
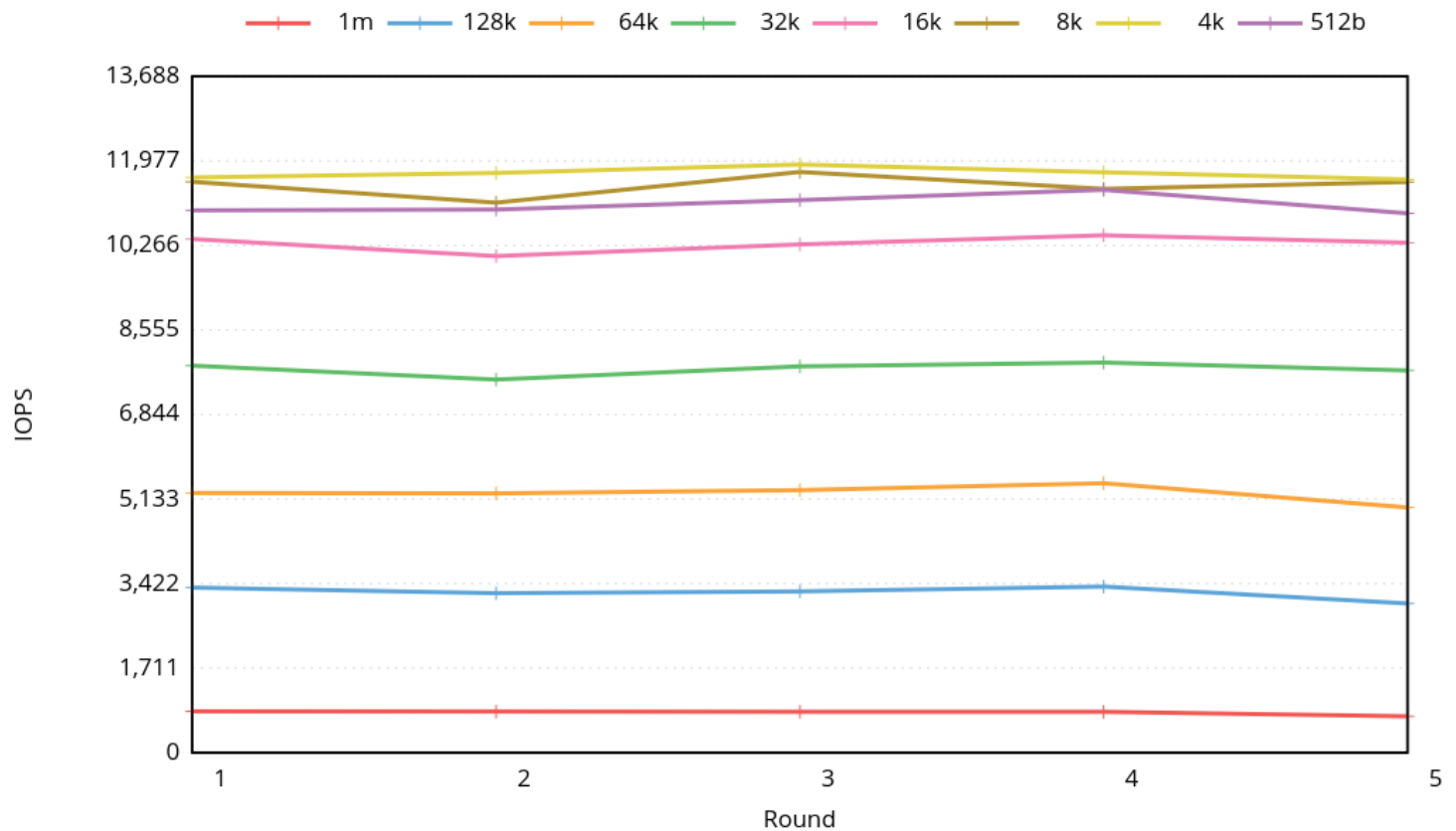

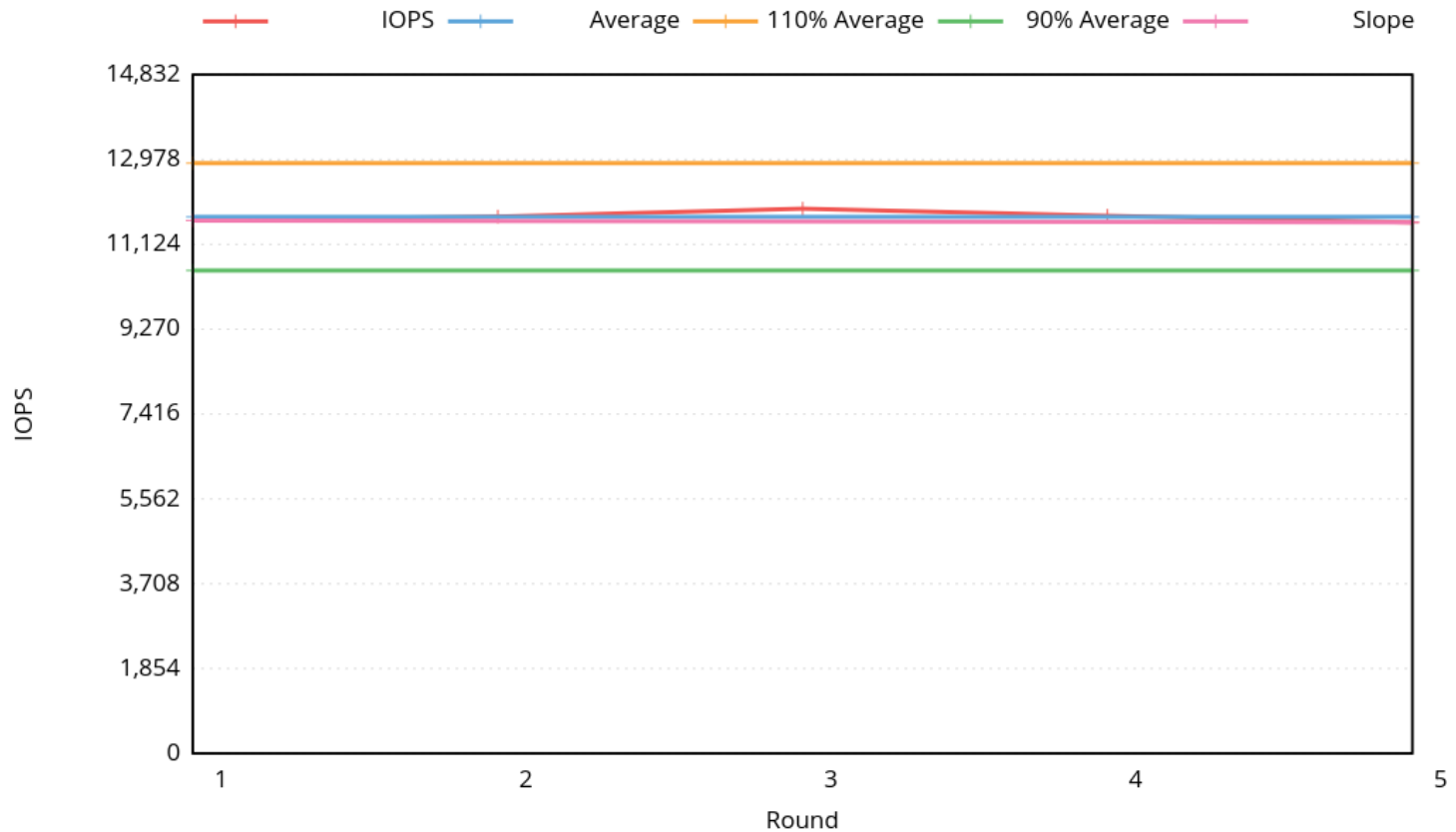


Test Run Date:			08/27/2014 21:06 UTC			Test Run Date:			08/28/2014 02:58 UTC						
IOPS Test - Report Page															
SNIA SSS TWG		Solid State Storage Performance Test Spec		IOPS - Block Size x RW Mix Matrix					Rev.		PTS-E 1.1				
									Page.		1 of 6				
Service:		Linode Cloud Hosting		Instance Type:		1gb			Tested By:		 transparency for the cloud				
Test Platform			Storage Platform			Setup Parameters			Test Parameters						
Provider		Linode		Storage Config		Not Specified		Data Pattern		RND		Data Pattern		RND	
Service		Linode Cloud Hosting		# Devices		1		AR		100%		AR & Amount		100%	
Region		newark		Devices		/dev/xvdb		AR Segments		N/A		Test Stimulus 1		IOPS Loop	
Instance ID		1gb		Device Capacities		16 GB		Pre Condition 1		SEQ 128K W		RW Mix		Outer Loop	
CPU		Intel Xeon E5-2680 v2 2.80GHz [1 cores]		Purge Methods		Zero		TOIO - TC/QD		TC 1/QD 1		Block Sizes		Inner Loop	
Memory		991 MB		Drive Model				Duration		2X Device Capacity		TOIO - TC/QD		TC 1/QD 32	
Operating System		Ubuntu 14.04 LTS		Drive Type		SSD		Pre Condition 2		IOPS Loop		Steady State		1 - 5	
Test SW				Drive Interface				TOIO - TC/QD		TC 1/QD 32		Test Stimulus 2		N/A	
Test ID		linode-0814-01		Notes				SS Rouds		1 - 5		TOIO - TC/QD		N/A	
Notes								Notes				Steady State		N/A	
IOPS Steady State Convergence Plot - All Block Sizes															




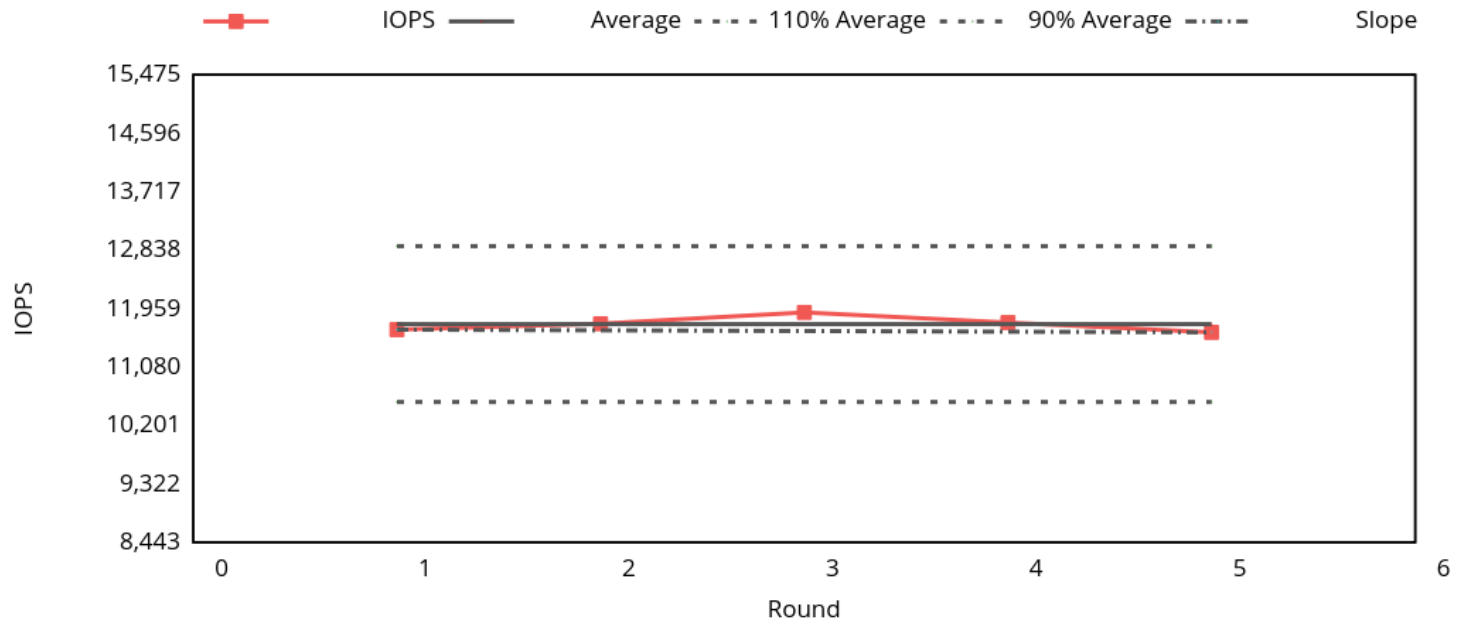
Plot A.1 - IOPS Steady State Convergence Plot - All Block Sizes

Test Run Date:			08/27/2014 21:06 UTC			Test Run Date:			08/28/2014 02:58 UTC						
IOPS Test - Report Page															
SNIA SSS TWG		Solid State Storage Performance Test Spec		IOPS - Block Size x RW Mix Matrix					Rev.		PTS-E 1.1				
									Page.		2 of 6				
Service:		Linode Cloud Hosting		Instance Type:		1gb			Tested By:						
Test Platform			Storage Platform			Setup Parameters			Test Parameters						
Provider		Linode		Storage Config		Not Specified		Data Pattern		RND		Data Pattern		RND	
Service		Linode Cloud Hosting		# Devices		1		AR		100%		AR & Amount		100%	
Region		newark		Devices		/dev/xvdb		AR Segments		N/A		Test Stimulus 1		IOPS Loop	
Instance ID		1gb		Device Capacities		16 GB		Pre Condition 1		SEQ 128K W		RW Mix		Outer Loop	
CPU		Intel Xeon E5-2680 v2 2.80GHz [1 cores]		Purge Methods		Zero		TOIO - TC/QD		TC 1/QD 1		Block Sizes		Inner Loop	
Memory		991 MB		Drive Model				Duration		2X Device Capacity		TOIO - TC/QD		TC 1/QD 32	
Operating System		Ubuntu 14.04 LTS		Drive Type		SSD		Pre Condition 2		IOPS Loop		Steady State		1 - 5	
Test SW				Drive Interface				TOIO - TC/QD		TC 1/QD 32		Test Stimulus 2		N/A	
Test ID		linode-0814-01		Notes				SS Rouds		1 - 5		TOIO - TC/QD		N/A	
Notes								Notes				Steady State		N/A	
IOPS Steady State Measurement Window															



