

BY DAVID BAUM

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# Lockheed Martin Propels Performance Gains with WebFOCUS



Accuracy is a familiar concept for Lockheed Martin. The corporation's Missiles and Fire Control (MFC) company is a pioneer in the field of high-performance missile and rocket technology. With a customer list that includes the United States Army, Navy, Air Force, and Marine Corps, its reputation for excellence is well established. In an era of precision warfare and computerized military defense systems, Lockheed Martin depends on powerful and precise information delivery tools to achieve its objectives.

MFC's two largest facilities are in Dallas, Texas and Orlando, Florida, each with some 3,000 employees. Although the two sites have different IT environments, each uses WebFOCUS to deliver information in a standard format.

"WebFOCUS not only streamlines reporting processes for end users, it's helping to bring the two organizations closer together," says Pam Hunt, Information Technology manager of Applications for Lockheed Martin Missiles and Fire Control in Orlando.

MFC has a medium-sized IT department staffed by about 150 employees. Because the company has various types of software applications, many different reporting systems have evolved over time. "Our Orlando facility uses WebFOCUS within a highly distributed legacy environment," Hunt says. "Dallas uses it for reporting against SAP and other packaged software applications. We needed to bring a common, Web-based look and feel to information delivery. That's where WebFOCUS comes into the picture."

## SNAPSHOT

**ORGANIZATION:** Lockheed Martin Missiles and Fire Control Company ([www.missilesandfirecontrol.com](http://www.missilesandfirecontrol.com)), a leading developer and manufacturer of advanced missile, rocket, and space systems

**THE CHALLENGE:** Provide users of a variety of diverse information systems with a standard, self-service way to obtain financial and operational data

**THE STRATEGY:** Create a Web-based, user-friendly reporting environment that delivers information from legacy sources and packaged ERP applications in a common format

**THE RESULTS:** Established a corporate standard for reporting across disparate information systems; reduced monthly financial closing cycle from two weeks to four days; decreased pressure on IT personnel to constantly answer questions about data; improved productivity; enhanced data security

**INFORMATION BUILDERS SOLUTION:** WebFOCUS, iWay, Consulting



BI Vision a Reality  
For MFC's Pam Hunt,  
the vision of a "one-stop"  
enterprise BI solution soon  
became reality.

**BI Systems  
Launch  
a new  
Corporate  
Standard for  
Worldwide  
Reporting**

### Launching a Web-Based Reporting System

Lockheed uses WebFOCUS to enforce consistent reporting standards throughout the enterprise. Formerly, the company attempted to achieve the same results with a third-party client/server reporting application—with limited success. “We were not satisfied with the user interface or the output from the application,” Hunt recalls. “On top of that, the licensing costs associated with moving it to the Web were prohibitive.”

Hunt harbored a vision of a “one-stop” BI solution that could be used by everyone from executives to administrative assistants. “When I saw WebFOCUS, I knew my vision could become reality,” she continues. “WebFOCUS was easy to use and intuitive. It appeared to have a lot of the capabilities that were lacking in the third-party reporting tool that we had been using. The browser-based reporting environment is not only architecturally efficient, but the pricing is advantageous as well. We immediately saw its potential: WebFOCUS would allow us to easily deploy a self-service reporting environment to our large and diverse user base. Our management supported the vision and made it possible for us to move forward with WebFOCUS.”

Lockheed Martin purchased WebFOCUS, and then worked with Information Builders’ technical experts to get the new software up and running. “I was quite impressed,” she says. “Information Builders showed up with a box of software and said they were ready to get started. Within an hour we were up and running with a rudimentary reporting platform. It was an easy installation.”

In addition to installing WebFOCUS, the consultants helped Lockheed Martin construct a data connectivity architecture using technology from iWay Software (see sidebar). Together, Lockheed Martin and Information Builders laid the foundation for a new self-service reporting environment called the Business Intelligence Enterprise Reporting (BIER) system. “Information Builders gave us far more than we paid for,” Hunt sums up. “They have been good partners—it is clear that they want us to be successful.”

Soon after, Stuart Ellerbusch, a lead programmer and developer for Lockheed Missiles and Fire Control, used WebFOCUS to create several key financial reports. Most of the reports accept parameterized input and are accessible through a dashboard interface.

Each report can be customized to a degree. Some are very detailed, and some are designed as drill-down reports. For example, the Work in Progress (WIP) report summarizes labor and material costs from the program level down through the various departments. “We used to depend on analysts in our IT department for these reports,” Hunt explains. “Now, they can access BIER to get the data on demand, in precisely the format they need.”

