

Comparison of FastConnect vs public Internet	Backup Performance Benefit Up to	Restore Performance Benefit Up to	Total	Restore time over FastConnect (In minutes)	Restore time over Internet (In minutes)	Difference (In minutes)	Hours saved
Overall - Equinix's Cloud adjacent Colo + Fabric [sub 2ms, 0%, 9000]* vs public Internet [100ms, 0.1%, 1500]*	28	28	NA	16	443	427	7
Overall - Equinix's Cloud adjacent Colo + Fabric [sub 2ms, 0%, 9000]* vs public Internet [100ms, 1%, 1500]*	141	141	NA	16	2253	2237	37
Just Cloud Proximity - local FastConnect [<2ms, 0%, 1500]* vs remote Internet [100ms, 0%, 1500]* - same MTU / 0% loss	3	3	NA	17	48	31	1
Just packet delivery - FastConnect [100ms, 0%, 1500]* vs. Internet [100ms, 0.1%, 1500]* - same MTU / same latency at 100ms	14	14	NA	31	443	412	7
Just packet delivery - FastConnect [100ms, 0%, 1500]* vs. Internet [100ms, 1%, 1500]* - same MTU / same latency at 100ms	71	72	NA	31	2253	2222	37
Just Jumbo Frames - FastConnect [100ms, 0%, 9000]* vs. Internet [100ms, 0%, 1500]* - same latency / 0% loss	2	2	NA	28	48	20	0
Just Fabric (Packet Delivery + Jumbo Frames) - FastConnect [100ms, 0%, 9000]* vs. Internet [100ms, 0.1%, 1500]* - same latency at 100ms	15	16	NA	28	443	415	7
Just Fabric (Packet Delivery + Jumbo Frames) - FastConnect [100ms, 0%, 9000]* vs. Internet [100ms, 1%, 1500]* - same latency at 100ms	76	79	NA	28	2253	2225	37
Total number of tests	192	192	384				
Total minutes of backup tests	42718	44386	87104				
Total months of tests	1	1	2				

* [Delay, Packet Loss %, Maximum Transmission Unit (MTU)]

	DB Backup size (TB)	1.06		Backup - 35 channels															
Cloud Connectivity	FC Peering Type	Total delay including tc imposed delay (ms)	tc pkt loss %	Run 1 (mins)	Run 2 (mins)	Run 3 (mins)	FastConnect via Fabric		Internet Avg run (mins)	ISP - High (99.9% pkt delivery)		ISP - Medium - (99.5% packet delivery)		ISP - Low (99% packet delivery)		ISP with same pkt delivery rate as Fabric			
							Avg. Backup Time (mins)	Avg. Throughput (Gbps)		Avg. Throughput (Gbps)	Throughput Performance Multiple	Avg. Throughput (Gbps)	Throughput Performance Multiple	Avg. Throughput (Gbps)	Throughput Performance Multiple	Avg. Throughput (Gbps)	Faster vs. ISP (Multiple)		