Plot A.2 - IOPS Steady State Measurement Window


Test Run Date:			08/27/2014 21:06 UTC			Test Run Date:			08/28/2014 02:58 UTC			
IOPS Test - Report Page												
SNIA SSS TWG		Solid State Storage Performance Test Spec		IOPS - Block Size x RW Mix Matrix					Rev.		PTS-E 1.1	
									Page.		3 of 6	
Service:		Linode Cloud Hosting	Instance Type:	1gb				Tested By:				
Test Platform			Storage Platform		Setup Parameters			Test Parameters				
Provider		Linode	Storage Config	Not Specified	Data Pattern		RND	Data Pattern		RND		
Service		Linode Cloud Hosting	# Devices	1	AR		100%	AR & Amount		100%		
Region		newark	Devices	/dev/xvdb	AR Segments		N/A	Test Stimulus 1		IOPS Loop		
Instance ID		1gb	Device Capacities	16 GB	Pre Condition 1		SEQ 128K W	RW Mix		Outer Loop		
CPU		Intel Xeon E5-2680 v2 2.80GHz [1 cores]	Purge Methods	Zero	TOIO - TC/QD		TC 1/QD 1	Block Sizes		Inner Loop		
Memory		991 MB	Drive Model		Duration		2X Device Capacity	TOIO - TC/QD		TC 1/QD 32		
Operating System		Ubuntu 14.04 LTS	Drive Type	SSD	Pre Condition 2		IOPS Loop	Steady State		1 - 5		
Test SW			Drive Interface		TOIO - TC/QD		TC 1/QD 32	Test Stimulus 2		N/A		
Test ID		linode-0814-01	Notes		SS Rouds		1 - 5	TOIO - TC/QD		N/A		
Notes					Notes			Steady State		N/A		
IOPS Steady State Measurement Window - RND/4KiB												



#### Steady State Determination Data


Average IOPS:		11726
Allowed Maximum Data Excursion:	2345.36	Measured Maximum Data Excursion: 300
Allowed Maximum Slope Excursion:	1172.68	Measured Maximum Slope Excursion: 25.6
Least Squares Linear Fit Formula:		-6.4 * R + 11746

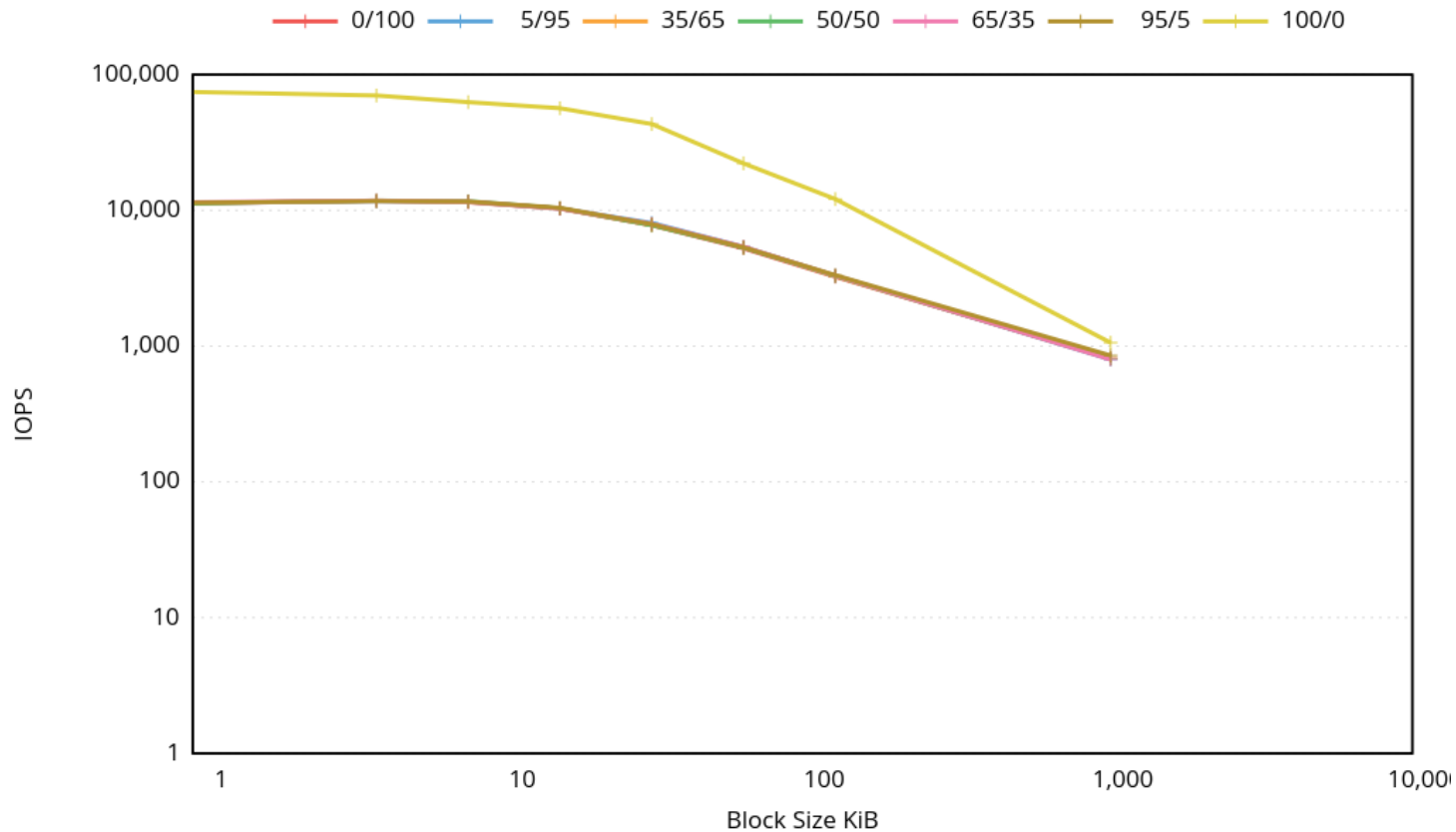
Plot A.3 - IOPS Steady State Measurement Window - RND/4KiB

Test Run Date:			08/27/2014 21:06 UTC			Test Run Date:			08/28/2014 02:58 UTC		
IOPS Test - Report Page											
SNIA SSS TWG		Solid State Storage Performance Test Spec		IOPS - Block Size x RW Mix Matrix				Rev.		PTS-E 1.1	
								Page.		4 of 6	
Service:		Linode Cloud Hosting	Instance Type:	1gb			Tested By:				
Test Platform			Storage Platform		Setup Parameters			Test Parameters			
Provider		Linode	Storage Config	Not Specified	Data Pattern		RND	Data Pattern		RND	
Service		Linode Cloud Hosting	# Devices	1	AR		100%	AR & Amount		100%	
Region		newark	Devices	/dev/xvdb	AR Segments		N/A	Test Stimulus 1		IOPS Loop	
Instance ID		1gb	Device Capacities	16 GB	Pre Condition 1		SEQ 128K W	RW Mix		Outer Loop	
CPU		Intel Xeon E5-2680 v2 2.80GHz [1 cores]	Purge Methods	Zero	TOIO - TC/QD		TC 1/QD 1	Block Sizes		Inner Loop	
Memory		991 MB	Drive Model		Duration		2X Device Capacity	TOIO - TC/QD		TC 1/QD 32	
Operating System		Ubuntu 14.04 LTS	Drive Type	SSD	Pre Condition 2		IOPS Loop	Steady State		1 - 5	
Test SW			Drive Interface		TOIO - TC/QD		TC 1/QD 32	Test Stimulus 2		N/A	
Test ID		linode-0814-01	Notes		SS Rouds		1 - 5	TOIO - TC/QD		N/A	
Notes					Notes			Steady State		N/A	
IOPS - All RW Mix & BS - Tabular Data											


Block Size (KiB)	Read / Write Mix %						
	0/100	5/95	35/65	50/50	65/35	95/5	100/0
512b	11093	11124.8	11030.8	11063.8	11357.6	11233.6	76888.2
4k	11726.8	11715.2	11802	11790.4	11781.8	11717	70105.8
8k	11482	11536.8	11543.8	11667.8	11583.8	11623.2	62755.4
16k	10306.2	10319.4	10343.8	10364.6	10301.4	10431.2	56564.2
32k	7768.2	8070.2	7791.8	7775.4	7964.4	7910.2	43290
64k	5247.4	5387	5352	5314.2	5394.6	5332.6	22173.6
128k	3243.2	3290	3267.6	3292.4	3309.2	3331.6	12111.8
1m	812.8	798.6	809.6	807.2	798.6	854	1059.8

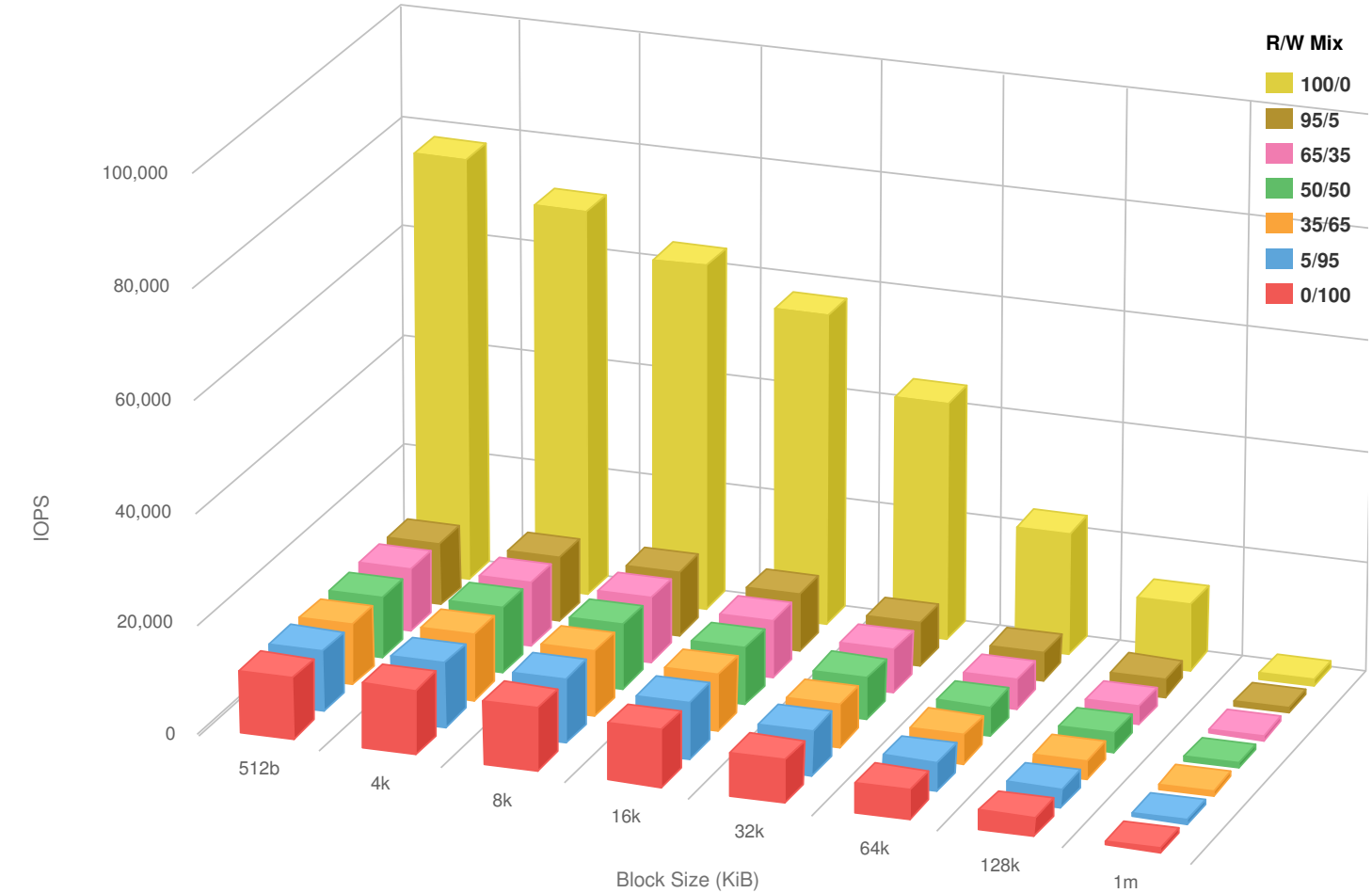
Plot A.4 - IOPS - All RW Mix & BS - Tabular Data

