



SWISS
VAULT

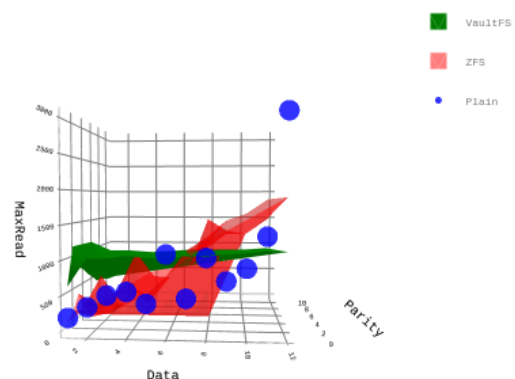
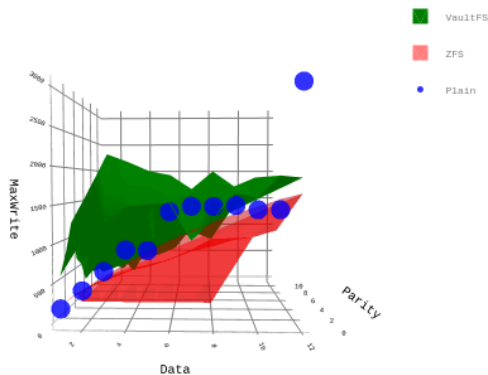
Performance Report

VaultFS vs ZFS (Scalability + Performance Benchmarks Results)

Click on the images below to access the full 360° view.

3D Mesh and Scatter Plot of Data Variables (VaultFS vs ZFS vs Plain)

3D Mesh and Scatter Plot of Data Variables (VaultFS vs ZFS vs Plain)



The above images display the results for the consistent performance of VaultFS. The linked interactive visualizations highlight the robust capabilities of VaultFS, superior to ZFS and the below table helps us understand the exceptional scalability that supports the above feature. The color ■ highlights the limitations to the parity structure of ZFS, which VaultFS overcomes with infinitely scalable parity to offer better performance and robustness. The instances where ZFS transfer speeds are higher, are highlighted by ■ and the instances where VaultFS performs better than ZFS, are highlighted by ■.

Table 1.0

S.No	Number of Disks (Total)	Data Disks	Parity Disks	VaultFS Max-Write	VaultFS Max-Read	ZFS Max- Write	ZFS Max- Read
1	1	1	0	602.23	634.39	222.42	133.37
2	2	2	0	1046.44	1039.63	416.74	327.83
3	3	3	0	1202.2	1039.92	594.57	454.4
4	4	4	0	1486.88	1075.89	762.63	397.2
5	5	5	0	1518.86	1050.87	921.12	530.47
6	6	6	0	1535.27	1045.47	1057.83	787.96
7	7	7	0	1054.06	1080.55	1188.92	1036.62
8	8	8	0	1326.23	1081.75	1294.38	1214.4
9	9	9	0	1658.15	1106.55	1405.34	1573.57
10	10	10	0	1600.29	1123.61	1489.61	1671.6
11	11	11	0	1879.16	1154.3	1585.07	1860.45
12	12	12	0	1852.7	1151.32	1652.49	1894.47
13	2	1	1	865.66	1176.52	211.42	223.26
14	3	2	1	1631.07	1245.85	379.48	151.57
15	4	3	1	2162.22	1126.27	509.68	216.41
16	5	4	1	2060.3	1128.34	632.54	623.16
17	6	5	1	1940.56	1108.67	684.6	367.11
18	7	6	1	1887.67	1096.65	803.46	780.19
19	8	7	1	1705.73	1115.99	896.03	1135.23
20	9	8	1	1936.51	1134.81	1035.88	1320.41
21	10	9	1	1740.78	1128.92	1047.63	1384.27
22	11	10	1	1856.7	1144.88	1120.49	1443.92
23	12	11	1	1877.51	1175.05	1166.75	1570.63
24	3	1	2	1238.87	844.26	199.76	438.45
25	4	2	2	1470.57	1086.67	353.71	276.96

26	5	3	2	917.17	1058.84	464.83	407.82
27	6	4	2	924.66	1084.42	578.01	862.01
28	7	5	2	1400.03	1055.69	674.01	614.98
29	8	6	2	1780.68	1061.68	739.52	702.67
30	9	7	2	1601.34	1077.76	846.51	1068.78
31	10	8	2	1805.02	1091.11	912.27	1144.88
32	11	9	2	1452.49	1108.5	1000.03	1351.54
33	12	10	2	1848.89	1125.28	1043.94	1351.83
34	4	1	3	696.81	764.81	189.73	163.63
35	5	2	3	1130.2	946.31	348.9	671.9
36	6	3	3	822.48	984.58	460.66	302.33
37	7	4	3	518.55	1028.33	567.51	1039.86
38	8	5	3	1018.95	1027.12	625.77	672.76
39	9	6	3	1597.35	1034.42	712.94	596.04
40	10	7	3	1006.97	1047.32	840.64	831.21
41	11	8	3	1215.9	1065.57	987.46	1357.07
42	12	9	3	1432.15	1089.82	997.98	1388.35
43	5	1	4	568.83	651.09	0	0
44	6	2	4	968.4	816.91	0	0
45	7	3	4	1092.05	931.82	0	0
46	8	4	4	822.4	973.09	0	0
47	9	5	4	853.2	1026.59	0	0
48	10	6	4	1092.13	1037.26	0	0
49	11	7	4	1059.85	1046.99	0	0
50	12	8	4	953.54	1069.07	0	0
51	6	1	5	288.19	561.9	0	0
52	7	2	5	627.5	766.24	0	0
53	8	3	5	740.3	881.02	0	0

54	9	4	5	761.1	955.71	0	0
55	10	5	5	1058.05	974.09	0	0
56	11	6	5	1025.04	1014.62	0	0
57	12	7	5	1119.47	1036.02	0	0
58	7	1	6	401.62	459.18	0	0
59	8	2	6	650.07	707.12	0	0
60	9	3	6	408.86	799.89	0	0
61	10	4	6	751.16	913.7	0	0
62	11	5	6	686.2	953.45	0	0
63	12	6	6	746.94	959.49	0	0
64	8	1	7	306.93	444.38	0	0
65	9	2	7	444.63	670.08	0	0
66	10	3	7	504.58	764.58	0	0
67	11	4	7	718.74	862.91	0	0
68	12	5	7	597.47	915.75	0	0
69	9	1	8	339.73	402.74	0	0
70	10	2	8	334.54	596.87	0	0
71	11	3	8	542.83	728.95	0	0
72	12	4	8	510.59	806.35	0	0
73	10	1	9	242.12	360.36	0	0
74	11	2	9	276.41	571.37	0	0
75	12	3	9	459.28	693.18	0	0
76	11	1	10	148.47	339.7	0	0
77	12	2	10	257.02	542.37	0	0
78	12	1	11	196.6	325.27	0	0

Get in touch with us:

VaultFS values its customers and has dedicated resources to ensure the best quality experience when demoing the product. Businesses can discover how VaultFS can serve their needs. Connect with the support team at [Swiss Vault Global Support](#).

For more information, visit us on the web at
<https://www.swissvault.global/>

