Integrate existing applications into GUI for .NET™
using WinKit

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Consultingwerk Ltd.

- Independent IT consulting organization
- Focusing on OpenEdge and .NET
- Located in Cologne, Germany
- Vendor of tools and consulting programs
- 21 years of Progress experience (V5 … V10)
- GUI for .NET early adaptor (since 10/2006)
- Just started with iPhone/iPad app development

http://www.consultingwerk.de/
Customers in Germany, Europe, USA
Working with small to large Progress Partners and direct end users
Supporting some of the largest Progress Partners in Germany, Belgium, The Netherlands, Austria, Switzerland and UK with application modernization and user interface technologies
Network of partnering consultants, like ic4b for Web UI’s, Whitestar Software, DBAppraise, Triangle Solutions

http://www.consultingwerk.de/
OpenEdge® application modernization solutions

- WinKit
- SmartComponent Library
- Dynamics4.NET

- Tools can be used together or separately
- Share common code base

- SmartComponents.Mobile
- SmartBPMAdapter for OpenEdge BPM/Savvion
Agenda

- Overview OpenEdge GUI for .NET
- Adoption challenges
- Adoption strategies using WinKit
- WinKit Features
- WinKit Workshop
- Customer References
- SmartComponent Library and WinKit
- Review
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OpenEdge GUI for .NET

A Microsoft® .NET™ based Windows graphical user interface that can replace or be integrated into an existing OpenEdge GUI application
OpenEdge GUI for .NET

- State-of-the-art UI on the Windows desktop
- Integrated feature of OpenEdge 10.2A and 10.2B
- Supported by both GUI clients
  - fat client, prowin32.exe
  - WebClient
- No separate license required
  - Deployment
  - Development
- Access and use any .NET control

WinKit – Window Integration Toolkit
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Adoption Challenges

- Need to support pre-10.2A users as well
- Not every Progress partner has SCM strategy that supports parallel development on two versions of the same application
- Thousands of existing screens
  - Progress isn’t used to build small applications
- Many Progress applications haven’t adopted latest language features at all

WinKit – Window Integration Toolkit
Adoption Challenges

- Training requirements
  - OO fundamentals (new programming paradigm)
  - .NET fundamentals
  - Infragistics controls (or any other vendor)
  - OpenEdge 10.0: ProDatasets etc.

- New tool: OpenEdge Architect
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GUI for .NET adoption using WinKit

- Consultingwerk’s best practice approach to GUI for .NET adoption
- WinKit is based on **Embedded Windows**
- ABL Windows embedded into .NET Forms
- Core feature of **OpenEdge 10.2A and 10.2B**
- Contents of Window will be embedded into a .NET control
GUI for .NET adoption using WinKit

- **Original source code** used in the context of GUI for .NET
- Just minor modifications that maintain code compatibility with previous Progress releases
- **NO architectural change required**
- **Existing application framework or templates used**
- Developers may continue to use AppBuilder for maintenance of existing screens
GUI for .NET adoption using WinKit

- Upgrading the appearance of ABL application by using .NET controls (menu, toolbar, Ribbon, explorer bars, dockable panes, lookups based on UltraGrid, ...)
- Step-by-step introduction of additional .NET controls to increase users productivity and appearance
- Active X controls contained on the window are well supported (documented in K-Base)
GUI for .NET adoption using WinKit

- WinKit simplifies the integration of ABL windows into the OpenEdge GUI for .NET using
  - Enhancements to existing programs, templates and the framework using include files
  - An API / SDK that simplifies embedding and enhancing existing windows
  - Templates for GUI for .NET designs that can be adjusted to a customer’s demand
Demo

- WinKit Sample MDI container showing various embedding scenarios
  - AppBuilder view
  - Embedded view (runtime)
  - MDI Childs with Toolbar
  - Independent Windows with ribbons
  - Turning ADM2 Tabfolder into dockable panes
  - Overlaying ABL Browse Widget with UltraGrid control
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WinKit Features

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WinKit Features

- prebuild GUI for .NET Templates that simply embedding and enhancing of ABL Windows
- functional .NET MDI container
- integration into GUI for .NET by adding 3 include files into program windows
- very often these include files can be added to existing framework without modification of .w files
- menu and toolbar rendering to Infragistics UltraToolbarsManager
WinKit Features

- All program logic remains in the .w file (procedural code)
- .NET event handlers execute ABL triggers as needed
- ABL triggers able to cancel processing of .NET events like Form- or Window-Closing
- Does not require AppServer enabled application
Toolbar- and Ribbon Designer

- Developer utility that allows to modify the generated Infragistics menu and toolbar structures using a Visual Studio like UI Designer
- Add Images, change menu structure, use additional UltraToolbarsManager controls

