

Report 1 (Closest Data Center + Round Robin)

Overall Response Time Summary

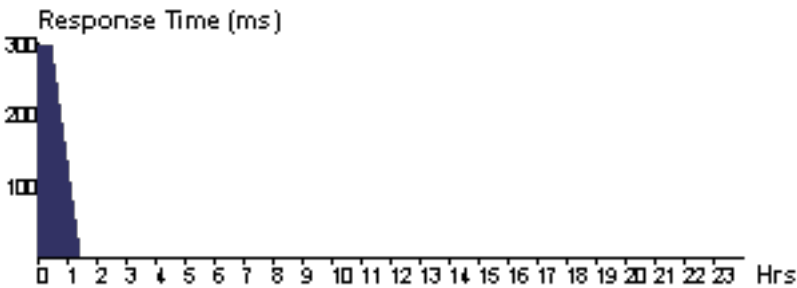
	Avg (ms)	Min (ms)	Max (ms)
Overall response time:	300.40	232.61	375.13
Data Center processing time:	0.36	0.02	0.66

Response Time by Region

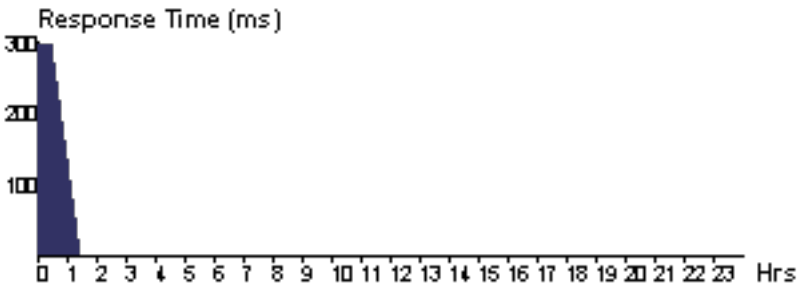
Userbase	Avg (ms)	Min (ms)	Max (ms)
UB1	300.28	232.64	360.14
UB2	301.13	232.61	375.13
UB3	300.65	237.11	360.12
UB4	299.52	241.61	363.16

User Base Hourly Response Times

UB1

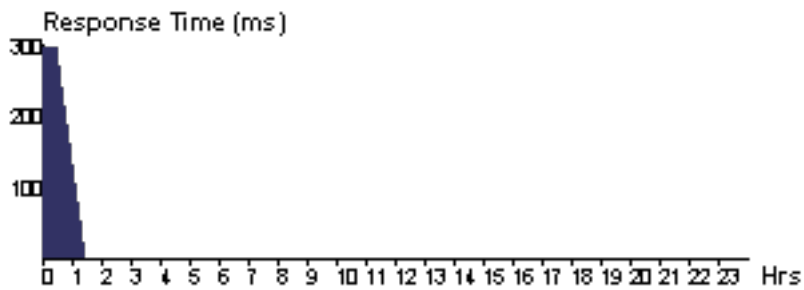
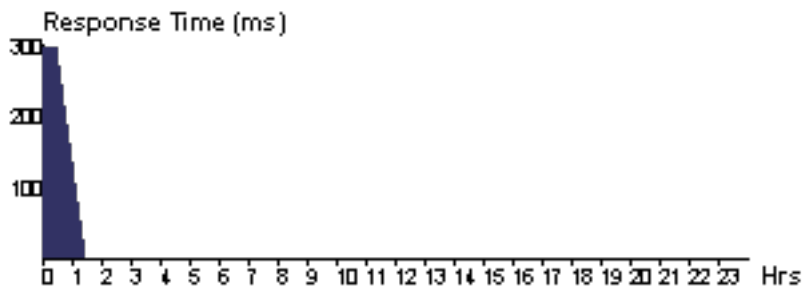


UB2



UB3

UB4



Data Center Request Servicing Times

Data Center	Avg (ms)	Min (ms)	Max (ms)
DC1	0.34	0.02	0.64
DC2	0.37	0.02	0.66

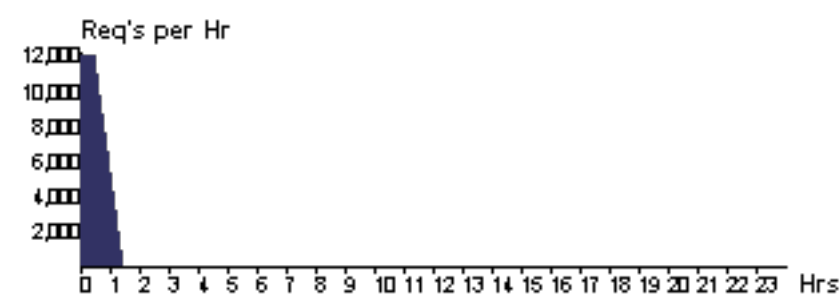
Data Center Hourly Average Processing Times

DC1

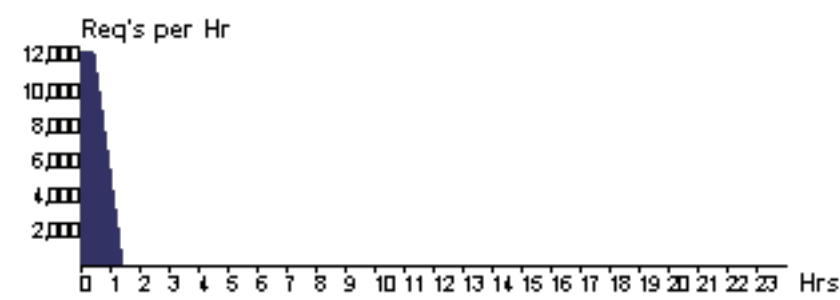
DC2

Data Center Hourly Loading

DC1



DC2



Cost

Total Virtual Machine Cost (\$):	1.00
Total Data Transfer Cost (\$):	0.25
Grand Total: (\$)	1.26

Data Center	VM Cost \$	Data Transfer Cost \$	Total \$
DC2	0.50	0.13	0.63
DC1	0.50	0.13	0.63

Results of the Simulation Completed at: 27/01/2024 22:41:33

Report 2 (Closest Data Center + ESCRL)

Overall Response Time Summary

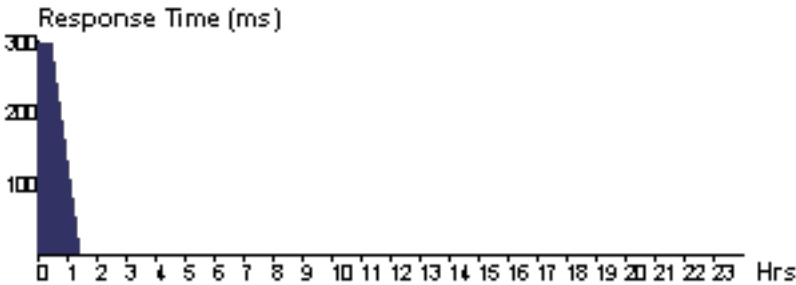
	Avg (ms)	Min (ms)	Max (ms)
Overall response time:	300.13	229.62	373.69
Data Center processing time:	0.36	0.02	0.67

Response Time by Region

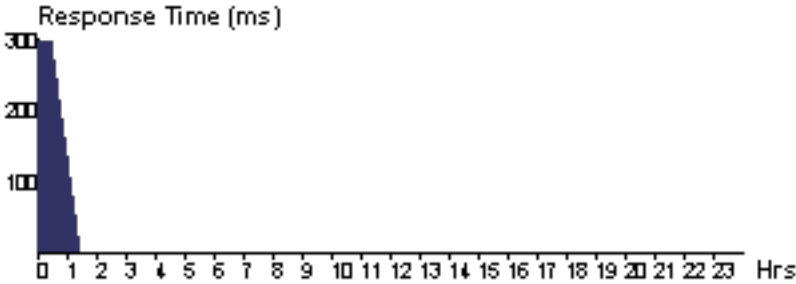
Userbase	Avg (ms)	Min (ms)	Max (ms)
UB1	299.73	246.12	363.14
UB2	301.29	240.19	370.64
UB3	299.48	241.64	373.69
UB4	299.86	234.14	370.64
UB5	300.25	229.62	366.15

User Base Hourly Response Times

UB1

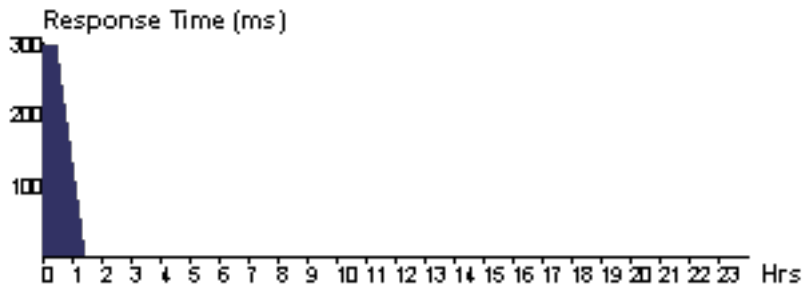
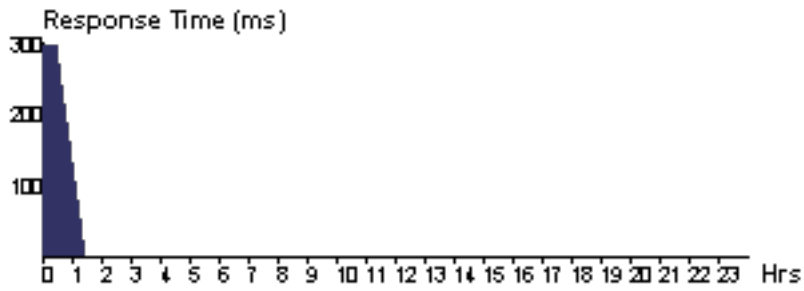


UB2

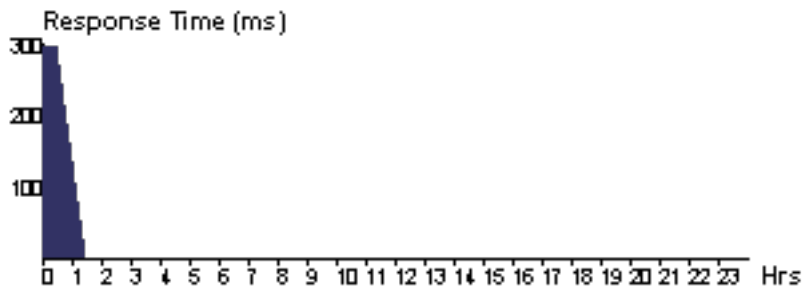


UB3

UB4



UB5



Data Center Request Servicing Times

Data Center	Avg (ms)	Min (ms)	Max (ms)
DC1	0.34	0.02	0.63
DC2	0.37	0.02	0.67
DC3	0.38	0.02	0.67

