

## Results of the Simulation Completed at: 16/01/2023 12:56:57

### Overall Response Time Summary

|                              | <b>Avg (ms)</b> | <b>Min (ms)</b> | <b>Max (ms)</b> |
|------------------------------|-----------------|-----------------|-----------------|
| Overall response time:       | 154.42          | 35.86           | 394.64          |
| Data Center processing time: | 0.39            | 0.01            | 0.97            |

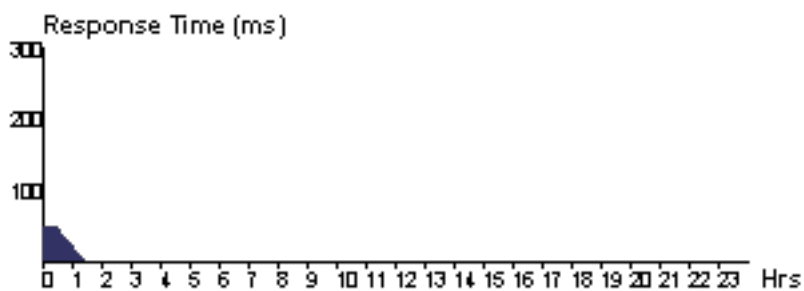
### Response Time by Region

| <b>Userbase</b> | <b>Avg (ms)</b> | <b>Min (ms)</b> | <b>Max (ms)</b> |
|-----------------|-----------------|-----------------|-----------------|
| UB10            | 300.51          | 237.15          | 363.14          |
| UB11            | 200.92          | 162.12          | 241.12          |
| UB12            | 199.34          | 162.12          | 235.11          |
| UB13            | 49.90           | 39.67           | 61.61           |
| UB14            | 50.17           | 40.11           | 63.61           |
| UB15            | 50.32           | 36.64           | 61.39           |
| UB16            | 50.25           | 39.43           | 60.39           |
| UB17            | 50.08           | 39.88           | 62.02           |
| UB18            | 50.17           | 38.88           | 61.63           |
| UB19            | 299.60          | 228.14          | 366.15          |
| UB1             | 50.09           | 40.38           | 62.13           |
| UB20            | 300.88          | 237.14          | 361.73          |
| UB21            | 299.92          | 247.64          | 387.14          |
| UB22            | 299.17          | 235.64          | 394.64          |
| UB23            | 199.85          | 158.11          | 254.12          |
| UB24            | 200.93          | 164.13          | 240.12          |
| UB25            | 50.37           | 41.13           | 62.77           |
| UB26            | 50.34           | 39.69           | 61.88           |
| UB27            | 50.07           | 38.86           | 62.07           |
| UB28            | 50.22           | 41.86           | 62.87           |
| UB29            | 49.92           | 38.89           | 59.65           |
| UB2             | 49.90           | 38.88           | 64.63           |
| UB30            | 50.21           | 38.15           | 60.14           |
| UB31            | 299.17          | 232.64          | 390.14          |
| UB32            | 299.52          | 237.16          | 363.10          |
| UB33            | 300.25          | 240.14          | 373.64          |

|      |        |        |        |
|------|--------|--------|--------|
| UB34 | 299.74 | 237.14 | 372.14 |
| UB35 | 200.71 | 167.11 | 250.11 |
| UB36 | 199.57 | 161.11 | 253.11 |
| UB37 | 49.92  | 38.86  | 62.86  |
| UB38 | 49.99  | 38.11  | 61.11  |
| UB39 | 50.16  | 40.90  | 59.64  |
| UB3  | 49.96  | 39.86  | 62.31  |
| UB40 | 49.99  | 39.89  | 61.65  |
| UB41 | 50.04  | 40.38  | 59.94  |
| UB42 | 49.80  | 38.38  | 61.88  |
| UB43 | 299.66 | 232.64 | 361.64 |
| UB44 | 300.36 | 232.59 | 370.64 |
| UB45 | 300.34 | 241.63 | 358.66 |
| UB46 | 300.49 | 240.14 | 361.64 |
| UB47 | 199.61 | 158.07 | 247.13 |
| UB48 | 200.40 | 156.12 | 247.12 |
| UB49 | 50.24  | 36.63  | 62.38  |
| UB4  | 50.18  | 35.86  | 59.86  |
| UB50 | 50.07  | 38.36  | 61.38  |
| UB5  | 50.26  | 40.39  | 63.40  |
| UB6  | 50.19  | 38.64  | 60.39  |
| UB7  | 300.80 | 249.14 | 366.14 |
| UB8  | 299.13 | 241.64 | 369.14 |
| UB9  | 300.34 | 213.10 | 355.64 |

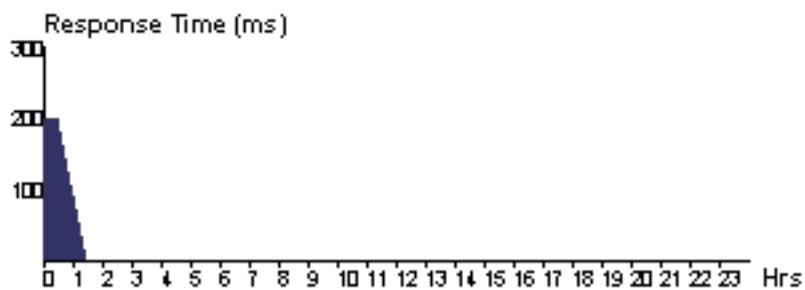
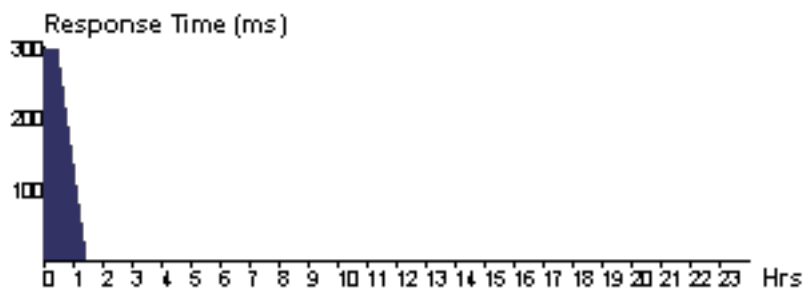
## User Base Hourly Response Times

