

Grid Computing and Big Data

Industry: Banking



Eliminating Computing Silos and Scaling to Meet Growing Demand for Data

For our client, separated but similar SAS computing platforms led to data duplication, inconsistency within updated files, and multiple locations of the same data. Since each business group had its own platform, many groups had unused computing power while others struggled to meet the ever-growing processing and big data demands of their analytic users. To make matters worse, the urgent need for regulatory information delivered in shorter time cycles increased the pressure to deliver more information, faster.

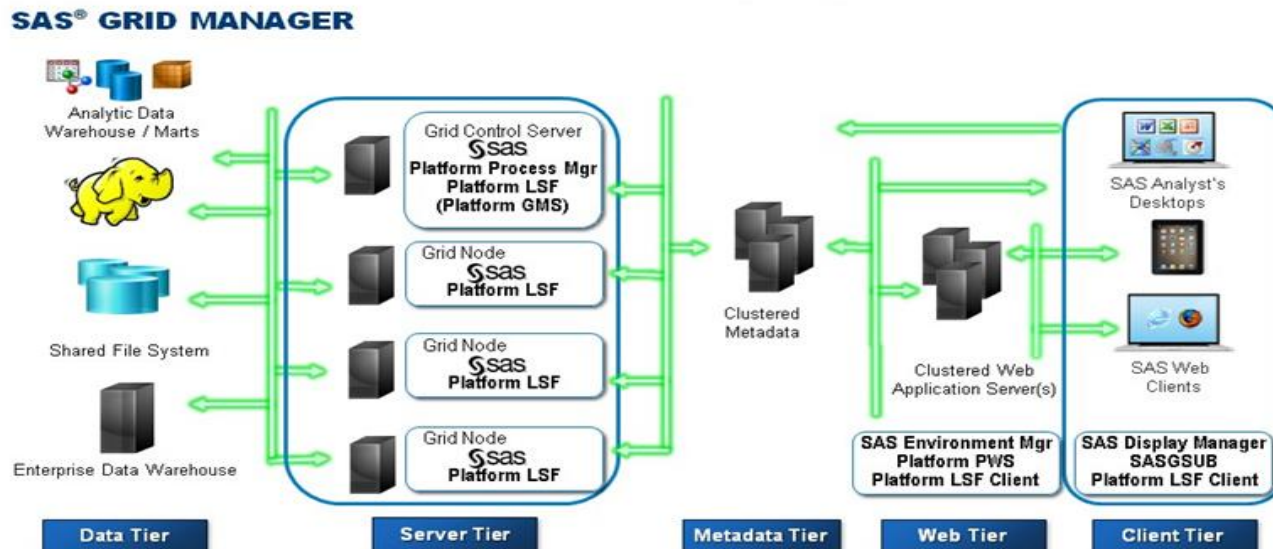
Key Client Challenges

- *Current environments are over utilized resulting in decreased throughput and recurring outages*
- *Environments are not scalable, resulting in data replication and multiple software licensing structures*
- *Some environments do not have Disaster Recovery – critical models execute on these environments*
- *PC SAS usage by hundreds of users poses unnecessary expense and risk for the bank*
- *Absence of an enterprise grade open source analytics ecosystem*
- *Unable to leverage unused computing power*
- *Excessive copying of data across platforms resulting in wasted time and storage costs*
- *Lack of centralized management capabilities and control of costs*
- *Lack of transparency and clarity across the enterprise on processes and protocols executing data requests*
- *Absence of discipline and agility when adding data and capability within production environments*
- *Models are uniquely managed across the organization*

Solution

Implementation of foundational infrastructure and associated application software, and data management capabilities necessary to govern and protect bank data assets, comply with regulatory requirements related to risk modeling, and enable the bank to proactively and efficiently derive informational insights out of data across marketing, risk, fraud, and AML.

Architect an **enterprise computing grid** with access to a big data repository when needed. At its most basic level, grid computing is a computer network in which each computer's resources are shared with every other computer in the system. Processing power, memory and data storage are all community resources that authorized users can tap into and leverage for specific tasks. This new Analytic grid environment allows the business to effectively manage risk, stay ahead of regulatory and other external changes, and leverage analytic capabilities that support proactive versus reactive decision making. The new platform has enabled our client to meet new business requirements, providing performance, scalability, agility, and resiliency and will offer quality-controlled processes that address key audit requirements.



Partnering with STS

Our client decided to partner with us based on:

- **Banking Business Experience** – Our team has over 20 years of experience in the banking industry including migrating key business processes to a grid computing model. We have the ability to communicate clearly with both the business and technical organizations within the bank.
- **Deep knowledge of SAS and Analytics** – Our architects and engineers have deep capability in analytics and SAS. More importantly we know how to integrate other technologies with SAS such as Oracle, Teradata, and Hadoop.
- **Grid Computing experience** – We've designed and implemented a number of grids in several technologies including java based grids. We understand the critical aspects of making a grid work correctly and efficiently. In order to successfully implement a grid computing platform you must understand how all the layers (Operating System, Network, Parallel Storage, and Client) work together and this is what set STS apart from other vendors.

What we did for our client?

1. Help develop the Roadmap and Communicate it to the Business
2. Document Current Environment Key Requirements
3. Develop, Document, and Communicate the Target State
4. Jointly Develop the Implementation and Migration Plans
5. Lead the Installation, Configuration, and Testing of the Grid Platform
6. Assist in migration of data and processing to the new platform

Client Results

- A common, powerful, and scalable computing platform established
- New common standards implemented around storage, security and processing resulting in easier to manage environment
- Elimination of untapped computing power
- Reduced data and computational processing cycle times
- Access to larger data sets to meet increased regulatory reporting requirements

Once the solution was implemented, our client was able to focus on enabling business users to meet the demand for large data sets and advanced analytics. Their IT department can now centrally administrate the environment and quickly deploy resources where they are needed.