

DATABASE CHECK ENGINE SERVICES



RACE-READY DATABASE

Your databases are tied to complex systems of moving parts just like an automobile. Just as a Formula 1 car needs to be properly tuned and cared for, so must your databases.

Your database personnel need to perform diagnostics, tire rotations, turbo charge, and quickly troubleshoot when things go wrong in order to keep things running toward the end goal. It takes a professional pit crew with specific tools to keep that vehicle running between laps. EN Data Solutions will work with your IT, Database, and GIS teams to help make sure the right people have the right tools for the job. We will consult and collaborate with you and build the necessary tools for relational databases on your servers, especially Esri Enterprise (SDE) databases.

Are your databases ready for the race?



OBSTACLES

GIS power users are not necessarily IT DBAs and IT DBAs are not necessarily GIS Power users. Often there is a gap in awareness, knowledge base, responsibility, tools, interpretation of priority and mutual best practice treatment of systems. This gap allows long term obstacles to become problems for

productivity in the form of system performance, security, and anomalies in server, database, and application maintenance.



TO THE WINNER'S CIRCLE

EN Data Solutions will use knowledge of GIS and IT systems to build up best practices and deploy tools for monitoring, troubleshooting, and other analysis within complex data SDE and other RDMS data structures. There is a set of recommended items to customize and deploy but this is an overall consultation service in which the activity is tailored to the needs of the organization.



DATA HEALTH LOGS

This will reduce the time consumption and tedium of investigating the inner working of SDE tables to ensure the data is healthy. Gathering the right information in the most useful, accessible spots can make this process more effective. A system that is best built for healthy growth should have a means of reporting on the unique metrics related to GIS databases such as persistent non-zero states, orphaned relationships, privileges inventory and XY spatial violations.



CHECK ENGINE ALERTS

EN Data Solutions can help create and deploy a system of alerts or messages integrated into other systems like an automated email or warning light in a dashboard. They may target things like “Data creator not following standard practice with registered items” or “Failure to reach a full completion of maintenance routine on nightly basis.” Our team can program the mechanisms that deliver the alerts, summarize and ‘table up’ the important details or consume them in visual interfaces such as Power BI, Arc Pro, a custom website or other APIs.



SCHEMA AUDIT TRAILS

EN Data Solutions will work with the specific needs of the organization in terms of long-term audit logging and build the tools to capture changes. How many times has the structure of each of your databases changed over the course of the last two years? How many of these were significant changes? Do you have a mechanism to assess this alongside the general volume of tickets with IT or spikes in overhead activity in your GIS group? How did you document your plan to upgrade to a new database source, be it combination or transfer to new structure? Even things like added field, domain, or relationship class may have large implications and may be worthy of associated documentation, tracking, and proof of testing.



MAINTENANCE REVIEW & ENHANCEMENTS

As database structures change, the pattern by which power users interact with the data should have a periodic review to ensure best practices and that programmed maintenance routines are kept up to date with the latest application compatibility, security expectations, and dependent libraries. This often requires a unique cross section of coding and analysis skills to determine if there is correct execution or to take action if there is a deficit. As part of our consultation, EN Data Solutions can build or update scripts and configurations to prioritize conflicting routines or sequence nightly or weekly routines in a fine-tuned manner such that the most optimal use of limited resources is achieved.



POWER USER BEST PRACTICES & WORKFLOWS

As database structures change, the pattern by which power users interact with the data should have periodic reviews to ensure best practice. This includes data intersections with new technology and database access methods such as branch versioning, Esri Portal services, location based SDE databases, etc.



DATABASE PERFORMANCE DIAGNOSTICS

Organizations may find themselves with longstanding untreated pain points related to performance, often without the dedicated time to orchestrate proper analysis and testing to determine the true source of the problem. This is where logging of errors and resources and their interpretation becomes a mixture of science and art. Analysis involves forensic information gathering, testing, and summary of recommendations. This can focus on known ongoing or upcoming needs or general strategies for developers, analysts, and IT.



SECURITY AND ACCESS TUNE-UPS

How sure are you that the people in your organization have the correct level of access? How would you report on this if there were a security audit? Security and access tuneups involves review of short term and long-term strategy for data access sharing and modeling threats within RDMBS and adjacent systems.



ON YOUR MARK....

Do these topics sound familiar?

Does your pit crew have what they need to keep moving?

Is your database ready for the race?

Ready? Set?...

...for more information about how EN Data Solutions can help you keep your database in racing form, **contact us at:**

info@entrustsol.com or call

630-353-4000