WebFOCUS includes a suite of financial reporting capabilities to automate the collection, analysis and presentation of financial information. Users can instantly obtain timely information in familiar formats such as Adobe

Acrobat PDF files and Microsoft Excel spreadsheets. Excel pivot tables can be automatically generated and saved from any report, combining WebFOCUS’ advanced reporting with Excel’s powerful data manipulation capabilities. WebFOCUS even maintains drill-downs and styling when a report is saved to an Excel or PDF file.

### Widening the Target

About a year after the BIER application was implemented in Orlando, Lockheed Martin’s Dallas facility implemented WebFOCUS as well. “The business drivers for adopting WebFOCUS were very different in Dallas,” recalls Gordon

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Fire Control, Orlando, FL**

Evans, IT manager of Business Intelligence deployment. “Where Orlando has a diverse legacy environment, our users wanted to get information out of SAP.”

Most of these reporting requirements were driven by finance and accounting users, who primarily use Microsoft Excel spreadsheets and Access databases. Evans and his team set up a self-service reporting environment that enables these users to access SAP data directly—either from an Oracle data warehouse or the SAP Business Warehouse (BW).

“We brought in Information Builders Consulting to help us identify the technical architecture and bring up three separate environments for development, testing, and production,” Evans says. “Once the infrastructure was in place, we deployed ReportCaster to streamline report distribution tasks, and we implemented the WebFOCUS Business Intelligence Dashboard to enhance the user interface.”

## Precision Guidance for Users

WebFOCUS has begun to free Lockheed Martin's business users from the old paradigm of having to go to the IT department and wait in line for reports. "Our users struggled with trying to understand the various new systems that have been installed over the past few years," says Evans. "WebFOCUS gives us a consistent way to present information from all of our application packages—and it alleviates the need for us to answer a lot of questions about the data. We now have an active portal strategy for business intelligence using the SAP Enterprise Portal. WebFOCUS serves as a robust reporting engine behind our executive



dashboards and portal assets."

Users throughout the organization are enthusiastic about the results of these comprehensive reporting initiatives. "It has been a real productivity boost for us," says Hunt. "For example, it used to take two weeks to close the books each month. WebFOCUS has reduced that to four days and we will soon be down to two days. We've heard a lot of appreciative comments from people in the accounting department who can now avoid working weekends and holidays."

Managers in the Engineering, Procurement, Quality Control, and Manufacturing departments are also eager to achieve the results currently generated by WebFOCUS developers in Finance and Product Data Management. In the wake of these ongoing reporting initiatives, the Lockheed Martin Information Architecture Board—which sets IT policy—has adopted WebFOCUS as its corporate standard for enterprise business intelligence and reporting.


## iWay Streamlines Data Access Initiatives

Integration technology from iWay Software serves a variety of uses at Lockheed Martin Missiles and Fire Control (MFC). For example, at the Orlando facility, developers use iWay to extract Sybase data residing on an HP UNIX server to deliver data to users of a Dell server running Microsoft Windows NT. The iWay Intelligent Adapter for Sybase receives SQL requests and determines the most efficient method for satisfying them. Based upon their content, they are either passed directly to the RDBMS engine or translated to take advantage of iWay features such as ANSI-standard syntax for complex joins and additional security features such as field and field-value level restrictions.

According to Pam Hunt, Information Technology Manager of Applications for Orlando, iWay integrates a wide variety of IT assets into a single virtual information system with shared data structures, transactions, and business logic. For a company such as Lockheed Martin, which depends on many diverse IT systems, iWay adapters ensure that nearly any type of information is uniformly accessible to business applications.

Meanwhile, Lockheed Martin's Dallas location is using iWay Data Migrator for SAP to transfer SAP production data into an Oracle data warehouse designed for reporting. In the future, the division plans to adopt the SAP Business Warehouse (BW) as a central repository of business intelligence information. Once again, iWay will play a critical role in moving data, including non-SAP source extraction, data transformation, and integration with InfoPackage, which loads the target BW InfoSource.

"iWay simplifies the development cycle with support of automated scheduling of the data extraction processes," reports Gordon Evans, IT manager of Business Intelligence deployment at Lockheed Martin. "It puts a consistent data-refresh process in place, saving us the effort of having to periodically build and maintain Excel spreadsheets or Access databases. iWay also allows us to bring up a consistent security environment."

"We are planning to use BIER as a launch pad for several other departments," Hunt concludes. "Eventually, we can foresee it becoming an enterprise-scale warehouse of information. Since we started working with Information Builders, our business intelligence initiatives have played out just like we hoped they would." 

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