Internet	No Peering MTU - 1500	<2	0.0%	16.8	16.7	16.7	16.7	8.6	-	8.33	NA	6.97	NA	3.77	NA	8.65	NA		
			0.1%	17.4	17.4	17.3	17.4	8.3	-	8.33	NA	6.97	NA	3.77	NA	8.33	NA		
			0.5%	20.8	20.7	20.8	20.8	7.0	-	8.33	NA	6.97	NA	3.77	NA	6.97	NA		
			1.0%	38.1	38.5	38.6	38.4	3.8	-	8.33	NA	6.97	NA	3.77	NA	3.77	NA		
		5	0.0%	16.9	16.9	16.9	16.9	8.6	-	6.38	NA	1.65	NA	1.15	NA	8.56	NA		
			0.1%	22.6	22.8	22.7	22.7	6.4	-	6.38	NA	1.65	NA	1.15	NA	6.38	NA		
			0.5%	86.8	87.9	88.7	87.8	1.6	-	6.38	NA	1.65	NA	1.15	NA	1.65	NA		
			1.0%	124.7	125.6	128.2	126.2	1.1	-	6.38	NA	1.65	NA	1.15	NA	1.15	NA		
		10	0.0%	16.9	16.7	16.9	16.8	8.6	-	3.24	NA	0.84	NA	0.58	NA	8.60	NA		
			0.1%	44.9	43.6	45.7	44.7	3.2	-	3.24	NA	0.84	NA	0.58	NA	3.24	NA		
			0.5%	170.1	174.2	172.9	172.4	0.8	-	3.24	NA	0.84	NA	0.58	NA	0.84	NA		
			1.0%	248.9	252.9	240.8	247.5	0.6	-	3.24	NA	0.84	NA	0.58	NA	0.58	NA		
		20	0.0%	17.8	17.6	17.9	17.8	8.1	-	1.60	NA	0.46	NA	0.29	NA	8.15	NA		
			0.1%	89.9	88.7	93.6	90.7	1.6	-	1.60	NA	0.46	NA	0.29	NA	1.60	NA		
			0.5%	322.0	318.4	312.3	317.6	0.5	-	1.60	NA	0.46	NA	0.29	NA	0.46	NA		
			1.0%	494.1	502.6	498.3	498.3	0.3	-	1.60	NA	0.46	NA	0.29	NA	0.29	NA		
		35	0.0%	19.5	19.4	19.8	19.6	7.4	-	0.83	NA	0.29	NA	0.18	NA	7.40	NA		
			0.1%	174.8	172.9	178.2	175.3	0.8	-	0.83	NA	0.29	NA	0.18	NA	0.83	NA		
			0.5%	504.1	502.4	500.8	502.4	0.3	-	0.83	NA	0.29	NA	0.18	NA	0.29	NA		
			1.0%	803.7	811.5	799.2	804.8	0.2	-	0.83	NA	0.29	NA	0.18	NA	0.18	NA		
		50	0.0%	23.1	23.4	23.6	23.4	6.2	-	0.51	NA	0.19	NA	0.13	NA	6.19	NA		
			0.1%	285.1	294.7	274.8	284.9	0.5	-	0.51	NA	0.19	NA	0.13	NA	0.51	NA		
			0.5%	779.3	742.4	739.0	753.6	0.2	-	0.51	NA	0.19	NA	0.13	NA	0.19	NA		
			1.0%	1094.1	1106.8	1092.6	1097.8	0.1	-	0.51	NA	0.19	NA	0.13	NA	0.13	NA		
		75	0.0%	32.8	32.2	33.5	32.8	4.4	-	0.40	NA	0.14	NA	0.09	NA	4.41	NA		
			0.1%	382.6	360.0	355.1	365.9	0.4	-	0.40	NA	0.14	NA	0.09	NA	0.40	NA		
			0.5%	1041.9	1037.1	1039.6	1039.5	0.1	-	0.40	NA	0.14	NA	0.09	NA	0.14	NA		
			1.0%	1616.2	1590.7	1603.8	1603.6	0.1	-	0.40	NA	0.14	NA	0.09	NA	0.09	NA		
		100	0.0%	45.8	40.7	44.2	43.6	3.3	-	0.34	NA	0.11	NA	0.07	NA	3.32	NA		
			0.1%	433.8	427.7	429.8	430.4	0.3	-	0.34	NA	0.11	NA	0.07	NA	0.34	NA		
			0.5%	1388.3	1380.8	1364.8	1378.0	0.1	-	0.34	NA	0.11	NA	0.07	NA	0.11	NA		
			1.0%	2154.9	2120.1	2129.6	2134.9	0.1	-	0.34	NA	0.11	NA	0.07	NA	0.07	NA		
