

Robocopy Multi-threaded Testing Results

Dennis Martin

President, Demartek

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Robocopy Introduction

- Included with Windows operating systems
- Robocopy basics
 - Two directories at a time
 - Different syntax than COPY or XCOPY
- Multi-thread option available with Windows 7 and Windows Server 2008 R2
 - Takes advantage of SMB 2.1
- Comparison of results with and without the /MT option
 - Thread count can be 1 - 128, default is 8

Testing Environment

- **Two Servers**
 - SRVR-H: Windows Server 2008 R2, Intel Xeon E5540, 2.53 GHz, 8 cores, Hyper-threading, 48GB RAM, SAS disk array, 1Gb and 10Gb NICs
 - SRVR-J: Windows Server 2008 R2, Intel Xeon X5570, 2.93 GHz, 8 cores, Hyper-threading, 16GB RAM, SAS disk array, 1Gb and 10Gb NICs
- **Network latency between servers < 1ms**

Data Copied

- **Website content folder**
 - 38.69 GB
 - 1,479,555 files
 - HTML, JPEG and PNG files
 - Average size: 27.4KB
- **Video folder**
 - 218.89 GB
 - 1 file
- **ISO folder**
 - 59.16 GB
 - 215 files
 - ISO files only
 - Average size: 283MB

Tested Combinations

1. SRVR-H local disk arrays

1. Source: 1.06TB 6Gb-SAS 146GB 10K x8 RAID0
2. Destination: 1.82TB SATA 500GB x4 RAID0

2. SRVR-H to SRVR-J, 1Gb

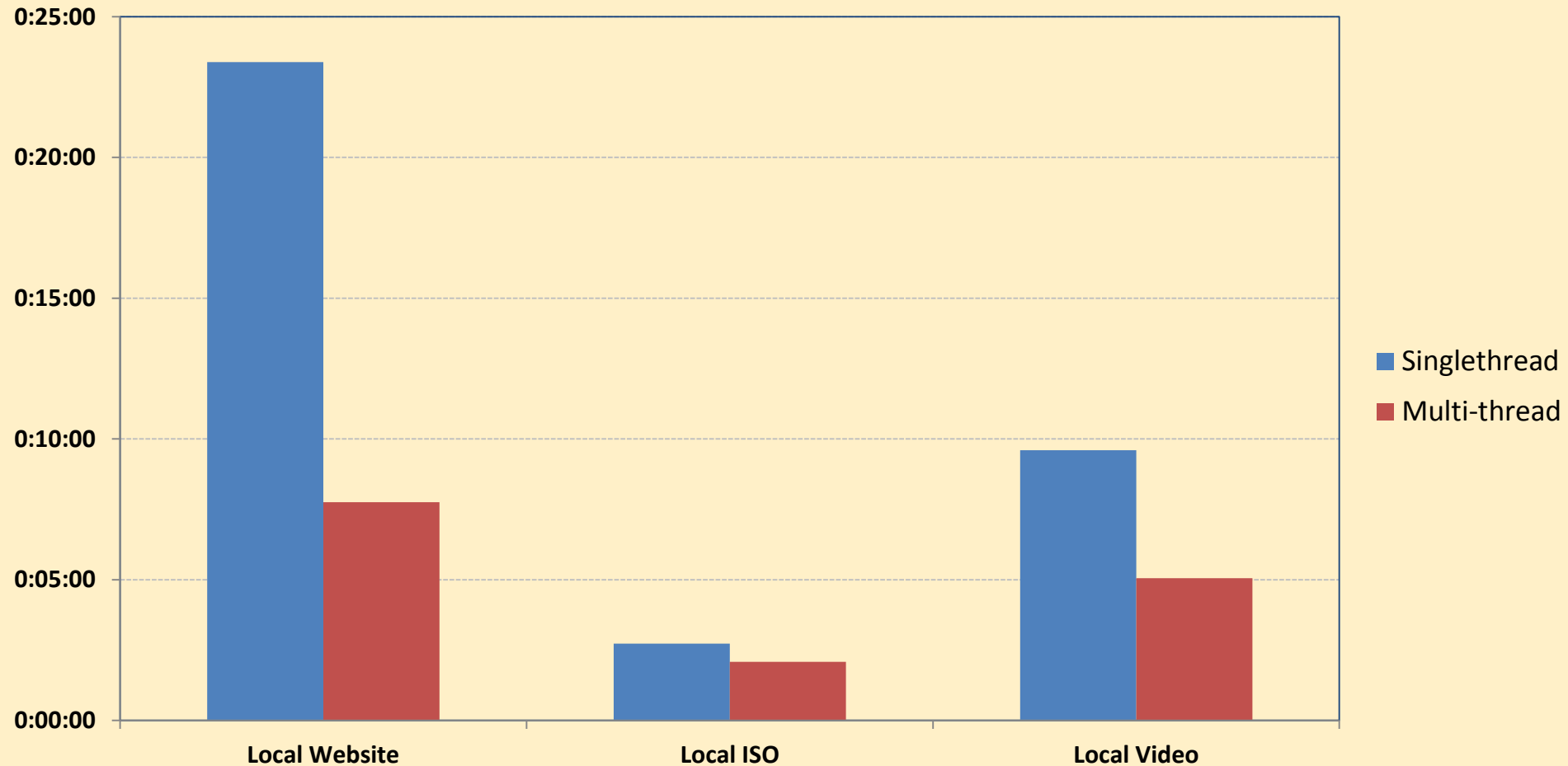
1. Destination: 1.59TB 6Gb-SAS 73GB 15K x24 RAID10