Test Run Date:			08/27/2014 21:06 UTC			Test Run Date:			08/28/2014 02:58 UTC						
IOPS Test - Report Page															
SNIA SSS TWG		Solid State Storage Performance Test Spec		IOPS - Block Size x RW Mix Matrix					Rev.		PTS-E 1.1				
									Page.		5 of 6				
Service:		Linode Cloud Hosting		Instance Type:		1gb			Tested By:						
Test Platform			Storage Platform			Setup Parameters			Test Parameters						
Provider		Linode		Storage Config		Not Specified		Data Pattern		RND		Data Pattern		RND	
Service		Linode Cloud Hosting		# Devices		1		AR		100%		AR & Amount		100%	
Region		newark		Devices		/dev/xvdb		AR Segments		N/A		Test Stimulus 1		IOPS Loop	
Instance ID		1gb		Device Capacities		16 GB		Pre Condition 1		SEQ 128K W		RW Mix		Outer Loop	
CPU		Intel Xeon E5-2680 v2 2.80GHz [1 cores]		Purge Methods		Zero		TOIO - TC/QD		TC 1/QD 1		Block Sizes		Inner Loop	
Memory		991 MB		Drive Model				Duration		2X Device Capacity		TOIO - TC/QD		TC 1/QD 32	
Operating System		Ubuntu 14.04 LTS		Drive Type		SSD		Pre Condition 2		IOPS Loop		Steady State		1 - 5	
Test SW				Drive Interface				TOIO - TC/QD		TC 1/QD 32		Test Stimulus 2		N/A	
Test ID		linode-0814-01		Notes				SS Rouds		1 - 5		TOIO - TC/QD		N/A	
Notes								Notes				Steady State		N/A	
IOPS - All RW Mix & BS - 2D Plot															




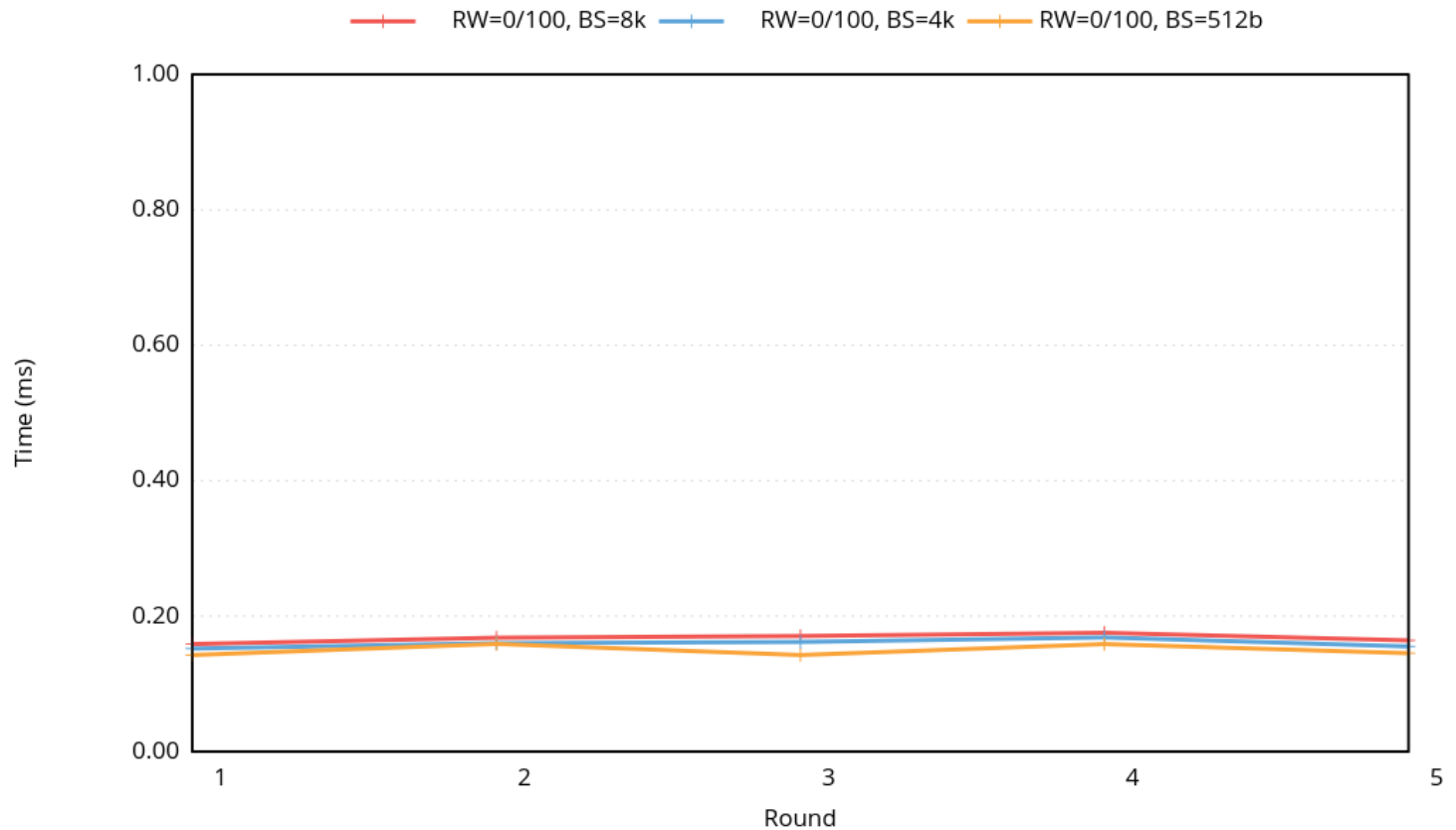
Plot A.5 - IOPS - All RW Mix & BS - 2D Plot

Test Run Date:			08/27/2014 21:06 UTC			Test Run Date:			08/28/2014 02:58 UTC			
IOPS Test - Report Page												
SNIA SSS TWG		Solid State Storage Performance Test Spec		IOPS - Block Size x RW Mix Matrix					Rev.		PTS-E 1.1	
									Page.		6 of 6	
Service:		Linode Cloud Hosting	Instance Type:	1gb				Tested By:				
Test Platform			Storage Platform		Setup Parameters			Test Parameters				
Provider		Linode	Storage Config	Not Specified	Data Pattern		RND	Data Pattern		RND		
Service		Linode Cloud Hosting	# Devices	1	AR		100%	AR & Amount		100%		
Region		newark	Devices	/dev/xvdb	AR Segments		N/A	Test Stimulus 1		IOPS Loop		
Instance ID		1gb	Device Capacities	16 GB	Pre Condition 1		SEQ 128K W	RW Mix		Outer Loop		
CPU		Intel Xeon E5-2680 v2 2.80GHz [1 cores]	Purge Methods	Zero	TOIO - TC/QD		TC 1/QD 1	Block Sizes		Inner Loop		
Memory		991 MB	Drive Model		Duration		2X Device Capacity	TOIO - TC/QD		TC 1/QD 32		
Operating System		Ubuntu 14.04 LTS	Drive Type	SSD	Pre Condition 2		IOPS Loop	Steady State		1 - 5		
Test SW			Drive Interface		TOIO - TC/QD		TC 1/QD 32	Test Stimulus 2		N/A		
Test ID		linode-0814-01	Notes		SS Rouds		1 - 5	TOIO - TC/QD		N/A		
Notes					Notes			Steady State		N/A		
IOPS -All RW Mix & BS - 3D Columns												




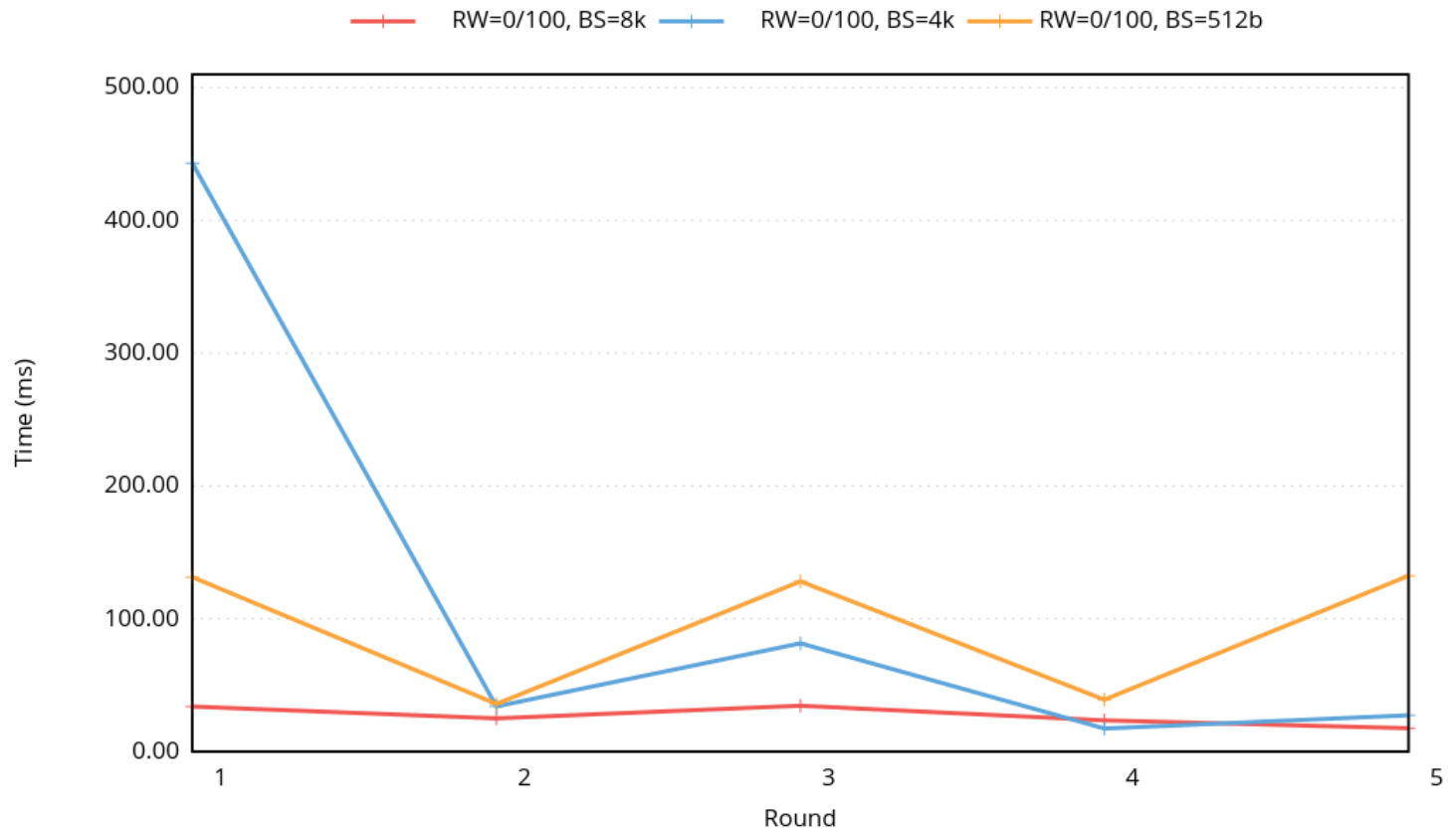
Plot A.6 - IOPS -All RW Mix & BS - 3D Columns

Test Run Date:			08/27/2014 21:06 UTC			Test Run Date:			08/28/2014 02:58 UTC		
LATENCY Test - Report Page											
SNIA SSS TWG		Solid State Storage Performance Test Spec		LATENCY - Response Time OIO=1				Rev.		PTS-E 1.1	
								Page.		1 of 6	
Service:		Linode Cloud Hosting	Instance Type:	1gb			Tested By:		 transparency for the cloud		
Test Platform			Storage Platform		Setup Parameters			Test Parameters			
Provider		Linode	Storage Config	Not Specified	Data Pattern		RND	Data Pattern		RND	
Service		Linode Cloud Hosting	# Devices	1	AR		100%	AR & Amount		100%	
Region		newark	Devices	/dev/xvdb	AR Segments		N/A	Test Stimulus 1		LAT Loop	
Instance ID		1gb	Device Capacities	16 GB	Pre Condition 1		SEQ 128K W	RW Mix		Outer Loop	
CPU		Intel Xeon E5-2680 v2 2.80GHz [1 cores]	Purge Methods	Zero	TOIO - TC/QD		TC 1/QD 1	Block Sizes		Inner Loop	
Memory		991 MB	Drive Model		Duration		2X Device Capacity	TOIO - TC/QD		TC 1/QD 1	
Operating System		Ubuntu 14.04 LTS	Drive Type	SSD	Pre Condition 2		LAT Loop	Steady State		1 - 5	
Test SW			Drive Interface		TOIO - TC/QD		TC 1/QD 1	Histogram		N/A	
Test ID		linode-0814-01	Notes		SS Rouds		1 - 5	TOIO - TC/QD		N/A	
Notes					Notes			Note			
Steady State Convergence Plot - Average Latency - 100% Writes											