UB1

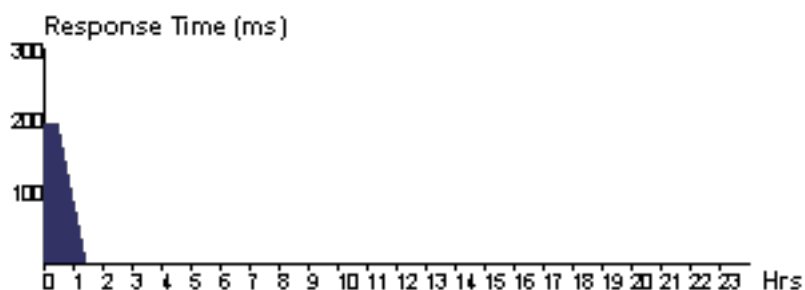


UB10

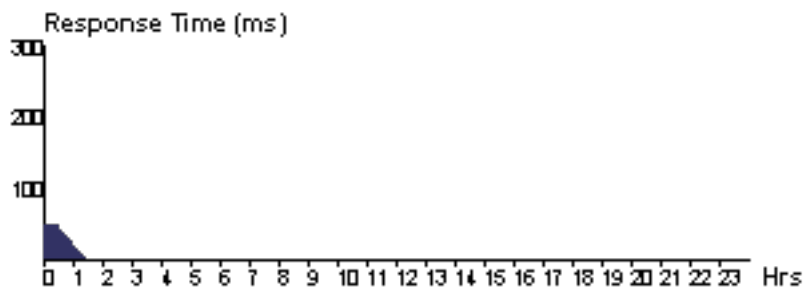
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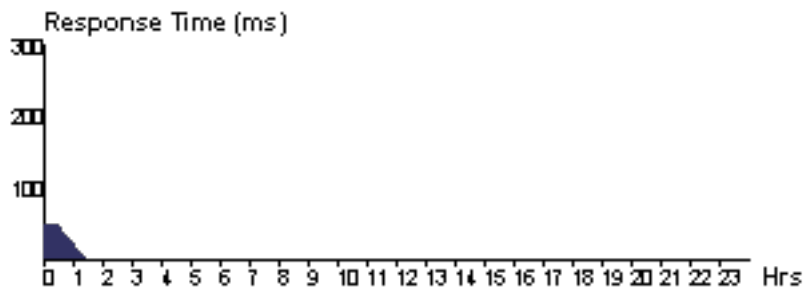
UB12



UB13

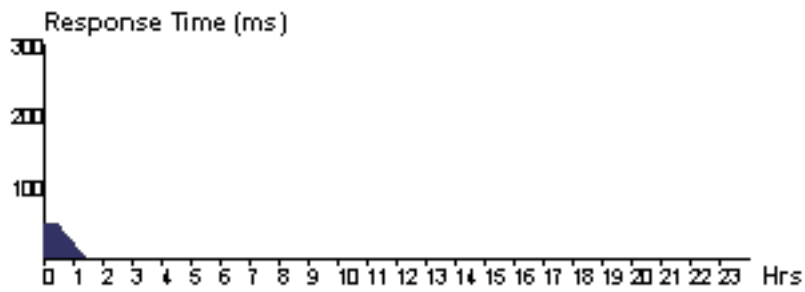
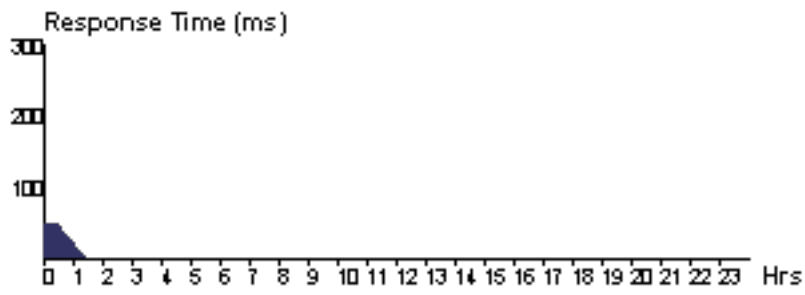


