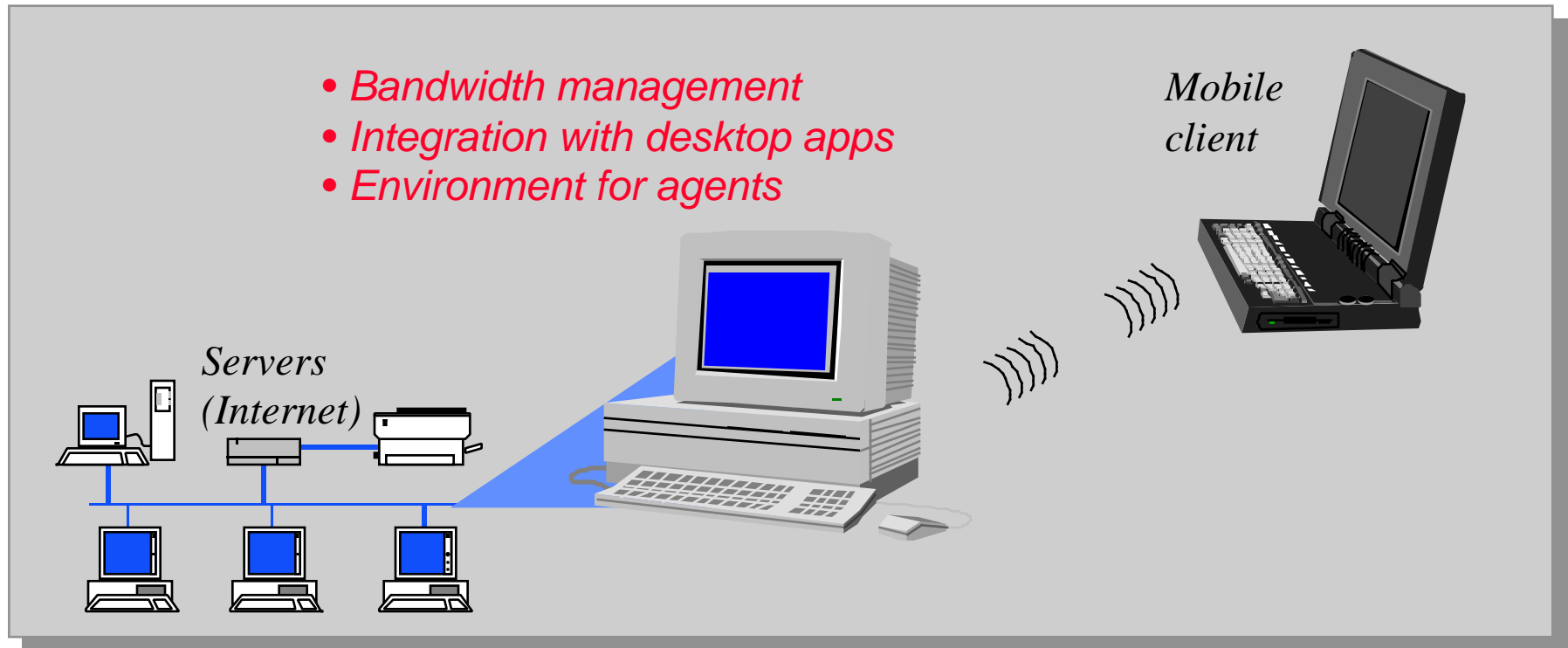


Proxy Architecture

- Process running on a well-connected desktop PC
- Isolates client from effects of poor networks



Proxy Architecture: Image Proxy

- *Distillation*: lossy compression that preserves semantic content
- Works in *real time* on desktop PC
- Client can request *refinement* of distilled image



78 colors,
49K bytes

4 grays,
530 bytes,
<2 sec.



>256 colors,
759K bytes (1024x768)

16 colors,
12K bytes,
<6 sec.



Video and PostScript®

- Try rendering PS or watching video on PDA screen...
- Real-time MBONE Video Gateway
 - » *Color reduction and halftoning*
 - » *H.261 or VQ output at ISDN or 28.8K (from ~3 Mbits)*
- PostScript to HTML
 - » *preserves significant formatting (not figures, yet)*
 - » *SPARC-20: $\sim 5 + 2n$ seconds for n pages of text*
 - » *typically 5-7x size reduction*

Pythia, an HTTP Proxy

- Distills inlined images, user can request originals
- Filters irritating background patterns
- “Pipelined” PostScript to HTML conversion
- Per-user preference profiles
- Image distillers harvest NOW cycles

<http://www.cs.berkeley.edu/~fox/pythia.html>