

Map:



Main Configuration:

Configure Simulation

Main Configuration

Data Center Configuration

Advanced

Simulation Duration:

User bases:

| Name | Region | Requests per User per Hr | Data Size per Request (bytes) | Peak Hours Start (GMT) | Peak Hours End (GMT) | Avg Peak Users | Avg Off-Peak Users |
|----------|--------|--------------------------|-------------------------------|------------------------|----------------------|----------------|--------------------|
| 1634_UB1 | 2 | 60 | 100 | 3 | 9 | 1000 | 100 |
| 1634_UB2 | 2 | 60 | 100 | 3 | 9 | 1000 | 100 |
| 1634_UB3 | 2 | 60 | 100 | 3 | 9 | 1000 | 100 |
| 1634_UB4 | 2 | 60 | 100 | 3 | 9 | 1000 | 100 |
| 1634_UB5 | 2 | 60 | 100 | 3 | 9 | 1000 | 100 |

Add New
Remove

Application Deployment Configuration:

Service Broker Policy:

| Data Center | # VMs | Image Size | Memory | BW |
|-------------|-------|------------|--------|------|
| 1634_DC1 | 5 | 10000 | 512 | 1000 |
| 1634_DC2 | 5 | 10000 | 512 | 1000 |
| 1634_DC3 | 5 | 10000 | 512 | 1000 |
| 1634_DC4 | 5 | 10000 | 512 | 1000 |
| 1634_DC5 | 5 | 10000 | 512 | 1000 |

Add New
Remove

Data Center Configuration:

Configure Simulation

Main Configuration Data Center Configuration Advanced

Data Centers:

| Name | Region | Arch | OS | VMM | Cost per VM \$/Hr | Memory Cost \$/s | Storage Cost \$/s | Data Transfer Cost \$/Gb | Physical HW Units |
|----------|--------|------|-------|-----|-------------------|------------------|-------------------|--------------------------|-------------------|
| 1634_DC1 | 1 | x86 | Linux | Xen | 0.1 | 0.05 | 0.1 | 0.1 | 25 |
| 1634_DC2 | 2 | x86 | Linux | Xen | 0.1 | 0.05 | 0.1 | 0.1 | 20 |
| 1634_DC3 | 3 | x86 | Linux | Xen | 0.1 | 0.05 | 0.1 | 0.1 | 15 |
| 1634_DC4 | 4 | x86 | Linux | Xen | 0.1 | 0.05 | 0.1 | 0.1 | 10 |
| 1634_DC5 | 5 | x86 | Linux | Xen | 0.1 | 0.05 | 0.1 | 0.1 | 5 |

Add New

Remove

Physical Hardware Details of Data Center : 1634_DC1

| Id | Memory (Mb) | Storage (Mb) | Available BW | Number of Processors | Processor Speed | VM Policy |
|----|-------------|--------------|--------------|----------------------|-----------------|-------------|
| 0 | 204800 | 100000000 | 1000000 | 4 | 10000 | TIME_SHARED |
| 1 | 204800 | 100000000 | 1000000 | 4 | 10000 | TIME_SHARED |
| 2 | 204800 | 100000000 | 1000000 | 4 | 10000 | TIME_SHARED |
| 3 | 204800 | 100000000 | 1000000 | 4 | 10000 | TIME_SHARED |
| 4 | 204800 | 100000000 | 1000000 | 4 | 10000 | TIME_SHARED |

