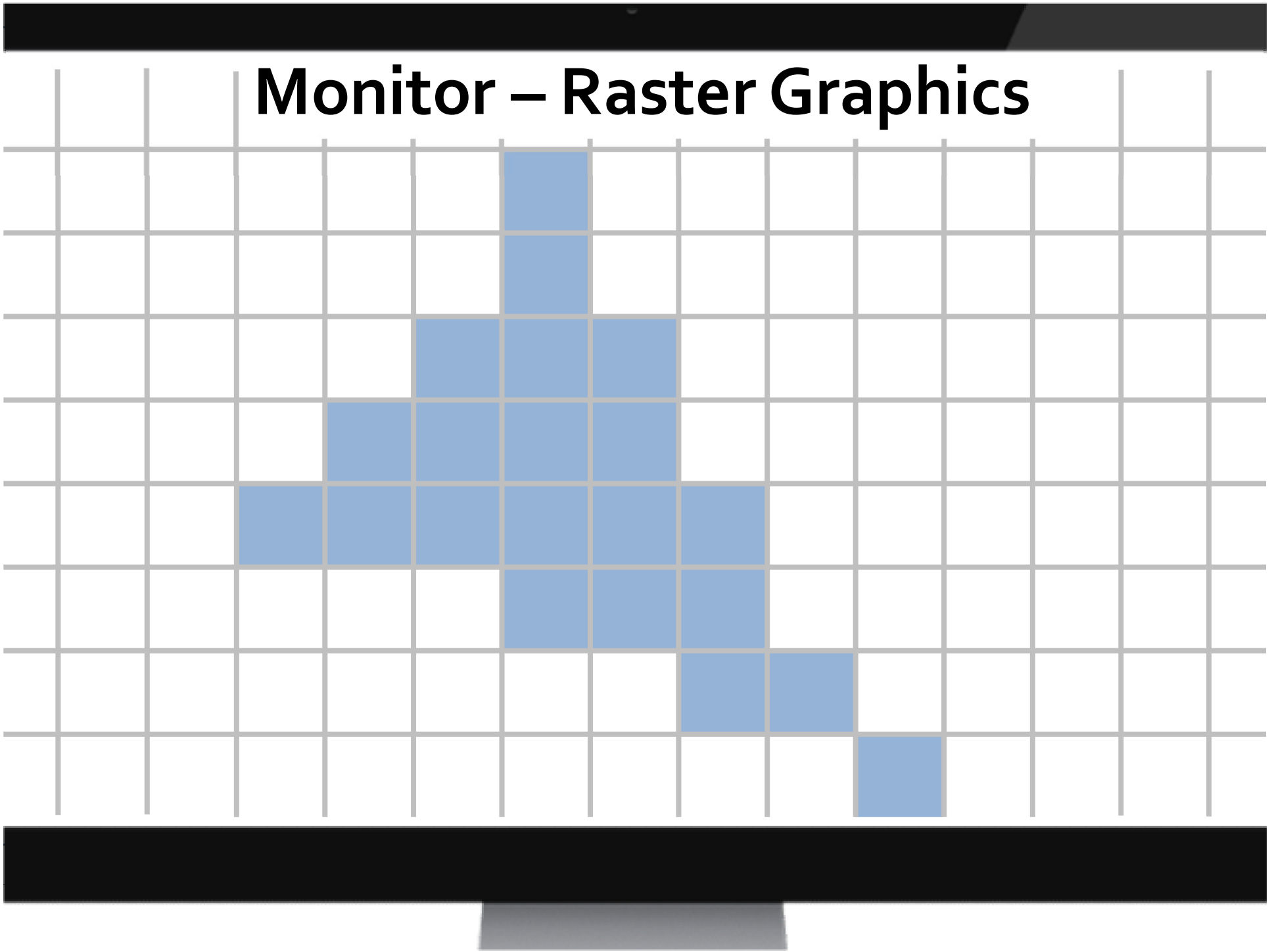
- Illustrator

- Maya

Monitor – Vector or Raster Graphics?



Monitor – Raster Graphics

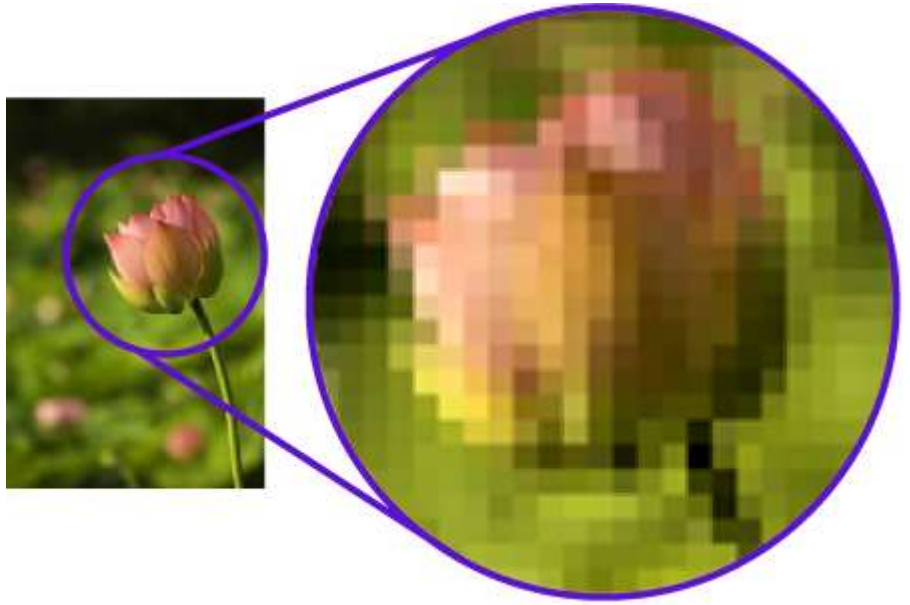


Raster Graphics is used by Hardware

- Monitor
- Handy
- TV
- Digicam
- Printer
- Scanner
- VR/AR
  - Google Glass
  - Holo Lens
- Mouse
- …

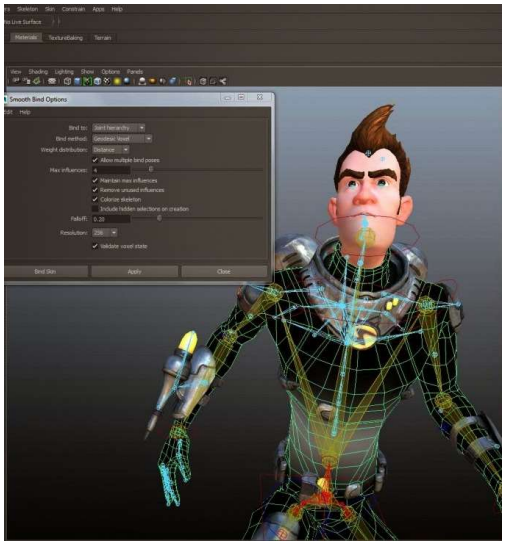
Why is it used by hardware?

- Easy and cheap to produce
- Very fast
- Arbitrary content



From Software to Hardware

- Conversion from Vector Graphics into Raster Graphics



Rasterisation