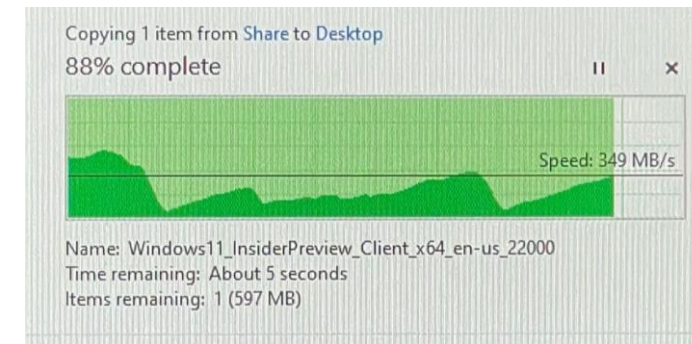
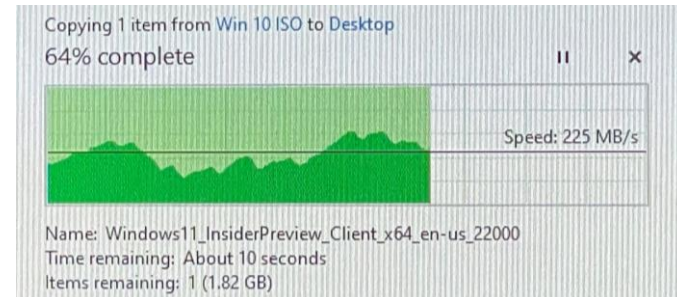
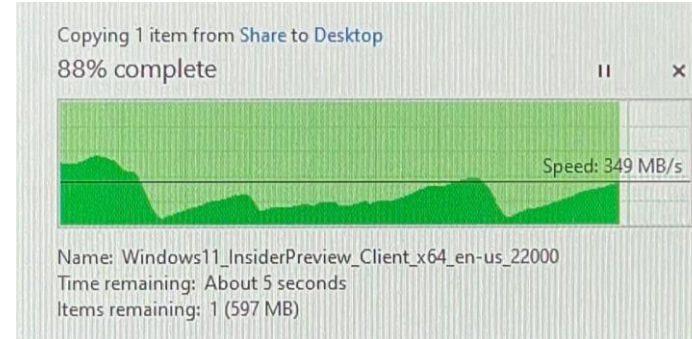
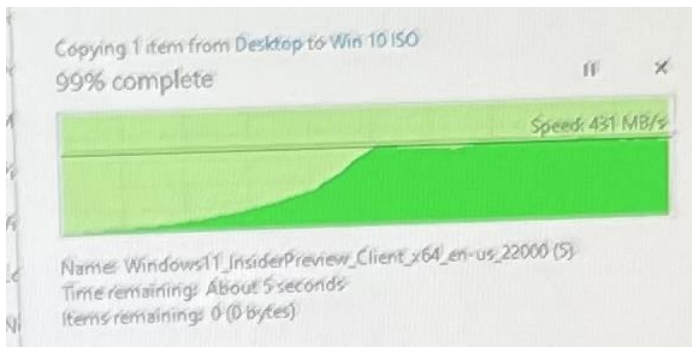


Benchmark Truenas Bridge



Data transfer from NVME to Truenas pool



Raw network performance

```
^[[
^C
root@truenas[~]# iperf -c 192.168.0.70 -P 6
[ 5] local 192.168.0.60 port 10409 connected with 192.168.0.70 port 5001
-----
Client connecting to 192.168.0.70, TCP port 5001
TCP window size: 32.8 KByte (default)
-----
[ 3] local 192.168.0.60 port 45855 connected with 192.168.0.70 port 5001
[ 6] local 192.168.0.60 port 42624 connected with 192.168.0.70 port 5001
[ 1] local 192.168.0.60 port 63613 connected with 192.168.0.70 port 5001
[ 4] local 192.168.0.60 port 53473 connected with 192.168.0.70 port 5001
[ 2] local 192.168.0.60 port 51361 connected with 192.168.0.70 port 5001
[ ID] Interval      Transfer    Bandwidth
[ 2] 0.00-10.01 sec  2.19 GBytes  1.88 Gbits/sec
[ 1] 0.00-10.01 sec  1.22 GBytes  1.04 Gbits/sec
[ 4] 0.00-10.01 sec  2.11 GBytes  1.81 Gbits/sec
[ 5] 0.00-10.01 sec  2.15 GBytes  1.84 Gbits/sec
[ 3] 0.00-10.03 sec  1.30 GBytes  1.11 Gbits/sec
[ 6] 0.00-10.01 sec  1.91 GBytes  1.64 Gbits/sec
[SUM] 0.00-10.00 sec  10.9 GBytes  9.33 Gbits/sec
[ CT] final connect times (min/avg/max/stdev) = 0.204/0.364/0.490/0.186 ms (tot/
err) = 6/0
root@truenas[~]#
```