UB14

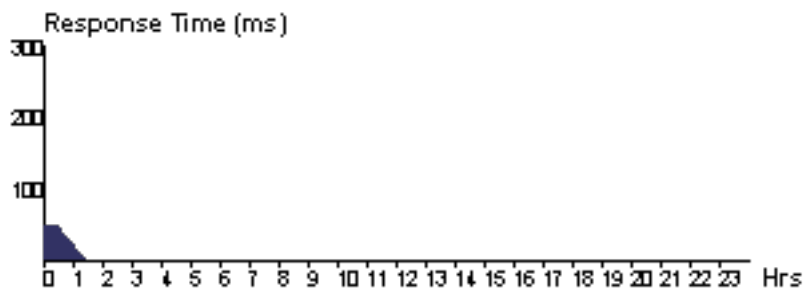


UB15

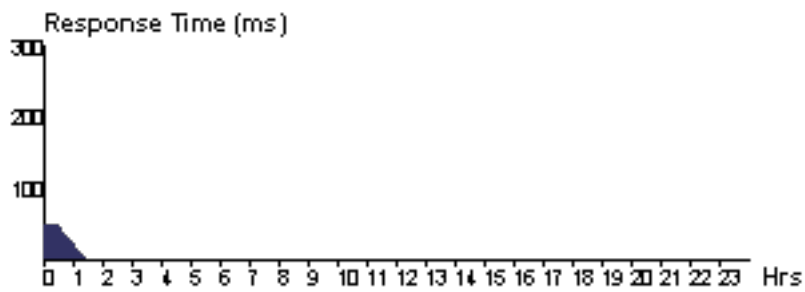
UB16



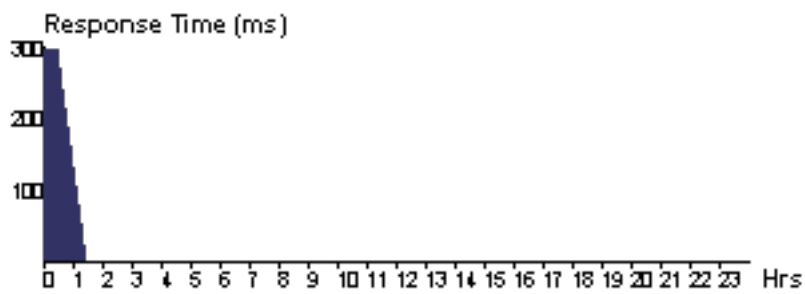
UB17



UB18

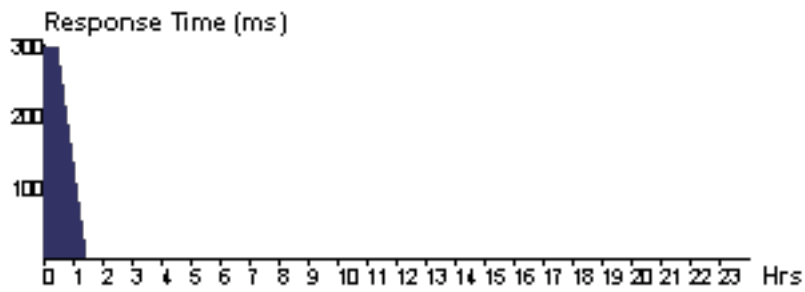
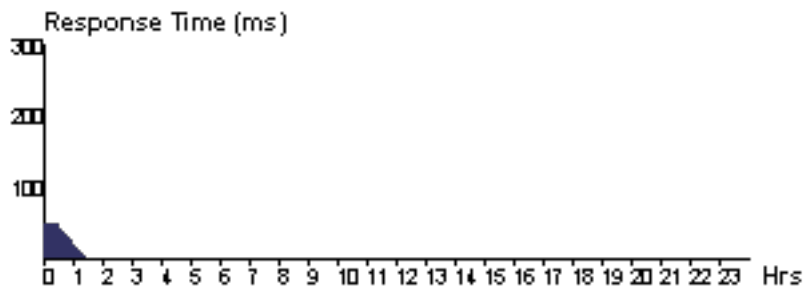


UB19

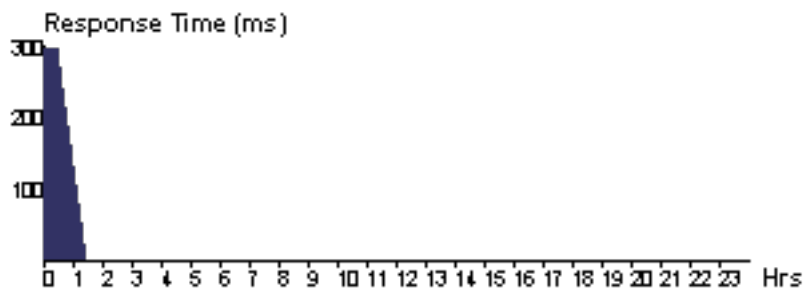


UB2

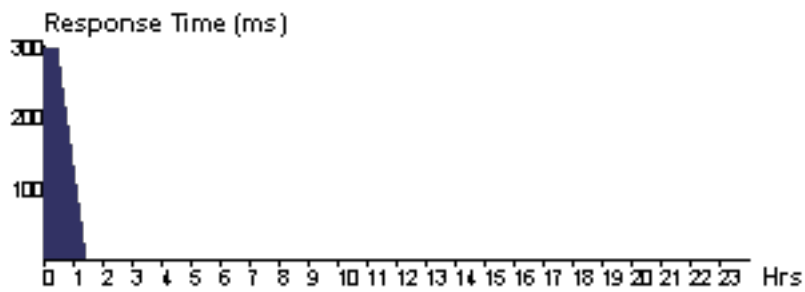
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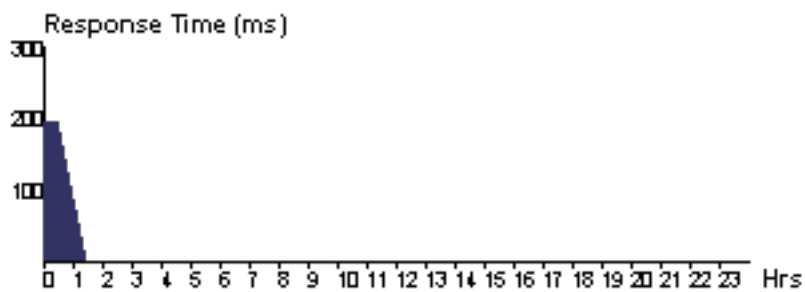
UB21



UB22

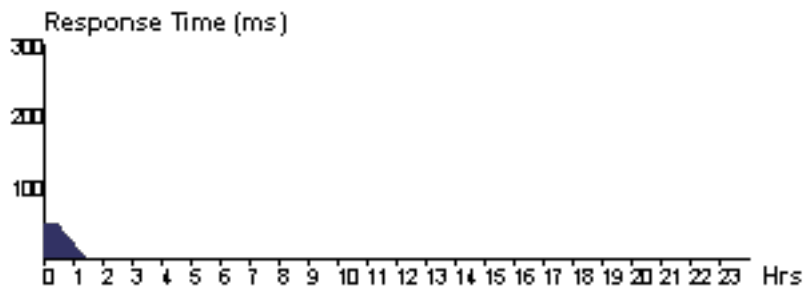
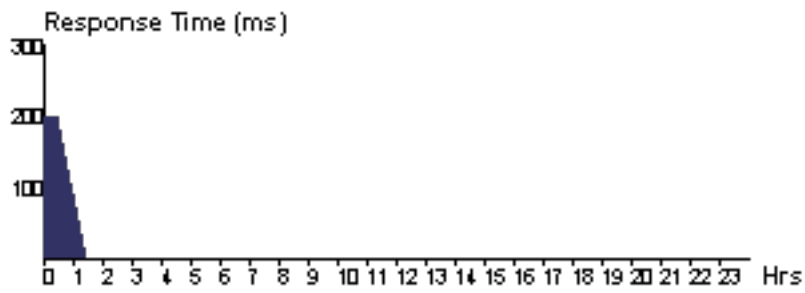