Plot A.7 - Steady State Convergence Plot - Average Latency - 100% Writes

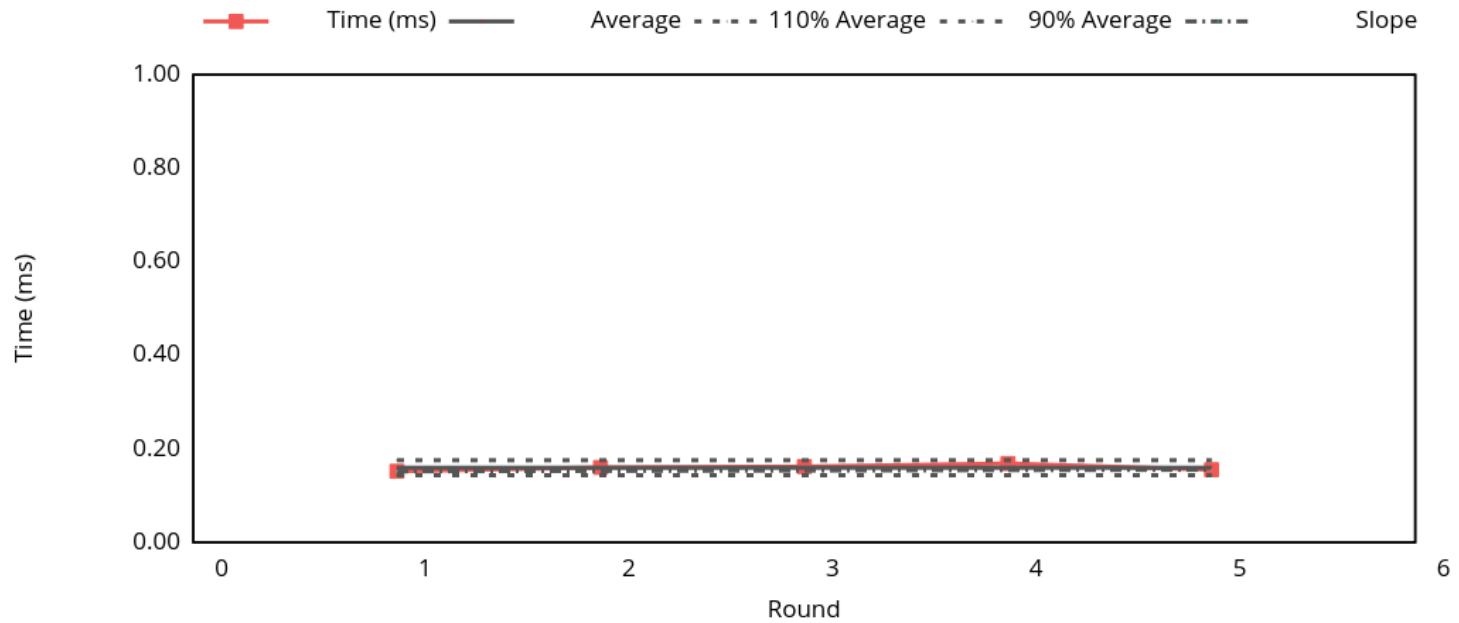
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LATENCY Test - Report Page												
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									Page.		2 of 6	
Service:		Linode Cloud Hosting	Instance Type:	1gb				Tested By:				
Test Platform			Storage Platform			Setup Parameters			Test Parameters			
Provider		Linode	Storage Config	Not Specified		Data Pattern		RND	Data Pattern		RND	
Service		Linode Cloud Hosting	# Devices	1		AR		100%	AR & Amount		100%	
Region		newark	Devices	/dev/xvdb		AR Segments		N/A	Test Stimulus 1		LAT Loop	
Instance ID		1gb	Device Capacities	16 GB		Pre Condition 1		SEQ 128K W	RW Mix		Outer Loop	
CPU		Intel Xeon E5-2680 v2 2.80GHz [1 cores]	Purge Methods	Zero		TOIO - TC/QD		TC 1/QD 1	Block Sizes		Inner Loop	
Memory		991 MB	Drive Model			Duration		2X Device Capacity	TOIO - TC/QD		TC 1/QD 1	
Operating System		Ubuntu 14.04 LTS	Drive Type		SSD	Pre Condition 2		LAT Loop	Steady State		1 - 5	
Test SW			Drive Interface			TOIO - TC/QD		TC 1/QD 1	Histogram		N/A	
Test ID		linode-0814-01	Notes			SS Rouds		1 - 5	TOIO - TC/QD		N/A	
Notes						Notes			Note			
Steady State Convergence Plot - Maximum Latency - 100% Writes												




Plot A.8 - Steady State Convergence Plot - Maximum Latency - 100% Writes



Test Run Date:			08/27/2014 21:06 UTC			Test Run Date:			08/28/2014 02:58 UTC					
LATENCY Test - Report Page														
SNIA SSS TWG		Solid State Storage Performance Test Spec		LATENCY - Response Time OIO=1					Rev.		PTS-E 1.1			
									Page.		3 of 6			
Service:		Linode Cloud Hosting		Instance Type:		1gb			Tested By:		 transparency for the cloud			
Test Platform			Storage Platform			Setup Parameters			Test Parameters					
Provider		Linode		Storage Config		Not Specified		Data Pattern		RND		Data Pattern	RND	
Service		Linode Cloud Hosting		# Devices		1		AR		100%		AR & Amount		100%
Region		newark		Devices		/dev/xvdb		AR Segments		N/A		Test Stimulus 1		LAT Loop
Instance ID		1gb		Device Capacities		16 GB		Pre Condition 1		SEQ 128K W		RW Mix		Outer Loop
CPU		Intel Xeon E5-2680 v2 2.80GHz [1 cores]		Purge Methods		Zero		TOIO - TC/QD		TC 1/QD 1		Block Sizes		Inner Loop
Memory		991 MB		Drive Model				Duration		2X Device Capacity		TOIO - TC/QD		TC 1/QD 1
Operating System		Ubuntu 14.04 LTS		Drive Type		SSD		Pre Condition 2		LAT Loop		Steady State		1 - 5
Test SW				Drive Interface				TOIO - TC/QD		TC 1/QD 1		Histogram		N/A
Test ID		linode-0814-01		Notes				SS Rouds		1 - 5		TOIO - TC/QD		N/A
Notes								Notes				Note		
Steady State Measurement Window - RND/4KiB														




Plot A.9 - Steady State Measurement Window - RND/4KiB

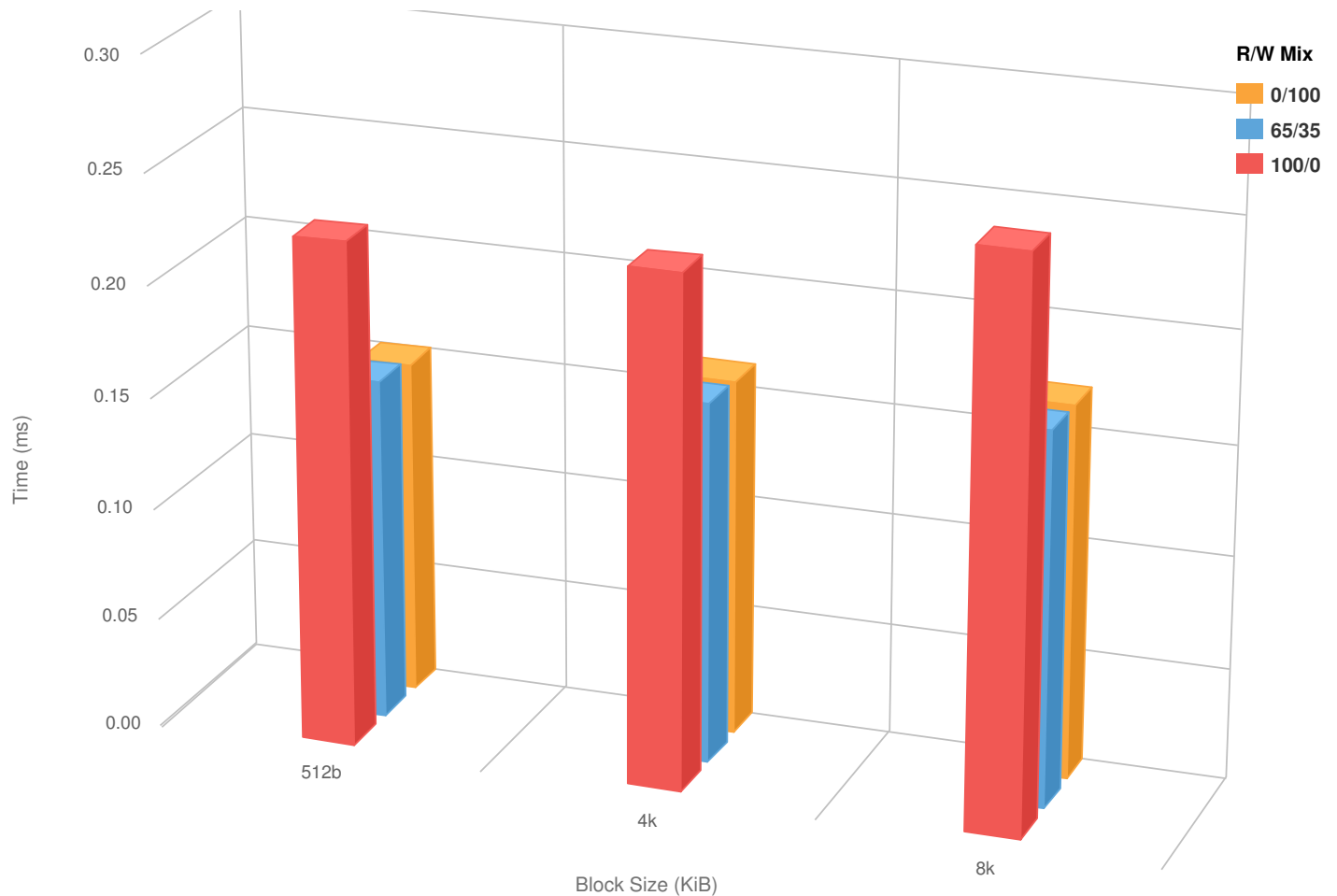
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LATENCY Test - Report Page												
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									Page.		4 of 6	
Service:		Linode Cloud Hosting	Instance Type:	1gb			Tested By:					
Test Platform			Storage Platform		Setup Parameters			Test Parameters				
Provider		Linode	Storage Config	Not Specified	Data Pattern		RND	Data Pattern		RND		
Service		Linode Cloud Hosting	# Devices	1	AR		100%	AR & Amount		100%		
Region		newark	Devices	/dev/xvdb	AR Segments		N/A	Test Stimulus 1		LAT Loop		
Instance ID		1gb	Device Capacities	16 GB	Pre Condition 1		SEQ 128K W	RW Mix		Outer Loop		
CPU		Intel Xeon E5-2680 v2 2.80GHz [1 cores]	Purge Methods	Zero	TOIO - TC/QD		TC 1/QD 1	Block Sizes		Inner Loop		
Memory		991 MB	Drive Model		Duration		2X Device Capacity	TOIO - TC/QD		TC 1/QD 1		
Operating System		Ubuntu 14.04 LTS	Drive Type	SSD	Pre Condition 2		LAT Loop	Steady State		1 - 5		
Test SW			Drive Interface		TOIO - TC/QD		TC 1/QD 1	Histogram		N/A		
Test ID		linode-0814-01	Notes		SS Rouds		1 - 5	TOIO - TC/QD		N/A		
Notes					Notes			Note				
Average and Maximum Response Time - All RW Mix & BS - Tabular Data												

Average Response Time (ms)			
Block Size (KiB)	Read / Write Mix %		
	0/100	65/35	100/0
512b	0.149724	0.153186	0.225818
4k	0.159608	0.161386	0.22898
8k	0.167504	0.16703	0.255142


Maximum Response Time (ms)			
Block Size (KiB)	Read / Write Mix %		
	0/100	65/35	100/0
512b	93.4	53.0466	15.8726
4k	120.6748	56.3558	23.6748
8k	26.9242	23.1738	27.811

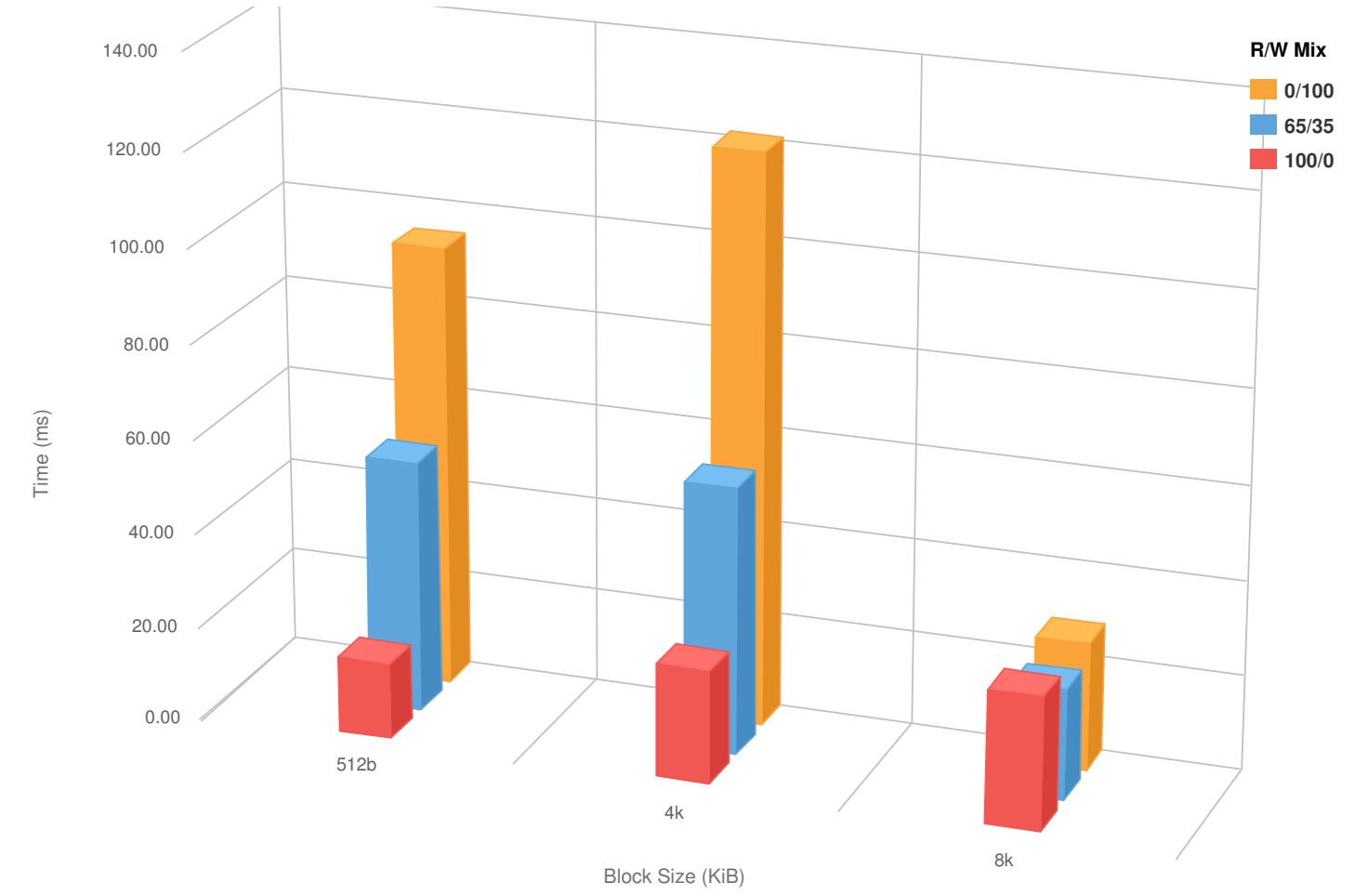
Plot A.10 - Average and Maximum Response Time - All RW Mix & BS - Tabular Data

