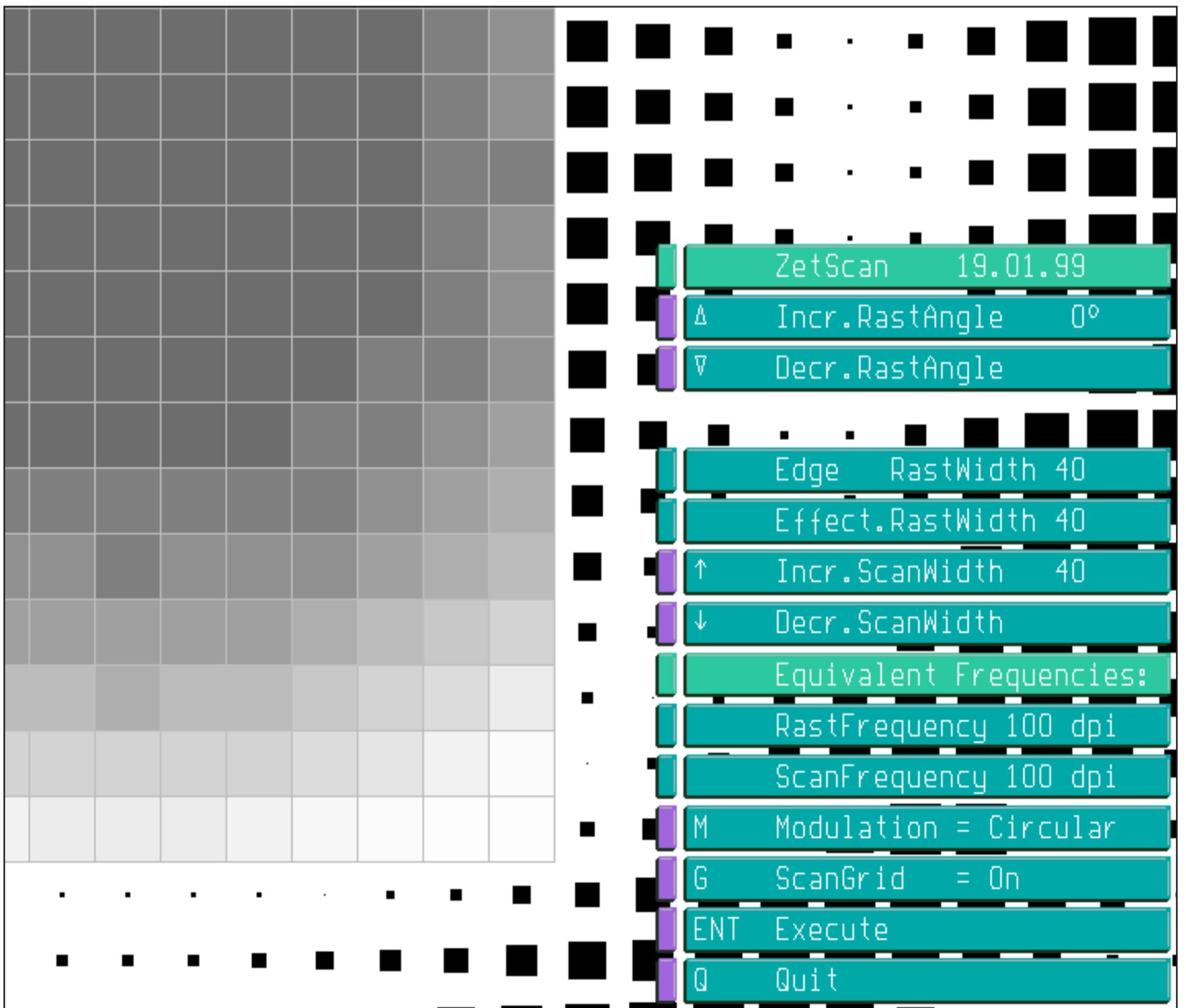# Gernot Hoffmann

Accurate Screenshots for PDFs

Very often we find in PDF documents blurred screenshots. The accurate handling of screenshots in PDFs requires well defined resolution ratios. The next page shows how this can be done by PageMaker automatically.

Please view directly by Acrobat (Reader) with zoom 100%. Browsers can cause pixel shifts.

ZetScan   19.01.99
△   Incr.RastAngle   0º
▽   Decr.RastAngle

Edge   RastWidth 40
Effect.RastWidth 40
↑   Incr.ScanWidth   40
↓   Decr.ScanWidth
Equivalent Frequencies:
RastFrequency 100 dpi
ScanFrequency 100 dpi
M   Modulation = Circular
G   ScanGrid   = On
ENT Execute
Q   Quit

72dpi for crisp view with zoom 100%

The PageMaker Trick

PageMaker offers 'MagicStretch'. This feature synchronizes any raster image with a printer raster. For large screenshots Acrobat Distiller´s excellent down-sampling quality is helpful. Never apply image processing by Photoshop or JPEG compression to screenshots.

Small screenshot without downsampling (example previous page)

1. Set your printer in Document Preferences pro forma to 72 dpi.
2. Place image on the page.
3. Press CTRL and resize by mouse, drawing at a corner.
   The image size jumps to a synchronized value.
4. Export to PDF
   Select 72 dpi in Export to PDF.
   Use ZIP(4) for 16 colors or ZIP(8) for up to 256 colors.
   Don´t downsample, use 'As Original'.
5. Use zoom 100% in Acrobat.