UB23

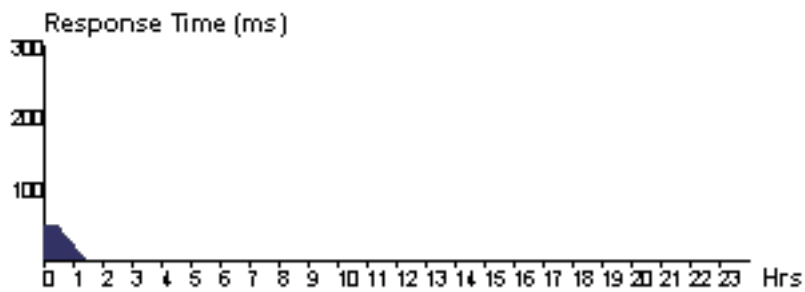


UB24

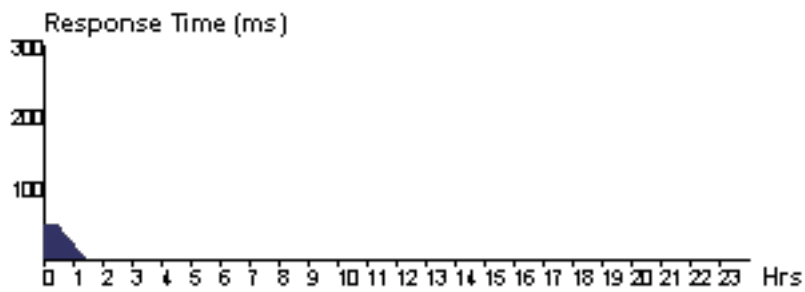
UB25



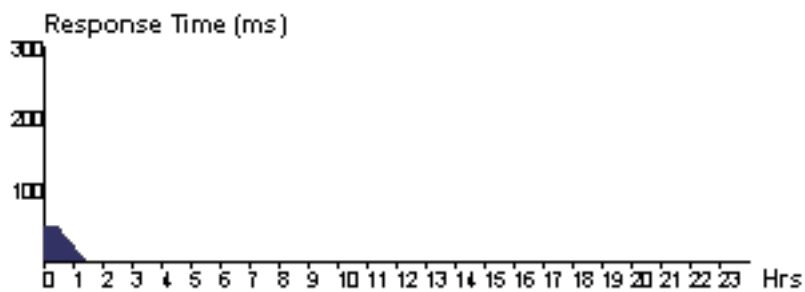
UB26



UB27

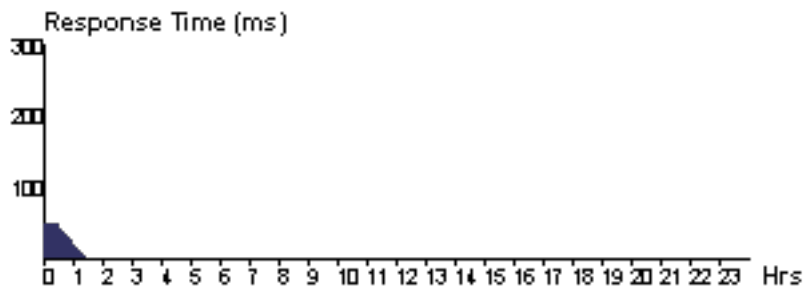
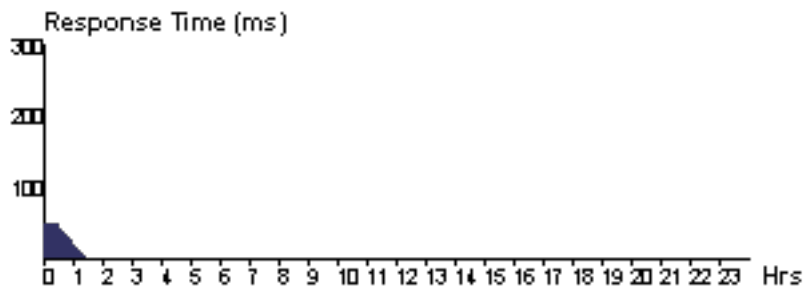