Test Run Date:			08/27/2014 21:06 UTC			Test Run Date:			08/28/2014 02:58 UTC		
LATENCY Test - Report Page											
SNIA SSS TWG		Solid State Storage Performance Test Spec		LATENCY - Response Time OIO=1				Rev.		PTS-E 1.1	
								Page.		5 of 6	
Service:		Linode Cloud Hosting	Instance Type:	1gb			Tested By:		 transparency for the cloud		
Test Platform			Storage Platform		Setup Parameters			Test Parameters			
Provider		Linode	Storage Config	Not Specified	Data Pattern		RND	Data Pattern		RND	
Service		Linode Cloud Hosting	# Devices	1	AR		100%	AR & Amount		100%	
Region		newark	Devices	/dev/xvdb	AR Segments		N/A	Test Stimulus 1		LAT Loop	
Instance ID		1gb	Device Capacities	16 GB	Pre Condition 1		SEQ 128K W	RW Mix		Outer Loop	
CPU		Intel Xeon E5-2680 v2 2.80GHz [1 cores]	Purge Methods	Zero	TOIO - TC/QD		TC 1/QD 1	Block Sizes		Inner Loop	
Memory		991 MB	Drive Model		Duration		2X Device Capacity	TOIO - TC/QD		TC 1/QD 1	
Operating System		Ubuntu 14.04 LTS	Drive Type		SSD		Pre Condition 2		LAT Loop	Steady State	
Test SW		Drive Interface		TOIO - TC/QD		TC 1/QD 1		Histogram		N/A	
Test ID		linode-0814-01		Notes		SS Rouds		1 - 5		TOIO - TC/QD	
Notes				Notes				Note			
Average Latency vs. BS and R/W Mix - 3D Plot											




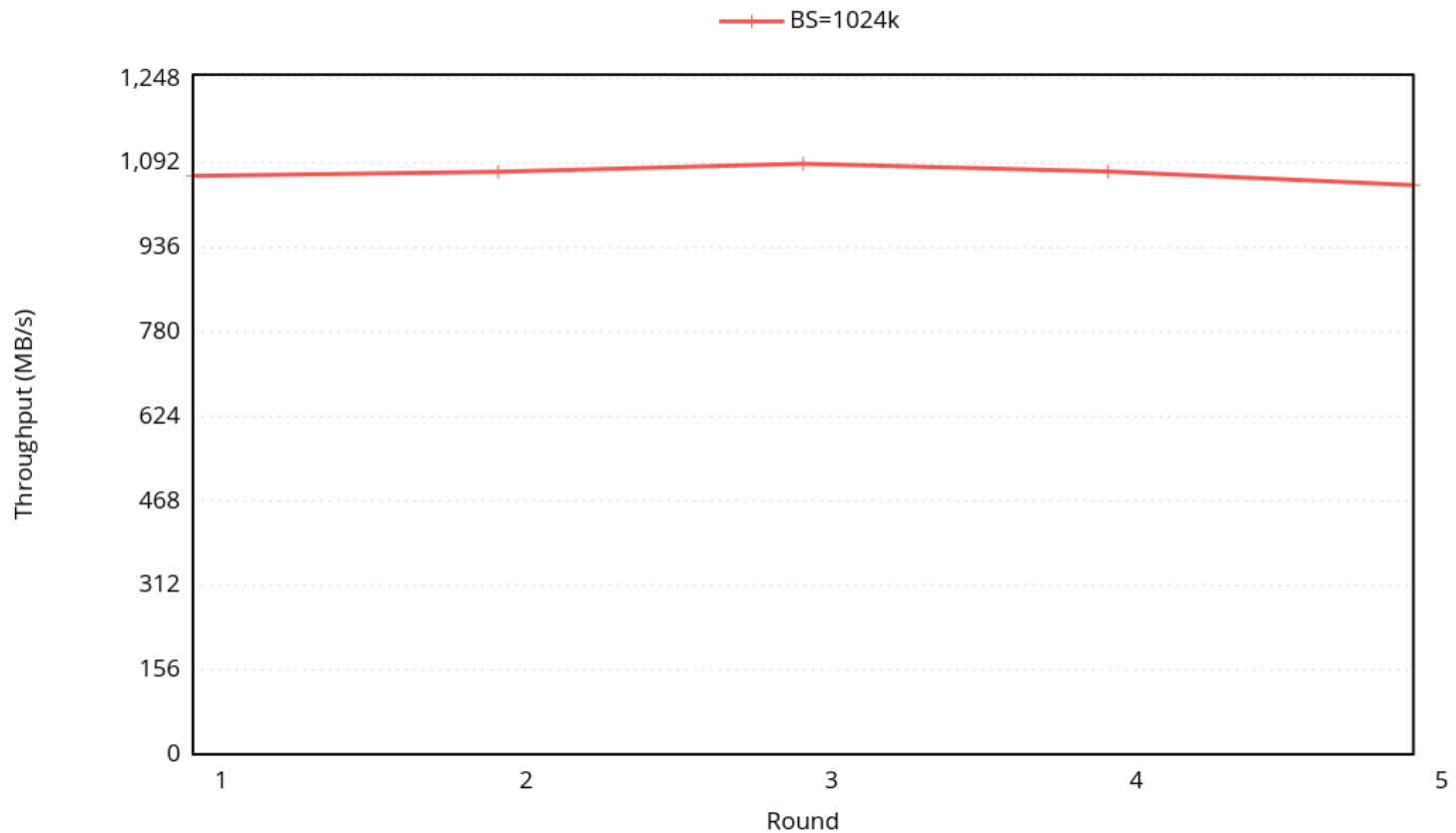
Plot A.11 - Average Latency vs. BS and R/W Mix - 3D Plot

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LATENCY Test - Report Page												
SNIA SSS TWG		Solid State Storage Performance Test Spec		LAT - 0.5, 4, 8KiB x R, 65:35, W					Rev.		PTS-E 1.1	
									Page.		6 of 6	
Service:		Linode Cloud Hosting	Instance Type:	1gb				Tested By:				
Test Platform			Storage Platform			Setup Parameters			Test Parameters			
Provider		Linode	Storage Config		Not Specified	Data Pattern		RND	Data Pattern		RND	
Service		Linode Cloud Hosting	# Devices		1	AR		100%	AR & Amount		100%	
Region		newark	Devices		/dev/xvdb	AR Segments		N/A	Test Stimulus 1		LAT Loop	
Instance ID		1gb	Device Capacities		16 GB	Pre Condition 1		SEQ 128K W	RW Mix		Outer Loop	
CPU		Intel Xeon E5-2680 v2 2.80GHz [1 cores]	Purge Methods		Zero	TOIO - TC/QD		TC 1/QD 1	Block Sizes		Inner Loop	
Memory		991 MB	Drive Model			Duration		2X Device Capacity	TOIO - TC/QD		TC 1/QD 1	
Operating System		Ubuntu 14.04 LTS	Drive Type		SSD	Pre Condition 2		LAT Loop	Steady State		1 - 5	
Test SW			Drive Interface			TOIO - TC/QD		TC 1/QD 1	Histogram		N/A	
Test ID		linode-0814-01	Notes			SS Rouds		1 - 5	TOIO - TC/QD		N/A	
Notes						Notes			Note			
Maximum Latency vs. BS and R/W Mix - 3D Plot												




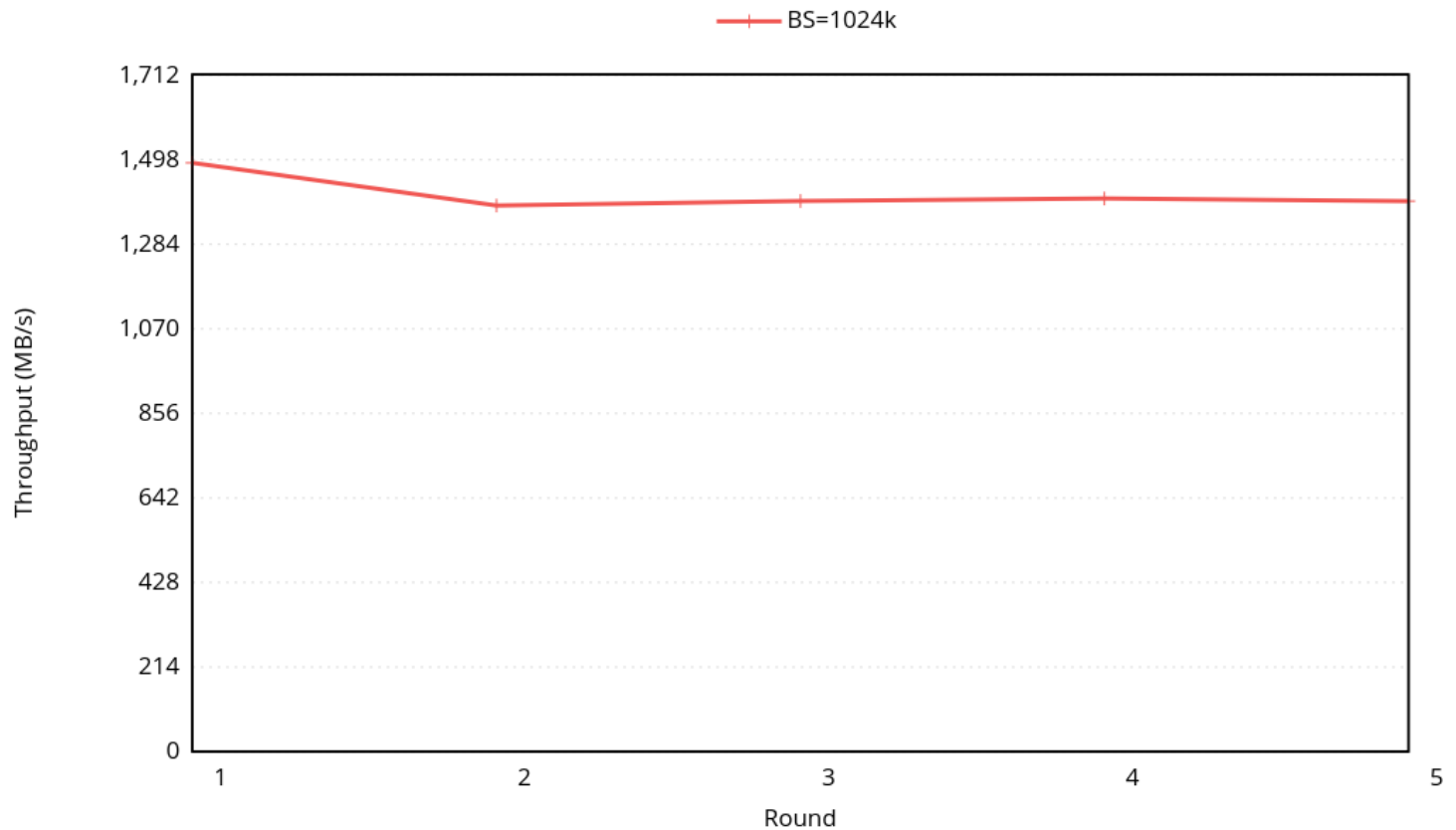
Plot A.12 - Maximum Latency vs. BS and R/W Mix - 3D Plot