3. SRVR-H to SRVR-J, 10Gb

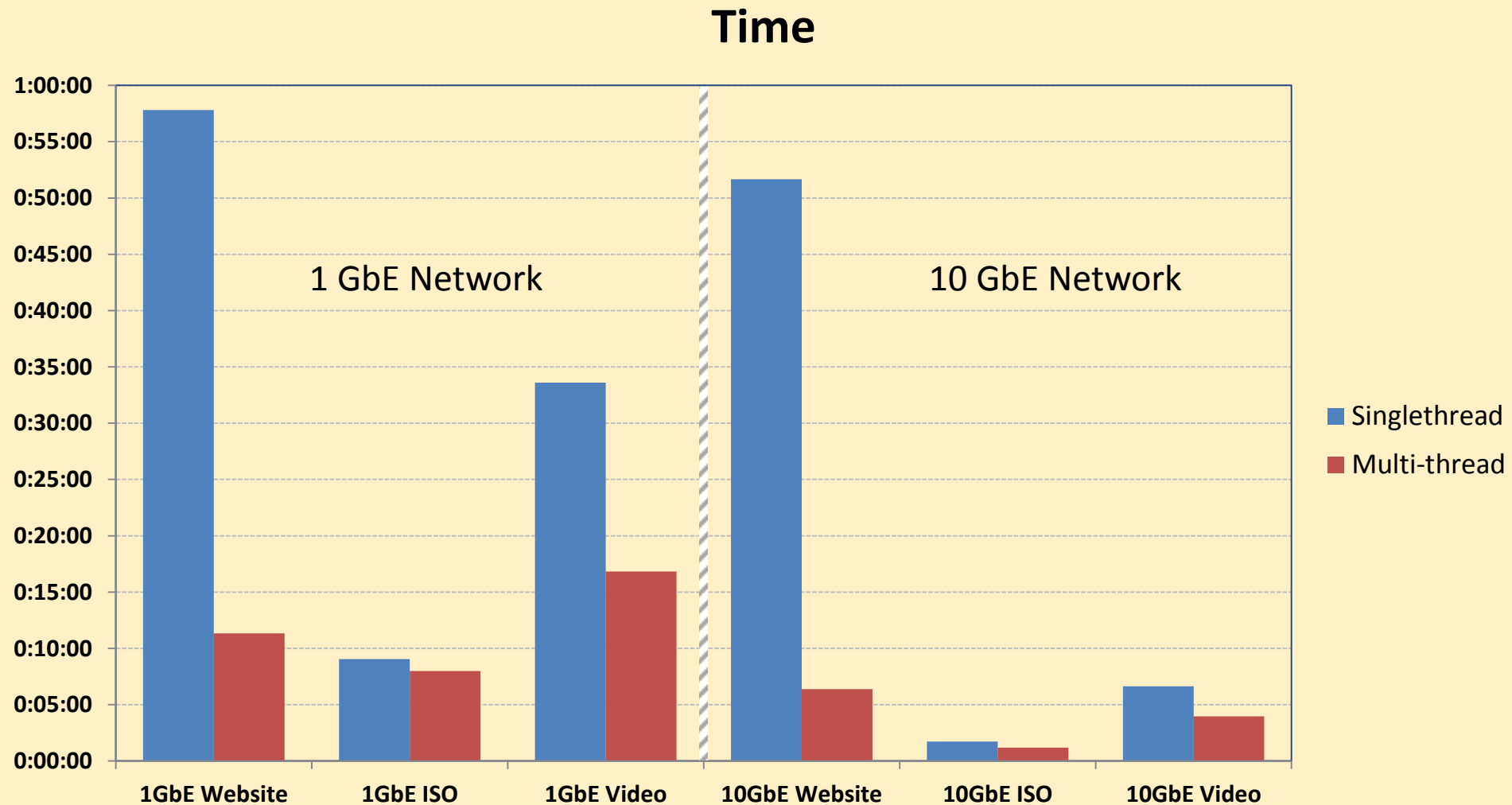
1. Destination: 1.59TB 6Gb-SAS 73GB 15K x24 RAID10