UB28

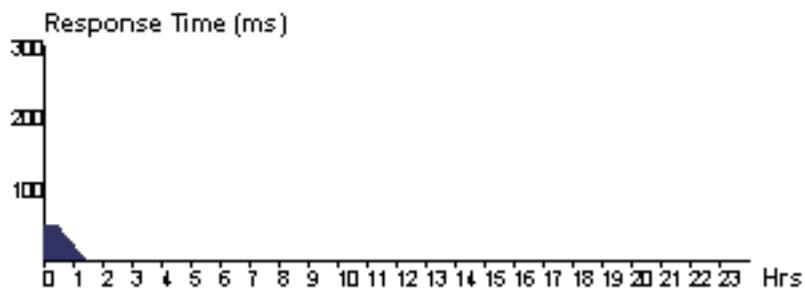


UB29

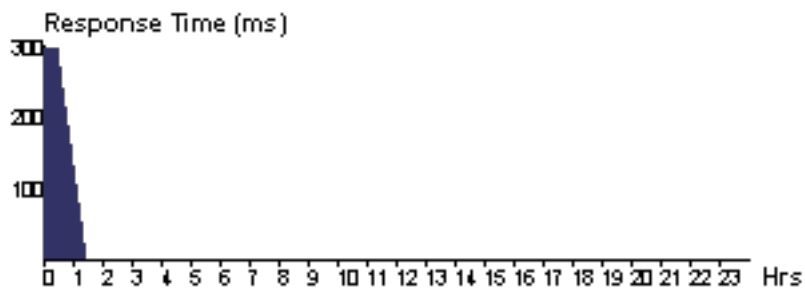
UB3



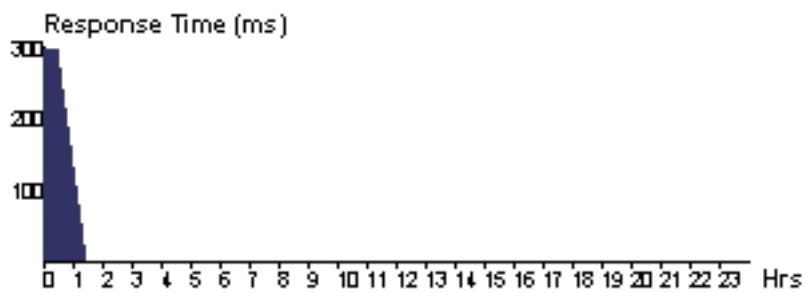
UB30



UB31

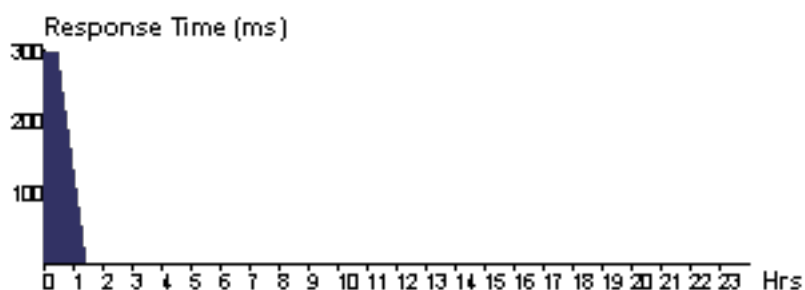
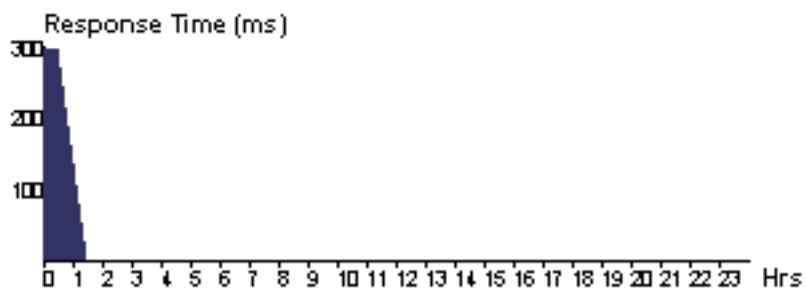


UB32

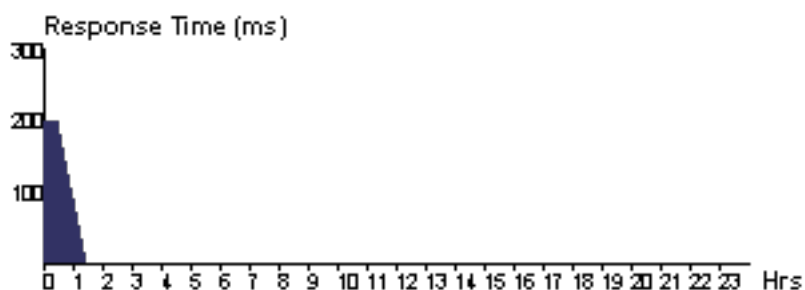


UB33

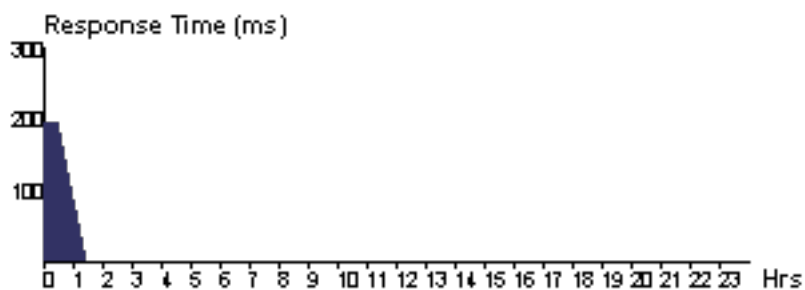
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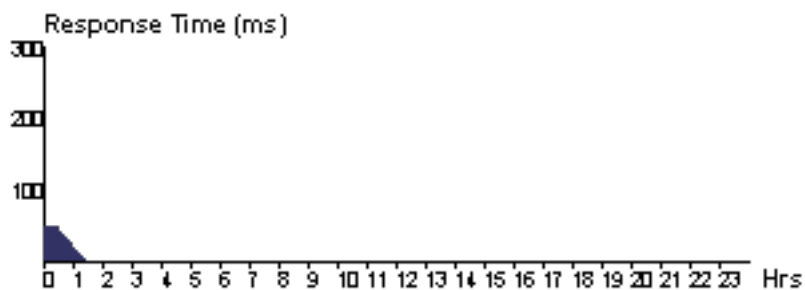
UB35



UB36



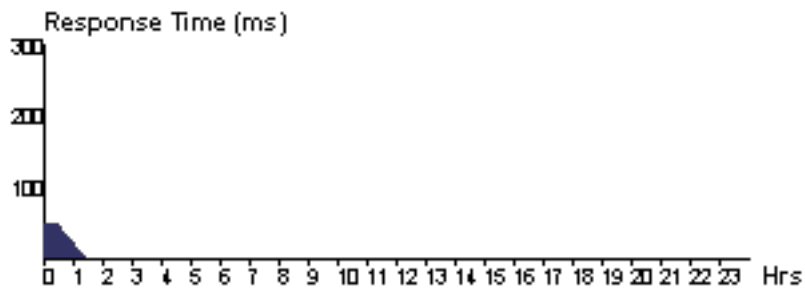
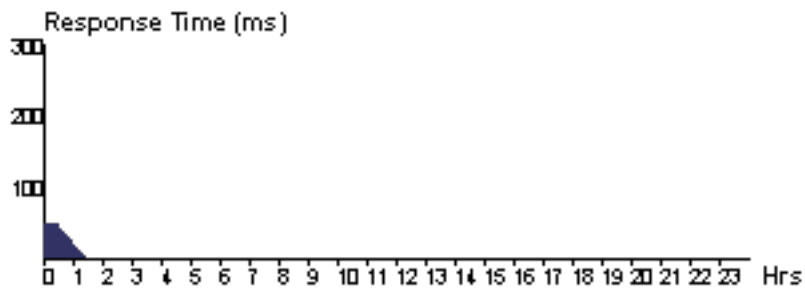
UB37