Test Run Date:			08/27/2014 21:06 UTC			Test Run Date:			08/28/2014 02:58 UTC			
THROUGHPUT Test - Report Page												
SNIA SSS TWG		Solid State Storage Performance Test Spec		TP - SEQ 1024KiB & 128KiB					Rev.		PTS-E 1.1	
									Page.		1 of 10	
Service:		Linode Cloud Hosting	Instance Type:	1gb				Tested By:		 transparency for the cloud		
Test Platform			Storage Platform		Setup Parameters			Test Parameters				
Provider		Linode	Storage Config	Not Specified	Data Pattern		RND	Data Pattern		RND		
Service		Linode Cloud Hosting	# Devices	1	AR		100%	AR & Amount		100%		
Region		newark	Devices	/dev/xvdb	AR Segments		N/A	Test Stimulus 1		SEQ 1024KiB		
Instance ID		1gb	Device Capacities	16 GB	Pre Condition 1		SEQ 128K W	RW Mix		100:0 / 0:100		
CPU		Intel Xeon E5-2680 v2 2.80GHz [1 cores]	Purge Methods	None	TOIO - TC/QD		TC 1/QD 1	Block Sizes		SEQ 1024KiB		
Memory		991 MB	Drive Model		Duration		2X Device Capacity	TOIO - TC/QD		TC 1/QD 32		
Operating System		Ubuntu 14.04 LTS	Drive Type		SSD		Pre Condition 2		SEQ 128K W		Steady State	1 - 5
Test SW		Drive Interface		TOIO - TC/QD		TC 1/QD 32		Test Stimulus 2		SEQ 128KiB		
Test ID		linode-0814-01		Notes		SS Rouds		1 - 5		TOIO - TC/QD		TC 1/QD 32
Notes				Notes				Steady State		1 - 5		
Throughput Test - SS Convergence - Write 1024KiB												




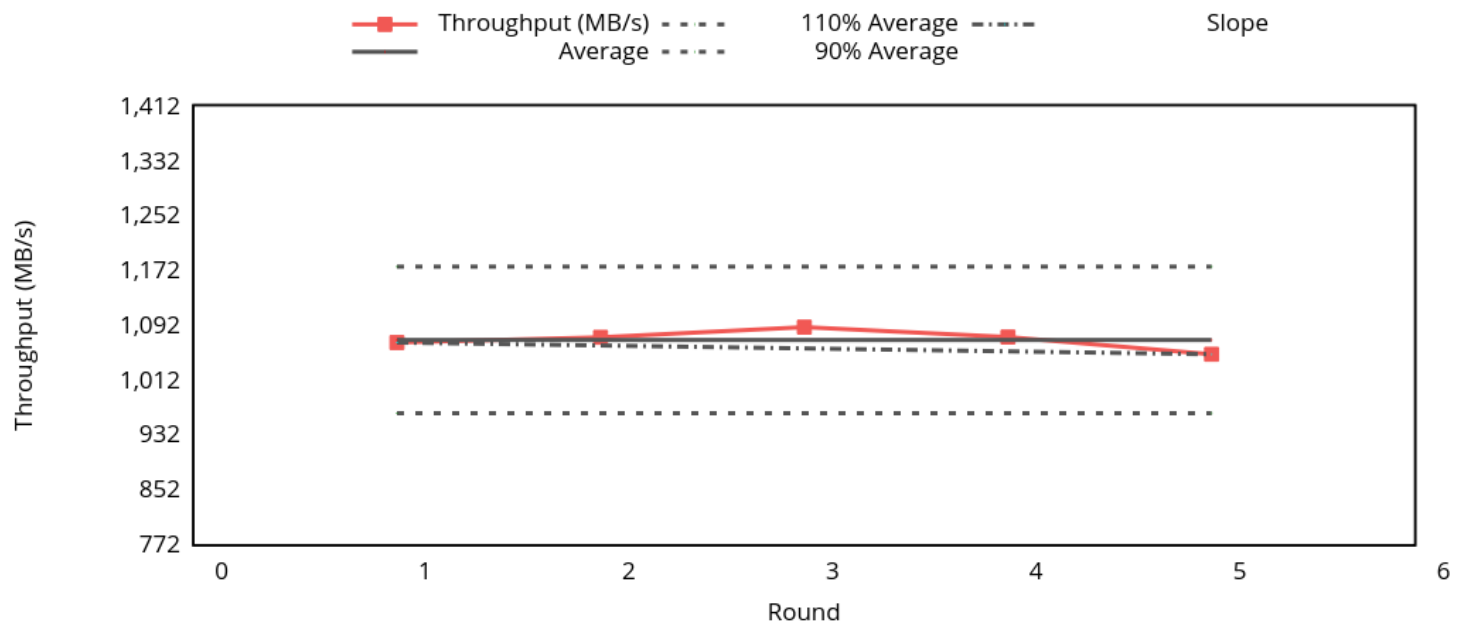
Plot A.13 - Throughput Test - SS Convergence - Write 1024KiB

Test Run Date:			08/27/2014 21:06 UTC			Test Run Date:			08/28/2014 02:58 UTC			
THROUGHPUT Test - Report Page												
SNIA SSS TWG		Solid State Storage Performance Test Spec		TP - SEQ 1024KiB					Rev.		PTS-E 1.1	
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Service:		Linode Cloud Hosting	Instance Type:	1gb				Tested By:				
Test Platform			Storage Platform		Setup Parameters			Test Parameters				
Provider		Linode	Storage Config	Not Specified	Data Pattern		RND	Data Pattern		RND		
Service		Linode Cloud Hosting	# Devices	1	AR		100%	AR & Amount		100%		
Region		newark	Devices	/dev/xvdb	AR Segments		N/A	Test Stimulus 1		SEQ 1024KiB		
Instance ID		1gb	Device Capacities	16 GB	Pre Condition 1		SEQ 128K W	RW Mix		100:0 / 0:100		
CPU		Intel Xeon E5-2680 v2 2.80GHz [1 cores]	Purge Methods	None	TOIO - TC/QD		TC 1/QD 1	Block Sizes		SEQ 1024KiB		
Memory		991 MB	Drive Model		Duration		2X Device Capacity	TOIO - TC/QD		TC 1/QD 32		
Operating System		Ubuntu 14.04 LTS	Drive Type		SSD		Pre Condition 2		SEQ 128K W	Steady State		
Test SW		Drive Interface		TOIO - TC/QD		TC 1/QD 32	Test Stimulus 2		SEQ 128KiB			
Test ID		linode-0814-01		Notes		SS Rouds		1 - 5	TOIO - TC/QD		TC 1/QD 32	
Notes				Notes				Steady State		1 - 5		
Throughput Test - SS Convergence - Read 1024 KiB												



Plot A.14 - Throughput Test - SS Convergence - Read 1024 KiB


Test Run Date:			08/27/2014 21:06 UTC			Test Run Date:			08/28/2014 02:58 UTC			
THROUGHPUT Test - Report Page												
SNIA SSS TWG		Solid State Storage Performance Test Spec		TP - SEQ 1024KiB					Rev.		PTS-E 1.1	
									Page.		3 of 10	
Service:		Linode Cloud Hosting	Instance Type:	1gb				Tested By:				
Test Platform			Storage Platform		Setup Parameters			Test Parameters				
Provider		Linode	Storage Config	Not Specified	Data Pattern		RND	Data Pattern		RND		
Service		Linode Cloud Hosting	# Devices	1	AR		100%	AR & Amount		100%		
Region		newark	Devices	/dev/xvdb	AR Segments		N/A	Test Stimulus 1		SEQ 1024KiB		
Instance ID		1gb	Device Capacities	16 GB	Pre Condition 1		SEQ 128K W	RW Mix		100:0 / 0:100		
CPU		Intel Xeon E5-2680 v2 2.80GHz [1 cores]	Purge Methods	None	TOIO - TC/QD		TC 1/QD 1	Block Sizes		SEQ 1024KiB		
Memory		991 MB	Drive Model		Duration		2X Device Capacity	TOIO - TC/QD		TC 1/QD 32		
Operating System		Ubuntu 14.04 LTS	Drive Type		SSD		Pre Condition 2		SEQ 128K W		Steady State	1 - 5
Test SW		Drive Interface		TOIO - TC/QD		TC 1/QD 32		Test Stimulus 2		SEQ 128KiB		
Test ID		linode-0814-01		Notes		SS Rouds		1 - 5		TOIO - TC/QD		TC 1/QD 32
Notes				Notes				Steady State		1 - 5		
Steady State Measurement Window - SEQ/1024 KiB												



#### Steady State Determination Data

Average Throughput:		1072
Allowed Maximum Data Excursion:	214.476	Measured Maximum Data Excursion: 39.48
Allowed Maximum Slope Excursion:	107.238	Measured Maximum Slope Excursion: 13.5
Least Squares Linear Fit Formula:	$-3.366 * R + 1082.478$	


Plot A.15 - Steady State Measurement Window - SEQ/1024 KiB

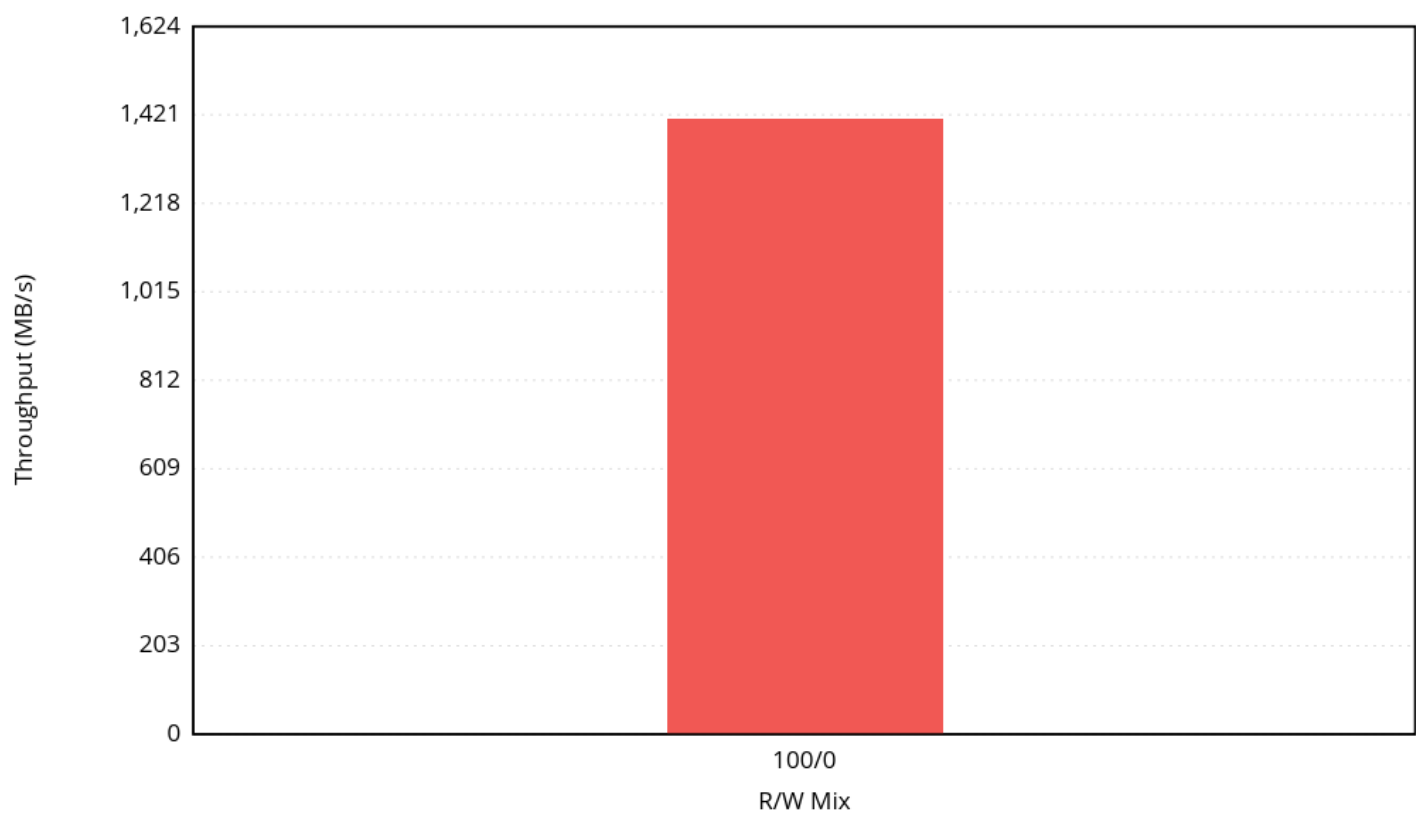
Test Run Date:			08/27/2014 21:06 UTC			Test Run Date:			08/28/2014 02:58 UTC			
THROUGHPUT Test - Report Page												
SNIA SSS TWG		Solid State Storage Performance Test Spec		TP - SEQ 1024KiB					Rev.		PTS-E 1.1	
									Page.		4 of 10	
Service:		Linode Cloud Hosting	Instance Type:	1gb				Tested By:				
Test Platform			Storage Platform		Setup Parameters			Test Parameters				
Provider		Linode	Storage Config	Not Specified	Data Pattern		RND	Data Pattern		RND		
Service		Linode Cloud Hosting	# Devices	1	AR		100%	AR & Amount		100%		
Region		newark	Devices	/dev/xvdb	AR Segments		N/A	Test Stimulus 1		SEQ 1024KiB		
Instance ID		1gb	Device Capacities	16 GB	Pre Condition 1		SEQ 128K W	RW Mix		100:0 / 0:100		
CPU		Intel Xeon E5-2680 v2 2.80GHz [1 cores]	Purge Methods	None	TOIO - TC/QD		TC 1/QD 1	Block Sizes		SEQ 1024KiB		
Memory		991 MB	Drive Model		Duration		2X Device Capacity	TOIO - TC/QD		TC 1/QD 32		
Operating System		Ubuntu 14.04 LTS	Drive Type		SSD		Pre Condition 2		SEQ 128K W	Steady State		
Test SW		Drive Interface		TOIO - TC/QD		TC 1/QD 32	Test Stimulus 2		SEQ 128KiB			
Test ID		linode-0814-01		Notes		SS Rouds		1 - 5	TOIO - TC/QD		TC 1/QD 32	
Notes				Notes				Steady State		1 - 5		
Throughput - All RW Mix & BS - Tabular Data 1024KiB												

