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Performance Testing Questionnaire

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# Directions for use

This questionnaire will assist your Performance Testing team with identifying your team’s and application’s needs for performance testing services.

Please fill out the line items to the best of your ability. Do not be concerned if some items are left empty. We will work together to ensure all necessary information is captured.

# Project Dates

|  |  |
| --- | --- |
| Production date: |  |
| Proposed UAT dates: |  |
| Proposed Load Testing date: |  |
| System Code Freeze: |  |
| Results due by: |  |
| Other pertinent dates: |  |
| When will functional testing be completed? |  |
| When will the database / data migration be completed? |  |

# Performance Goals

1. **Application Name, Modules to be tested, Description, and Versions.**
2. **What are the test objectives (check all that apply)?**

* Average Load Testing (Expected normal load)
* Peak Load Testing (Busiest day of year)
* Stress Testing (Breakpoint)
* Capacity planning (Future Growth)
* Endurance Testing (Memory leaks / stability)
* Spike Testing
* Configuration Testing (Tuning and tweaks)
* Isolation Testing (Silo)
* High Availability validation
* Other operation validation

1. **What is the projected size/scalability of the application?**
2. **What is the target resource utilization?**

* Target server count with description
* Resource utilization goals per server {<80% CPU, < 60Mbps, <300 IOPS, < 15 GB RAM}
* Or Resource utilization per transaction

|  |  |  |
| --- | --- | --- |
| Web Server Name | Metric | Goal |
|  |  |  |

|  |  |  |
| --- | --- | --- |
| App Server Name | Metric | Goal |
|  |  |  |

|  |  |  |
| --- | --- | --- |
| DB Server Name | Metric | Goal |
|  |  |  |

|  |  |  |
| --- | --- | --- |
| Other Server Name | Metric | Goal |
|  |  |  |

1. **What is high availability/reliability target?**

What is the target recovery time per failure point?

Please enumerate failure points to be tested.

1. **Please describe your environment that will be used to run the performance test.** (Architecture Diagram Preferred)

Is it equal to production? Is the hardware the same CPU/Storage class if not the same size? Are both the same in terms of physical or virtual?

1. **How many days of actual performance test execution do you anticipate?**

1. **Describe the network layout with diagrams and any special requirements?**
2. **If this is a WAN test, what is the bandwidth of your external circuit?**

What is the normal % utilization in current operations?

1. **Who is the target user?**
   1. External Web based?
   2. Internal LAN?
   3. VPN based?
   4. Mobile based?
   5. A combination of the above?
2. **Is the target load based on number of users or based on number of transactions per** second/minute/hour?
3. **What are the inputs to this system?**
   1. Human inputs (interactive)
   2. Computer that provide data for this system (system interfaces)?
      1. Internal
      2. Cloud based
      3. External (non-cloud)
4. **What are the outputs from this system?**
   1. Human outputs (screen, files or paper)?
   2. Computers that receive data from this system (system interfaces)?
      1. Internal
      2. Cloud based
      3. External (non-cloud)
5. **Are the transactions involved human based (application) or system interface (i.e., web services)** based?
6. **What other systems share the same servers in use by this system?**
7. **Is the application browser based, “fat client” based or “remote user” (Citrix, RDP) based?**
   1. If Fat Client, what is the communication protocol?
   2. If Remote based, is it Citrix or RDP?
8. **Does the application use and any CDN networks such as Akamai or Amazon S3?**
9. **Will any applications to be performance tested be hosted full or partially in the cloud? If so** **which cloud providers if know?**
10. **Will any tests exceed 10,000 concurrent users in a 15-minute window? (40-50k users per hour)**
11. **Will the application have a mobile native client? Mobile enabled website?**
12. **How often will you need an external test to be run and what volumes?** (Daily/Weekly/Quarterly/etc)
13. **How long would a high volume burst test of over 1,000 users last?**(Common industry is to keep large scale burst tests shorter than traditional performance tests for instance 15-30 minutes)
14. **Is the application load balanced? If so what LB?**
15. **Is an IPS Security device in the testing mix if any users are external?**
16. **Would you like an end to end test or will this focus solely on the application and database servers.** (Not LB / Firewalls/ Networks)
17. **Is the application hosted in your data center or dedicated rack or is it cloud based – Amazon, Azure, HP, IBM, etc.?**
18. **Does your application have any physical devices such as credit card readers?**
19. **Do you have a way to provide test data for the test?**

Is the data scrubbed so it doesn’t require any special PCI/HIPPA/PII restrictions? (Or is the test data such that the information is not PII or other security concern?)

1. **Does the performance test execution at full loads have to be executed off hours?**

If so what are the time restrictions for test execution?

1. **Describe performance problems this application has suffered in the past or new architecture changes that are of high concern?**
2. **Are you deploying any mobile modules? Are they native applications, web or responsive web sites?**

If so, please indicate if standard iOS/Android and versions or if specialized hardware.

1. **Are there any batch processes that execute in the same environment? If so, what are they?**
2. **Are there any other applications that will be running in the same environment? If so, what are they?**
3. **List known interfaces**

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Latency Goal | Peak Throughput min |
| XXX | Web Service – REST | < .5 second response time |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# Business Processes in Scope

Please indicate all business processes that are high volume or heavy load on the system that are in scope for the performance tests. These will typically be a subset of the functional tests, chained together for form complete business processes.

**BP’s in Scope**

|  |  |  |
| --- | --- | --- |
| Business Process Name | Description | SME |
| Example: Register new Customer | Process to register a new customer | Raja |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
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|  |  |  |
|  |  |  |

# Process Statistics Peak Hour

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Distinct Users | Login (ex) | New Sale (ex) | Process 3 | Process 4 | Process 5 | Process 6 |
| Cashier |  |  |  |  |  |  |
| Storage Manager |  |  |  |  |  |  |
| User X |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Hour Total |  |  |  |  |  |  |

# Batch Transactions

1. What are the batch execution windows for each of the batch jobs mentioned in the workload section?
2. Are any of the batch processes time dependent? If so, which ones?
3. Are there any SLA’s or other performance requirement documentation for the batch files?
4. Does any of the batch processes need to be monitored for its performance? If so, which ones and what mechanisms are in place to monitor them?
5. Is there a sufficient amount of data to execute a typical batch run and a peak load batch run? If not, is there a bulk loader to input the data?
6. For each batch process, what response can be expected from this batch (none, printout, table updates, etc)?