


CASE STUDY:

Database infrastructure assessment services for a global Aerospace & Defense contractor

In anticipation of an increase in data storage throughput for a Ground Mission Control System, a global Aerospace & Defense contractor based in Massachusetts selected Synapse SE to assess the capacity of an existing Sybase database infrastructure and advise the database management team on the modifications required to accommodate the impending change in usage.





Description:

A technology leader specializing in defense, homeland security, and other government markets throughout the world.

Size:

70,000+ Employees

Headquarters:

Massachusetts

Industry:

Aerospace & Defense

Software:

Sybase Adaptive Server Enterprise



BUSINESS NEED

Our client, a global Aerospace & Defense contractor, was facing a significant uptick in data throughput requirements related to a sophisticated Ground Mission Control System running on the Sybase Adaptive Server Enterprise (ASE) database platform.

The client determined that the system would need to be re-architected to facilitate a 1000 mbps rate of throughput over the next 5 years. With limited Sybase resources at their disposal, our client sought external assistance from Synapse SE to (a) document the current infrastructure's capacity, (b) further define and quantify the desired outcome, and (c) identify short and long-range improvement opportunities.

This effort encompassed the client's software development methodology along with the Sybase ASE configuration, its supporting hardware capabilities, and architecture. The recommendations needed to address the client's growth projections and outline the measures required to prevent potential outages of the system.

SOLUTION & RESULTS

Synapse SE was engaged to provide Sybase ASE infrastructure assessment services to the client's database management team in order to craft an advisory-level overview along with technical documentation that would illustrate:

1. The system and process modifications that would be required to achieve the desired outcome
2. Which modifications could be achieved in the short-term and which would require longer-term commitments
3. The desired result of each modification and the likelihood of success

This assessment was performed by interviewing client developers, directly gathering data from the Sybase ASE infrastructure, analyzing baseline information provided by client developers, and in-depth clarification discussions with client team members who were familiar with the Ground Mission Control System.

For security purposes, in some instances production data was unavailable by direct means. In those instances, Synapse SE delivered custom queries to client personnel and the relevant data was returned for analysis. To ensure a comprehensive analysis was performed, data points received from the client's production environment were compared against the development environment to determine areas of need at specific sites; hence, showing various system performance degradation symptoms.

By comparing industry standards and best practices with the client's current processes and configuration, we were able to identify key inefficiencies, "quick wins" and performance improvement recommendations that were clearly outlined in the assessment results overview. We were also able to incorporate technical appendices that enabled client developers and engineers to quickly implement the recommendations at their discretion.



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ABOUT SYNAPSE SE

Synapse SE is a provider of management advisory services, technology consulting, and staffing services for Healthcare and other organizations throughout North America. We create value for our clients by leveraging industry-specific capabilities, a national delivery model, and uniquely blended strategic and tactical services. For more information, visit www.synapse-se.com

For more information on this case study, or for questions regarding our services, please contact us at 800.934.4110 or information@synapse-se.com