Data Center Hourly Average Processing Times

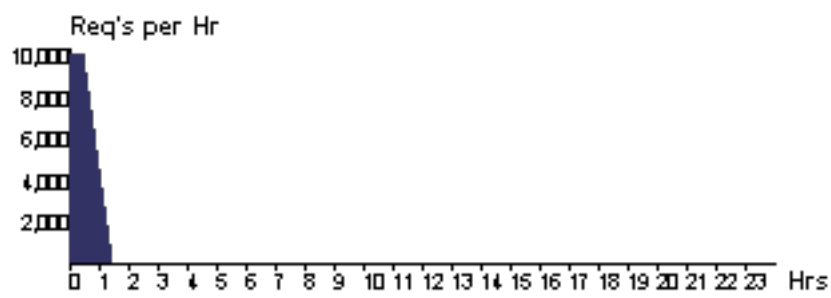
DC1

DC2

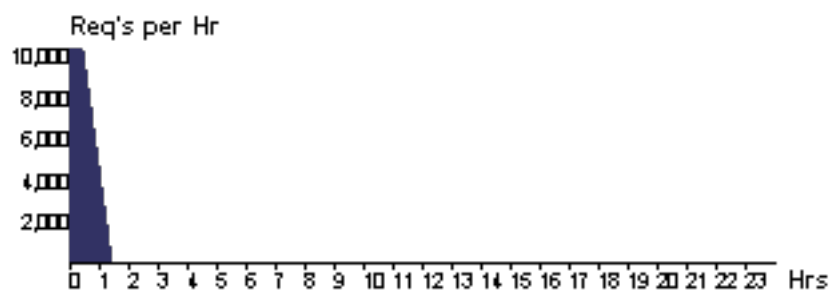
DC3

Data Center Hourly Loading

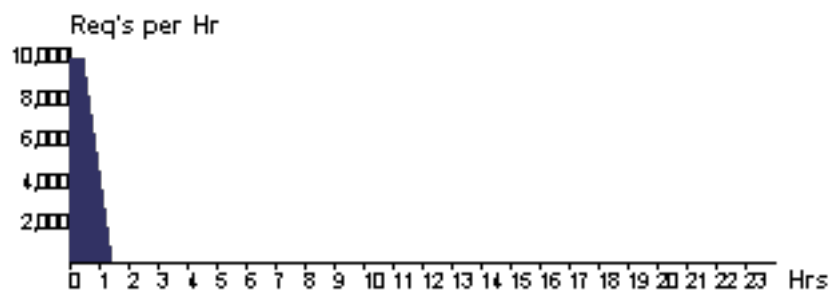
DC1



DC2



DC3



Cost

Total Virtual Machine Cost (\$):	1.51
Total Data Transfer Cost (\$):	0.32
Grand Total: (\$)	1.83

Data Center	VM Cost \$	Data Transfer Cost \$	Total \$
DC2	0.50	0.11	0.61
DC1	0.50	0.11	0.61
DC3	0.50	0.10	0.61

Report 3 (Closest Data Center + Throttled)

Overall Response Time Summary

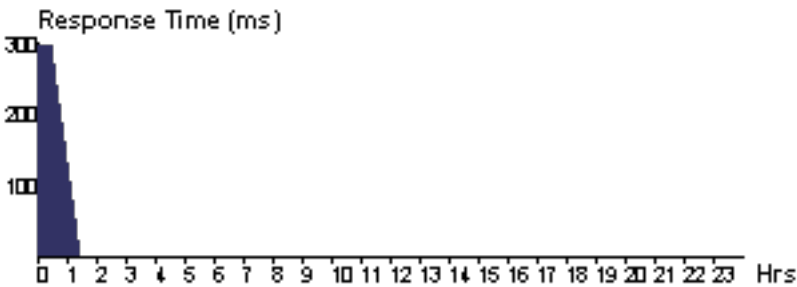
	Avg (ms)	Min (ms)	Max (ms)
Overall response time:	300.13	229.62	373.69
Data Center processing time:	0.37	0.02	0.67

Response Time by Region

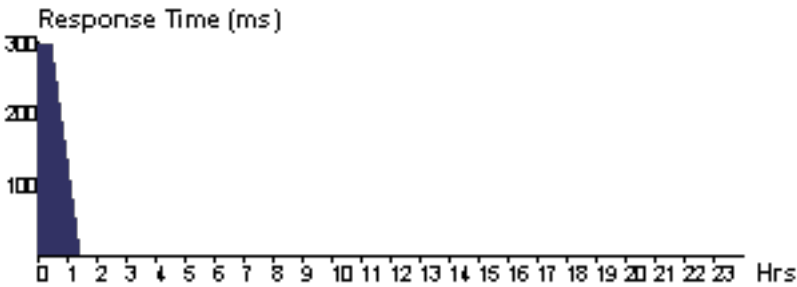
Userbase	Avg (ms)	Min (ms)	Max (ms)
UB1	299.97	246.12	373.69
UB2	301.26	241.61	370.64
UB3	299.20	241.61	369.14
UB4	300.24	234.14	370.64
UB5	299.98	229.62	366.15

User Base Hourly Response Times

UB1

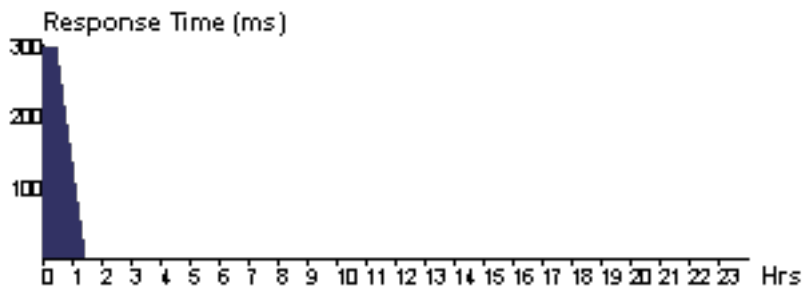
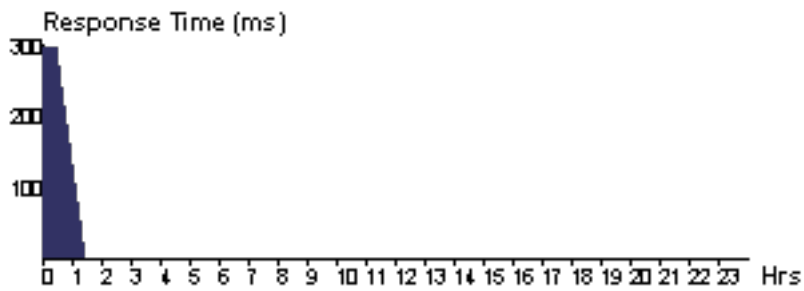


UB2

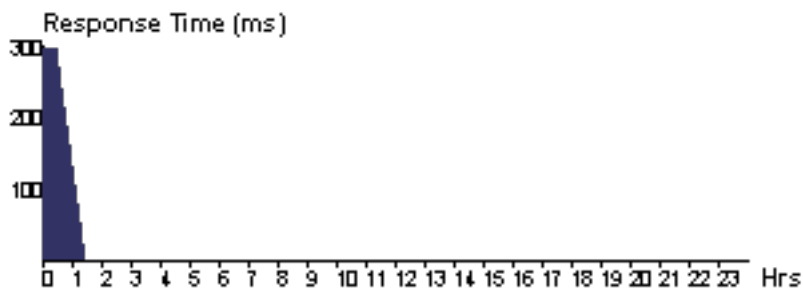


UB3

UB4



UB5



Data Center Request Servicing Times

Data Center	Avg (ms)	Min (ms)	Max (ms)
DC1	0.35	0.02	0.65
DC2	0.37	0.02	0.67
DC3	0.37	0.02	0.66
DC4	0.38	0.02	0.66

Data Center Hourly Average Processing Times

DC1

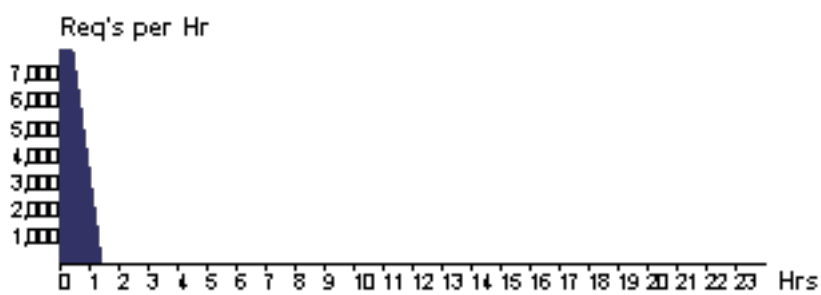
DC2

DC3

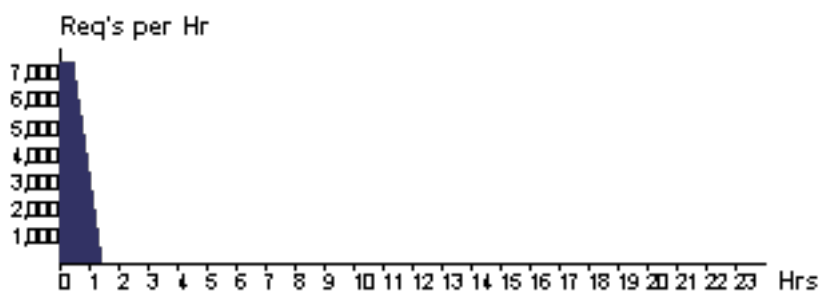
DC4

Data Center Hourly Loading

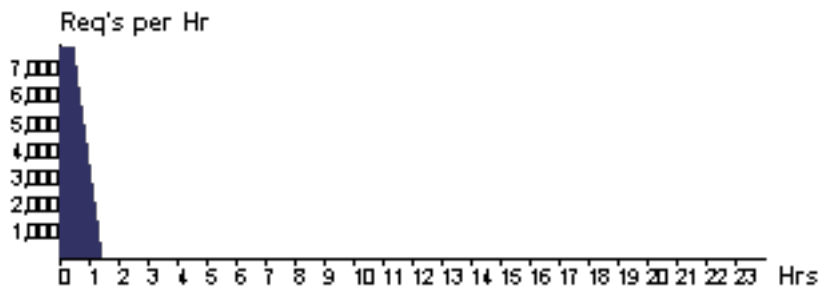
DC1



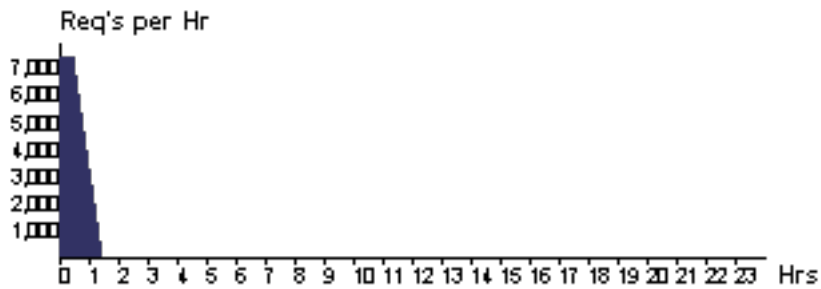
DC2



DC3



DC4



Cost

Total Virtual Machine Cost (\$):	2.01
Total Data Transfer Cost (\$):	0.32
Grand Total: (\$)	2.33

