

Component Enabler for .NET

*Component Enabler
Application Generation*

Overview

- Overview of the generate process
- Component Enabler user interface configuration properties
- Bundles
- Client application generators and generate environments
- Ispec model source language
- System/bundle generate
- .NET generator output

Overview of the Generate Process

1. Configure model for system generate
 - Create a Build configuration
 - Define a system deployment folder and set configuration properties
2. Set *Component Enabler User Interface* segment configuration properties
3. Define a bundle (CE deployment folder)
 - Add a bundle to the segment
 - Add ispecs to the bundle as “existing items”
 - Set bundle configuration properties
4. Build CE user interface
 - On its own (bundle generate)
 - As part of a system generate

Component Enabler User Interface Configuration Properties

Before generating a Component Enabler client application, specify values for the *Component Enabler User Interface* segment configuration properties.

Sample system

| Category | Property | Value |
|----------------------------------|---------------------|--------------------|
| Component Enabler User Interface | Application Name | SAMPLE |
| | Package Prefix | com.unisys |
| | CE Output Directory | C:\NGEN_CE\classes |

CE Deployment Folders (Bundles)

- Subset of ispecs in a system
- Meet the needs of different sets of users. For example, you could create:
 - A VB.NET WinForms bundle for desktop access to all forms
 - An ASP.NET WebForms bundle for Internet access to selected forms
- Reduce overhead of generating unused ispecs
- Do not provide a security mechanism
- In System Modeler, bundles are defined as deployment folders with *Deploy Component Enabler User Interface* set to True

CE Bundle Configuration Properties

Sample system

| Category | Property | Value |
|----------------------------------|---|--------------------------------|
| Build Target Filter | Deploy Component Enabler User Interface | True |
| Component Enabler User Interface | Generate Views | True |
| | User Defined View Generator | GenerateFormASPdotNET.dll |
| | Ispec Models Source Language | C# |
| General | Deployable | True |
| Installation | Package Name | SampleASPBundle |
| | Package Intermediate Directory | C:\ABSuiteSystems\Intermediate |

Client Application Generators

- The following client application generators are available with Agile Business Suite Client Tools and the Client Tools Feature Pack for EAE:
 - ASP.NET WebForms Generator
 - ASP.NET Web Services Generator
 - VB.NET Client Generator
 - Default (Presentation Client) Generator
 - ASP Generators
 - Visual Basic Client Generators
 - Soap Toolkit Web Services Generator
- Custom generators can be created with the CE Customization Kit (separately licensed)

Generate Environments

- Java based generate
 - Requires Java SDK on the development workstation
 - Works with all CE generators
 - Works with EAE or AB Suite
- .NET Framework based generate
 - Requires .NET Framework 1.1 or higher (instead of Java SDK) on the development workstation
 - Only works with .NET generators
 - Produces same output as Java based generate
 - Not available for generation from EAE
- Java and .NET generate environments can coexist on same machine

User Defined View Generator

- *User Defined View Generator* bundle configuration property specifies generator and generate environment
- Append .dll to the generator name, to generate using the .NET Framework based generate environment

| User Defined View Generator | Generate Environment | Output |
|---|----------------------|----------------------------------|
| com.unisys.jellygen.GenerateForm ASPdotNET | Java | Views for ASP.NET + ispec models |
| GenerateFormASPdotNET.dll | .NET | |
| com.unisys.jellygen.GenerateForm VBdotNET | Java | Views for VB.NET + ispec models |
| GenerateFormVBdotNET.dll | .NET | |
| com.unisys.jellygen.GenerateWSdot NET | Java | Web Services + ispec models |
| GenerateWSdotNET.dll | .NET | |

Ispec Model Source Language

- *Ispec Model Source Language* bundle configuration property specifies source language for ispec models
 - Java for use with the Java based CE Runtime
 - C# for use with the .NET based CE Runtime
 - C# & Java to generate ispec models in both languages

| ☐ Component Enabler User Interface | |
|------------------------------------|---------------------------|
| Generate Getters And Setters | False |
| Generate Views | True |
| User Defined View Generator | GenerateFormASPdotNET.dll |
| User Defined Public Segment Method | |
| CE Post Build Script | |
| Ispec Models Source Language | C# |

System/Bundle Generate

- The CE client interface can be generated:
 - As part of a system generate
 - On its own (bundle generate)
- To perform a system generate:
 1. Right-click the top-level deployment folder
 2. Select **Build** or **Rebuild**
- To perform a bundle generate:
 1. Right-click the CE bundle you wish to generate
 2. Select **Build** or **Rebuild**

.NET Generator Output

- Component Enabler .NET generators produce:
 - Views:
 - ASP.NET WebForms, VB.NET WinForms, or ASP.NET Web Service definitions
 - Ispec interface files (ispec models) for use with .NET or Java Runtime
 - *Ispec Models Source Language* bundle configuration property determines source language (C# and/or Java)
 - Compiled ispec models

Creating a Remote Access Server View

- Create a Remote Access Server View with “RATL over TCP/IP” enabled
- Procedure for View creation is host dependent — see the Agile Business Suite Runtime Administration Guide for your host environment

The screenshot shows the 'SAMPLE Properties' dialog box with the 'General' tab selected. The 'View Name' is 'SAMPLE', 'System Name' is 'SAMPLE', and 'Runtime Server' is 'localhost'. Under 'Protocols', 'RATL over TCP/IP' is checked, while 'RATL over MSMQ', 'NOF/OFF/GLI', 'SOAP over HTTP', 'SOAP over MSMQ', and 'HUB' are unchecked. Under 'Packet Logging', 'Enabled' is unchecked. The 'MSMQ Name' section has empty fields for 'RAIL:' and 'SOAP:', with example text below each. The 'HUB User' section has empty fields for 'Name:', 'Domain:', and 'Password:', and a 'RATL Login Settings...' button. At the bottom are 'OK', 'Cancel', 'Apply', and 'Help' buttons.

Summary

- Generate process creates ispec models (C# or Java) and views for a CE client
- Generate options specified as configuration properties on the system deployment folder, segment, and CE deployment folder (bundle)
- Bundles enable the generation of multiple CE applications from one system definition
- AB Suite Client Tools provides a set of .NET client generators
 - ASP.NET WebForms Generator
 - ASP.NET Web Services Generator
 - VB.NET WinForms Generator
- Choice of generate environments (Java or .NET Framework based) when generating a .NET client from AB Suite