**Automation Script**

1. Copy your code from part C here :
2. Screenshot showing that the automation script executes without errors (from part D):

**Diagnostic Report**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Data Description** | **Optimal Range** | **Data and Results** | **Script Used to Extract Data** | **Screenshot of Result of Script** |
| Time to scale from 1 cluster to 200 clusters  (8 million users expected at peak after PAX West) based on 40K users per cluster (subject to change based on load testing) | 15–30 minutes for each cluster | 1 cluster = 9min11sec  200 clusters = 1836 Min or 30.6 hours | kitchen converge |  |
| Time to register a cluster and then quench connections to the load balancer, taking the cluster off-line (start-up, operation, shutdown) | 1 minute per connection quench, start of cluster launch, and part of time to scale cluster, can be tracked separately as a quench | 1m17s | Kitchen destroy |  |
| Peak load averages per system at 20K, 30K, and 40K users per game cluster | 60% of CPU triggers new cluster launch; if reaching core load at 20K users, launch new cluster on 60% CPU loads |  |  |  |
| Write times to the diagnostic data drive | <30 milliseconds |  |  |  |
| Pull time from the game instances (1 core, 1 web front end, 1 web back end, 1 database, and 1 micropayment server) and initialization time | Part of cluster launch 15–30 minutes |  |  |  |
| Average messaging service (queue) time | <1 minute in queue |  |  |  |
| Average latency for the micropayment server | <30 milliseconds |  |  |  |
| Average latency of each cluster | <30 milliseconds |  |  |  |
| Network data in and out for each cluster | <1 second |  |  |  |
| Overall CPU utilization of the environment for each cluster | Not >60% |  |  |  |
| Diagnostic data able to be written by the automation to the correct cloud bucket storage space | Show read/write times <1 second |  |  |  |
| Cooperative play cluster latency | <30 milliseconds |  |  |  |
| Cooperative play latency between gateway/matching and core | <30 milliseconds |  |  |  |
| Cooperative play latency between gateway/matching and environment | <30 milliseconds |  |  |  |
| Pull time from the cooperative play instances and initialization time | 15–30 minutes for each cluster |  |  |  |