1. OVERVIEW

This document examines a formal benchmarking session using ExtremeZ-IP by Group Logic Inc. for file transfers between a Windows 2000 server and a Macintosh OS 9.1 client.

ExtremeZ-IP is a Services For Macintosh (SFM) replacement that is intended to provide greater overall throughput for cross-platform file transfer operations. It provides an AppleShare/IP stack, as well as several other features that are either not found in, or are improvements over, Windows 2000's SFM. For detailed information of ExtremeZ-IP's features, see the manufacturers website at http://www.grouplogic.com.

This document concentrates on the throughput advantages (if any) of using ExtremeZ-IP as a replacement for SFM. It does not address other features.

2. BENCHMARK CONFIGURATION

Server	Client
Dell OptiPlex GX260C	Macintosh G4
Intel P4 3.06Ghz, HT on	MacOS 9.1
1.0GB RAM	512MB RAM
2 x 40GB UATA hard disks	1 x 40GB UATA hard disk
On-board Intel Pro1000XT Gigabit Ethernet Adapter	Asante GigaNix Gigabit Ethernet Adapter

3. BENCHMARK TECHNIQUE

A file of known size (664MB) was copied both to and from the server from the Macintosh client, and the time taken recorded. Simple math then resulted in the final MB/s rating.

Note: Please note that the artificial benchmark numbers based on Helios' LANTest were deemed unrealistic and not at all representative of real world file operations. Therefore this utility was not used.

All recorded times are in seconds.

3.1 SFM Results

Mac Read	Run 1	Run 2	Run 3	Average	MB/s
	50.11	60.94	64.73	58.6	**11.30**

Mac Write	Run 1	Run 2	Run 3	Average	MB/s
	145.47	144.37	153.92	147.92	**4.48**

3.2 ExtremeZ-IP Results

Mac Read	Run 1	Run 2	Run 3	Average	MB/s
	63.35	55.38	48.72	55.8	**11.9**

Mac Write	Run 1	Run 2	Run 3	Average	MB/s
	33.98	33.75	33.69	33.81	**19.64**

4. CONCLUSION

Though ExtremeZ-IP's read performance is roughly the same as SFM's, it exhibits a 438% increase in write throughput. The advantages of this should be obvious. It will probably not directly result in a system Pages per Hour (PPH) increase, but it can definitely streamline other aspects of Prepress operations; namely working on large impositions or images directly on the server, rather than copying them to a local workstation.