Data Center	VM Cost \$	Data Transfer Cost \$	Total \$
DC2	0.50	0.08	0.58
DC1	0.50	0.08	0.58
DC4	0.50	0.08	0.58
DC3	0.50	0.08	0.58

Results of the Simulation Completed at: 27/01/2024 22:48:07

Report 4 (Optimise Response Time + Round Robin)

Overall Response Time Summary

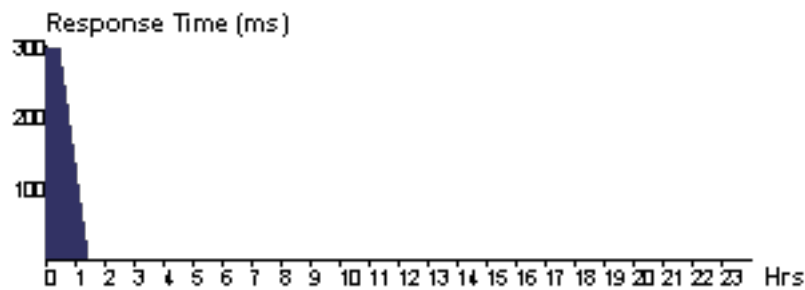
	Avg (ms)	Min (ms)	Max (ms)
Overall response time:	300.07	225.14	369.14
Data Center processing time:	0.36	0.02	0.65

Response Time by Region

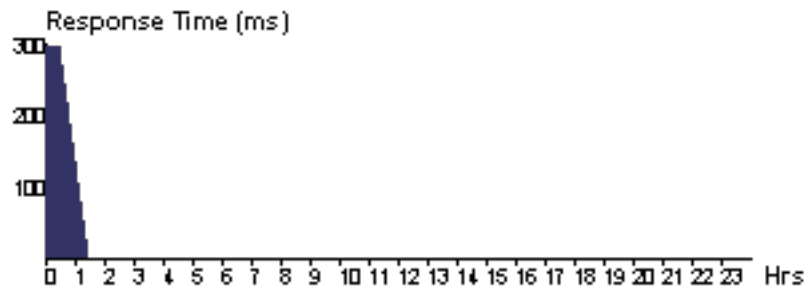
Userbase	Avg (ms)	Min (ms)	Max (ms)
UB1	300.54	225.14	369.14
UB2	300.64	235.64	363.11
UB3	299.00	229.64	360.03

User Base Hourly Response Times

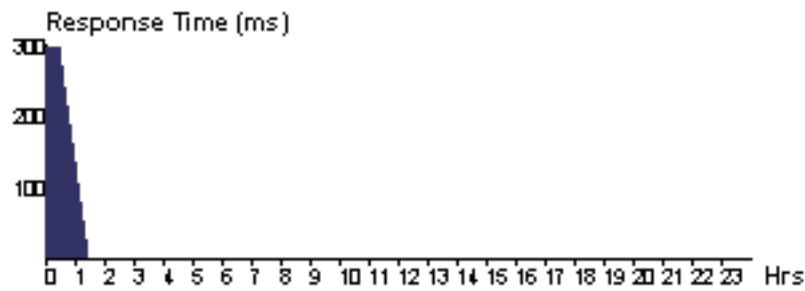
UB1



UB2



UB3



Data Center Request Servicing Times

Data Center	Avg (ms)	Min (ms)	Max (ms)
DC1	0.35	0.02	0.62
DC2	0.40	0.02	0.65
DC3	0.34	0.02	0.65
DC4	0.34	0.02	0.64
DC5	0.39	0.04	0.64
DC6	0.36	0.04	0.65
DC7	0.36	0.02	0.64

Data Center Hourly Average Processing Times

DC1

DC2

DC3

DC4

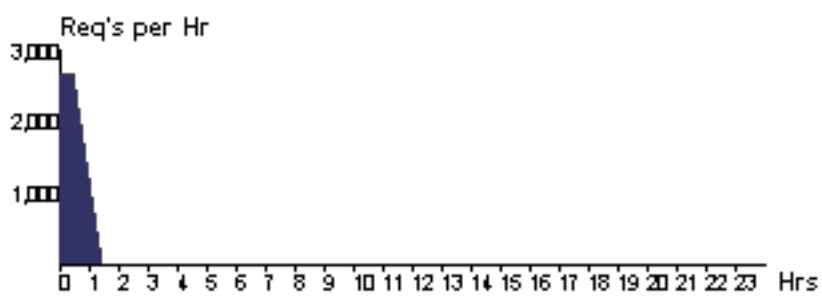
DC5

DC6

DC7

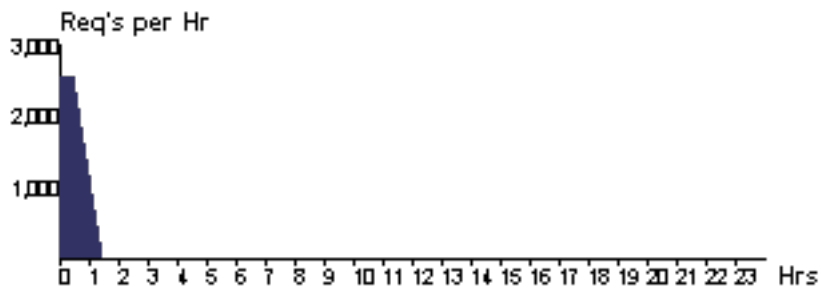
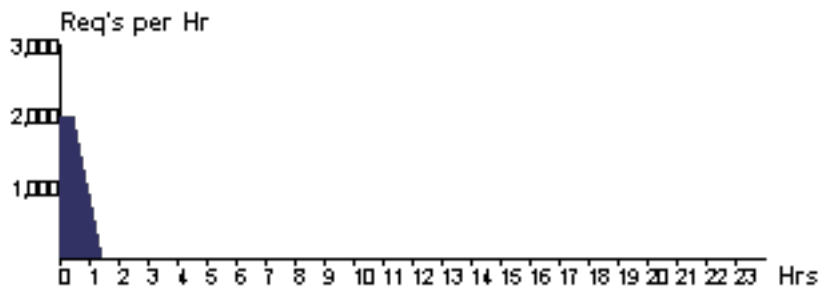
Data Center Hourly Loading

DC1

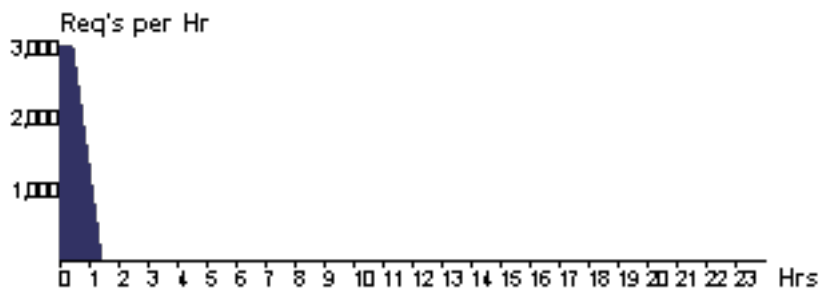


DC2

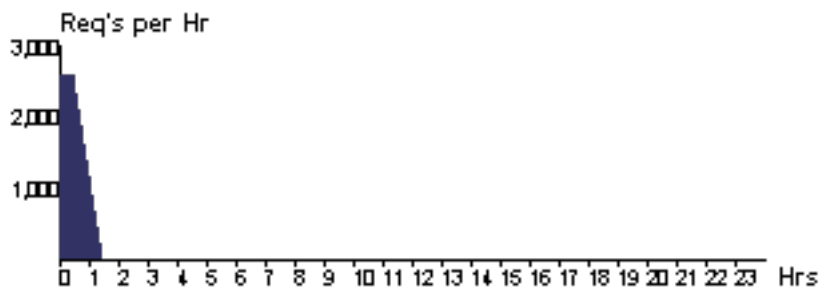
DC3



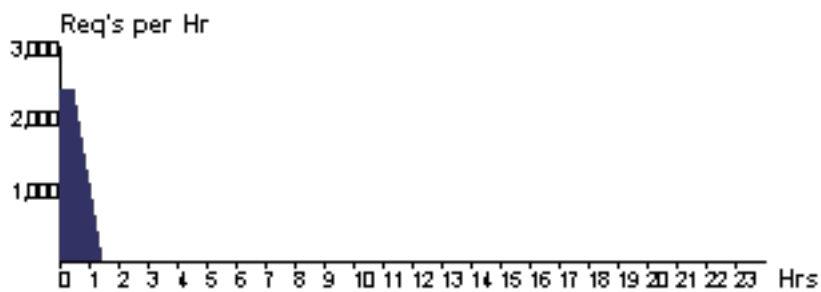
DC4



DC5



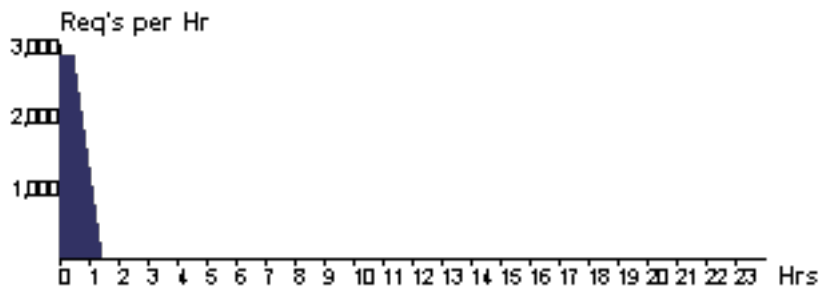
DC6



DC7

Cost

Total Virtual Machine Cost (\$):	3.51
Total Data Transfer Cost (\$):	0.19



Grand Total: (\$)

