Composites One is the largest North American distributor of composite materials, with thousands of products from hundreds of supplier partners reaching over 9,000 manufacturing customers via a robust e-commerce website. For over 20 years, Composites One has relied on Progress’ OpenEdge® to power its enterprise computing infrastructure and drive its warehouse automation and e-commerce applications, and Composites One is now modernizing its character-based applications to further drive productivity, simplify online ordering, drive sales and streamline operations.

**CHALLENGE: MANAGING APPS FOR A LARGE & COMPLEX DISTRIBUTION COMPANY**

Introduced over 50 years ago, composites are fiber-reinforced plastics used in a variety of products and industries. While the term “composite” can apply to any combination of individual materials, Composites One focuses on fibers, primarily glass, that have been impregnated with a plastic resin matrix. Combining glass fibers with resin matrix results in composites that are strong, lightweight, corrosion-resistant and dimensionally stable. Everything that composites manufacturers need—from reinforcements and resins, to equipment and processing supplies—is available from Composites One.

For over 20 years, Composites One has worked with Progress Software and has used the Progress OpenEdge development platform to build its enterprise systems. The company originally relied on enterprise resource planning (ERP) applications from a Progress Partner, but Composites One acquired the code and has tailored the applications internally and developed new enterprise applications using the OpenEdge platform.

“Every job function that contributes to our customer-driven solution involves automation that is addressed through our enterprise system. As applications for composite materials grow through expanding and emerging markets, our opportunities grow as well, so our enterprise systems have become ingrained in how we operate our business.” said Hal Greene, Vice President of Information Systems for Composites One.

Composites One is currently running OpenEdge 10.2, and has historically developed its applications with character-based interfaces using OpenEdge. “Progress provides high-levels of performance in terms of speed and reliability with large volumes of transactions and historical data,” said Greene. “Progress provides us with powerful tools for customizing applications for external and internal use.”

The e-commerce site, located at www.b2bcomposites.com, allows users to quickly check product availability, review pricing on past purchases and access product information without the need to pick up a phone and contact company sales representatives. The site is fast, secure and user-friendly, and is available 24x7. Registered users can fill out

**CHALLENGE**

Leverage existing investments in application development while modernizing applications with browser-based interfaces that simplify the user experience and increase productivity.

**SOLUTION**

Implement a modular upgrade approach with a small staff using Progress OpenEdge to enable gradual migration from character-based to browser-based interfaces.

**BENEFIT**

Streamlining the ordering process to capture new business and generate incremental sales while enhancing workforce productivity.
a quote request and a Customer Service Representative will quickly email a custom quote, automating the sales cycle and make the purchasing experience as easy as possible for buyers. Customers can place and track orders, and the online purchasing application is integrated with the warehouse automation application for streamlined order fulfillment and tracking.

**SOLUTION: MODERNIZE ENTERPRISE APPLICATIONS**

The company decided to modernize its character-based applications to increase productivity and make it easier for customers to purchase products online. "We were happy with the business logic we had designed into our enterprise system but realized that they could be easier to use for both customers and employees," said Greene. Composites One decided to implement a phased modernization strategy to browser-based interfaces using OpenEdge. "Our experience with Progress was so positive and deep that we had no reason to move to alternative platforms," Greene explained.

The Progress OpenEdge Application Server provides Composites One with the foundation for building a flexible and scalable application infrastructure. It supports an open, component-based model for partitioning applications and enables the easy distribution and reuse of business logic, thus saving time and resources. By partitioning applications and separating the business-processing logic from the user-interface logic, Composites One can access applications through virtually any interface. Centralized business logic then improves productivity by providing Composites One with a single point to manage access to data and processes. The WebSpeed Transaction Server provides an optimized transaction-processing environment to help Composites One achieve high transaction volumes and rapid responses for browser-based applications.

Composites One has a small development staff and a small IT organization, so re-using business logic while incorporating the flexibility of web technologies was essential. "It took us many years to refine our enterprise applications," said Greene. "Building enterprise applications tuned to the way we conduct our business didn’t happen overnight. We didn’t want to abandon our existing investments in software development but instead wanted to provide a more powerful user experience that is more visual and that delivers a better ease-of-use experience that encourages customers to use our site more and enables employees to do their jobs faster.”