Benchmark of Tp-Link



Raw network performance

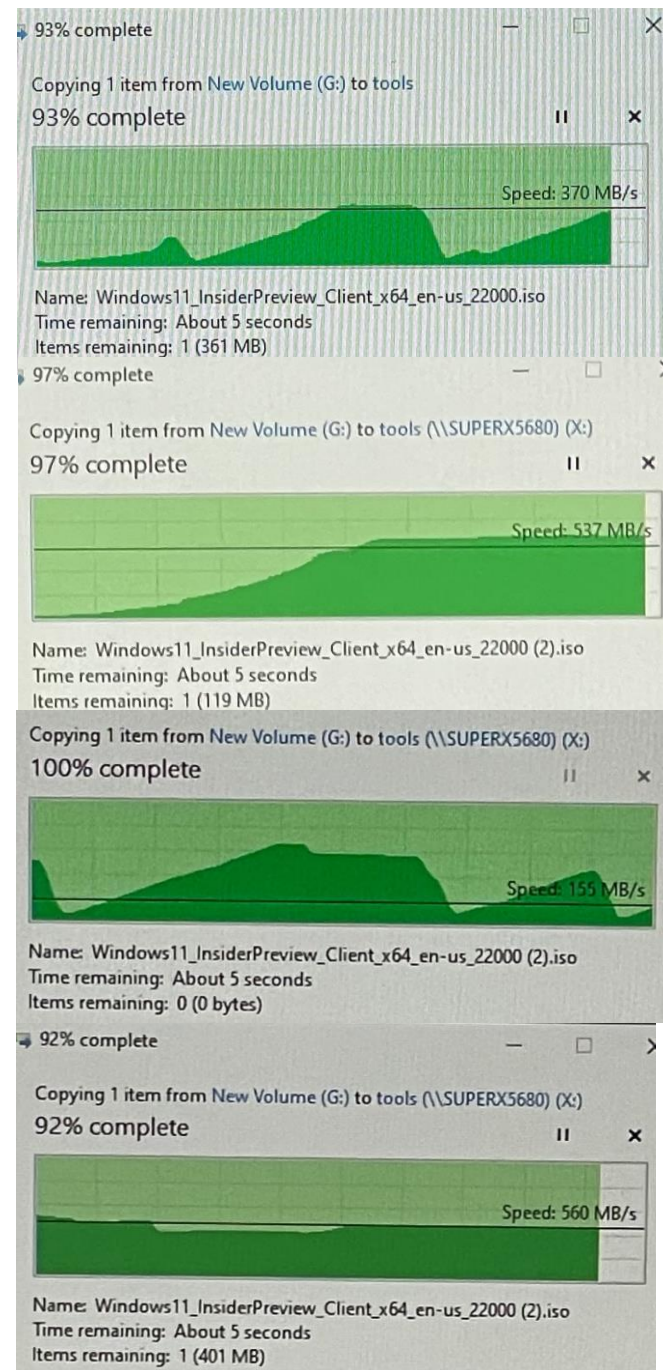
Data transfer from
NVME to Truenas pool

Command Prompt

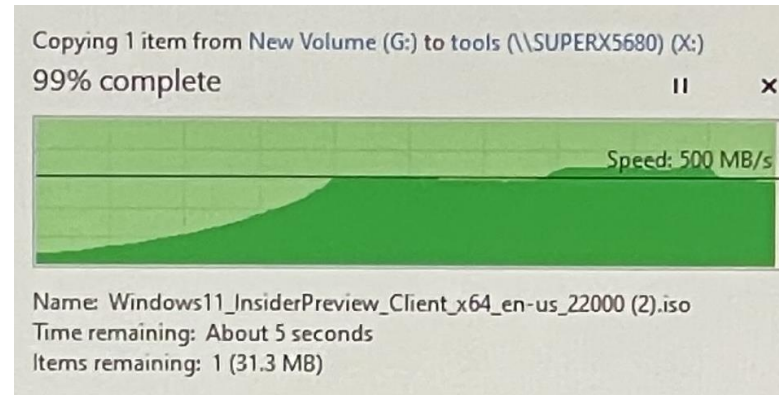
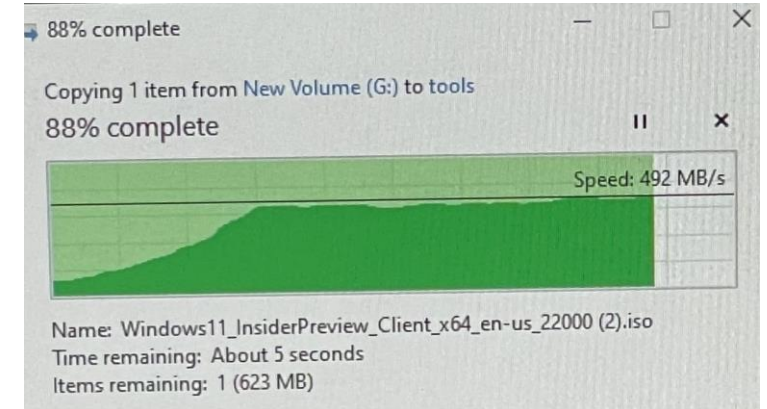
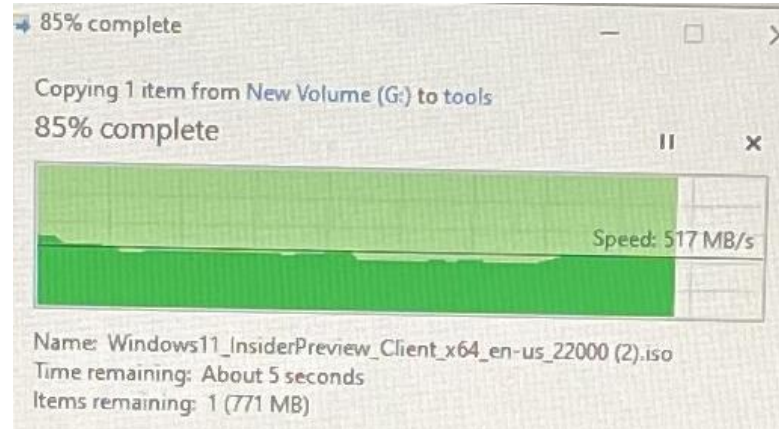
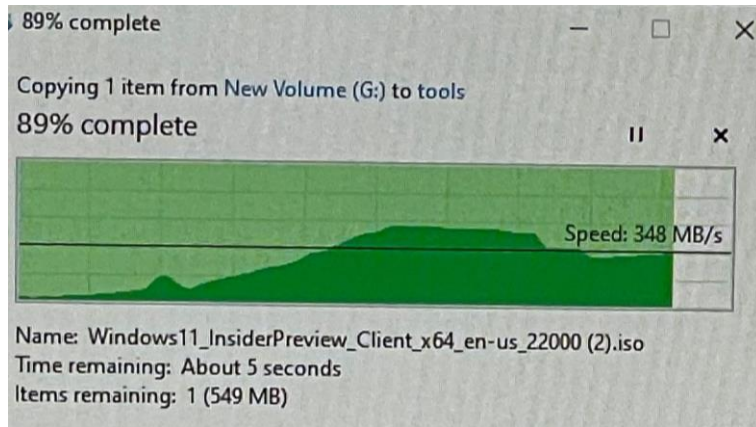
```
[ 9] local 192.168.0.114 port 51169 connected with 192.168.0.70 port 5001
[10] local 192.168.0.114 port 51171 connected with 192.168.0.70 port 5001
[16] local 192.168.0.114 port 51172 connected with 192.168.0.70 port 5001
[ 7] local 192.168.0.114 port 51166 connected with 192.168.0.70 port 5001
[13] local 192.168.0.114 port 51173 connected with 192.168.0.70 port 5001
[ 6] local 192.168.0.114 port 51163 connected with 192.168.0.70 port 5001
[ 5] local 192.168.0.114 port 51167 connected with 192.168.0.70 port 5001
[14] local 192.168.0.114 port 51178 connected with 192.168.0.70 port 5001
[ 2] local 192.168.0.114 port 51174 connected with 192.168.0.70 port 5001
[12] local 192.168.0.114 port 51176 connected with 192.168.0.70 port 5001
```