3.70

Data Center	VM Cost \$	Data Transfer Cost \$	Total \$
DC2	0.50	0.02	0.52
DC1	0.50	0.03	0.53
DC4	0.50	0.03	0.53
DC3	0.50	0.03	0.53
DC6	0.50	0.03	0.53
DC5	0.50	0.03	0.53
DC7	0.50	0.03	0.53

Report 5 (Optimise Response Time + ESCRL)

Overall Response Time Summary

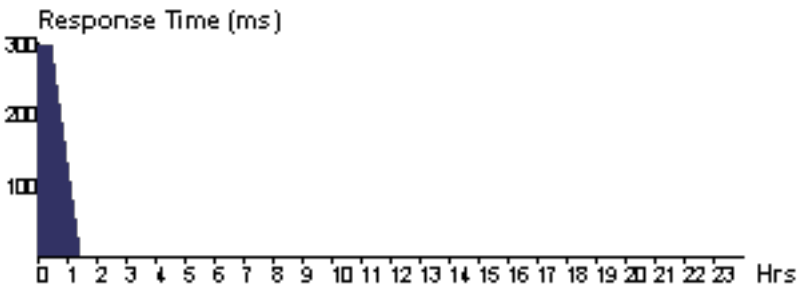
	Avg (ms)	Min (ms)	Max (ms)
Overall response time:	300.05	220.64	367.65
Data Center processing time:	0.36	0.02	0.68

Response Time by Region

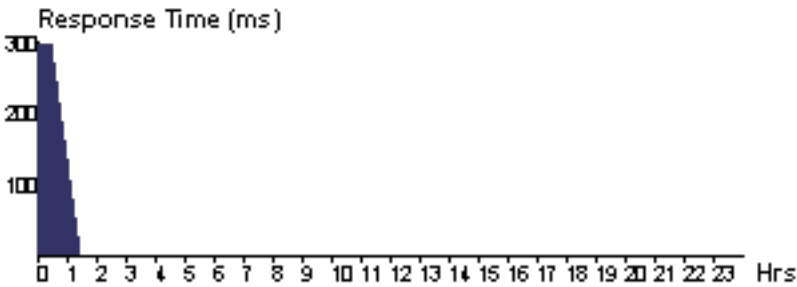
Userbase	Avg (ms)	Min (ms)	Max (ms)
UB1	298.46	238.64	358.60
UB2	300.09	241.64	361.61
UB3	300.88	220.64	367.65
UB4	300.10	241.64	357.16
UB5	300.69	240.14	363.14

User Base Hourly Response Times

UB1

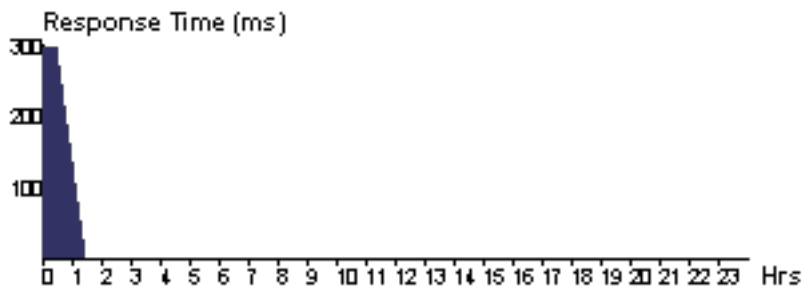
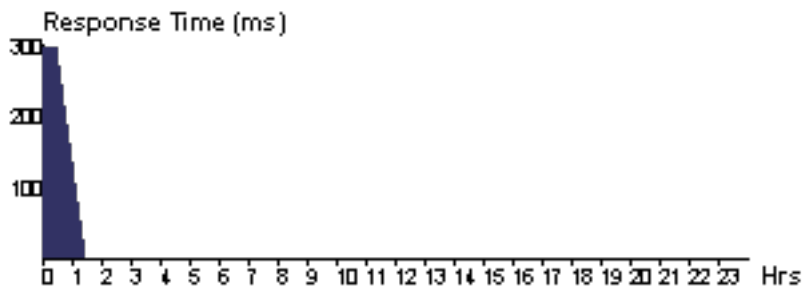


UB2

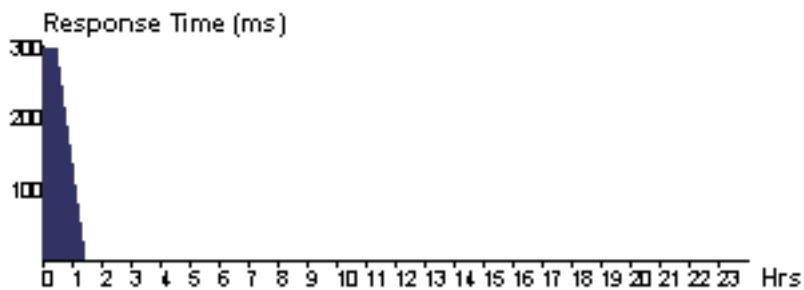


UB3

UB4



UB5



Data Center Request Servicing Times

Data Center	Avg (ms)	Min (ms)	Max (ms)
DC1	0.35	0.02	0.65
DC2	0.37	0.02	0.68

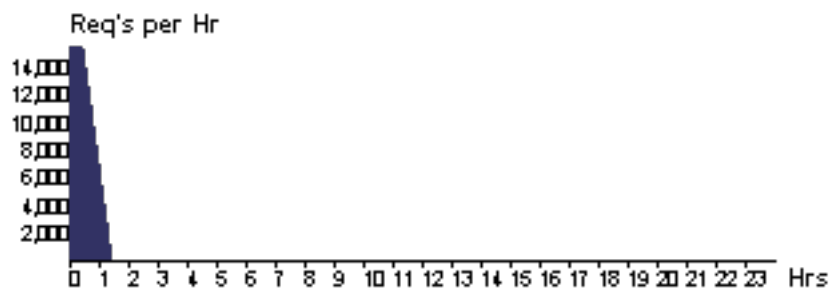
Data Center Hourly Average Processing Times

DC1

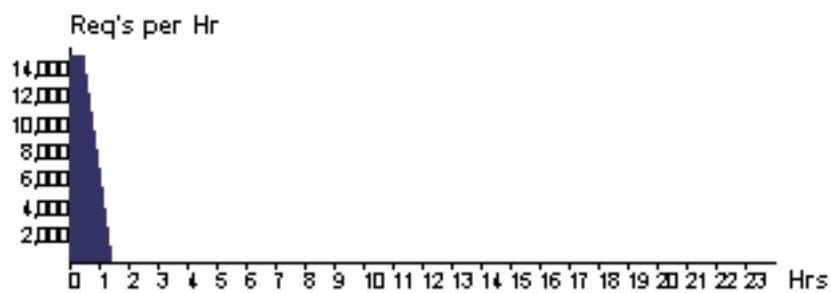
DC2

Data Center Hourly Loading

DC1



DC2



Cost

Total Virtual Machine Cost (\$):	1.00
Total Data Transfer Cost (\$):	0.32
Grand Total: (\$)	1.32

Data Center	VM Cost \$	Data Transfer Cost \$	Total \$
DC2	0.50	0.16	0.66
DC1	0.50	0.16	0.66

Report 6 (Optimise Response Time + Throlled)

Overall Response Time Summary

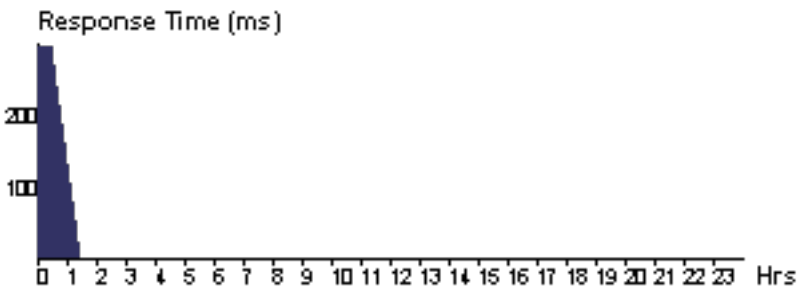
	Avg (ms)	Min (ms)	Max (ms)
Overall response time:	299.43	235.62	364.61
Data Center processing time:	0.35	0.02	0.64

Response Time by Region

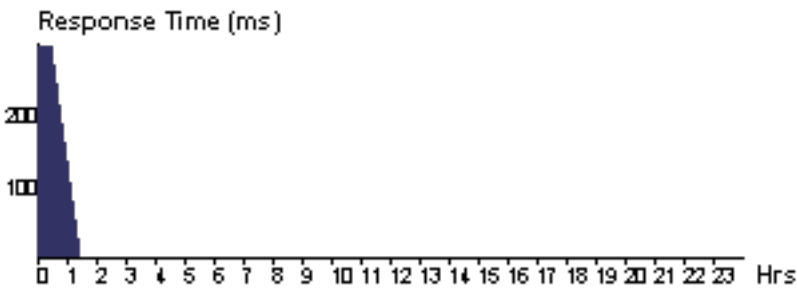
Userbase	Avg (ms)	Min (ms)	Max (ms)
UB1	298.87	235.62	360.14
UB2	299.98	241.63	364.61

User Base Hourly Response Times

UB1



UB2



Data Center Request Servicing Times

Data Center	Avg (ms)	Min (ms)	Max (ms)
DC1	0.35	0.02	0.62
DC2	0.36	0.02	0.64
DC3	0.36	0.02	0.64

DC4	0.35	0.02	0.64
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Data Center Hourly Average Processing Times