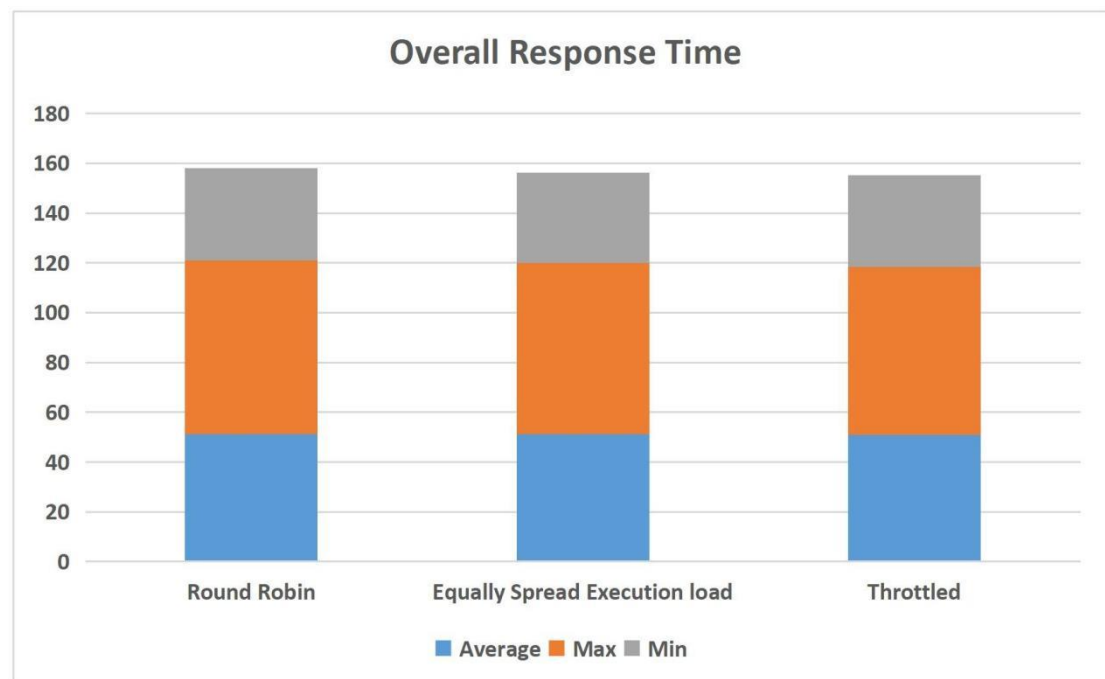
Add New

Copy

Remove

Comparison based on Overall Response Time Summary :

| | Round Robin | Equally Spread Execution load | Throttled |
|---------|-------------|-------------------------------|-----------|
| Average | 51.11 | 51.10 | 51.08 |
| Max | 70.00 | 68.89 | 67.24 |
| Min | 36.87 | 36.30 | 36.87 |



Comparison based on Average Data center request servicing time:

| Data Center | Avg (ms)(Round Robin) | Avg (ms)(Equally Spread Execution Load) | Avg (ms) (Throttled) |
|-------------|-----------------------|---|----------------------|
| 1634_DC1 | 1.49 | 1.47 | 1.45 |
| 1634_DC2 | 1.49 | 1.49 | 1.46 |
| 1634_DC3 | 1.49 | 1.49 | 1.47 |
| 1634_DC4 | 1.50 | 1.50 | 1.47 |
| 1634_DC5 | 1.47 | 1.46 | 1.44 |

Comparison based on Maximum Data center request servicing time:

| Data Center | Max (ms)(Round Robin) | Max (ms)(Equally Spread Execution Load) | Max (ms) (Throttled) |
|-------------|-----------------------|---|----------------------|
| 1634_DC1 | 13.41 | 9.27 | 7.36 |
| 1634_DC2 | 15.53 | 12.59 | 8.81 |
| 1634_DC3 | 13.01 | 11.88 | 9.62 |
| 1634_DC4 | 13.81 | 11.64 | 7.72 |
| 1634_DC5 | 13.77 | 11.27 | 7.58 |

Comparison based on Minimum Data center request servicing time:

| Data Center | Min (ms)(Round Robin) | Min (ms)(Equally Spread Execution Load) | Min (ms) (Throttled) |
|-------------|-----------------------|---|----------------------|
| 1634_DC1 | 0.02 | 0.02 | 0.02 |
| 1634_DC2 | 0.01 | 0.02 | 0.02 |
| 1634_DC3 | 0.02 | 0.02 | 0.02 |
| 1634_DC4 | 0.03 | 0.03 | 0.03 |
| 1634_DC5 | 0.02 | 0.02 | 0.02 |

Comparison based on Grand Total Cost(total virtual machine cost + total transfer cost):

| Data Center | Round Robin | Equally Spread Execution Load | Throttled |
|-------------|-------------|-------------------------------|-----------|
| 1634_DC1 | 3.44 | 3.44 | 3.44 |
| 1634_DC2 | 3.42 | 3.42 | 3.42 |
| 1634_DC3 | 3.43 | 3.43 | 3.43 |
| 1634_DC4 | 3.44 | 3.44 | 3.44 |
| 1634_DC5 | 3.44 | 3.44 | 3.44 |

Overall Response Time Summary:

| | Round Robin | | | Equally Spread Execution | | | Throttled | | |
|------------------------------|-------------|---------|---------|--------------------------|---------|---------|-----------|---------|---------|
| | Avg(ms) | Min(ms) | Max(ms) | Avg(ms) | Min(ms) | Max(ms) | Avg(ms) | Min(ms) | Max(ms) |
| Overall response time: | 51.08 | 36.87 | 67.24 | 51.10 | 36.30 | 68.89 | 51.08 | 36.87 | 67.24 |
| Data Center processing time: | 1.46 | 0.02 | 9.62 | 1.48 | 0.02 | 12.59 | 1.46 | 0.02 | 9.62 |