

# The full-stack modernization framework SmartComponent Library by Consultingwerk

The SmartComponent Library - the full-stack modernization framework for OpenEdge



## Key benefits:

- Development Framework for OpenEdge
- Application modernization and refactoring
- Standards based: OERA and CCS
- Enforcement of best practices
- Choice of user interfaces: Windows Desktop, Angular Web and NativeScript Mobile
- Application integration through standard interfaces
- Integration with Progress Software Tools and 3rd parties
- Focusing on developer productivity and flexibility
- Support offerings and ongoing access to enhancements
- Consulting and mentoring services
- Proven at over 50 customers



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As the full-stack developer's framework for OpenEdge, the SmartComponent Library was designed to meet the demands of the classic ABL developer as well as object-oriented purists. The framework provides the architecture required to build modern, future proof applications today and facilitates integration with, and modernization of, existing OpenEdge applications.

- Data and application logic is equally consumed by our own Web and Desktop frontends, partner frontends and service consumers (REST, RESTful, SOAP, JMS, ...).
- Self-provisioned API documentation using standard tools such as Swagger/OpenAPI is available out of the box for every REST service developed.
- User interfaces can be designed depending on specific requirements either using our own WYSIWYG tooling or with the native tools for the target platform - OpenEdge GUI for .NET, Angular or NativeScript.

The SmartComponent Library is based on the OpenEdge Reference Architecture (OERA) and was the first framework to implement the Common Component Specification (CCS) thus allowing the flexible reuse of business logic in any kind of user interface or consumer, facilitating and improving the capabilities of the object-oriented ABL.

The framework is successfully used by developers in teams of virtually any size - from single developer projects to multi-national distributed developer teams. It provides rich functionality both at design time and at runtime and allows integration with existing frameworks while providing flexible customization options. Together with our partners around the globe we are supporting customers in all aspects of application development.

## Application Modernization and Refactoring

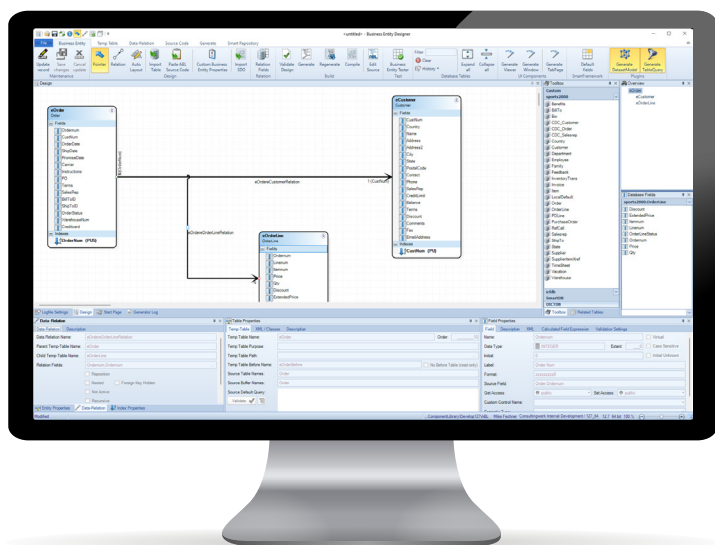
The SmartComponent Library is equipped with a plethora of extensible application modernization tools to support the refactoring of legacy ABL GUI and TTY code into distributed applications with a modern desktop user interface, or Angular web user interface, and backend business logic components deployed on PASOE.

**OpenEdge Application Modernization does NOT need to be a rewrite!**

## Latest features include:

Dynamic Tables - allowing the end user to extend the data schema and services provided by the Application at runtime and to design user interface components on the fly.  
Status based workflows - allowing the definition of workflows known from DMS systems or task management applications like JIRA. The workflows control possible status transition and can trigger functionality on either the backend or the user interface as needed.

User authentication based on OAuth2 or SAML and authentication providers such as Microsoft Office 365, Google, Facebook, or the like, combine user-friendliness as well as increased security. The framework further al-



lows the integration of authentication and authorization functionality of the existing ABL (legacy) application.