DC1

DC2

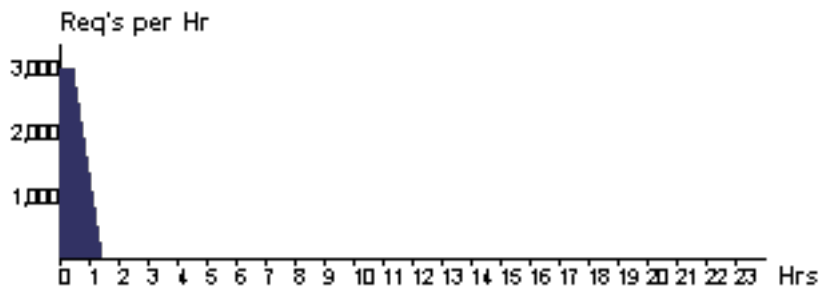
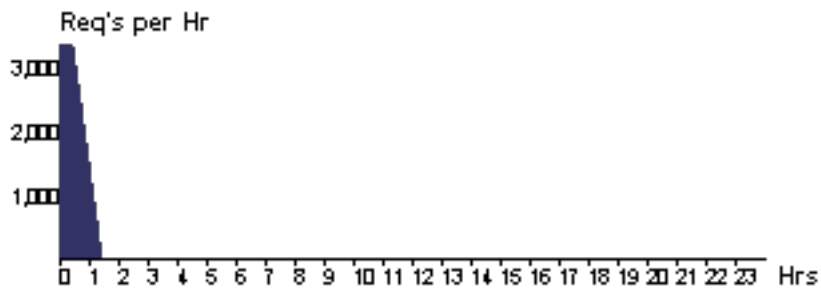
DC3

DC4

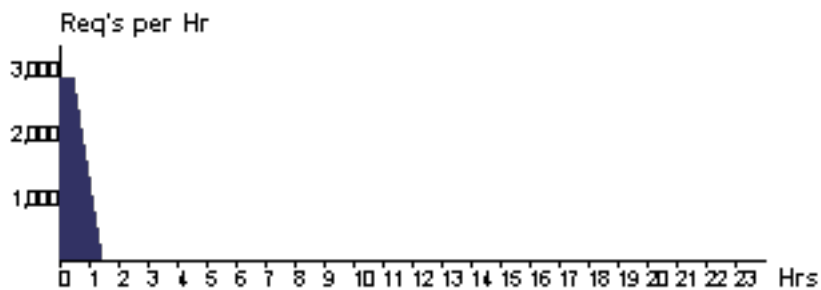
Data Center Hourly Loading

DC1

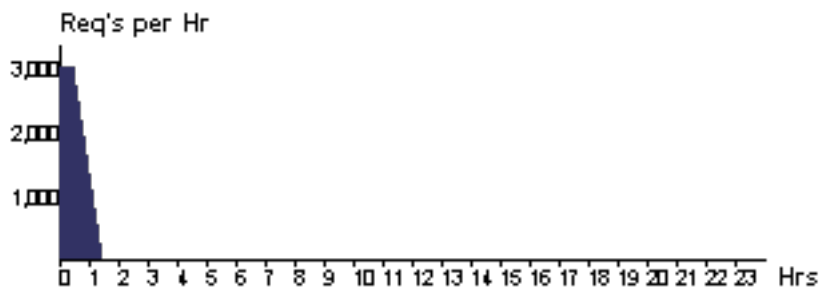
DC2



DC3



DC4



Cost

Total Virtual Machine Cost (\$):	2.03
Total Data Transfer Cost (\$):	0.13
Grand Total: (\$)	2.16

Data Center	VM Cost \$	Data Transfer Cost \$	Total \$
DC2	0.51	0.03	0.54
DC1	0.51	0.04	0.54
DC4	0.51	0.03	0.54
DC3	0.51	0.03	0.54

Results of the Simulation Completed at: 27/01/2024 22:59:33

Report 7 (Reconfigure Dynamically + Round Robin)

Overall Response Time Summary

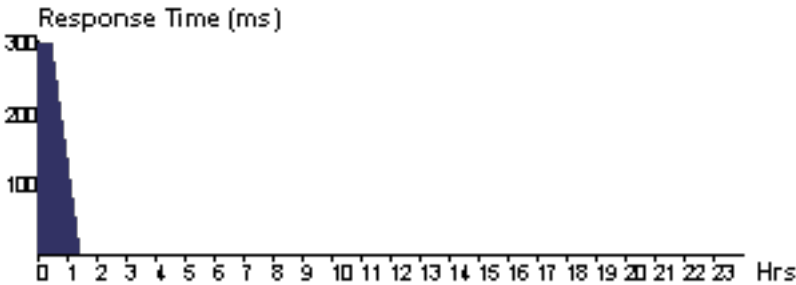
	Avg (ms)	Min (ms)	Max (ms)
Overall response time:	301.44	241.07	380.24
Data Center processing time:	1.00	0.02	3.60

Response Time by Region

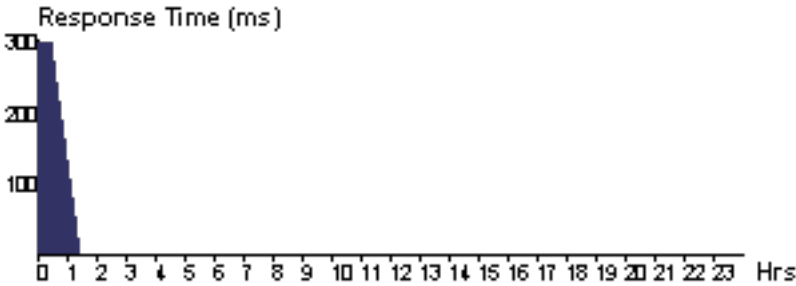
Userbase	Avg (ms)	Min (ms)	Max (ms)
UB1	302.24	241.84	380.24
UB2	300.25	242.19	365.09
UB3	301.87	241.07	369.66

User Base Hourly Response Times

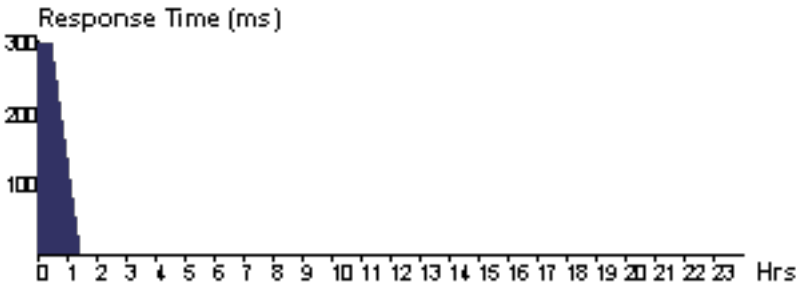
UB1



UB2



UB3



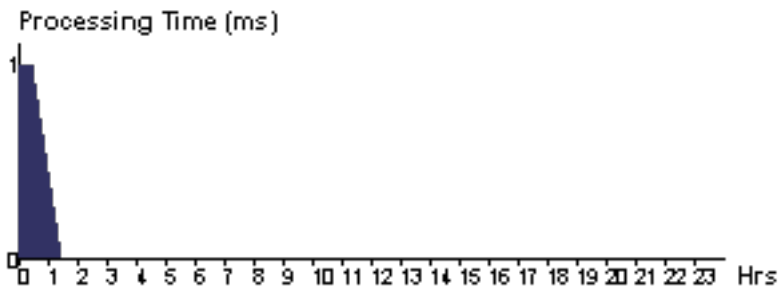
Data Center Request Servicing Times

Data Center	Avg (ms)	Min (ms)	Max (ms)
DC1	0.67	0.04	1.75
DC2	1.06	0.02	3.60
DC3	1.10	0.04	3.59
DC4	1.05	0.10	2.90
DC5	1.05	0.04	3.55
DC6	1.10	0.12	3.56
DC7	1.01	0.06	2.38

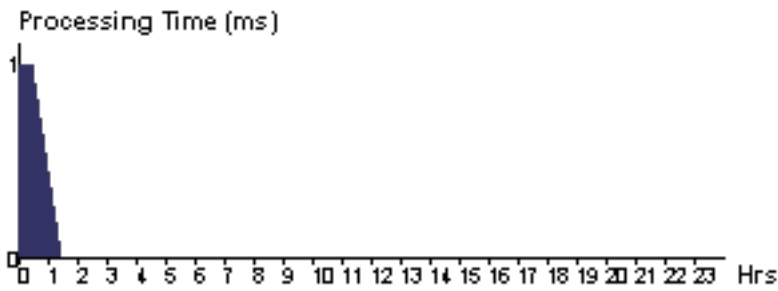
Data Center Hourly Average Processing Times

DC1

DC2

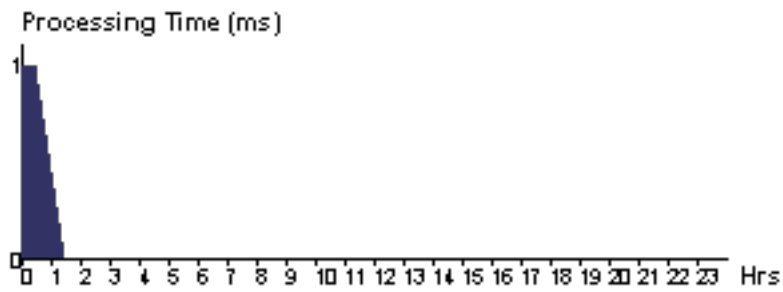
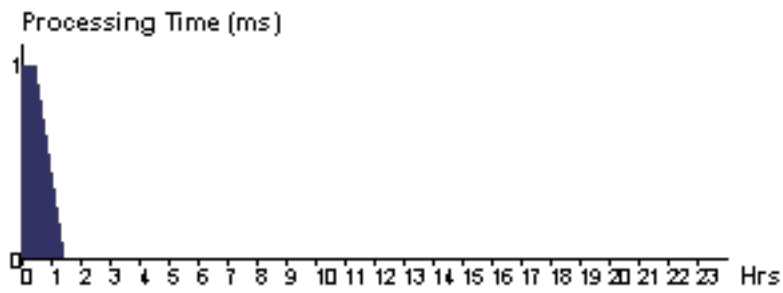