		FastConnect	Private FastConnect over EF -MTU 9000	<2	0.0%	15.1	15.2	15.1	15.1	9.6	16.73	8.33	1.1	6.97	1.4	3.77	2.5	8.65	1.1
					0.1%	15.4	15.4	15.5	15.4	9.4	17.37	8.33	1.1	6.97	1.3	3.77	2.5	8.33	1.1
				5	0.0%	15.5	15.6	15.5	15.5	9.3	16.90	6.38	1.5	1.65	5.7	1.15	8.1	8.56	1.1
					0.1%	15.7	15.7	15.7	15.7	9.2	22.70	6.38	1.4	1.65	5.6	1.15	8.0	6.38	1.4
				10	0.0%	15.7	15.7	15.7	15.7	9.2	16.83	3.24	2.8	0.84	11.0	0.58	15.8	8.60	1.1
					0.1%	16.9	16.8	16.9	16.9	8.6	44.73	3.24	2.7	0.84	10.2	0.58	14.7	3.24	2.7
				20	0.0%	15.9	16.0	16.0	16.0	9.1	17.77	1.60	5.7	0.46	19.9	0.29	31.2	8.15	1.1
					0.1%	23.7	24.0	23.9	23.9	6.1	90.72	1.60	3.8	0.46	13.3	0.29	20.9	1.60	3.8
				35	0.0%	17.2	16.9	17.1	17.1	8.5	19.57	0.83	10.3	0.29	29.4	0.18	47.2	7.40	1.1
					0.1%	39.7	39.8	38.7	39.4	3.7	175.30	0.83	4.4	0.29	12.8	0.18	20.4	0.83	4.4
				50	0.0%	19.6	20.1	19.8	19.8	7.3	23.37	0.51	14.4	0.19	38.0	0.13	55.4	6.19	1.2
					0.1%	49.3	49.8	50.1	49.7	2.9	284.87	0.51	5.7	0.19	15.2	0.13	22.1	0.51	5.7
				75	0.0%	24.0	24.1	23.7	23.9	6.0	32.83	0.40	15.3	0.14	43.4	0.09	67.0	4.41	1.4
					0.1%	65.2	64.6	64.4	64.7	2.2	365.90	0.40	5.7	0.14	16.1	0.09	24.8	0.40	5.7
				100	0.0%	27.9	28.0	27.9	27.9	5.2	43.57	0.34	15.4	0.11	49.3	0.07	76.4	3.32	1.6
					0.1%	79.5	78.6	79.4	79.2	1.8	430.43	0.34	5.4	0.11	17.4	0.07	27.0	0.34	5.4
Private FastConnect over EF -MTU 1500 (manually setup via OS setting)	<2			0.0%	16.4	16.4	16.3	16.4	8.8	16.73	8.33	1.1	6.97	1.3	3.77	2.3	8.65	1.0	
				0.1%	16.6	16.5	16.6	16.6	8.7	17.37	8.33	1.0	6.97	1.3	3.77	2.3	8.33	1.0	
	5			0.0%	16.6	16.7	16.6	16.6	8.7	16.90	6.38	1.4	1.65	5.3	1.15	7.6	8.56	1.0	
				0.1%	21.6	22.0	21.9	21.8	6.6	22.70	6.38	1.0	1.65	4.0	1.15	5.8	6.38	1.0	
	10			0.0%	16.7	16.8	16.7	16.7	8.6	16.83	3.24	2.7	0.84	10.3	0.58	14.8	8.60	1.0	
				0.1%	44.5	45.2	44.3	44.7	3.2	44.73	3.24	1.0	0.84	3.9	0.58	5.5	3.24	1.0	
	20			0.0%	17.5	17.7	17.6	17.6	8.2	17.77	1.60	5.2	0.46	18.0	0.29	28.3	8.15	1.0	
				0.1%	83.4	84.2	84.9	84.2	1.7	90.72	1.60	1.1	0.46	3.8	0.29	5.9	1.60	1.1	
	35		0.0%	19.1	19.4	19.3	19.3	7.5	19.57	0.83	9.1	0.29	26.1	0.18	41.8	7.40	1.0		
			0.1%	157.9	155.9	156.2	156.7	0.9	175.30	0.83	1.1	0.29	3.2	0.18	5.1	0.83	1.1		
	50		0.0%	22.2	22.7	22.9	22.6	6.4	23.37	0.51	12.6	0.19	33.3	0.13	48.6	6.19	1.0		