Block Size (KiB)	Read / Write Mix %	
	0/100	100/0
1024k	1072.38	1411.83


Plot A.16 - Throughput - All RW Mix & BS - Tabular Data 1024KiB

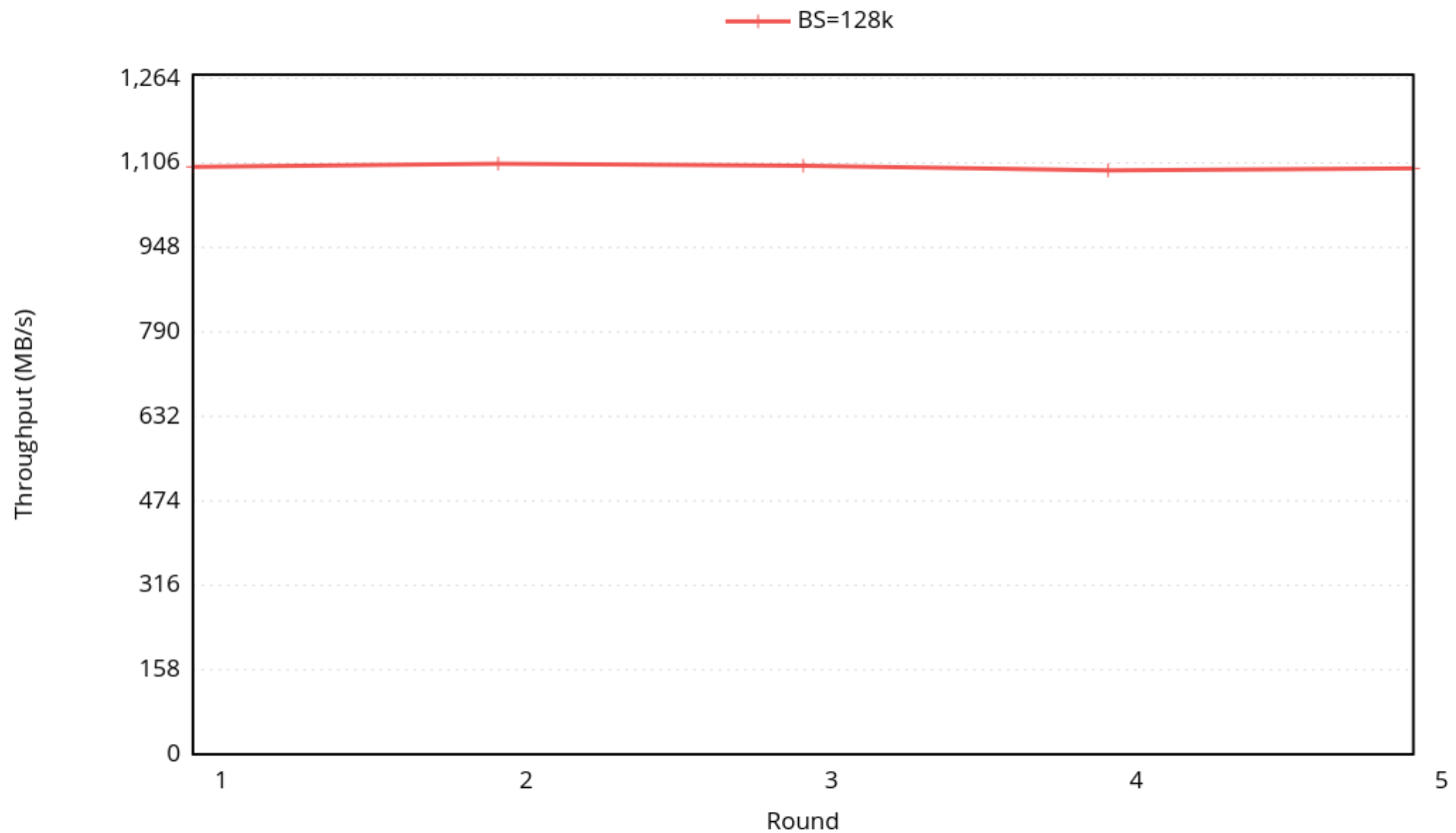


Test Run Date:			08/27/2014 21:06 UTC			Test Run Date:			08/28/2014 02:58 UTC			
THROUGHPUT Test - Report Page												
SNIA SSS TWG		Solid State Storage Performance Test Spec		TP - SEQ 1024KiB					Rev.		PTS-E 1.1	
									Page.		5 of 10	
Service:		Linode Cloud Hosting	Instance Type:	1gb				Tested By:				
Test Platform			Storage Platform		Setup Parameters			Test Parameters				
Provider		Linode	Storage Config	Not Specified	Data Pattern		RND	Data Pattern		RND		
Service		Linode Cloud Hosting	# Devices	1	AR		100%	AR & Amount		100%		
Region		newark	Devices	/dev/xvdb	AR Segments		N/A	Test Stimulus 1		SEQ 1024KiB		
Instance ID		1gb	Device Capacities	16 GB	Pre Condition 1		SEQ 128K W	RW Mix		100:0 / 0:100		
CPU		Intel Xeon E5-2680 v2 2.80GHz [1 cores]	Purge Methods	None	TOIO - TC/QD		TC 1/QD 1	Block Sizes		SEQ 1024KiB		
Memory		991 MB	Drive Model		Duration		2X Device Capacity	TOIO - TC/QD		TC 1/QD 32		
Operating System		Ubuntu 14.04 LTS	Drive Type	SSD	Pre Condition 2		SEQ 128K W	Steady State		1 - 5		
Test SW			Drive Interface		TOIO - TC/QD		TC 1/QD 32	Test Stimulus 2		SEQ 128KiB		
Test ID		linode-0814-01	Notes		SS Rouds		1 - 5	TOIO - TC/QD		TC 1/QD 32		
Notes					Notes			Steady State		1 - 5		
Throughput - All RW Mix & BS - 2D Plot 1024KiB												




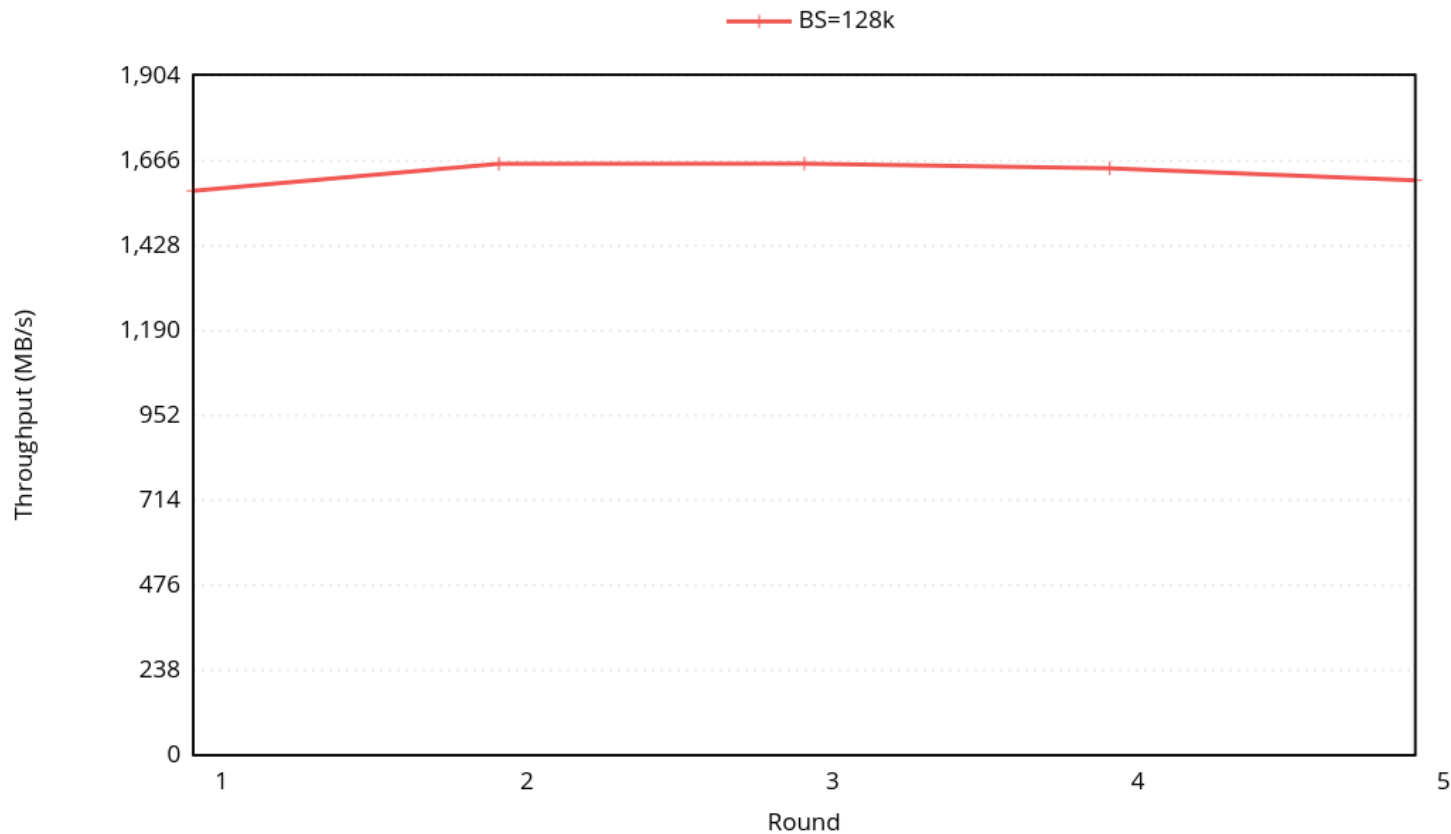
Plot A.17 - Throughput - All RW Mix & BS - 2D Plot 1024KiB

Test Run Date:			08/27/2014 21:06 UTC			Test Run Date:			08/28/2014 02:58 UTC			
THROUGHPUT Test - Report Page												
SNIA SSS TWG		Solid State Storage Performance Test Spec		TP - SEQ 128KiB					Rev.		PTS-E 1.1	
									Page.		6 of 10	
Service:		Linode Cloud Hosting	Instance Type:	1gb				Tested By:		 transparency for the cloud		
Test Platform			Storage Platform		Setup Parameters			Test Parameters				
Provider		Linode	Storage Config	Not Specified	Data Pattern		RND	Data Pattern		RND		
Service		Linode Cloud Hosting	# Devices	1	AR		100%	AR & Amount		100%		
Region		newark	Devices	/dev/xvdb	AR Segments		N/A	Test Stimulus 1		SEQ 1024KiB		
Instance ID		1gb	Device Capacities	16 GB	Pre Condition 1		SEQ 128K W	RW Mix		100:0 / 0:100		
CPU		Intel Xeon E5-2680 v2 2.80GHz [1 cores]	Purge Methods	None	TOIO - TC/QD		TC 1/QD 1	Block Sizes		SEQ 1024KiB		
Memory		991 MB	Drive Model		Duration		2X Device Capacity	TOIO - TC/QD		TC 1/QD 32		
Operating System		Ubuntu 14.04 LTS	Drive Type		SSD		Pre Condition 2		SEQ 128K W		Steady State	1 - 5
Test SW		Drive Interface		TOIO - TC/QD		TC 1/QD 32		Test Stimulus 2		SEQ 128KiB		
Test ID		linode-0814-01		Notes		SS Rouds		1 - 5		TOIO - TC/QD		TC 1/QD 32
Notes				Notes				Steady State		1 - 5		
Throughput Test - SS Convergence - Write 128KiB												