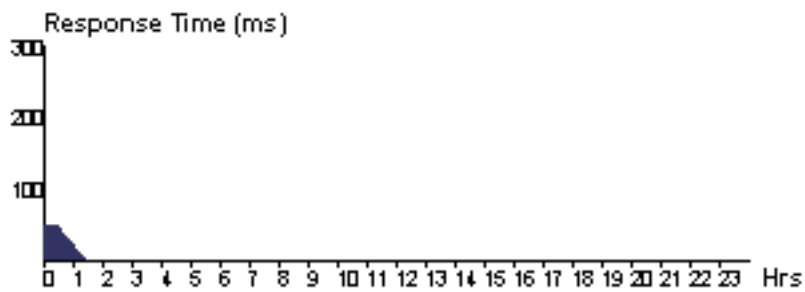
UB38

UB39

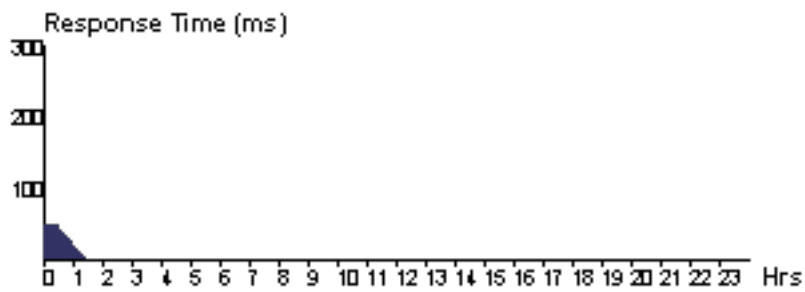




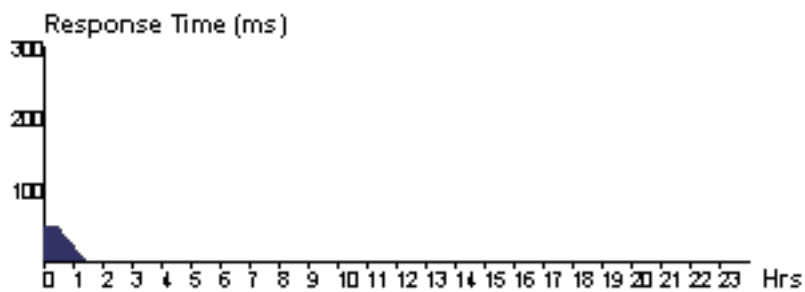
UB4



UB40

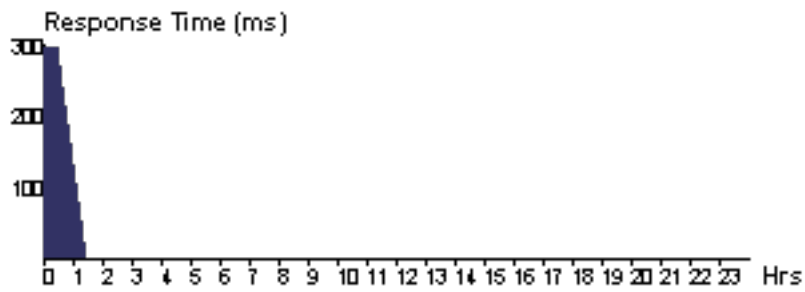
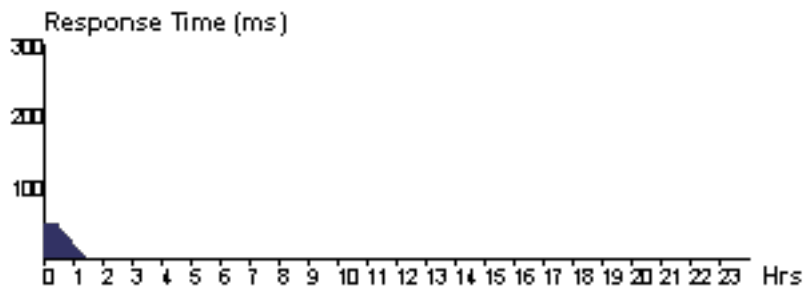