			0.1%	227.2	235.7	242.0	235.0	0.6	284.87	0.51	1.2	0.19	3.2	0.13	4.7	0.51	1.2		
	75		0.0%	26.2	26.6	26.3	26.4	5.5	32.83	0.40	13.9	0.14	39.4	0.09	60.8	4.41	1.2		
			0.1%	288.8	274.8	285.9	283.2	0.5	365.90	0.40	1.3	0.14	3.7	0.09	5.7	0.40	1.3		
	100		0.0%	30.3	30.3	30.1	30.2	4.8	43.57	0.34	14.2	0.11	45.6	0.07	70.6	3.32	1.4		
			0.1%	291.2	348.1	358.0	332.4	0.4	430.43	0.34	1.3	0.11	4.1	0.07	6.4	0.34	1.3		

	DB Backup size (TB)	1.06	Restore - 35 channels																			
Cloud Connectivity	FC Peering Type	Total delay including tc imposed delay (ms)	tc pkt loss %	Run 1 (mins)	Run 2 (mins)	Run 3 (mins)	FastConnect via Fabric		Internet Avg run (mins)	Internet - High		Internet - Medium		Internet - Low		ISP with same pkt delivery rate as Fabric		Time Saved vs. ISP - High (hours)	Time Saved vs. ISP - Medium (hours)	Time Saved vs. ISP - Low (hours)		
							Avg Restore Time (mins)	Avg. Throughput (Gbps)		Avg. Throughput (Gbps)	Throughput Performance Multiple	Avg. Throughput (Gbps)	Throughput Performance Multiple	Avg. Throughput (Gbps)	Throughput Performance Multiple	Avg. Throughput (Gbps)	Faster vs. ISP (Multiple)					
Internet	No Peering MTU - 1500	<2	0.0%	16.9	16.9	16.8	16.9	8.6	-	8.15	NA	6.74	NA	3.66	NA	8.58	NA	NA	NA	NA		
			0.1%	17.8	17.8	17.6	17.8	8.2	-	8.15	NA	6.74	NA	3.66	NA	8.15	NA	NA	NA	NA		
			0.5%	21.5	21.3	21.6	21.5	6.7	-	8.15	NA	6.74	NA	3.66	NA	6.74	NA	NA	NA	NA		
			1.0%	39.8	39.0	39.8	39.5	3.7	-	8.15	NA	6.74	NA	3.66	NA	3.66	NA	NA	NA	NA		
		5	0.0%	17.3	17.3	17.3	17.3	8.4	-	6.34	NA	1.62	NA	1.01	NA	8.36	NA	NA	NA	NA		
			0.1%	23.0	22.9	22.7	22.8	6.3	-	6.34	NA	1.62	NA	1.01	NA	6.34	NA	NA	NA	NA		
			0.5%	88.7	89.9	88.8	89.1	1.6	-	6.34	NA	1.62	NA	1.01	NA	1.62	NA	NA	NA	NA		
			1.0%	143.2	141.4	144.5	143.0	1.0	-	6.34	NA	1.62	NA	1.01	NA	1.01	NA	NA	NA	NA		
		10	0.0%	18.0	18.1	18.0	18.0	8.0	-	2.69	NA	0.79	NA	0.54	NA	8.04	NA	NA	NA	NA		
			0.1%	53.8	53.4	54.0	53.7	2.7	-	2.69	NA	0.79	NA	0.54	NA	2.69	NA	NA	NA	NA		
			0.5%	183.0	182.2	182.8	182.7	0.8	-	2.69	NA	0.79	NA	0.54	NA	0.79	NA	NA	NA	NA		
			1.0%	268.9	263.4	269.0	267.1	0.5	-	2.69	NA	0.79	NA	0.54	NA	0.54	NA	NA	NA	NA		
		20	0.0%	19.8	19.8	19.9	19.8	7.3	-	1.27	NA	0.44	NA	0.29	NA	7.29	NA	NA	NA	NA		
			0.1%	114.5	111.2	115.9	113.9	1.3	-	1.27	NA	0.44	NA	0.29	NA	1.27	NA	NA	NA	NA		