CefSharp based Web Browser component for desktop applications optimized to integrate and interoperate with modernized browser based applications.

### Future Proof Your OpenEdge Development

The SmartComponent Library helps to protect your investment in your OpenEdge based application.

The framework is designed to enhance existing OpenEdge applications and to facilitate the development of new applications. The architecture of the SmartComponent Library greatly simplifies integration with future technologies and the implementation of new business requirements. We invest considerable time in research and development to constantly be a step ahead of the demands of our customers.

The SmartComponent Library allows the integration of modernized OpenEdge GUI for .NET or Angular screens into a legacy OpenEdge GUI application.

### No vendor lock-in

Users of the SmartComponent Library get visibility into the framework and remain in full control without a vendor lock-in. We provide a full source code of the framework and tools to ensure your enduring success. The framework has been designed to be fully customizable and extensible.

### Tools to Ensure Your Productivity!

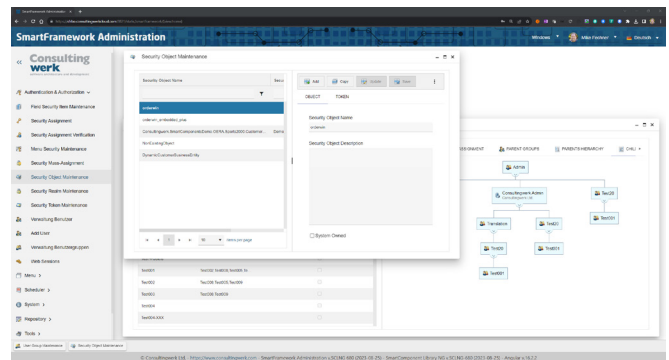
The application backend is built using the roundtrip development capable Business Entity Designer that allows flexible template-based code generation both for the application front and back end. The tool can be easily extended using ABL-based plug-ins. The framework is built by ABL developers for ABL developers and is tightly integrated into the development tools provided by Progress to ensure ultimate developer productivity. The SmartComponent Library provides out of the box integration with web

application development tools such as VS Code or command line interfaces of the Angular ecosystem and simplifies the development of responsive web applications.

Our user interface repository supports WYSIWYG design for Angular web applications as well as Desktop applications.

### Angular Web Applications

The SmartComponent Library Angular client provides simple template based, or data driven development, of web and tablet applications based on Telerik Kendo UI, Angular and TypeScript without requiring our clients to deal with the complexity of integrating those technologies to build responsive web applications. User interface components can be defined and combined using a variety of options: Kendo UI Builder, annotations in your Business Logic, our repository database or leveraging the flexibility of Angular directives directly in HTML5 code. All applications leverage our proven components for navigation, data entry and validation.



### OpenEdge GUI for .NET

The SmartComponent Library was developed to provide a productive and flexible development environment with GUI for .NET. The framework provides wizards integrated into Visual Designer that speed up development without limiting the possibilities of .NET UI technology - no matter if you are using Infragistics/OpenEdge UltraControls or Progress Software/Telerik RadControls or any other 3rd party control set. A release based on .NET Core/.NET 6.0 based controls is under development.

## Consultingwerk - Empowering Developers

Since our founding in 2006 Consultingwerk has been known as the premier provider of consulting and mentoring services for organizations developing and modernizing OpenEdge applications. We have a proven track-record of supporting our clients in solving modernization challenges and simplifying the integration of advanced technologies in a wide variety of software development projects. From our offices in Cologne, Germany, and our subsidiary in the United Kingdom we currently support customers all over Europe, in Northern America, South Africa and Australia.

Consultingwerk supports both application partners and end customers by providing consulting services for every phase of application development and modernization projects throughout the lifetime of a business application. We are the leading provider of independent OpenEdge development tools for application modernization, application architecture, OpenEdge GUI for .NET, Mobile and Web applications. Our comprehensive consulting services include coaching, mentoring, training, technology, architecture assessment, prototyping, framework design and software development.



Consultingwerk was awarded the 2017 Community Service Award by Progress Software, is a founding member of the Common Component Specification initiative and is a Progress Software Service Delivery and Technology Alliance Partner.

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