Db2 z/OS Performance and Availability Audit

Cost avoidance can be achieved for many challenges via identification of performance/availability opportunities and implementation of best practice design and tuning efforts. A Db2 z/OS Performance and Availability Audit provides skilled expertise to find those opportunities and provide recommendations for achieving high performance and availability, thereby realizing cost avoidance/savings by avoiding unnecessary cost and availability exposure. It can also help to identify and fix lingering performance issues with applications involved in cloud migration efforts, thus leading to additional cost and potential risks.

Challenges addressed:

Performance

- Need for CPU upgrade to support increased or poorly tuned database workloads
- Software licensing cost increase due to increased MIPs
- Additional storage and processing for unthrottled database growth
- Redesigns/tuning of legacy databases and applications to support increase volumes and availability needs
- Competing maintenance/batch windows not meeting SLAs (performance/availability)
- Lack of knowledge and experience with Db2 z/OS performance features and optimal integration with other mainframe platform products
- Poorly performing applications (SQL) causing SLAs to be missed and resulting in financial penalties and/or compliancy violations
- Lack of sufficient performance testing environment
- Cost associated with inability to perform migration to cloud services platform

Availability

- Poorly defined availability requirements (RTO) for mission critical applications running on Db2 z/OS
- Poor backup and recovery planning and testing for Db2 z/OS applications and systems
- Unplanned outages resulting in financial penalties
- Lack of knowledge and experience with Db2 z/OS backup and recovery options to meet SLAs for availability
- Trouble meeting SLAs during migration to cloud computing environments when expectations are not being met in timely manner

Approach:

- Review subsystem opportunities to help with better application performance (memory/dynamic SQL caching, optimization, DBAT performance, etc)
- Review current application/SQL code of application(s) experiencing performance challenges
- Review Db2 database structures for best usage and possible restructuring or indexing opportunities

- Identify repetitive errors (i.e locking (deadlock/timeouts), insert duplication, etc) and provide resolutions
- Define issues, remediation, test plans and perform/measure results
- Rollout in test environment(s) and perform comparison testing

Deliverables:

- Knowledge transfer and staff mentoring
- Identify gaps in performance and tuning policies, practices, and procedures
- Identify single points of failure in infrastructure architecture related to Db2 z/OS
- Identify proper usage of Db2 z/OS features and functions to achieve performance and availability SLAs
- Identify problem applications/SQL and potential resolutions
- Identify performance and availability anomalies and provide solutions