			0.5%	324.9	335.1	334.2	331.4	0.4	-	1.27	NA	0.44	NA	0.29	NA	0.44	NA	NA	NA	NA		
			1.0%	504.0	511.9	504.9	506.9	0.3	-	1.27	NA	0.44	NA	0.29	NA	0.29	NA	NA	NA	NA		
		35	0.0%	21.1	21.3	21.2	21.2	6.8	-	0.75	NA	0.27	NA	0.17	NA	6.82	NA	NA	NA	NA		
			0.1%	196.6	187.5	198.2	194.1	0.7	-	0.75	NA	0.27	NA	0.17	NA	0.75	NA	NA	NA	NA		
			0.5%	528.8	530.1	523.7	527.5	0.3	-	0.75	NA	0.27	NA	0.17	NA	0.27	NA	NA	NA	NA		
			1.0%	834.7	829.1	824.5	829.4	0.2	-	0.75	NA	0.27	NA	0.17	NA	0.17	NA	NA	NA	NA		
		50	0.0%	24.6	25.5	25.6	25.2	5.7	-	0.49	NA	0.19	NA	0.13	NA	5.74	NA	NA	NA	NA		
			0.1%	292.8	291.9	294.1	292.9	0.5	-	0.49	NA	0.19	NA	0.13	NA	0.49	NA	NA	NA	NA		
			0.5%	759.0	769.9	765.8	764.9	0.2	-	0.49	NA	0.19	NA	0.13	NA	0.19	NA	NA	NA	NA		
			1.0%	1132.6	1113.9	1109.4	1118.6	0.1	-	0.49	NA	0.19	NA	0.13	NA	0.13	NA	NA	NA	NA		
		75	0.0%	34.5	34.2	34.9	34.5	4.2	-	0.39	NA	0.14	NA	0.09	NA	4.19	NA	NA	NA	NA		
			0.1%	370.9	375.3	369.2	371.8	0.4	-	0.39	NA	0.14	NA	0.09	NA	0.39	NA	NA	NA	NA		
			0.5%	1058.6	1057.2	1058.5	1058.1	0.1	-	0.39	NA	0.14	NA	0.09	NA	0.14	NA	NA	NA	NA		
			1.0%	1603.8	1617.6	1607.6	1609.7	0.1	-	0.39	NA	0.14	NA	0.09	NA	0.09	NA	NA	NA	NA		
		100	0.0%	48.2	48.0	47.7	48.0	3.0	-	0.33	NA	0.10	NA	0.06	NA	3.02	NA	NA	NA	NA		
			0.1%	443	439.6	447.8	443.4	0.3	-	0.33	NA	0.10	NA	0.06	NA	0.33	NA	NA	NA	NA		
			0.5%	1398.8	1384.1	1394.0	1392.3	0.1	-	0.33	NA	0.10	NA	0.06	NA	0.10	NA	NA	NA	NA		
			1.0%	2253.8	2258.5	2246.9	2253.0	0.1	-	0.33	NA	0.10	NA	0.06	NA	0.06	NA	NA	NA	NA		
		FastConnect	Private FastConnect over EF -MTU 9000	<2	0.0%	16.0	16.0	16.0	16.0	9.1	16.88	8.15	1.1	6.74	1.3	3.66	2.5	8.58	1.1	0.0	0.1	0.4
					0.1%	16.0	16.0	16.0	16.0	9.1	17.76	8.15	1.1	6.74	1.3	3.66	2.5	8.15	1.1	0.0	0.1	0.4
				5	0.0%	16.4	16.3	16.3	16.3	8.9	17.30	6.34	1.4	1.62	5.5	1.01	8.8	8.36	1.1	0.1	1.2	2.1
					0.1%	16.3	16.2	16.3	16.3	8.9	22.84	6.34	1.4	1.62	5.5	1.01	8.8	6.34	1.4	0.1	1.2	2.1
				10	0.0%	16.8	16.7	16.5	16.6	8.7	18.00	2.69	3.2	0.79	11.0	0.54	16.0	8.04	1.1	0.6	2.8	4.2
					0.1%	17.2	17.2	17.1	17.2	8.4	53.74	2.69	3.1	0.79	10.6	0.54	15.6	2.69	3.1	0.6	2.8	4.2
				20	0.0%	17.6	17.5	17.6	17.6	8.2	19.85	1.27	6.5	0.44	18.9	0.29	28.9	7.29	1.1	1.6	5.2	8.2
					0.1%	25.6	25.6	25.5	25.6	5.7	113.86	1.27	4.5	0.44	13.0	0.29	19.8	1.27	6.5	1.5	5.1	8.0