- Turn Menu and Toolbar into a Ribbon!
WinKit Features

- Further enhancements of ABL windows, like
  - integration of DatePopups
  - replacement of selected ABL Widgets with .NET Controls
  - replacement of ABL Browse with UltraGrid
  - integration of SplitContainer, UltraTabFolder or Dockable Panes
  - changes to colors and fonts used
  - …
WinKit Migration Tool

- automated migration of ABL Windows
- based on AppBuilder, **AppBuilder API** or **Proparse** for non AppBuilder source
- integration of required include files
- integration of hooks into existing program logic to refresh .NET UI when required
- process a single file at a time or a list of files
Demo

- Order maintenance
  - ABL UI
  - Embedded, basic features
    - Toolbar and menu rendered
    - Browser replaced with UltraGrid
  - Embedded, advanced features
    - SplitContainer, UltraTab
    - Ribbon
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WinKit Workshop

- the WinKit is delivered typically in the form of an implementation workshop
- typically 10 days (usually two full weeks with a few weeks in between)
- onsite or in our office in Cologne
- introduction of WinKit to the development team
WinKit Workshop

- analysis of integration points in the existing application
- integration of the WinKit into the existing development environment
- customization of WinKit and existing framework or application components
- “creative” finding of additional enhancements to the application (usually the user interface)
WinKit Workshop

- analysis of the existing application
- evaluation of possibility for architectural modifications (like AppServer enablement etc.)
- documentation of modifications to the framework and the WinKit
- General Q&A

- The WinKit workshop should be following basic OpenEdge GUI for .NET training
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Reference I: Update Texware / Germany

- ERP for textile producers of a German Progress partner
  - AppBuilder view
  - Runtime GUI for .NET
- Own framework, developed in V7/V8
- Transition to multi-window application
- Challenge with pessimistic locking and large transactions
- 10 days of research, customization of customers' framework and WinKit

WinKit – Window Integration Toolkit
Reference I: Update Texware / Germany
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Umsatzsteuer-Identnr.: DE1234567890

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Sprache: K
Währung: EUR

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Zollnummer:
Reference I: Update Texware / Germany

- Case study available at:
- http://www.consultingwerk.de/update-texware/
Reference II: Shuttleworth / UK

- UK-based Progress Partner
- Huge ERP system for printing industry
- V8 style framework (ADM1-like)
- Clear vision of Outlook look-and-feel
- Browse windows as MDI children
- Data windows as separate windows
  - Similar to Outlook where Emails and Appointments are opened separately
- Majority of changes in existing framework
- Minor changes to existing screens
### Menu Toolbar & Browse Window

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# ABL Frame

The ABL Frame is a component within the Shuttleworth System Selector - Company interface. It allows for the visualization of company data in a structured format, with options to filter and sort the information.

### Entities
- **Home**
- **Company**
- **Event**

### Navigation
- **Entities**
- **New Group**
- **New Group**

### Selector - Company
- **Company Filter:**
  - Prospective Customers
  - Customers
  - Suppliers

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Shuttleworth: Data Window
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SmartComponent Library and WinKit

- *SmartComponent Library* and *WinKit* are part of our GUI for .NET adoption and migration strategy
  - WinKit: Enhancement of existing screens
  - SmartComponent Library: New functionality

- Shared framework foundation classes
- Compatible directory and project structure
- Used side by side in customer projects already
- WinKit compatible with *SmartBPMAdapter*
SmartComponent Library

- Designed to make OpenEdge GUI for .NET developers productive
  - *UI Design* and *Business Logic* development
- Minimum to no manual code for repetitive tasks
- No constraints in GUI design capabilities
- Rapid prototyping as well as real-world development
- Prepared for the future of OpenEdge
- Part of our *GUI for .NET adoption strategy*
SmartComponent Library

- OERA compliant back end (OpenEdge Reference Architecture), based on object orientation and ProDatasets
- Business Entity Designer for rapid design of Business Logic
- User Interface component Library for rapid UI design
- Integrated into the OpenEdge Architect Visual Designer, Wizards, Templates, Property Sheets
- Integration with existing Frameworks possible
Agenda

- Overview OpenEdge GUI for .NET
- Adoption challenges
- Adoption strategies using WinKit
- WinKit Features
- WinKit Workshop
- Customer References
- SmartComponent Library and WinKit

Review
Review

- WinKit has successfully proven to work with about 25 different Progress/OpenEdge applications already
  - Different kinds of frameworks
  - Including ADM1, ADM2, custom frameworks
- Dramatically reduces training requirements of development staff
Review

- Takes away time pressure from Progress ISV
  - Recognizable UI improvements with minimal effort
  - Reduced implementation risk (reduces testing and training)
- Same source code remains usable on V9, V10.0, V10.1 (preprocessor checks)
- Simplified maintenance, single code base
- Developers can still use the well-known tools (AppBuilder) to maintain the application
- Technology change at the pace of the team, not a technology trend
- No “shock” for existing users, but sales easier

WinKit – Window Integration Toolkit
Questions