UB41

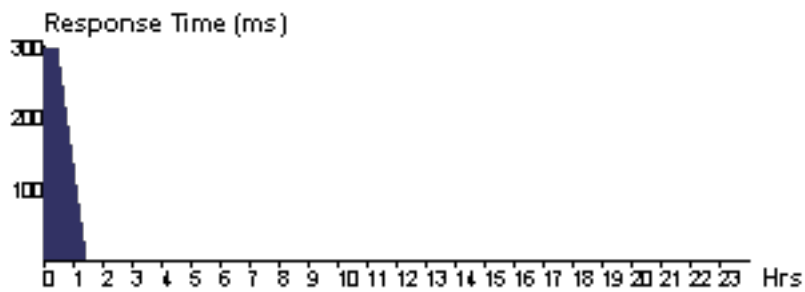


UB42

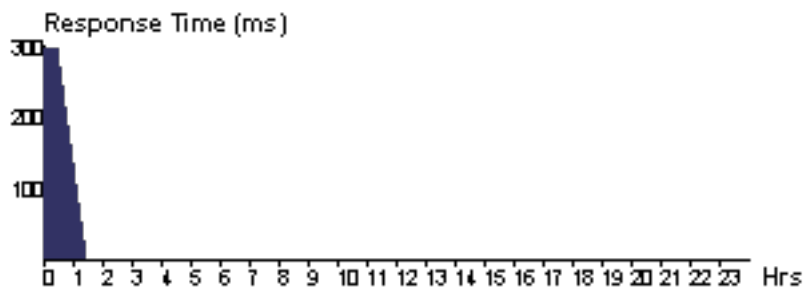
UB43



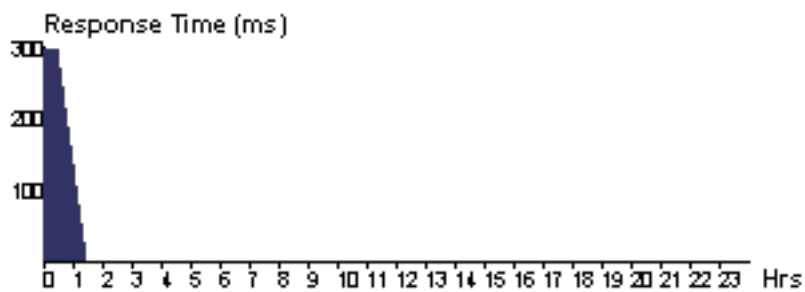
UB44



UB45

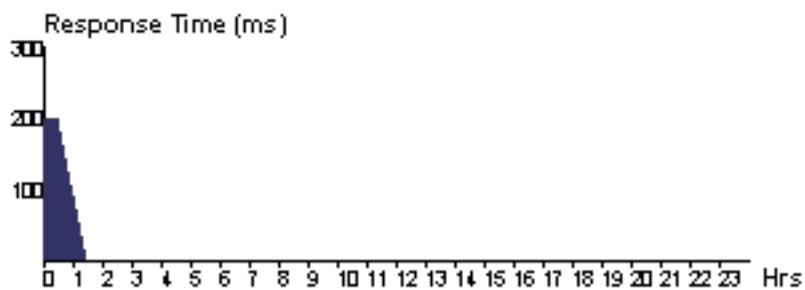
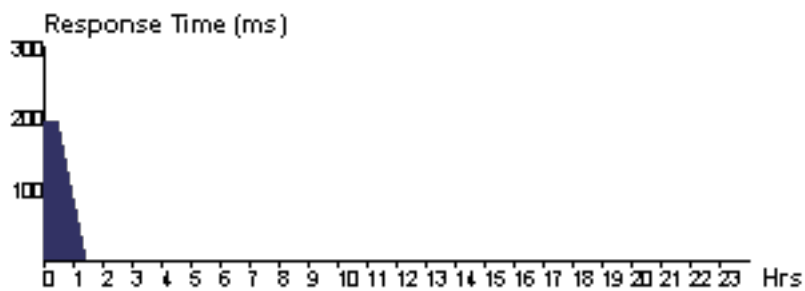


UB46

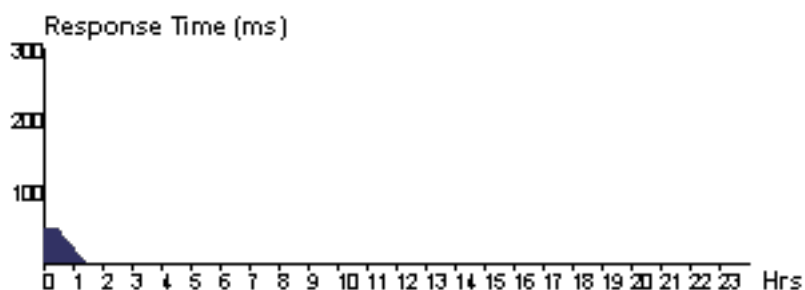


UB47

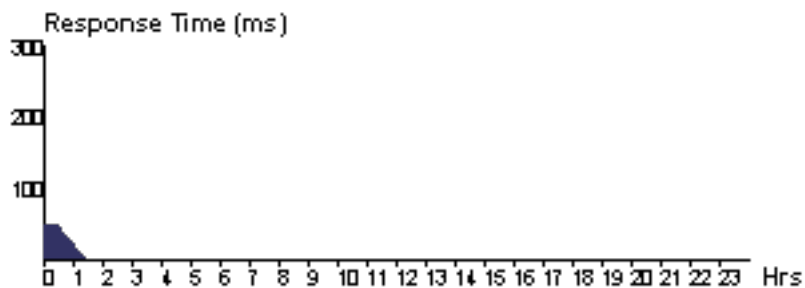
UB48



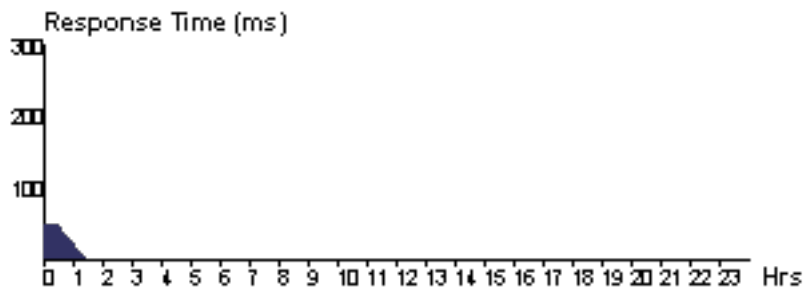
UB49



UB5

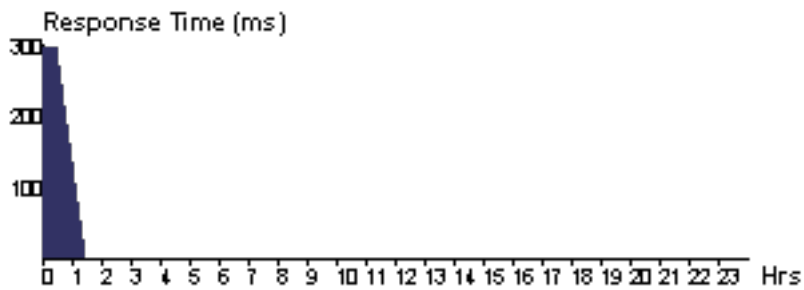
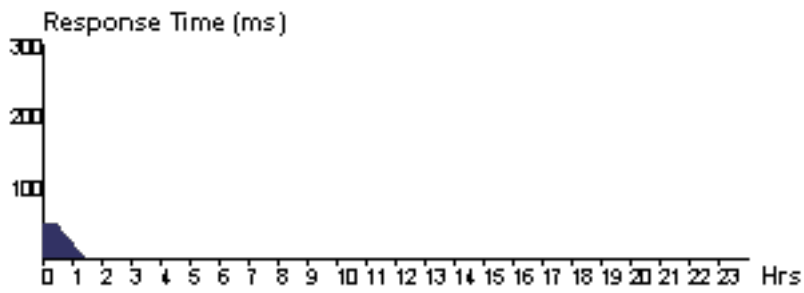