Kevin McDaniel, Director of Enterprise Systems for Composites One, added, “With our legacy interfaces, we only had so many characters to present on a screen, while web interfaces provide a more dynamic user experience. On a web page you can allow the client to manipulate the data dynamically and can move a lot of the functionality to the client instead of having it on the server side. We’re now able to let the server do what it does best, which is find and retrieve data, while letting the client do what it does best, which is present the data to the user. When you look at all the navigation tools available in a web browser—such as scroll bars, drop-down lists and hyperlinks—you see many different visual ways of presenting information that aren’t available with character-based interfaces, where power users instead have to learn how to use function keys. Browsers allow us to deliver web-based interfaces that are easier to use and let users more quickly get the information they need.”

**BENEFITS**

Each enterprise application is being revisited based on user feedback, and the modernization effort is viewed as an opportunity to drive productivity enhancements across the business. "We view the long-term plan as roughly a five-year effort, with major modules introduced about every nine months,” Greene explained. “Once a modernized application module is introduced, employees have the option to use the character-based screens but we don’t envision many
employees opting for the character-based interfaces once they realize the productivity and ease-of-use advantages of the browser-based interfaces.”

Composites One tracks customer activity through its e-commerce B2B web portal, and is now receiving over 100,000 online information requests per month—a substantial increase in usage and interaction year-over-year. Over 7,000 customers actively use the web portal and this represents over 80 % of Composite One’s revenue. “Progress provides us with robust capabilities that we’re able to utilize every day in our development tools,” Greene stated. “When I look at really complex, highly functional applications such as our B2B web portal, I think about how thousands of customers use it every day to retrieve information and submit orders and how we’re able to use OpenEdge to tailor it to our specific business requirements. A lot of the functionality under the hood of our website has been enabled by the power of the Progress development tools.”

IT has leveraged Progress OpenEdge developer tools to increase programmer productivity and streamline code maintenance and quality assurance. “We’re leveraging the dynamic functionality of the OpenEdge development tools. For example, it used to take about 2,000 lines of code to create a table for our system, and now we’re able to create a table using only about 200,” said McDaniel. “This gives us a smaller, more compact code base to maintain.”

Customers are able to conduct more business over the website. “Our customers can better utilize our website to get most of the information they need, making our internal sales support jobs more efficient because now our Customer Service Representatives typically focus their time on dealing with exceptions and on providing high-value consultative services,” said Greene. “We’re enabling more self-service over the web so that customers can conduct more business with us online, which makes Composites One more efficient and allows us to provide enhanced customer service.”

Composites One will soon introduce web-based interfaces for reporting. “All the reports available currently have character-based interfaces for configuration, but with the new web-based approach users will be able to go into a browser and set parameters for reports in a much easier way,” said Greene. “That will draw in current users accustomed to the character-based interface and they’ll appreciate the improved interface, but it will also open up our applications more to sales managers and senior executives who currently may ask staff to run reports for them but may start running reports themselves once they see how easy it is becoming. In addition to converting our current users to a better and newer approach, we’ll also be bringing in new users who didn’t feel comfortable going into a VPN and setting up reports via a character-based interface that wasn’t very intuitive.”

With a workforce of about 450 employees, virtually every employee in the company interacts with the enterprise applications at some level. “Progress OpenEdge has allowed us to build enterprise applications that are available to improve productivity throughout the enterprise,” said Greene. For example, employees in our warehouses can access our enterprise systems from a handheld computer via a browser, interrogate the OpenEdge database directly and leverage all of the forms needed via a web-based interface, and they can even enter data via a bar code reader.”

The company plans to upgrade to OpenEdge 11 running at a third-party hosting facility to further improve scalability, and expects increased mobile usage, particularly by tablets accessing the website by workers within the company and by sales representatives querying the database for product availability while at customer locations.

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Hal Greene
Vice President of Information Systems
Composites One
Greene concluded, “The Progress technology has been extremely reliable—I’ve been here over 17 years and I can’t think of a single bit of data that we’ve lost. The number of times our systems have gone down because of Progress technology has been in the single digits, and we usually recover in a minute or two—our systems just flat out work. Through all the turbulence in technology offerings over the past 20 years, Progress has continued to move forward with solid offerings on which top-notch applications can be developed and implemented. For both large and small enhancements, Progress provides a platform on which real improvements can be deployed to improve business operations.”

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Composites One

ABOUT COMPOSITES ONE

Composites One is the nation’s leading distributor of composite materials serving customers from more than 30 locations in North America. Composites One offers composites fabricators and molders thousands of products from over 400 of the industry’s top suppliers through a technical sales and customer service force that is the most knowledgeable in the industry. The company offers a variety of value-added services that include the Closed Mold Alliance, a dedicated Advanced Composites Group, technical applications reviews, and unmatched regulatory compliance assistance. Visit www.compositesone.com for more information.