				35	0.0%	19.3	19.2	19.2	19.2	7.5	21.22	0.75	10.1	0.27	27.5	0.17	43.2	6.82	1.1	2.9	8.5	13.5
					0.1%	41.5	41.1	41.2	41.2	3.5	194.12	0.75	4.7	0.27	12.8	0.17	20.1	0.75	4.7	2.5	8.1	13.1
				50	0.0%	21.5	21.6	21.6	21.6	6.7	25.23	0.49	13.6	0.19	35.4	0.13	51.8	5.74	1.2	4.5	12.4	18.3
					0.1%	53.4	53.1	52.9	53.1	2.7	292.93	0.49	5.5	0.19	14.4	0.13	21.1	0.49	5.5	4.0	11.9	17.8
				75	0.0%	24.4	24.2	24.5	24.4	5.9	34.54	0.39	15.3	0.14	43.4	0.09	66.1	4.19	1.4	5.8	17.2	26.4
					0.1%	66.8	66.5	67.8	67.0	2.2	371.80	0.39	5.5	0.14	15.8	0.09	24.0	0.39	5.5	5.1	16.5	25.7
				100	0.0%	28.5	28.4	28.5	28.4	5.1	47.95	0.33	15.6	0.10	49.0	0.06	79.2	3.02	1.7	6.9	22.7	37.1
					0.1%	81.7	81.4	80.9	81.3	1.8	443.40	0.33	5.5	0.10	17.1	0.06	27.7	0.33	5.5	6.0	21.8	36.2
Private FastConnect over EF -MTU 1500 (manually setup via OS setting)	<2			0.0%	16.7	16.7	16.7	16.7	8.7	16.88	8.15	1.1	6.74	1.3	3.66	2.4	8.58	1.0	0.0	0.1	0.4	
				0.1%	17.1	16.8	17.0	17.0	8.5	17.76	8.15	1.0	6.74	1.3	3.66	2.3	8.15	1.0	0.0	0.1	0.4	
	5			0.0%	17.2	17.1	17.2	17.2	8.4	17.30	6.34	1.3	1.62	5.2	1.01	8.3	8.36	1.0	0.1	1.2	2.1	
				0.1%	22.9	22.2	22.5	22.5	6.4	22.84	6.34	1.0	1.62	4.0	1.01	6.3	6.34	1.0	0.0	1.1	2.0	
	10			0.0%	17.8	17.8	17.7	17.7	8.2	18.00	2.69	3.0	0.79	10.3	0.54	15.1	8.04	1.0	0.6	2.7	4.2	
				0.1%	52.7	51.8	52.2	52.2	2.8	53.74	2.69	1.0	0.79	3.5	0.54	5.1	2.69	1.0	0.0	2.2	3.6	
	20			0.0%	19.5	19.4	19.3	19.4	7.5	19.85	1.27	5.9	0.44	17.1	0.29	26.2	7.29	1.0	1.6	5.2	8.1	
				0.1%	104.5	102.7	101.9	103.0	1.4	113.86	1.27	1.1	0.44	3.2	0.29	4.9	1.27	1.1	0.2	3.8	6.7	
	35		0.0%	21.1	21.0	21.0	21.1	6.9	21.22	0.75	9.2	0.27	25.1	0.17	39.4	6.82	1.0	2.9	8.4	13.5		
			0.1%	183.1	182.1	184.6	183.3	0.8	194.12	0.75	1.1	0.27	2.9	0.17	4.5	0.75	1.1	0.2	5.7	10.8		
	50		0.0%	22.9	23.1	23.0	23.0	6.3	25.23	0.49	12.7	0.19	33.2	0.13	48.6	5.74	1.1	4.5	12.4	18.3		
			0.1%	242.0	247.1	239.9	243.0	0.6	292.93	0.49	1.2	0.19	3.1	0.13	4.6	0.49	1.2	0.8	8.7	14.6		
	75		0.0%	26.7	26.3	26.3	26.4	5.5	34.54	0.39	14.1	0.14	40.1	0.09	61.0	4.19	1.3	5.8	17.2	26.4		
			0.1%	316.5	330.3	310.2	319.0	0.5	371.80	0.39	1.2	0.14	3.3	0.09	5.0	0.39	1.2	0.9	12.3	21.5		
	100		0.0%	31.0	31.4	31.0	31.1	4.6	47.95	0.33	14.2	0.10	44.7	0.06	72.4	3.02	1.5	6.9	22.7	37.0		
			0.1%	358.0	368.8	349.8	358.9	0.4	443.40	0.33	1.2	0.10	3.9	0.06	6.3	0.33	1.2	1.4	17.2	31.6		