

Scenario	Overall Duration [sec]	PCAPNG trace file length [MegaBytes]	Approximate Number and Type of SMB / SMB2 Operations in Network Trace [Number of Operations x Operation Type(s)]	Exact Overall Number of SMB / SMB2 Operations in Network Trace	Sum of Network Service Response Times (Wireshark SRTs) [sec]	File Copy Speed [Files/Sec]	Protocol Verbosity [Bytes/File]	Protocol Overhead compared to SMB 1.5 [%]	Performance Overhead compared to SMB 1.5 [%]
<b>Write (Copy from local NTFS to Share) Single Directory with 2000 Empty Files (length 0)</b>									
W1 - SMB 1.5 Win 10 Client (Explorer) to Samba 3.6.15 (Thecus)	44,64	10,43	~ 2000 x SetFileInfo ~ 4000 x FindFirst2, QueryFSInfo ~ 6000 x NTCreatAndX, Close ~ 8000 x QueryFileInfo	30105	37,32	45	5	base line	base line
W1 - SMB 1.5 Win 10 Client ("xcopy /s") to Samba 3.6.15 (Thecus)	101,27	19,63	~ 2000 x QueryFSInfo ~ 6000 x SetFileInfo ~ 8000 x FindFirst2, QueryPathInfo ~ 10000 x NTCreatAndX, QueryFileInfo, Close	54038	90,38	20	10	+88,21	+126,86
W2 - SMB2 3.11 Win 10 Client (Explorer) to Samba 4.7.0 (self-compiled)	90,73	25,34	~ 2000 x GetInfo, SetInfo ~ 2500 x Find ~ 6000 x Create, Close	18563	116,47	22	13	+142,95	+103,25
W2 - SMB2 3.11 Win 10 Client ("xcopy /s") to Samba 4.7.0 (self-compiled)	164,47	36,84	~ 5500 x Find ~ 6000 x SetInfo ~ 15500 x Create, Close	42755	279,17	12	19	+253,21	+268,44
W3 - SMB2 3.11 Win 10 Client (Explorer) to Win 10 Share	72,66	26,58	~ 2000 x GetInfo, SetInfo ~ 2500 x Find ~ 6000 x Create, Close	18572	70,04	28	14	+154,84	+62,77
W3 - SMB2 3.11 Win 10 Client ("xcopy /s") to Win 10 Share	138,49	39,34	~ 5500 x Find ~ 6000 x SetInfo ~ 16000 x Create, Close	43661	143,49	14	20	+277,18	+210,24
W4 - SMB vers=1.0 Linux mount.cifs Client (krusader) to Samba 3.6.15 (Thecus)	51,67	7,46	2 x FindFirst2 4 x QueryFSInfo ~ 2000 x Close ~ 4000 x SetFileInfo ~ 6000 x QueryPathInfo, SetPathInfo	18102	49,14	39	4	-28,48	+15,75
W4 - SMB vers=1.0 Linux mount.cifs Client ("cp -r") to Samba 3.6.15 (Thecus)	20,59	1,54	4 x FindFirst2 6 x QueryFSInfo 25 x QueryPathInfo ~ 2000 x SetPathInfo, Close	4036	19,98	97	1	-85,23	-53,88
W5 - SMB2 (Linux CIFS) vers=3.0 Linux mount.cifs Client (krusader) to Samba 4.7.0 (self-compiled)	70,09	12,40	4 x Find ~ 2000 x GetInfo ~ 8000 x SetInfo, Close ~ 10000 x Create	28310	67,33	29	6	+18,89	+57,01
W5 - SMB2 (Linux CIFS) vers=3.0 Linux mount.cifs Client ("cp -r") to Samba 4.7.0 (self-compiled)	21,94	2,98	~ 2000 x Create, GetInfo, Close	6073	21,17	91	2	-71,43	-50,85
W6 - SMB2 (Linux CIFS) vers=3.0 Linux mount.cifs Client (krusader) to Win 10 Share	149,49	13,52	4 x Find ~ 2000 x GetInfo ~ 8000 x SetInfo, Close ~ 10000 x Create	28466	146,16	13	7	+29,63	+234,88
W6 - SMB2 (Linux CIFS) vers=3.0 Linux mount.cifs Client ("cp -r") to Win 10 Share	33,49	3,16	8 x Find ~ 2000 x Create, GetInfo, Close	6141	32,60	60	2	-69,70	-24,98