Time - Local

Time

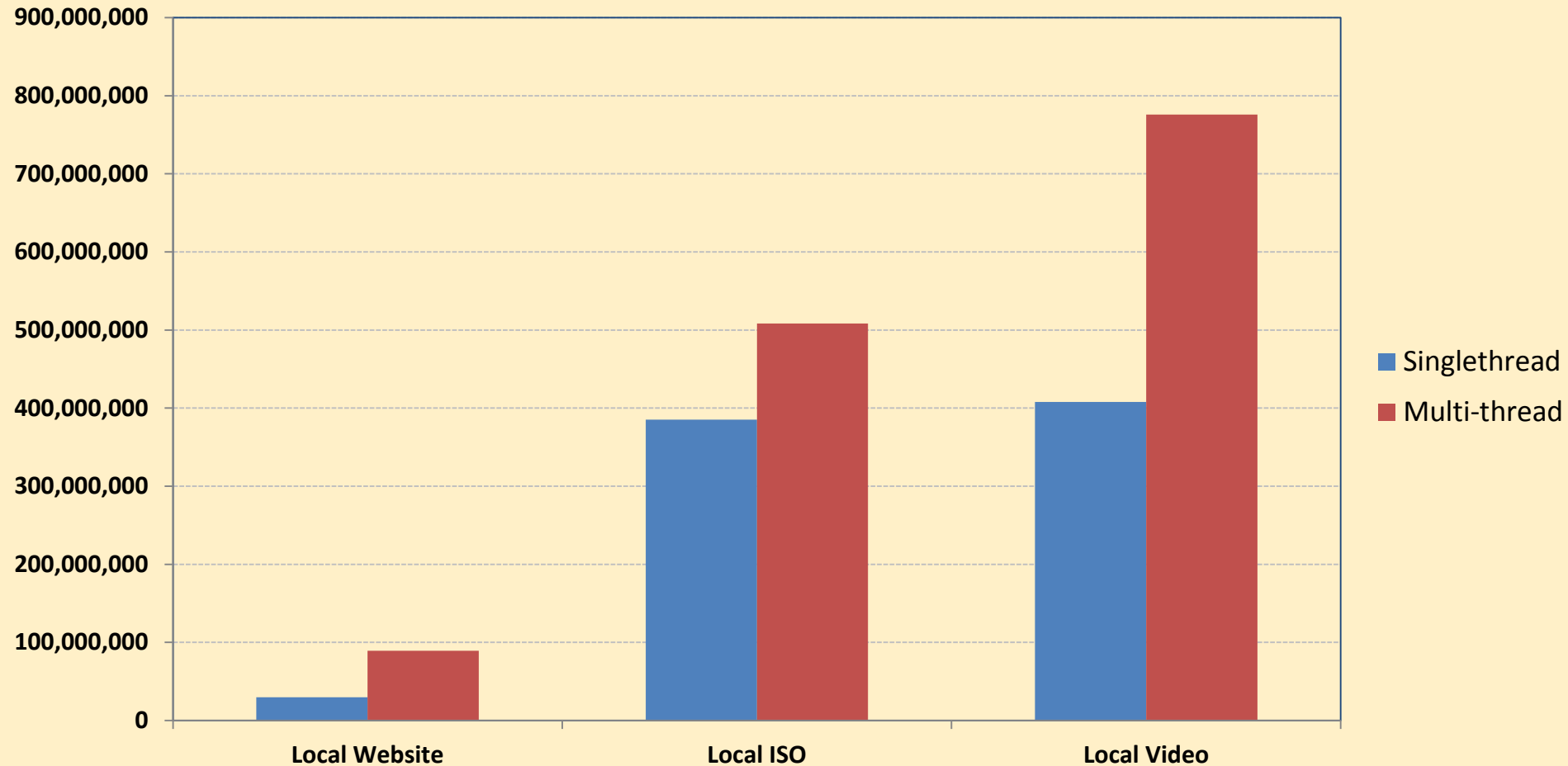


Time – Network



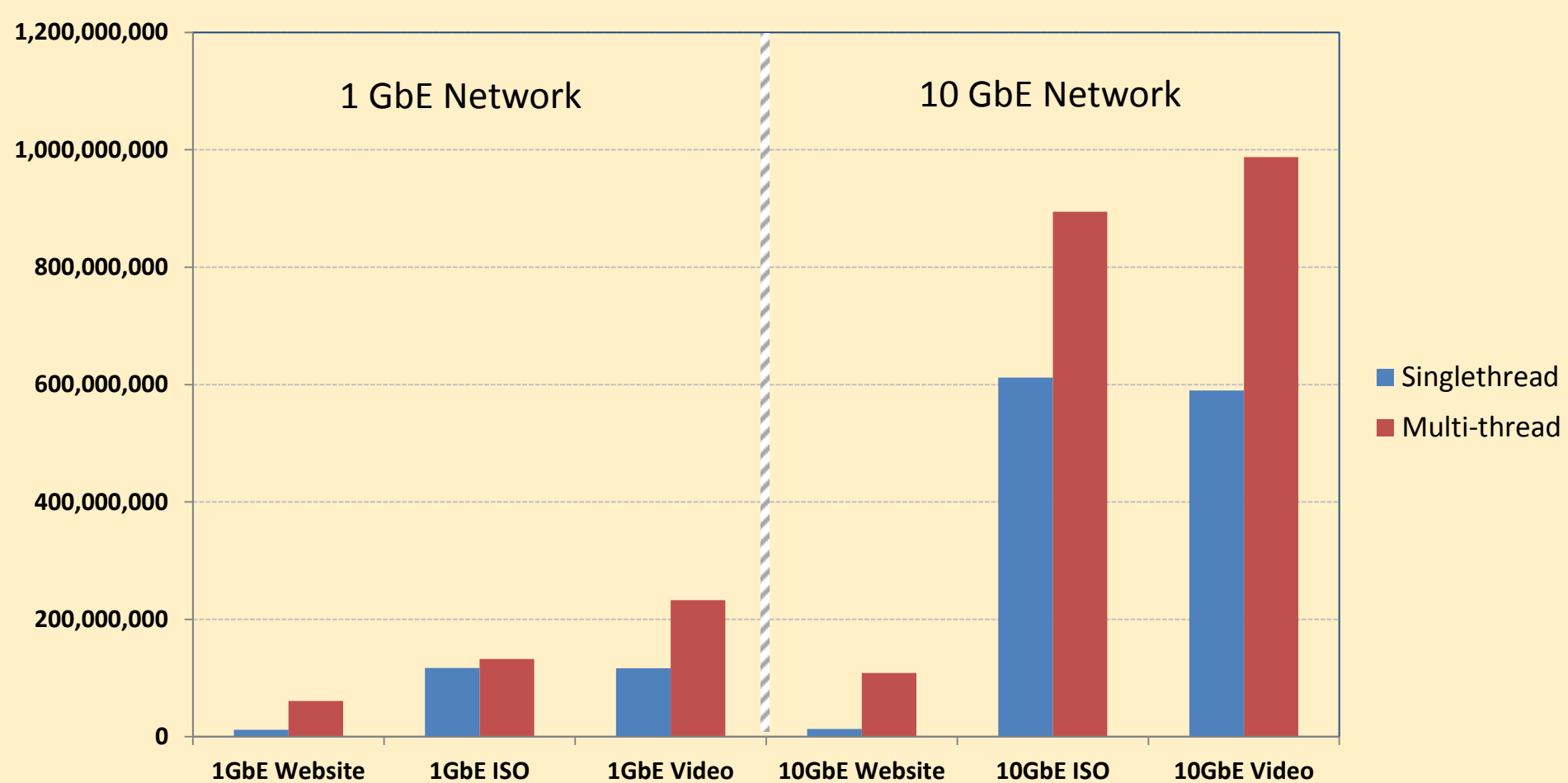
Bytes/sec - Local

Bytes/sec



Bytes/sec – Network

Bytes/sec



Future Tests

- Look for more detailed test results to follow in Demartek Robocopy Multithread report at www.demartek.com
 - Will include Perfmon statistics
 - Will show different thread counts

Contact Information

(303) 940-7575

www.demartek.com

<http://twitter.com/Demartek>

YouTube: www.youtube.com/Demartek

Skype: Demartek

Dennis Martin, President

dennis@demartek.com

www.linkedin.com/in/dennismartin

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