Smart Client Baseline Architecture Toolkit (SC-BAT)

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What is SC-BAT?

- Integrated guidance for smart clients
  - Narrative guidance
  - Reusable assets
  - Guidance automation
  - Reference implementations
  - Hands on labs
Scenarios

- Windows Forms on .NET 2.0
- Existing patterns & practices assets
  - Composite UI Application Block (CAB)
  - Enterprise Library
  - Guidance Automation Toolkit (GAT/GAX)
- Reference applications based on the Global Bank scenario
Integrated Guidance

Documentation

Patterns  used by  How-to topics

automate  automate  illustrate  illustrate

Guidance Package  built with  Reference Implementation
What is CAB?

- Framework for building enterprise Smart Client apps
- Based on proven design patterns
- Aligned with future Microsoft Client technologies
CAB Design Objectives

- Composite client applications
- Cooperating, loosely coupled “parts”
  - Communicate with minimum knowledge
  - Independently developed and deployed
  - Heavy use of dependency injection
- Reuse of common services
- Separation of concerns
- Designed for extensibility
Key CAB Concepts

- Shell application
- Loadable modules
- WorkItem
  - Smart object factory
  - Dependency injection container
  - Service locator
- EventBroker
- Workspaces
- UI extension sites
- Commands
Reference Implementations

Reference Implementation 1: Appraiser Workbench

Reference Implementation 2: Global Bank Workbench
Appraiser Workbench

- Composable UI
  - Reusable Shell Application
  - Appraiser Workbench Module
  - Common Utility Library
- ClickOnce deployment
- Service Agent
- Occasionally connected
  - Server operations as asynchronous
  - Operations queued when off-line
  - Local data cache
Appraiser Workbench

- Windows authentication
- Exception handling
  - Enterprise Library Exception Handling Block
  - Centralized configuration
- Service operation logging
- Simple back-end service provided
Demo

Appraiser Workbench
What is GAT?

Two pieces:
- Guidance Automation Extentions (GAX)
- Guidance Automation Toolkit (GAT)

Lightweight Visual Studio extensibility

Simplified authoring experience

Delivers contextual guidance to devs
- Patterns
- “How-To”s
- Company conventions
Guidance Lifecycle

Guidance Author (Architect)

Guidance Package

Guidance Consumer (Developer)

End User

Guidance Automation Toolkit

Guidance Automation eXtensions

Visual Studio 2005

Source Code

Application

builds

generates

compiles to

builds

consumes
Guidance Automation Toolkit

- Deliver contextual guidance within the Visual Studio environment
- Automate How Tos and Patterns
- Customizable and extensible
- Familiar user experience
Demo

Smart Client Guidance Package
Customizing Guidance

Global Bank Smart Client Baseline Architecture Toolkit

Recommended Practices:

Code guidance:
- Sample Application
- Composite UI App Block
- Enterprise Library

Architecture Guidance
- Design Patterns
- How-Tos

Automation
- Tool Extensions
- Code Templates
- Wizards

Investments Workbench
- Global Bank Smart Client Baseline
- Smart Client Baseline Architecture Toolkit

Branch Automation
- Global Bank Smart Client Baseline
- Smart Client Baseline Architecture Toolkit
Links

Composite UI Application Block
http://codegallery.gotdotnet.com/cab/

Smart Client Baseline Architecture Toolkit
http://codegallery.gotdotnet.com/scbat/

patterns & practices
http://msdn.microsoft.com/practices/
Microsoft

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