

CASESTUDY

GLOBAL FINANCIAL SERVICES



STREAMLINING & OPTIMIZING SYSTEMS

CHALLENGE

The Department of Global Financial Management Systems (GFMS) at the U.S. Department of State (DoS) manages an extremely complex environment of financial, accounting, payroll, and reporting systems and interfaces. Consequently, these systems and interfaces are frequently updated, revised, replaced, or retired. Adding to the complexity, there is a high degree of connectivity and interaction among the many systems. Because a change to one system may have far-reaching effects on other systems, the entire environment must be considered before implementing any enhancement. Using paper tracking methods, or simply tracking one system at a time, can result in unintended impacts to secondary systems, databases that are outdated almost as soon as they're updated, and an incomplete picture of how all systems work in concert.

SOLUTION

To remedy the task at hand, MIL applied The Business Systems Universe (BSU), which is a collection of tools to help DoS manage the complicated environment of systems and interfaces in a way that benefits both users and GFMS itself. The BSU is made up of two main parts, which include a database and a graphical map that shows the relationships among all the systems GFMS oversees, rather than describing them. Both are critical in providing up-to-the-minute information about the DoS environment in a way that is clear, concise, and easy to navigate. The database modernized by the BSU now provides current information on each system, how it works, where to stem potential risk, and how it interacts with other systems. Specifically, it tells us how files move throughout the universe. The BSU map was designed to reduce confusion, allowing users to either view a printed copy (for portions of the system they refer to often) or navigate an interactive version. Not only can users move from system to system with the click of a mouse, they'll know everything they see is current, as workflows and other version-controlled diagrams are linked to the BSU website. This means changes appear in real-time.

BENEFIT

The BSU is a powerful new tool that offers a number of benefits for both MIL and for the client including the following:

- **Reduced risk** of unintended impact. Now that users can click on the smallest element of a system and see every element, system, or interface it touches, unintentional impacts to integrated systems will be minimal.
- **Validation of testing scenarios.** With a clear picture of every system that touches every other, the Independent Verification and Validation (IV&V) team can use BSU for the validation of software testing scenarios.
- **Customizability.** While BSU was designed specifically to manage DoS systems, the concept could be executed in any software development organization.
- **Real-time updates.** Because the BSU is linked to version-controlled designs, when a design is revised, the BSU website updates automatically.

The development of the BSU establishes MIL as a provider of sophisticated configuration management tools that can be customized to suit almost any set of systems.