**Deployment Guideline**

Monitoring Guidelines

The following items should be monitored for each deployment to a production environment. Automatic monitoring is preferred and should be set up prior to any deployment. Please keep in mind that the suggested approaches listed below are generic and should be tailored to each application that is being deployed.

| **Element** | | **Description** | **Approach** | **Verification** |
| --- | --- | --- | --- | --- |
| Application Uptime | Monitor whether the target application is up and running correctly | | * Application monitoring   + Ensure target page(s) is up * Endpoint monitoring   + Compare actual versus expected response data   + Compare actual versus expected response code | * Is the site up and accessible by target user(s)? * Does the application return the expected response? * Does the API endpoint return the expected response code? |
| Application Responsiveness | Monitor if the system is responding effectively | | * Compare actual versus expected response time | * Is the system/API responding within the expected time frame |
| Application Environment | Monitor whether the environment configuration is set up correctly | | * Data monitoring   + Compare actual versus expected data | * Is the system/API connected to the intended database environment? * Which database is the data read from? Production, Staging, UAT, or Dev? |
| Logging | Monitor if the application log is generated correctly | | * Log monitoring   + Compare actual versus expected log entries | * Is log file generated after the deployment? * Does the content of the log file make sense? Is it expected? |
| System Resources | Monitor if the underlying host is operating normally | | * System resource monitoring   + Compare actual versus expected:     - CPU     - RAM     - JVM threads | * Does the application use more system resources than expected? * Does the application use up more and more system resources over time? (10, 30, 60 mins) |