ID	Interval	Transfer	Bandwidth
[12]	0.00-10.02 sec	1.49 GBytes	1.27 Gbits/sec
[6]	0.00-10.02 sec	147 MBytes	123 Mbits/sec
[9]	0.00-10.02 sec	168 MBytes	141 Mbits/sec
[3]	0.00-10.02 sec	140 MBytes	117 Mbits/sec
[4]	0.00-10.02 sec	1005 MBytes	842 Mbits/sec
[2]	0.00-10.02 sec	248 MBytes	207 Mbits/sec
[5]	0.00-10.02 sec	1.02 GBytes	878 Mbits/sec
[10]	0.00-10.02 sec	172 MBytes	144 Mbits/sec
[13]	0.00-10.02 sec	363 MBytes	304 Mbits/sec
[7]	0.00-10.02 sec	245 MBytes	205 Mbits/sec
[1]	0.00-10.04 sec	1.30 GBytes	1.11 Gbits/sec
[16]	0.00-10.02 sec	1.63 GBytes	1.40 Gbits/sec
[8]	0.00-10.02 sec	609 MBytes	510 Mbits/sec
[14]	0.00-10.02 sec	245 MBytes	205 Mbits/sec
[11]	0.00-10.18 sec	1.07 GBytes	902 Mbits/sec
[15]	0.00-11.08 sec	1.03 GBytes	800 Mbits/sec
[SUM]	0.00-10.17 sec	10.8 GBytes	9.12 Gbits/sec

C:\tools>



Transfer from NVME to Truenas drive



Performance evaluation using Crystal Drive – TP-Link 10GB/s Switch
Different drive technology

Stop	5	256MiB	C: 70% (156/223GiB)	MB/s
			Read (MB/s)	Write (MB/s)
Stop			191.14	194.67
Stop			187.30	189.75
Stop			23.22	72.76
Stop			15.82	40.39

Local Crucial SSD drive

All	5	256MiB	F: 12% (56/465GiB)	MB/s
			Read (MB/s)	Write (MB/s)
SEQ1M Q8T1			112.64	112.56
SEQ1M Q1T1			112.33	111.14
RND4K Q32T1			0.73	0.64
RND4K Q1T1			0.70	0.59

Local Seagate Spinner drive

All	5	256MiB	G: 15% (35/238GiB)	MB/s
			Read (MB/s)	Write (MB/s)
SEQ1M Q8T1			1557.69	1111.73
SEQ1M Q1T1			1340.46	1055.49
RND4K Q32T1			130.49	86.72
RND4K Q1T1			29.38	51.37

Local NVME drive

Stop	5	256MiB	U: 67% (10112/15074C)	MB/s
			Read (MB/s)	Write (MB/s)
Stop			415.02	518.88
Stop			260.75	385.40
Stop			123.42	116.66
Stop			6.33	9.96

Truenas Server – 4 x 3TB drives

All	5	256MiB	W: 1% (1/213GiB)	MB/s
			Read (MB/s)	Write (MB/s)
SEQ1M Q8T1			412.50	497.88
SEQ1M Q1T1			274.88	347.41
RND4K Q32T1			117.35	122.95
RND4K Q1T1			11.65	11.63

Truenas SSD single drive pool

All	5	64GiB	W: 1% (1/213GiB)	MB/s
			Read (MB/s)	Write (MB/s)
SEQ1M Q8T1			417.86	500.08
SEQ1M Q1T1			272.45	363.52
RND4K Q32T1			40.92	26.02
RND4K Q1T1			7.21	8.47

Truenas SSD single drive pool Big Pool