

Enterprise Data Audit Service

The Enterprise Data Audit Service offered by Authentic Intelligence promotes maximizing operational efficiency to safe-guard and optimize the use of enterprise data. The service analyzes not only technology implementation but also business process, focusing on database systems along with associated interfaces that utilize the data generating a road map for improvement.

Why Authentic Intelligence

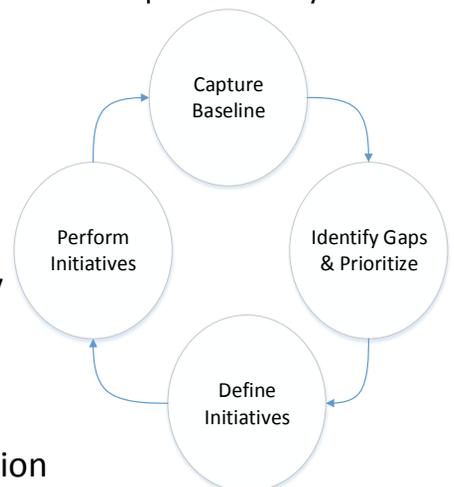
Authentic Intelligence is uniquely equipped to address the entire spectrum of enterprise data systems. Employees hold a wide variety of Microsoft and industry-standard certifications and distinctions. This includes Microsoft SQL Server Master, .NET Developer, System Engineer, and Trainer certifications and industry-standard CISSP and CompTIA certifications. Staff includes individuals with over 30 years experience and former Microsoft employees earning achievements such as the Microsoft Team Foundation Server Ranger distinction and CPE Champion, Most Valuable Player and Outstanding Contributor performance awards. Authentic Intelligence is a certified Halo partner able to deliver consulting services to help clients realize the full potential of the Halo Business Intelligence stack.

Continuous Improvement Approach

Critical gaps are identified across seven key process areas affecting enterprise data efficiency. This results in the identification of initiatives that target the gaps detected. Initiatives are performed iteratively to meet milestones generating a new baseline and fostering a continuous improvement cycle.

Enterprise Data Process Areas

- Monitoring and Measurement
- Security and Access Control
- Information Access/Data Integrity
- Disaster Recovery
- Development/QA Infrastructure
- Technology Utilization
- Throughput and Resource Utilization



Initiatives

The service goes beyond just assessing areas, defining prescriptive solutions through a set of proven standardized initiatives as well as formulating custom initiatives specific to a client based on their unique situation.

Standard initiatives map remediation work to the process areas including items such as:

- 1. Monitoring Framework:** Ensure collection of all key metrics needed for meeting the information requirements. Integrate third party tools, automated processes, and policies to ensure accurate baselines measuring progress of initiatives across all problem areas.
- 2. Function-oriented Access Control:** Ensure security is at the granularity needed to represent the business processes within the departments for appropriate access to data assets.
- 3. Disaster Recovery Planning and Setup:** Ensure adequate backups of databases and related applications are maintained at a secure offsite location that can be restored for operation in another environment in the event of a disaster.
- 4. SQL Server Instance Optimization:** Ensure appropriate server configuration with optimal provisioning and utilization of server resources.. Achieve higher database efficiency through instance consolidation, shared data aggregation, data cache reuse, and resource governance. Implement log shipping ,mirroring, strategic replication designs to relieve stresses of OLTP systems in parallel with building a low latency reporting infrastructure.
- 5. SQL Server Database Optimization:** Automate database maintenance tasks for indexing and defragmentation to optimize storage utilization and responsiveness. Implement enterprise features for database compression, data quality services, and snapshot isolation to improve storage efficiency, promote data quality and improve throughput. Implement adequate data protection using suitable backup strategies. Ensure adequate security through mechanisms including Transparent Data Encryption (TDE).
- 6. Query Optimization:** Identify and optimize information queries critical to the organization in conjunction with optimizing the hosting instances and databases. Utilize SQL Server Profiler and related tools to identify bottlenecks, refactor queries, and define optimal indexes.
- 7. Enterprise Collaboration Framework:** Breaks down communication walls using an Agile/SCRUM mindset to focus database and applications effort on the business goals based on SMART criteria (Specific, Measurable, Assignable, Realistic, and Time-Related).
- 8. Team Foundation Server (TFS) Training and Deployment:** Ensure optimal deployment and use of Microsoft Team Foundation Server for organizations with in-house software or database development efforts. Configure TFS to provide full life-cycle source code control, integrated project management, and quality assurance for reliable deployment of application and database assets. Utilize TFS Lab management to automate creation of virtual machines for QA testing as well as provide an environment for disaster recovery testing.

- 9. Data flow optimization with Business Intelligence using Halo BI:** Perform data flow analysis to identify bottlenecks and inefficiencies in information flows. Eliminate inconsistencies and bottlenecks due to information silos or client centric data stores automating data consolidation into a central data warehouse with cube and tabular model generation. Remove inefficient and redundant data duplication processes and replace with a centralized data warehouse supporting cubes for analytics with predictive capabilities. Implement KPIs, visualization and reporting through Halo Prism with integration to Microsoft and third-party Reporting and Visualization tools.
- 10. Database Technology Training and Strategy Formulation:** Provide training to equip staff to meet operational and strategic challenges. Prescribe best practices for database design, implementation, and maintenance. Analyze emerging technologies such as HBase, Shark, Hadoop and others for integration of big data, cloud-based analytics, and non-relational databases into the enterprise data framework.
- 11. Virtualization Migration:** Provide guidance for capacity planning based on virtualization with strategies utilizing storage technology options such as PCIE SSD, SATA SSD, SAN Cached SSD, HBA, and high-speed network backbones including InfiniBand. Develop strategies for high availability for Windows Hyper-V as well as ESXI platforms.
- 12. Master Data Management and Business Rules Enforcement:** Identify metadata involved in various processes surfacing significant data key/value pairs which incorporate business logic. Simplify queries by utilizing master data management interfaces that encapsulate data configurations that represent business rules.

Qualitative and Quantitative Return on Investment

The audit with resulting initiatives transforms efficiency of enterprise data within an organization. The iterative approach continually evaluates the baseline measure actual progress. Progress is quantified in terms of costs related to infrastructure resources and time savings. Qualitative improvements result to the reliability and security of the data leading to more profitability, reduction in risks and decreased costs. Among results enjoyed by customers:

- 1) 40% reduction in storage utilization
- 2) 90% reduction in database deadlocks and locks
- 3) 75% reduction in help desk tickets due to data duplication failures
- 4) 90% and greater improvements in critical queries that took minutes now reduced to just seconds.
- 5) Overall throughput and resource utilization improvements of over 30%.
- 6) Improving to full regulatory compliance to less than 50%
- 7) Speed up creation of data warehouse, cubes, and tabular analytic models by 70% generating operational cost savings and revenue of over 30%