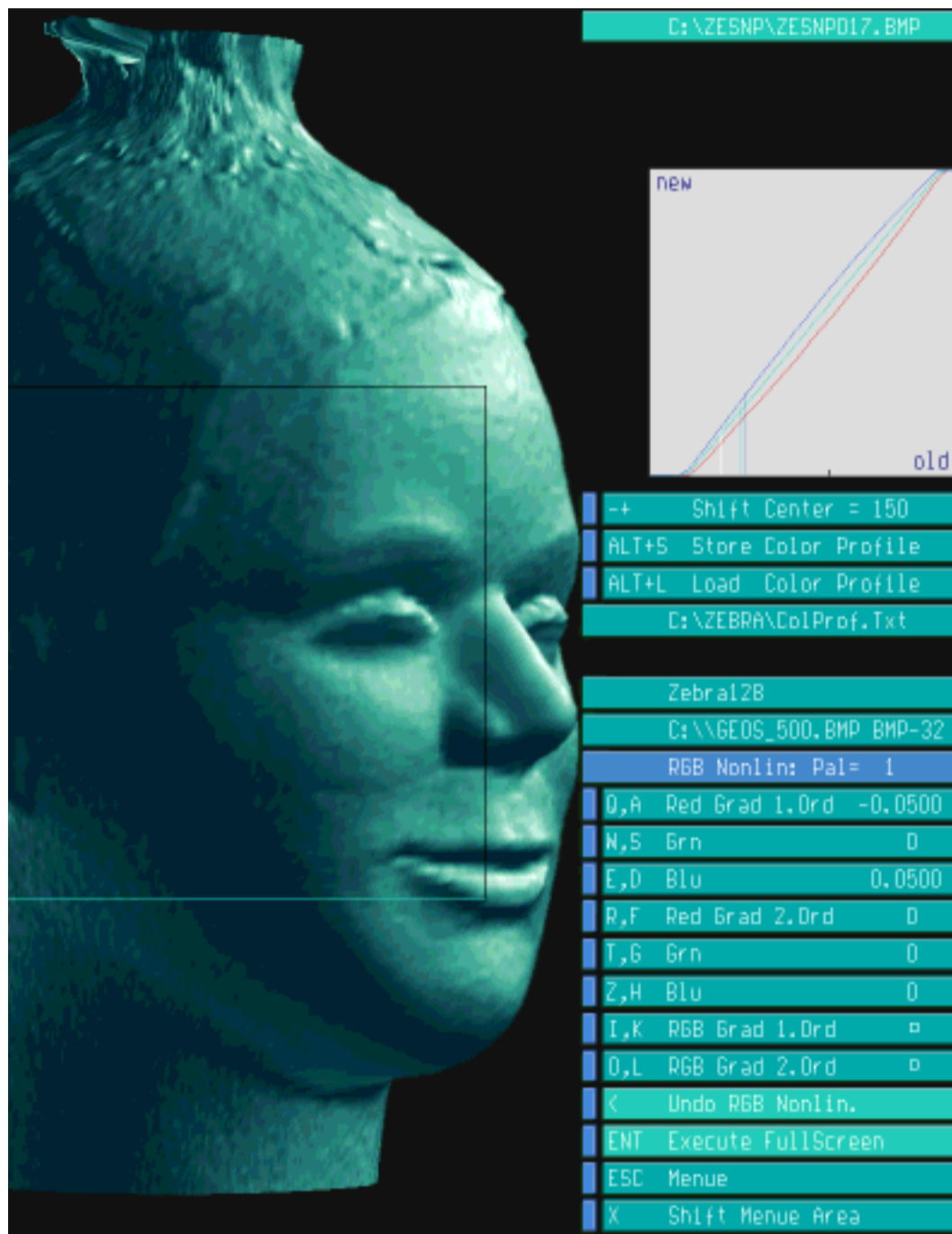## Large screenshot with downsampling (example next page)

1. Set your printer in Document Preferences pro forma to 144 dpi.
2. Place image on the page.
3. Press CTRL and resize by mouse, drawing at a corner.
   The image size jumps to a synchronized value.
4. Export to PDF
   Select 72 dpi in Export to PDF.
   Use ZIP(4) for 16 colors or ZIP(8) for up to 256 colors.
   Downsample for 72 dpi.
5. Use zoom 100% in Acrobat.

Alternatively, the combination 144/144 without downsampling can be used for crisp screenshots for zoom 200%.

After the synchronization (3) the page resolution can be changed to any higher value in order to improve the kerning.

Downsampled Example

The rather good quality of Distiller´s downsampling (interpolation) is obvious. Page resolution 144 dpi, downsampling 72dpi, ZIP(4). Additionally the cal-cula-tions which would be necessary without MagicStretch are shown.

Because of the features of Acrobat it's essential to use 72 or 144 dpi as page resolution for images for zoom 100% or for zoom 200%.

A Photoshop Bitmap

Photoshop: bitmap 144 dpi, 10 lpi, halftone round dot. PageMaker: page resolution 144 dpi, no downsampling, CCITT(4). View by 72 dpi / zoom 200%.

Gernot Hoffmann
December 15 / 2001 February 11 / 2013
Website
Load browser / Click here