# Brotli update

2013 10 11

# Key points

Brotli compression is impressive

Brotli decompression speed is very good

Single stream > per-table compression

# WOFF2(Brotli) vs WOFF1

29.21% size win (corpus)

3.18x decompression speed loss

preprocessing ~4.5ns/byte

entropy ~12ns/byte

WOFF1 baseline: 5.1ns/byte

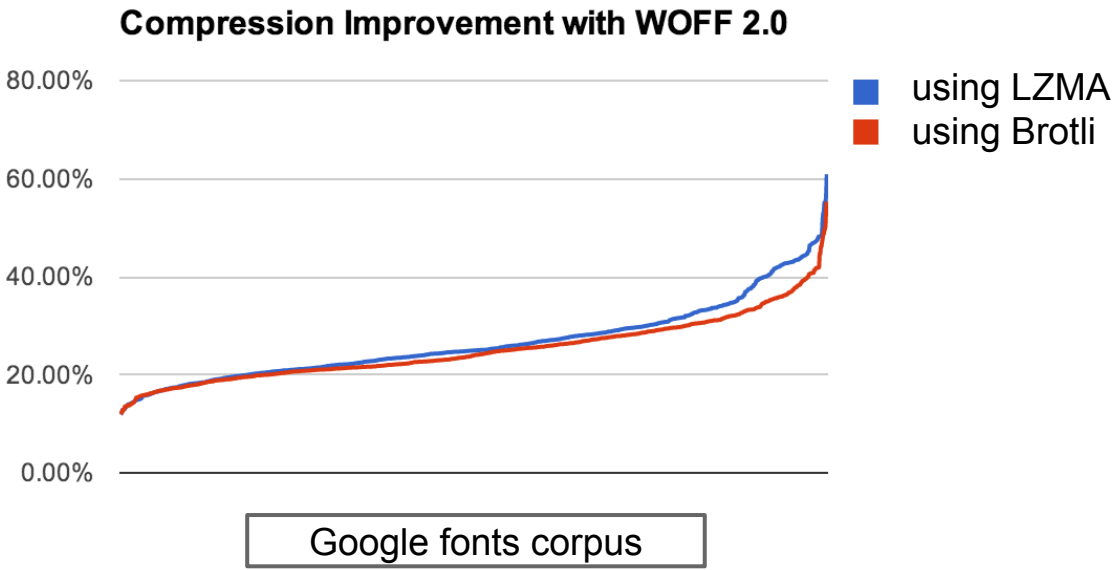
# WOFF2(Brotli) vs WOFF2(LZMA)

LZMA size win 4.74% (corpus)

Brotli 1.67x decompression speed win

# Compression distribution

Worst case: 11.93% better than WOFF1



# Continue stream

Conclusion: with Brotli, continue stream is significantly better

1.3% better compression ratio

8.7% better decompression speed

# Do we still want gzip as an option?

Compression speed 85x

Fast Brotli compressor (same wire format) is possible

# Continue stream (gzip)

With gzip as entropy coder, continue stream is on average *not* optimal

No significant effect on decompression speed (<1%)

# Simplifications

Brotli only

(no dynamic selection of type)

Whole font only

(no per-table option)