DC3

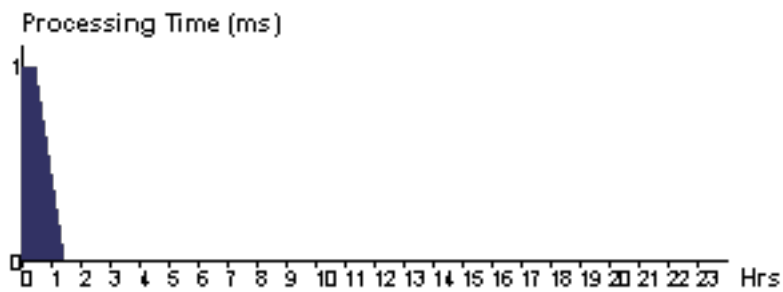


DC4

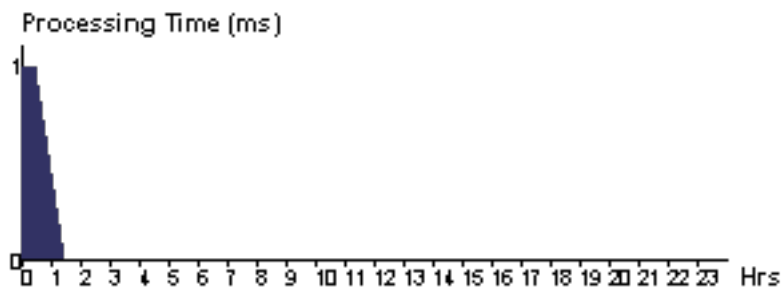
DC5



DC6

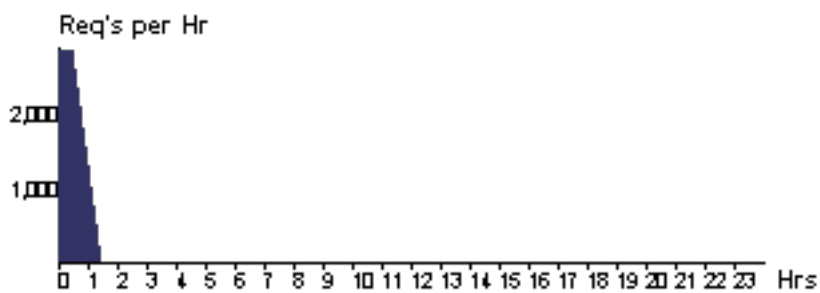


DC7



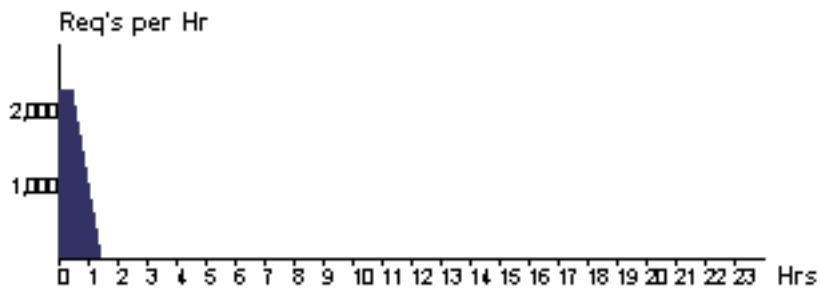
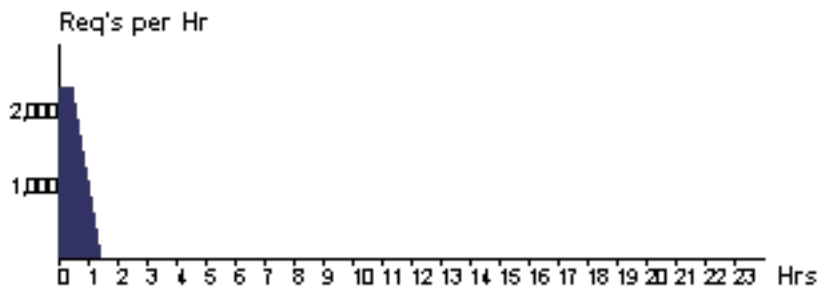
Data Center Hourly Loading

DC1

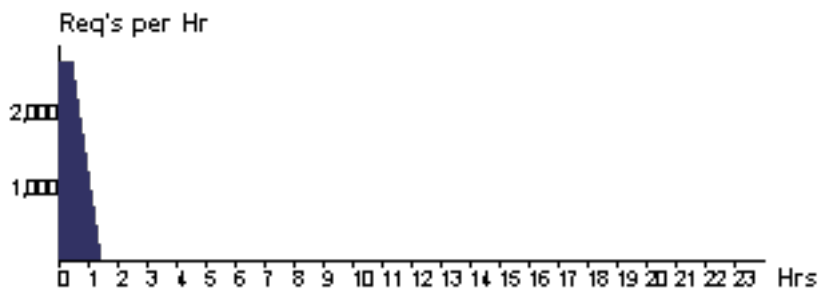


DC2

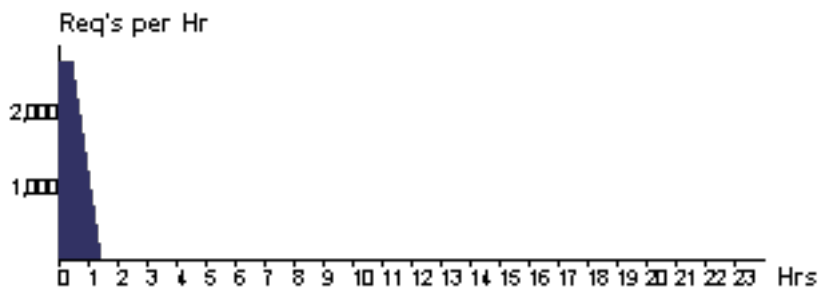
DC3



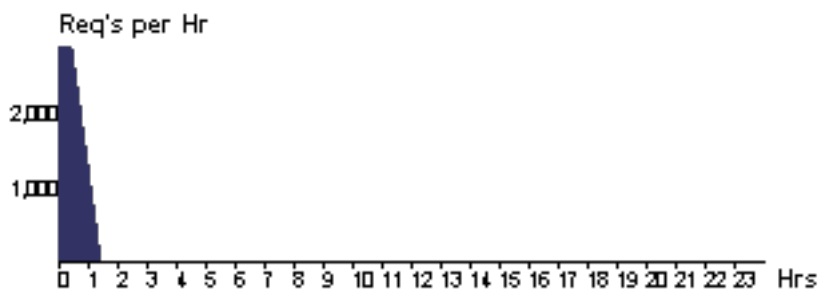
DC4



DC5



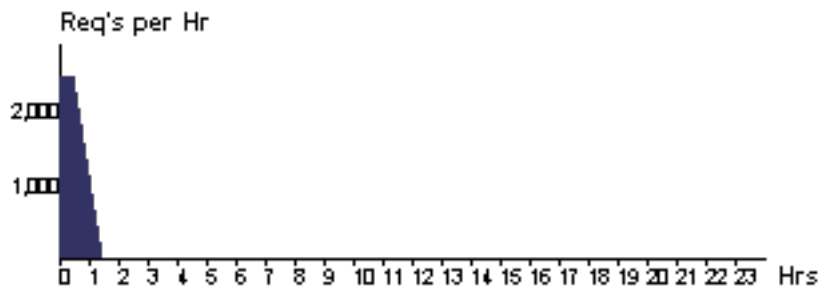
DC6



DC7

Cost

Total Virtual Machine Cost (\$):	22.79
Total Data Transfer Cost (\$):	0.19



Grand Total: (\$) 22.98

Data Center	VM Cost \$	Data Transfer Cost \$	Total \$
DC2	3.35	0.02	3.38
DC1	3.26	0.03	3.29
DC4	3.35	0.03	3.38
DC3	3.25	0.02	3.28
DC6	3.16	0.03	3.19
DC5	3.25	0.03	3.28
DC7	3.16	0.03	3.19

Report 8 (Reconfigure Dynamically + ESCRL)

Overall Response Time Summary

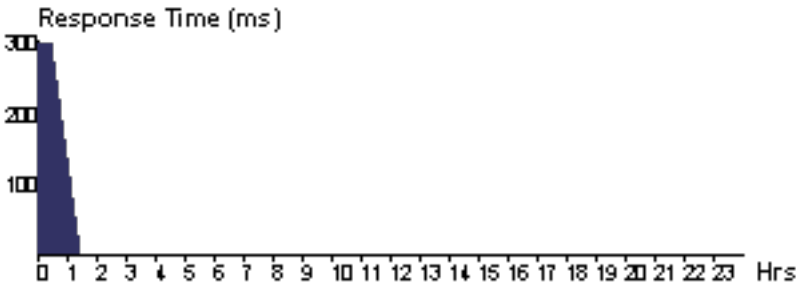
	Avg (ms)	Min (ms)	Max (ms)
Overall response time:	301.42	241.07	380.22
Data Center processing time:	0.97	0.02	3.14

Response Time by Region

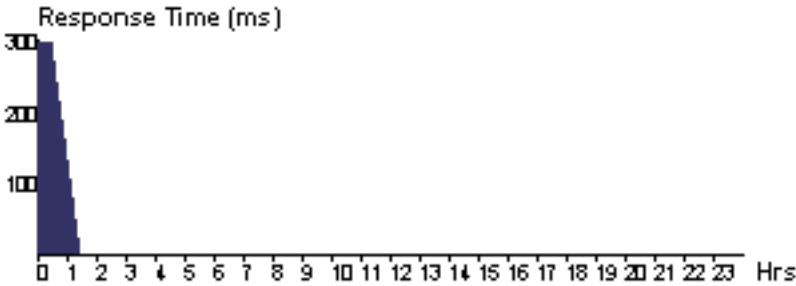
Userbase	Avg (ms)	Min (ms)	Max (ms)
UB1	302.56	241.89	380.22
UB2	300.01	242.84	365.12
UB3	301.71	241.07	369.33

User Base Hourly Response Times

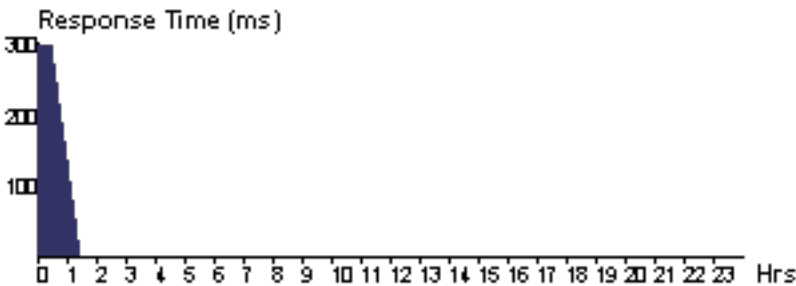
UB1



UB2



UB3



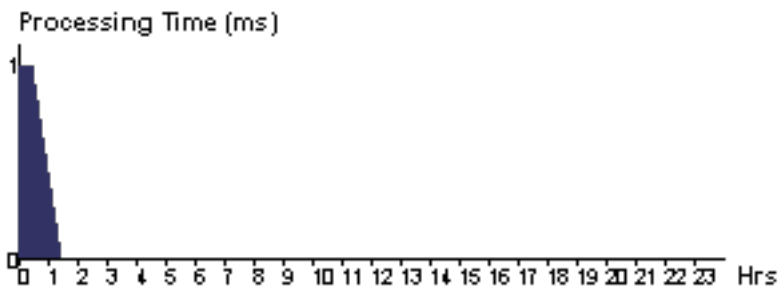
Data Center Request Servicing Times

Data Center	Avg (ms)	Min (ms)	Max (ms)
DC1	0.61	0.02	1.25
DC2	1.02	0.05	2.05
DC3	1.01	0.07	2.16
DC4	1.11	0.09	2.20
DC5	1.03	0.07	2.03
DC6	1.05	0.02	3.14

