CATIA TEAMCENTER ENTERPRISE INTEGRATION.

Lockheed Martin leads the way in streamlining the design and engineering of new systems-based possibilities and opportunities.

T··Systems·

THE REFERENCE IN DETAIL.

THE CUSTOMER.

Lockheed Martin Corporation is headquartered in Bethesda, MD. and is a global enterprise principally engaged in the research, design, development, manufacture and integration of advanced technology systems, products and services.

The corporation's core businesses are systems integration, space, aeronautics and technology services. Lockheed Martin Aeronautics Company, a unit of Lockheed Martin Corporation, is a world leader in the design, development, systems integration, production and support of military aircraft. Headquartered in Fort Worth, TX., its customers include the military services of the United States and allied countries throughout the world.

THE TASK.

With plans underway to initially produce 22 aircraft for the U.S. armed forces, Lockheed Martin Aeronautics Company required a way to improve efficiency by streamlining the design and engineering of its Joint Strike Fighter (JSF) Program. The JSF project is the largest military fighter project ever awarded, valued at $200 billion over its lifespan. Lockheed Martin wanted to integrate from Teamcenter Enterprise [1], a product data management (PDM) system with CATIA [2], a computer-aided design and computer-aided manufacturing three-dimensional graphics program.

Without an interface, data from Teamcenter Enterprise had to be manually transitioned through a complex and involved process into a CATIA program in order for it to be represented visually.

SYSTEM REQUIREMENTS.

The key task was to implement the CATIA Teamcenter Enterprise Interface (CMI) to streamline all internal processes by allowing information from design and engineering to be passed back and forth. While taking all requirements into account Lockheed Martin Aeronautics Company needed to produce their Joint Strike Fighters.

THE SOLUTION.

Starting with the off-the-shelf CMI product T-Systems had originally designed, Lockheed Martin contracted T-Systems to develop additional custom functionality needed for the JSF Program. The unique interface would allow CATIA [2] and Teamcenter Enterprise [1] to communicate with one another. The customized CATIA Teamcenter Enterprise Interface (CMI) tied Teamcenter Enterprise to native CATIA without any additional software between the two applications.

T-Systems also created interfaces from CMI to other engineering products utilized by Lockheed Martin. Additionally, T-Systems is providing installation, implementation, training, support and maintenance services to Lockheed Martin.

CUSTOMER BENEFITS.

The new solution has helped Lockheed Martin to improve the efficiency and quality of their engineering process. The new interface allows data from Teamcenter Enterprise to be transitioned seamlessly through an involved process into a CATIA program. This allows for data to be visually represented without the hassle of manually integrating the alphanumeric data. The CMI solution succeeds in lowering the TCO because no additional products or maintenance is needed internally.

"After a rigorous evaluation process, we selected T-Systems' CATIA Teamcenter Enterprise Interface software product as the initial tool for interfacing CATIA with our Teamcenter Enterprise Product Data Management System for our Joint Strike Fighter Program," said Mark Peden, Lockheed Martin's Vice President of Information Systems and Technology. "CMI offers us an initial lower risk and more supportable, simpler architecture for the Joint Strike Fighter program as it brings new team members and suppliers on board."

AT A GLANCE:

- Streamlined Internal processes
- Reduced time and labor
- Increased performance

LOCKHEED MARTIN

1) Trademark of Siemens Product Lifecycle Management Software Inc.
2) Trademark of Dassault Systèmes