Scenario	Overall Duration [sec]	PCAPNG trace file length [MegaBytes]	Approximate Number and Type of SMB / SMB2 Operations in Network Trace [Number of Operations x Operation Type(s)]	Exact Overall Number of SMB / SMB2 Operations in Network Trace	Sum of Network Service Response Times (Wireshark SRTs) [sec]	File Copy Speed [Files/Sec]	Protocol Verbosity [Bytes/File]	Protocol Overhead compared to SMB 1.5 [%]	Performance Overhead compared to SMB 1.5 [%]
<b>Read (Copy from Share to local NTFS) Single Directory with 2000 Empty Files (length 0)</b>									
R1 - SMB 1.5 Samba 3.6.15 (Thecus) to Win 10 Client (Explorer)	30,84	8,45	15 x FindNext2 ~ 2000 x NTCreatAndX, Close ~ 4000 x FindFirst2, QueryFSInfo ~ 10000 x QueryFileInfo	22068	24,41	65	4	base line	base line
R1 - SMB 1.5 Samba 3.6.15 (Thecus) to Win 10 Client ("xcopy /s")	15,10	6,13	4 x FindFirst2 30 x FindNext2 ~ 2000 x NTCreatAndX, Close, QueryFSInfo ~ 10000 x QueryFileInfo	16041	11,38	132	3	-27,46	-51,04
R2 - SMB2 3.11 Samba 4.7.0 (self-compiled) to Win 10 Client (Explorer)	63,16	10,13	~ 4000 x Find ~ 6000 x Create, GetInfo, Close	22065	95,04	32	5	+19,88	+104,80
R2 - SMB2 3.11 Samba 4.7.0 (self-compiled) to Win 10 Client ("xcopy /s")	26,25	4,82	142 x Find ~ 2000 x Create, Close ~ 6000 x GetInfo	10157	28,08	76	2	-42,96	-14,88
R3 - SMB2 3.11 Win 10 Share to Win 10 Client (Explorer)	66,72	12,20	~ 4000 x Find ~ 6000 x Create, Close ~ 8000 x GetInfo	24084	70,24	30	6	+44,38	+116,34
R3 - SMB2 3.11 Win 10 Share to Win 10 Client ("xcopy /s")	22,00	5,60	138 x Find ~ 2000 x Create, Close ~ 8000 x GetInfo	12154	27,95	91	3	-33,73	-28,66
R4 - SMB vers=1.0 Samba 3.6.15 (Thecus) to Linux mount.cifs Client (krusader)	41,81	5,46	1 x FindFirst2 17 x FindNext2 ~ 2000 x NTReadAndX, SetPathInfo, Close ~ 8000 x QueryPathInfo	14090	39,19	48	3	-35,38	+35,57
R4 - SMB vers=1.0 Samba 3.6.15 (Thecus) to Linux mount.cifs Client ("cp -r")	22,33	3,35	1 x FindFirst2 17 x FindNext2 ~ 2000 x NTReadAndX, QueryPathInfo, SetPathInfo, Close	7989	21,47	90	2	-60,36	-27,59
R5 - SMB2 (Linux CIFS) vers=3.0 Samba 4.7.0 (self-compiled) to Linux mount.cifs Client (krusader)	33,14	6,81	16 x Find ~ 2000 x Read ~ 4000 x Create, GetInfo, Close	14107	30,84	60	3	-19,41	+7,46
R5 - SMB2 (Linux CIFS) vers=3.0 Samba 4.7.0 (self-compiled) to Linux mount.cifs Client ("cp -r")	29,84	6,70	16 x Find ~ 2000 x Read ~ 4000 x Create, GetInfo, Close	13877	28,61	67	3	-20,71	-3,24
R6 - SMB2 (Linux CIFS) vers=3.0 Win 10 Share to Linux mount.cifs Client (krusader)	67,54	7,21	16 x Find ~ 2000 x Read ~ 4000 x Create, GetInfo, Close	14124	64,77	30	4	-14,67	+119,00
R6 - SMB2 (Linux CIFS) vers=3.0 Win 10 Share to Linux mount.cifs Client ("cp -r")	67,11	7,20	16 x Find ~ 2000 x Read ~ 4000 x Create, GetInfo, Close	14105	65,47	30	4	-14,79	+117,61