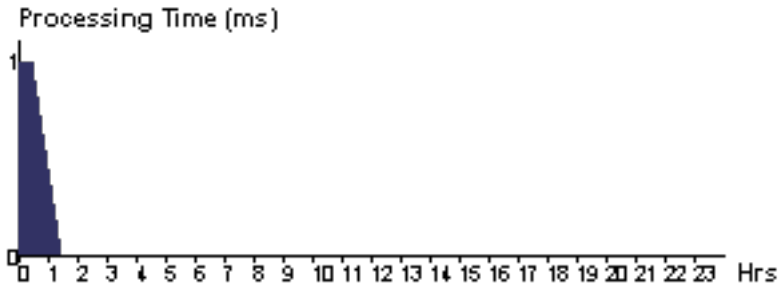
Data Center Hourly Average Processing Times

DC1

DC2

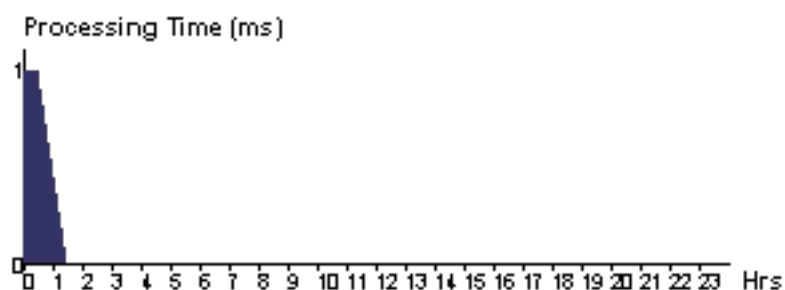
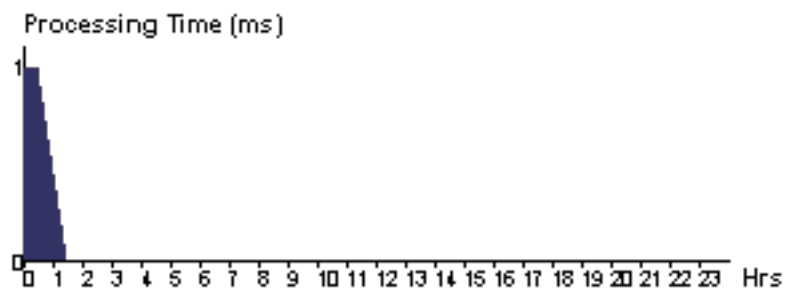


DC3

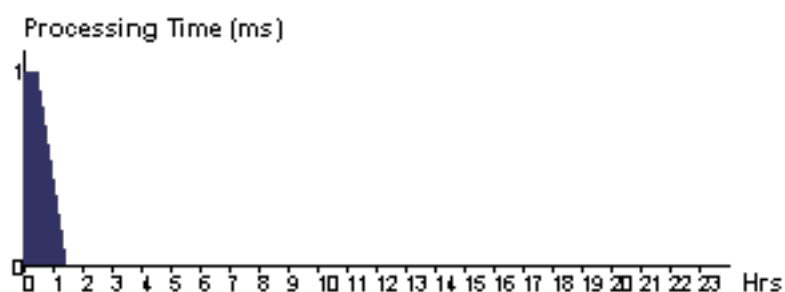


DC4

DC5

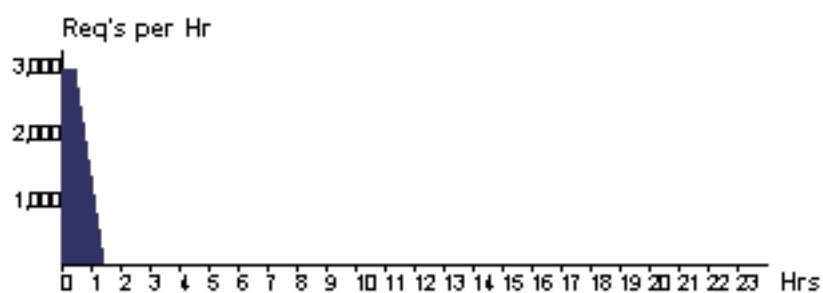


DC6

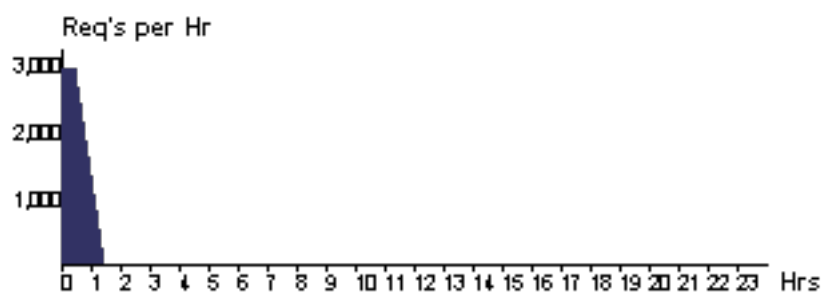


Data Center Hourly Loading

DC1

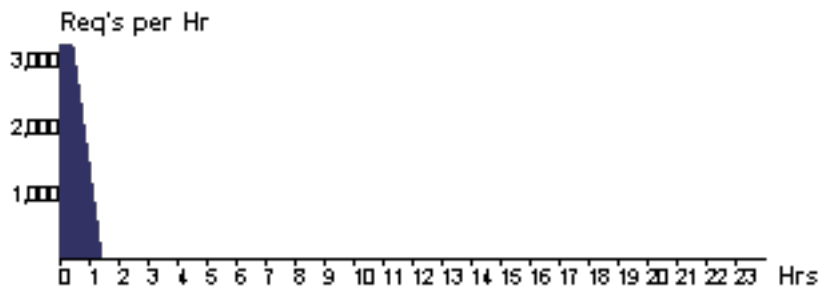
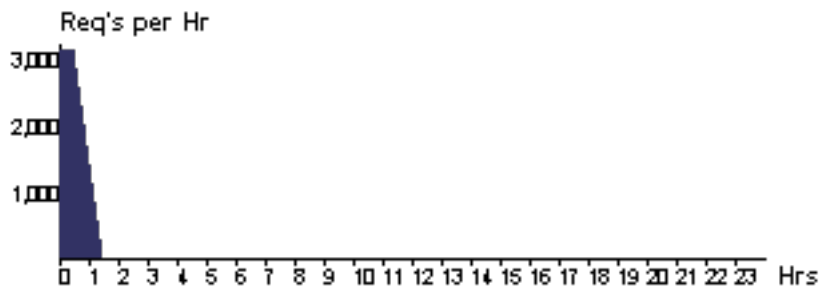


DC2

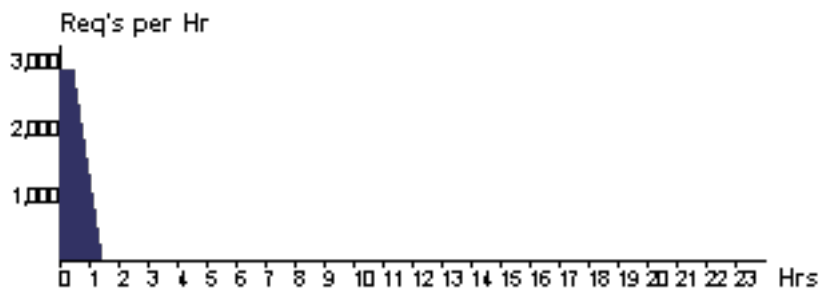


DC3

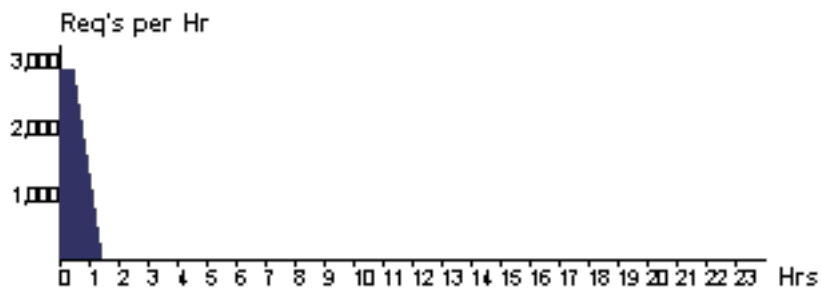
DC4



DC5



DC6



Cost

Total Virtual Machine Cost (\$):	19.45
Total Data Transfer Cost (\$):	0.19
Grand Total: (\$)	19.64

Data Center	VM Cost \$	Data Transfer Cost \$	Total \$
DC2	3.26	0.03	3.29
DC1	3.07	0.03	3.10
DC4	3.35	0.03	3.39
DC3	3.25	0.03	3.29

DC6	3.35	0.03	3.38
DC5	3.16	0.03	3.19

Results of the Simulation Completed at: 27/01/2024 23:04:40

Report 9 (Reconfigure Dynamically + Throttled)

Overall Response Time Summary

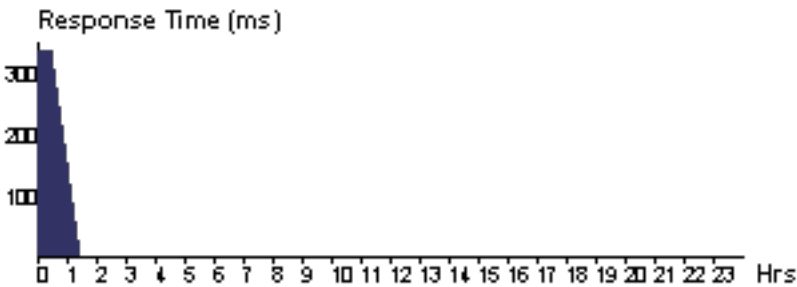
	Avg (ms)	Min (ms)	Max (ms)
Overall response time:	329.24	241.09	29685.01
Data Center processing time:	28.80	0.02	29392.50