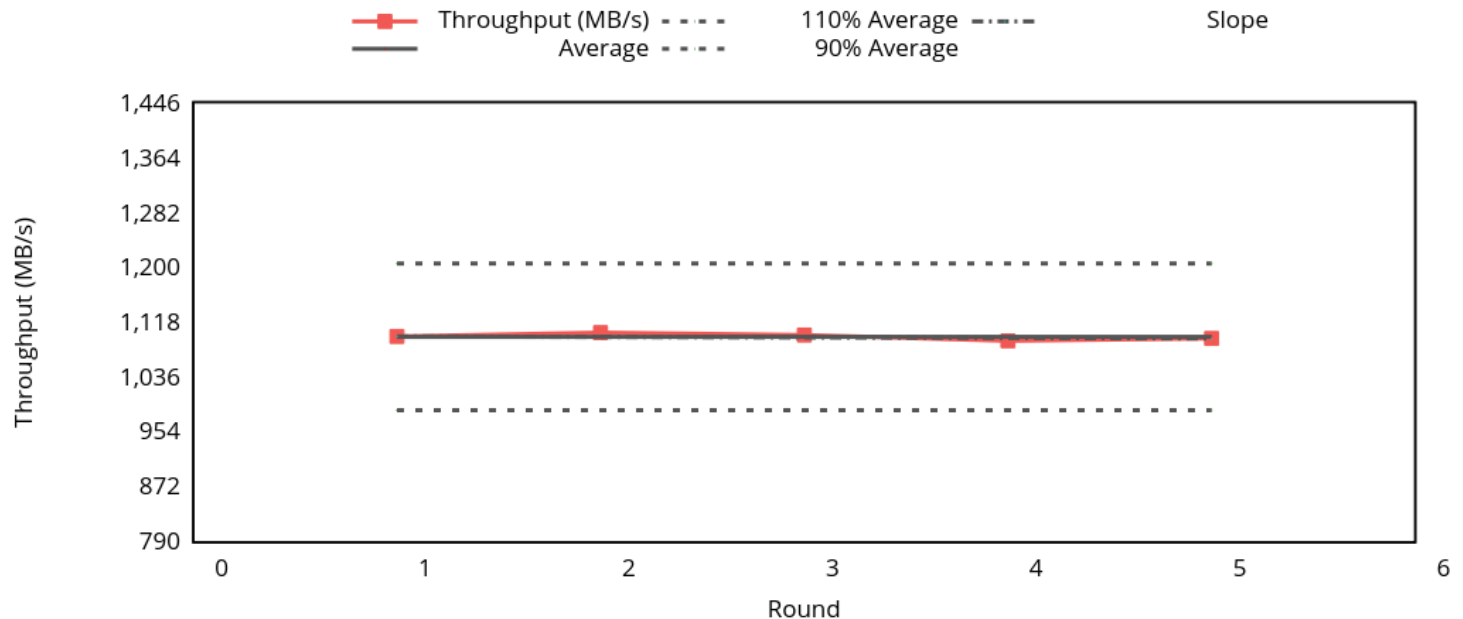
Plot A.18 - Throughput Test - SS Convergence - Write 128KiB

Test Run Date:			08/27/2014 21:06 UTC		Test Run Date:			08/28/2014 02:58 UTC	
THROUGHPUT Test - Report Page									
SNIA SSS TWG	Solid State Storage Performance Test Spec		TP - SEQ 1024KiB / 128KiB				Rev.	PTS-E 1.1	
							Page.	7 of 10	
Service:	Linode Cloud Hosting	Instance Type:	1gb			Tested By:			
Test Platform		Storage Platform		Setup Parameters		Test Parameters			
Provider	Linode	Storage Config	Not Specified	Data Pattern	RND	Data Pattern	RND		
Service	Linode Cloud Hosting	# Devices	1	AR	100%	AR & Amount	100%		
Region	newark	Devices	/dev/xvdb	AR Segments	N/A	Test Stimulus 1	SEQ 1024KiB		
Instance ID	1gb	Device Capacities	16 GB	Pre Condition 1	SEQ 128K W	RW Mix	100:0 / 0:100		
CPU	Intel Xeon E5-2680 v2 2.80GHz [1 cores]	Purge Methods	None	TOIO - TC/QD	TC 1/QD 1	Block Sizes	SEQ 1024KiB		
Memory	991 MB	Drive Model		Duration	2X Device Capacity	TOIO - TC/QD	TC 1/QD 32		
Operating System	Ubuntu 14.04 LTS	Drive Type	SSD	Pre Condition 2	SEQ 128K W	Steady State	1 - 5		
Test SW		Drive Interface		TOIO - TC/QD	TC 1/QD 32	Test Stimulus 2	SEQ 128KiB		
Test ID	linode-0814-01	Notes		SS Rouds	1 - 5	TOIO - TC/QD	TC 1/QD 32		
Notes				Notes		Steady State	1 - 5		
Throughput Test - SS Convergence - Read 128KiB									



Plot A.19 - Throughput Test - SS Convergence - Read 128KiB


Test Run Date:			08/27/2014 21:06 UTC			Test Run Date:			08/28/2014 02:58 UTC			
THROUGHPUT Test - Report Page												
SNIA SSS TWG		Solid State Storage Performance Test Spec		TP - SEQ 1024KiB / 128KiB					Rev.		PTS-E 1.1	
									Page.		8 of 10	
Service:		Linode Cloud Hosting	Instance Type:	1gb				Tested By:				
Test Platform			Storage Platform		Setup Parameters			Test Parameters				
Provider		Linode	Storage Config	Not Specified	Data Pattern		RND	Data Pattern		RND		
Service		Linode Cloud Hosting	# Devices	1	AR		100%	AR & Amount		100%		
Region		newark	Devices	/dev/xvdb	AR Segments		N/A	Test Stimulus 1		SEQ 1024KiB		
Instance ID		1gb	Device Capacities	16 GB	Pre Condition 1		SEQ 128K W	RW Mix		100:0 / 0:100		
CPU		Intel Xeon E5-2680 v2 2.80GHz [1 cores]	Purge Methods	None	TOIO - TC/QD		TC 1/QD 1	Block Sizes		SEQ 1024KiB		
Memory		991 MB	Drive Model		Duration		2X Device Capacity	TOIO - TC/QD		TC 1/QD 32		
Operating System		Ubuntu 14.04 LTS	Drive Type	SSD	Pre Condition 2		SEQ 128K W	Steady State		1 - 5		
Test SW			Drive Interface		TOIO - TC/QD		TC 1/QD 32	Test Stimulus 2		SEQ 128KiB		
Test ID		linode-0814-01	Notes		SS Rouds		1 - 5	TOIO - TC/QD		TC 1/QD 32		
Notes					Notes			Steady State		1 - 5		
Steady State Measurement Window - SEQ/128 KiB												



#### Steady State Determination Data


Average Throughput:		1098
Allowed Maximum Data Excursion:	219.6692	Measured Maximum Data Excursion: 12.29
Allowed Maximum Slope Excursion:	109.8346	Measured Maximum Slope Excursion: 7.3
Least Squares Linear Fit Formula:	$-1.829 * R + 1103.833$	

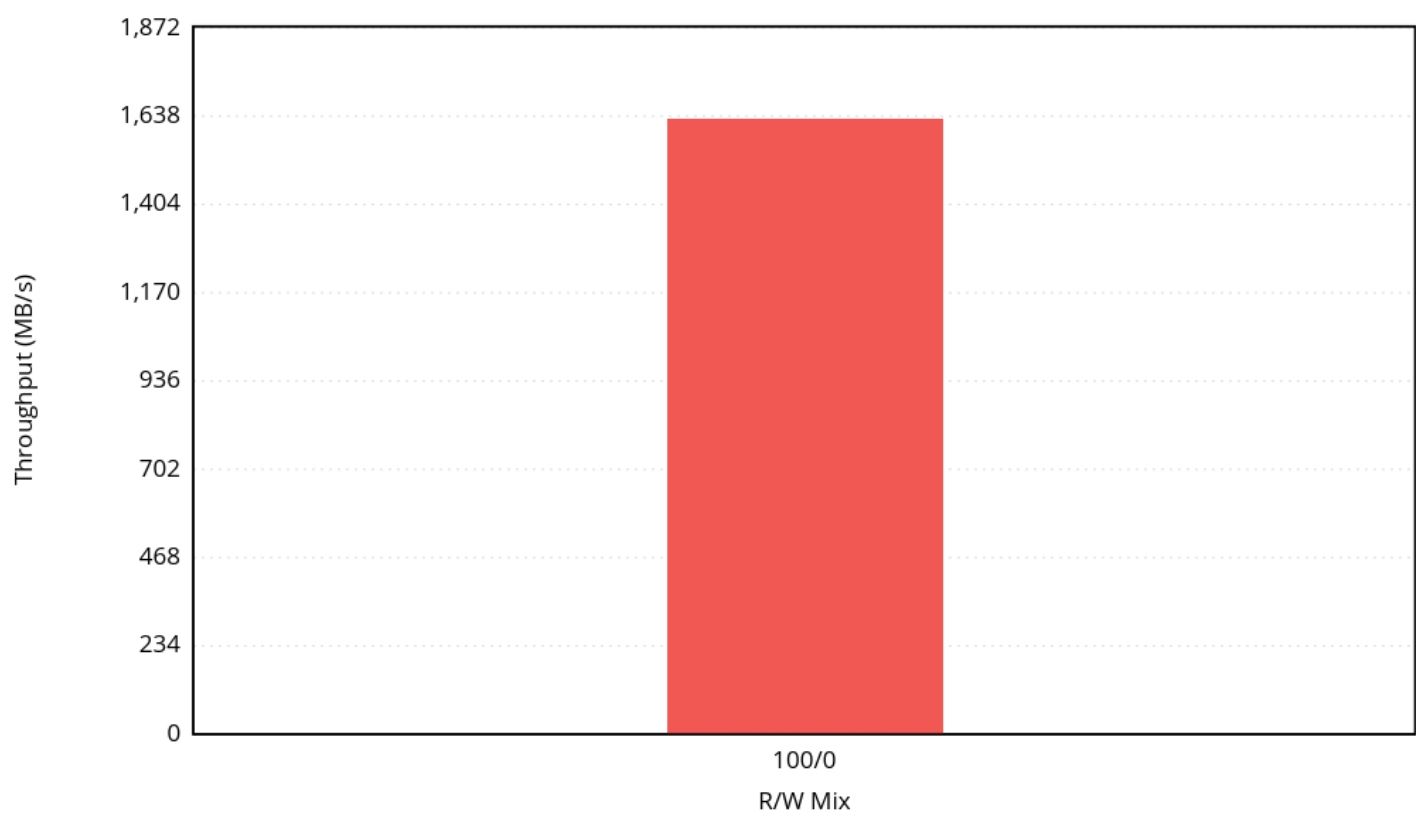
Plot A.20 - Steady State Measurement Window - SEQ/128 KiB

Test Run Date:			08/27/2014 21:06 UTC			Test Run Date:			08/28/2014 02:58 UTC			
THROUGHPUT Test - Report Page												
SNIA SSS TWG		Solid State Storage Performance Test Spec		TP - SEQ 1024KiB / 128KiB					Rev.		PTS-E 1.1	
									Page.		9 of 10	
Service:		Linode Cloud Hosting	Instance Type:	1gb				Tested By:				
Test Platform			Storage Platform		Setup Parameters			Test Parameters				
Provider		Linode	Storage Config	Not Specified	Data Pattern		RND	Data Pattern		RND		
Service		Linode Cloud Hosting	# Devices	1	AR		100%	AR & Amount		100%		
Region		newark	Devices	/dev/xvdb	AR Segments		N/A	Test Stimulus 1		SEQ 1024KiB		
Instance ID		1gb	Device Capacities	16 GB	Pre Condition 1		SEQ 128K W	RW Mix		100:0 / 0:100		
CPU		Intel Xeon E5-2680 v2 2.80GHz [1 cores]	Purge Methods	None	TOIO - TC/QD		TC 1/QD 1	Block Sizes		SEQ 1024KiB		
Memory		991 MB	Drive Model		Duration		2X Device Capacity	TOIO - TC/QD		TC 1/QD 32		
Operating System		Ubuntu 14.04 LTS	Drive Type		SSD		Pre Condition 2		SEQ 128K W		Steady State	1 - 5
Test SW		Drive Interface		TOIO - TC/QD		TC 1/QD 32		Test Stimulus 2		SEQ 128KiB		
Test ID		linode-0814-01		Notes		SS Rouds		1 - 5		TOIO - TC/QD		TC 1/QD 32
Notes				Notes				Steady State		1 - 5		
Throughput -All RW Mix & BS - Tabular Data 128KiB												

Block Size (KiB)	Read / Write Mix %	
	0/100	100/0
128k	1098.35	1630.65

Plot A.21 - Throughput -All RW Mix & BS - Tabular Data 128KiB

Test Run Date:			08/27/2014 21:06 UTC			Test Run Date:			08/28/2014 02:58 UTC			
THROUGHPUT Test - Report Page												
SNIA SSS TWG		Solid State Storage Performance Test Spec		TP - SEQ 1024KiB / 128KiB					Rev.		PTS-E 1.1	
									Page.		10 of 10	
Service:		Linode Cloud Hosting	Instance Type:	1gb				Tested By:		 transparency for the cloud		
Test Platform			Storage Platform			Setup Parameters			Test Parameters			
Provider		Linode	Storage Config		Not Specified	Data Pattern		RND	Data Pattern		RND	
Service		Linode Cloud Hosting	# Devices		1	AR		100%	AR & Amount		100%	
Region		newark	Devices		/dev/xvdb	AR Segments		N/A	Test Stimulus 1		SEQ 1024KiB	
Instance ID		1gb	Device Capacities		16 GB	Pre Condition 1		SEQ 128K W	RW Mix		100:0 / 0:100	
CPU		Intel Xeon E5-2680 v2 2.80GHz [1 cores]	Purge Methods		None	TOIO - TC/QD		TC 1/QD 1	Block Sizes		SEQ 1024KiB	
Memory		991 MB	Drive Model			Duration		2X Device Capacity	TOIO - TC/QD		TC 1/QD 32	
Operating System		Ubuntu 14.04 LTS	Drive Type		SSD	Pre Condition 2		SEQ 128K W	Steady State		1 - 5	
Test SW			Drive Interface			TOIO - TC/QD		TC 1/QD 32	Test Stimulus 2		SEQ 128KiB	
Test ID		linode-0814-01	Notes			SS Rouds		1 - 5	TOIO - TC/QD		TC 1/QD 32	
Notes						Notes			Steady State		1 - 5	
Throughput -All RW Mix & BS - 2D Plot 128KiB												



Plot A.22 - Throughput -All RW Mix & BS - 2D Plot 128KiB