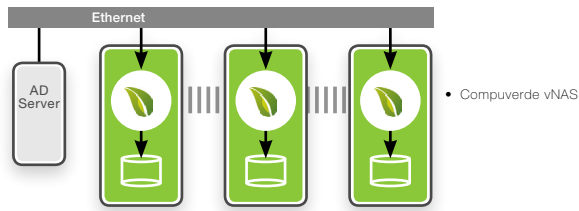


SMB Protocol Compatibility Tests

January 2018

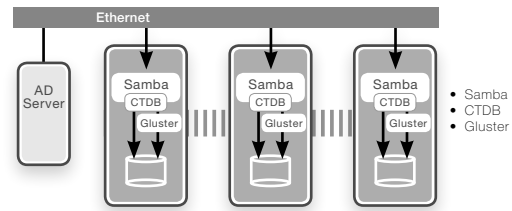
Test results comparing Compuverde Scale-out Storage with the compatibility found in storage solutions based on Samba.

Compuverde Storage Cluster



Compuverde scale-out storage in one package, built from ground up in C++. No open source.

Storage Cluster based on Samba

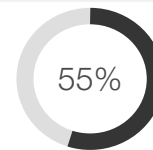
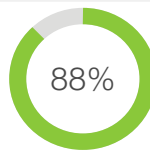


Using Samba for SMB, CTDB for cluster and Gluster for a CTDB clustered file system.

Compuverde 1.7.0.0

Samba 4.7.1

SMB
2.0 / 2.1 / 3.0 / 3.1.1



SMB Features

	Total	Compuverde		Samba		WinServer	
		Passed		Passed		Passed	
Remote Shared Virtual Disk							
Version 1	17	0	0%	0	0%	17	100%
Version 2	12	0	0%	0	0%	12	100%
Storage Quality of Service	13	1	8%	1	8%	13	100%
Authentication & Authorization							
Kerberos	15	0	0%	0	0%	1	7%
File Access	6	6	100%	4	67%	6	100%
Folder Access	6	6	100%	2	33%	6	100%
Share Access	7	7	100%	7	100%	7	100%
Claim Based Access	11	0	0%	0	0%	0	0%
SMB 2&3							
Negotiate	107	107	100%	99	93%	107	100%
Replay	575	526	91%	257	45%	575	100%
Credit	53	53	100%	53	100%	53	100%
Signing	97	97	100%	97	100%	97	100%
Encryption	8	8	100%	8	100%	8	100%
MultipleChannel	8	8	100%	7	88%	8	100%
Session	223	222	100%	198	89%	223	100%
Tree	16	13	81%	12	75%	15	94%
CreateClose	32	30	94%	29	91%	32	100%
Oplock	341	330	97%	60	18%	341	100%
Directory Leasing	19	13	68%	2	11%	19	100%
Lease V1	276	272	99%	188	68%	276	100%
Lease V2	138	115	83%	9	7%	138	100%
DurableHandle	225	216	96%	166	74%	225	100%
Compound	2	2	100%	2	100%	2	100%
AppInstanceId	74	74	100%	58	78%	74	100%
AppInstanceVersion	7	7	100%	0	0%	7	100%
FSCTL / IOCTL	202	189	94%	97	48%	191	95%
CombinedFeature	12	10	83%	9	75%	12	100%
OperateOneFileFromTwoNodes	29	29	100%	29	100%	29	100%
MixedOplockLease	24	24	100%	24	100%	24	100%
ChangeNotify	1	1	100%	1	100%	1	100%
LockUnlock	1	1	100%	1	100%	1	100%
QueryAndSetFileInfo	1	1	100%	1	100%	1	100%
File Server Failover	10	0	0%	0	0%	9	90%
File Server Remote VSS	14	0	0%	0	0%	14	100%
Service Witness	26	3	12%	2	8%	19	73%
Distributed File System Referral	43	27	63%	27	63%	33	77%
File System Algorithms	465	351	75%	264	57%	465	100%
Total	3116	2749	88%	1714	55%	3059	98%

Tests made with File Server Family Test Suite version 2.0.66.0 developed by Microsoft, Protocol Test Manager version 2.0.66.0, Protocol Test Framework version 1.0.5500.0. Microsoft Windows Server 2016 Standard version 10.0.14393.

2018-02-02