Response Time by Region

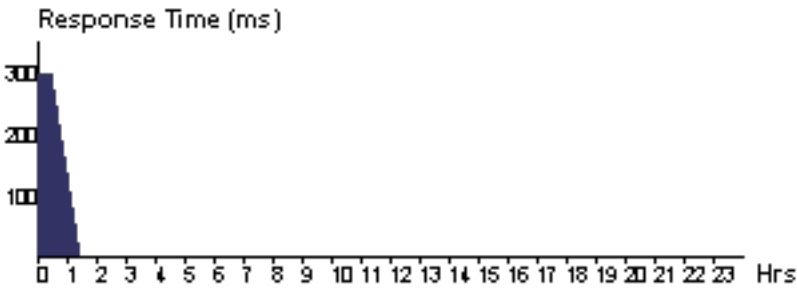
Userbase	Avg (ms)	Min (ms)	Max (ms)
UB1	339.54	241.89	23697.02
UB4	300.21	242.89	365.12
UB6	348.97	241.09	29685.01

User Base Hourly Response Times

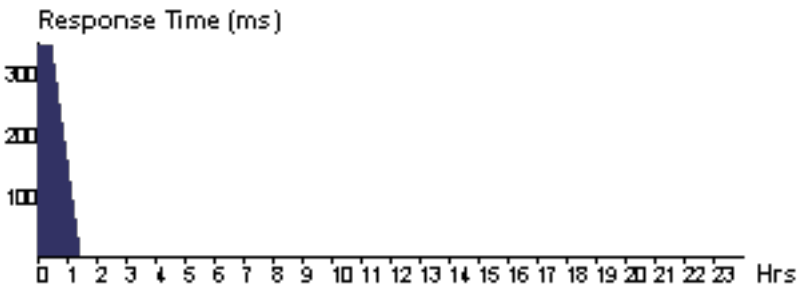
UB1



UB4



UB6

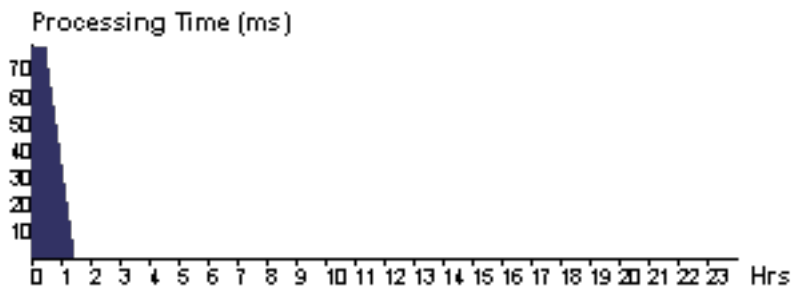


Data Center Request Servicing Times

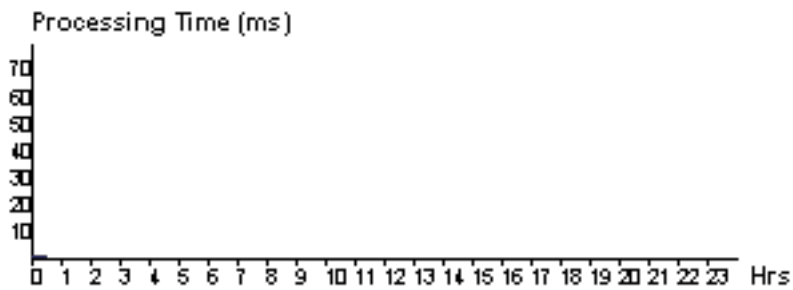
Data Center	Avg (ms)	Min (ms)	Max (ms)
DC1	78.81	0.04	29392.50
DC2	1.13	0.09	3.54
DC3	1.09	0.05	3.65
DC4	1.08	0.05	2.85
DC5	60.03	0.02	23391.51

Data Center Hourly Average Processing Times

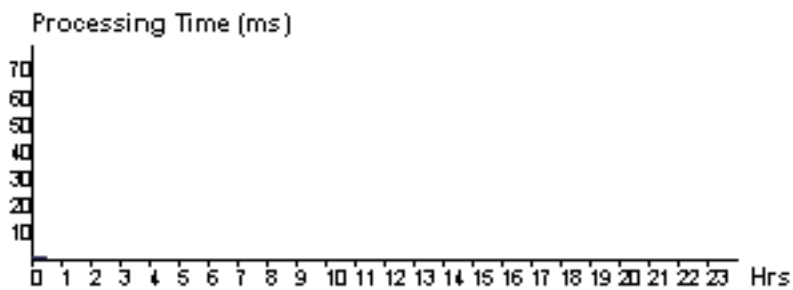
DC1



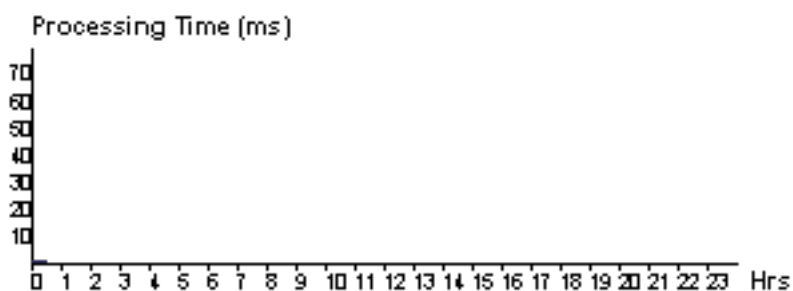
DC2



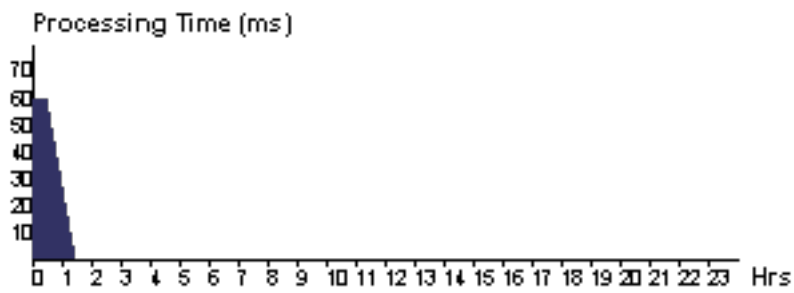
DC3



DC4

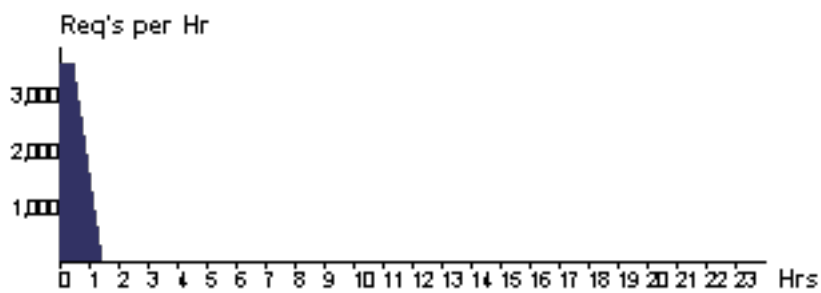


DC5

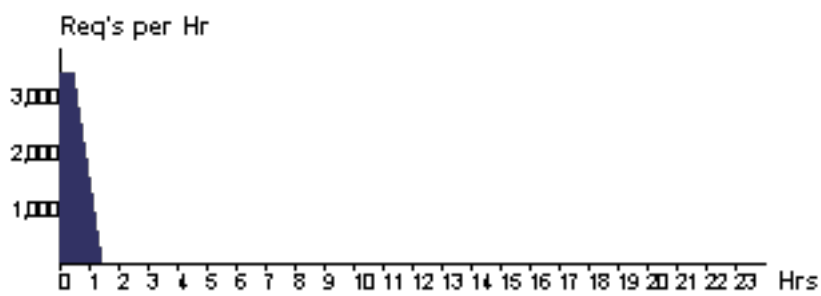


Data Center Hourly Loading

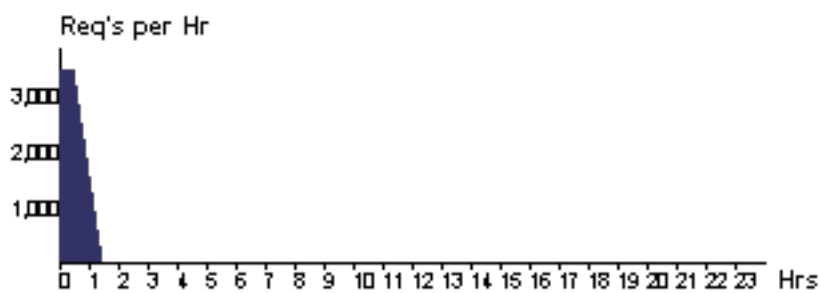
DC1



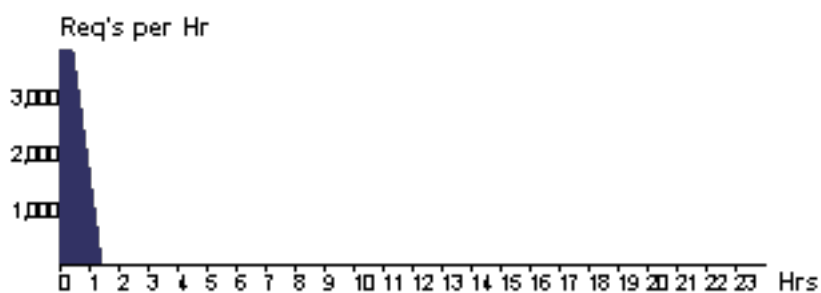
DC2



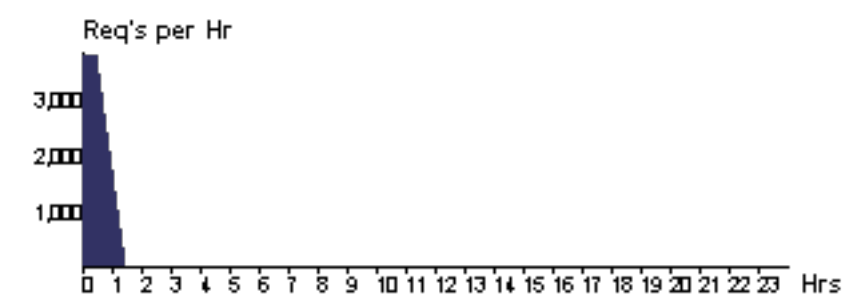
DC3



DC4



DC5



Cost

Total Virtual Machine Cost (\$):	16.59
Total Data Transfer Cost (\$):	0.19
Grand Total: (\$)	16.78

Data Center	VM Cost \$	Data Transfer Cost \$	Total \$
DC2	3.35	0.04	3.39
DC1	3.18	0.04	3.22
DC4	3.35	0.04	3.39
DC3	3.35	0.04	3.39
DC5	3.35	0.04	3.39