UB50

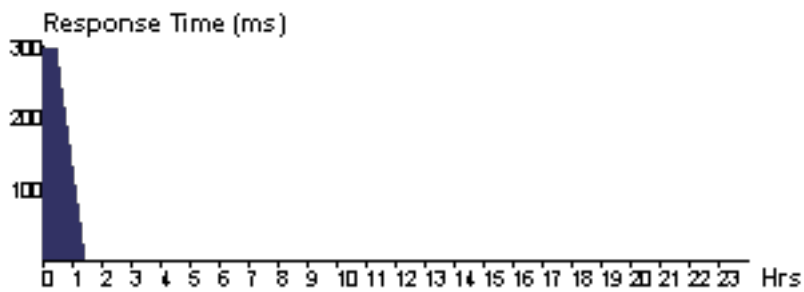


UB6

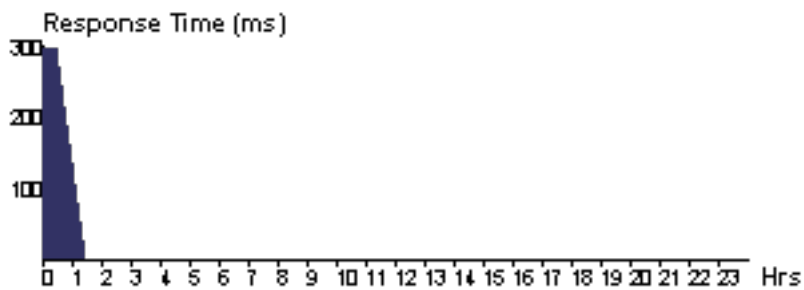
UB7



UB8



UB9



## Data Center Request Servicing Times

| Data Center | Avg (ms) | Min (ms) | Max (ms) |
|-------------|----------|----------|----------|
| DC1         | 0.29     | 0.01     | 0.89     |
| DC2         | 0.50     | 0.02     | 0.97     |
| DC3         | 0.43     | 0.02     | 0.91     |

## Data Center Hourly Average Processing Times

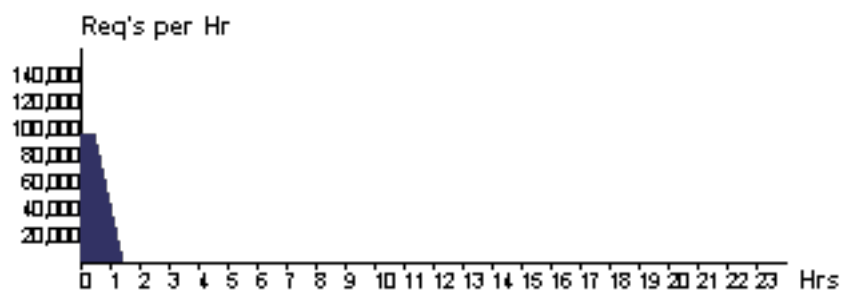
DC1

DC2

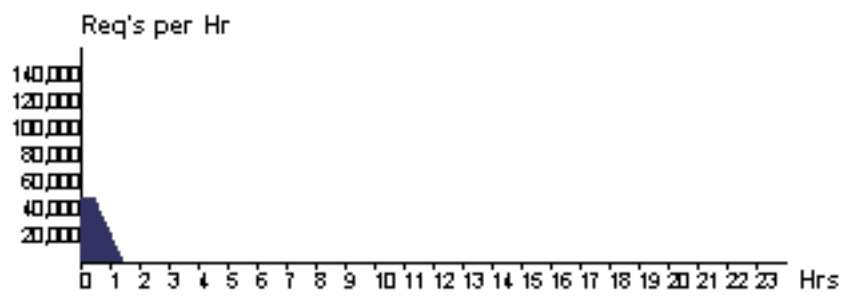
DC3

### Data Center Hourly Loading

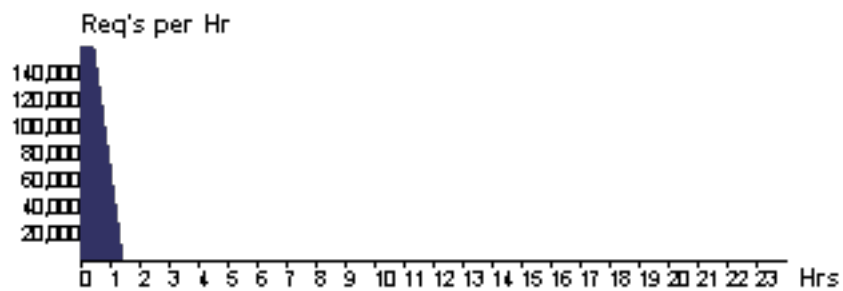
DC1



DC2



DC3



## Cost

|                                  |      |
|----------------------------------|------|
| Total Virtual Machine Cost (\$): | 1.50 |
| Total Data Transfer Cost (\$):   | 3.20 |
| Grand Total: (\$)                | 4.70 |

| Data Center | VM Cost \$ | Data Transfer Cost \$ | Total \$ |
|-------------|------------|-----------------------|----------|
| DC2         | 0.50       | 0.51                  | 1.01     |
| DC1         | 0.50       | 1.02                  | 1.52     |
| DC3         | 0.50       | 1.67                  | 2.17     |