

CTC WPF Client Generator

Version 2.0.1

ReadMe

Table of Contents

Prerequisites	2
Install Instructions	3
Uninstall Instructions	3
Getting Started	4
Configuration File	5
Upgrading to CE 3.0/AB Suite 3.0	5
Downgrading to a Previous Version	5
Installed Files	5
Known WPF Issues	8
CTC Generate Gateway Issue	9
Version History	10

Prerequisites

The following software levels are required for the CTC WPF Client Generator version 2.0.1 and the generated user interface application.

Developer/Generate Workstation

- Microsoft Software requirements:
 - .NET 3.5 SP1 (including WPF 3.5) or .NET 4.0 (including WPF 4.0)
 - Visual Studio 2008 SP1, Visual Studio 2010 SP1 or Visual Studio 2012
 - WPF Toolkit.
The WPF Toolkit can be downloaded from <http://wpf.codeplex.com/>. The CTC WPF Client Generator 2.0.1 has been tested with the February 2010 release of the toolkit.

- Unisys Software requirements:
 - EAE 3.3 with CE IC 3240 or higher with support for VS2005 and .NET 2.0.
 - Users of EAE 3.3 IC3260 or earlier, see CTC Software requirements below.
 - Users of EAE 3.3 IC3270 or later must be using CE 2.0 with the CE .NET Generate Environment enabled.
 - or
 - AB Suite 1.2 IC 1450 or higher with CE 1.2
 - or
 - AB Suite 2.0 with CE 2.0

- or
- AB Suite 3.0 with CE 3.0

Note: CE 3.0 requires .NET 4.0. This means Visual Studio 2010 SP1 with .NET 4.0 is required for project generated with the CTC WPF Client Generator (see Upgrading to CE 3.0/AB Suite 3.0 below).

- CTC Software requirements:
 - Users of EAE 3.3 IC 3260 or earlier must download and install the CTC Generate Gateway 1.0 software. The CTC Generate Gateway allows generators, such as the CTC generators, written in .NET and C# to be run from EAE Developer.

End User Workstation

- Microsoft Software requirements:
 - .NET 3.5 SP1 or higher.

- Unisys Software requirements:

- Component Enabler version 1.0.1.0 including the CE .NET Feature Pack and IC 3240 or higher with support for VS2005 and .NET 2.0. This version of CE is required when using EAE 3.3 or AB Suite 1.2.
- or
- Component Enabler version 2.0.1000.1. This version of CE is required when using AB Suite 2.0.

As an alternative, to avoid installing Component Enabler on end user workstations, include the two dll's (CEdotNET.dll and CEWindowsAPI.dll) with the generated WPF UI Application. For further details see **Section 6 Deployment Options** of the **CTC WPF Client Generator** document.

Install Instructions

Download the installation package CTCWPFClientGeneratorSetupV2.0.1.zip to your computer and save. Unzip and run the installation package and follow the instructions to install this release.

When generating a new bundle for the first time, all infrastructure files required will automatically be copied to the bundle views directory.

When upgrading from a previous version of the generator and local changes have been made to any of the generator infrastructure files, ensure you have a recent backup before installing the new version, as the generator infrastructure files may have changed.

When generating a bundle for the first time after upgrading to a newer version of the generator, all infrastructure files that have been changed since the last release, will automatically be copied to the bundle views directory. If local changes have been made to any of the infrastructure files of the bundle, ensure you have a recent backup before generating the bundle.

Administrator privileges are required for installing the software.

Depending on the anti-virus software being used, it may be necessary to disable the anti-virus software while installing the generator.

Uninstall Instructions

Uninstall this package from Control Panel/Add or Remove Programs, select "CTC WPF Client Generator 2.0.1" and follow the instructions.

If you have made changes to any of the infrastructure files or the sample Custom Controls project, ensure you have a recent backup of these files before you uninstall the CTC WPF Client Generator.

Getting Started

To start the generator, set up a bundle in EAE 3.3 or a folder in AB Suite for Component Enabler and specify "**CTCWPFClientGenerate.dll**" as the name of the generator. For further instructions on how to setup a bundle/folder for Component Enabler, refer to the **Component Enabler User Guide** or the **CTC WPF Client Generator** documentation.

When building the folder/bundle from the AB Suite Developer, it is recommended the 'Rebuild' option is always chosen, in order to ensure the configuration setting of the CTC WPF Client Generator takes effect on all specs in the folder/bundle.

When performing partial builds (i.e. using the Build option rather than the Rebuild option) from AB Suite Developer, certain methods on the User Interface generator are not invoked by the AB Suite build environment. This means, the CTC Silverlight Generator is not able to automatically reset IIS and compile the generated solution. In this case, the MSBuildSolution.bat file, located in the views directory of the generated bundle, must be run manually.

When starting the generator for the first time, a dialog prompting for a License Key will open. Cut and paste the License Key exactly as received from CTC, into the dialog. The License Key can also be entered using the CTC Configurator.

To configure the generator, start the **CTC Configurator** from the desktop shortcut created during the installation of the generator, or from the Start Menu/All Programs/CTC Software/CTC Configurator 2.0.2.

To start the generated WPF User Interface Application, navigate to the release bin directory of the views directory of the generated application and start the .exe file. The location of the .exe is:

\views\[ApplicationName]_[BundleName]\bin\release\[ApplicationName]_[BundleName].exe

(i.e.: \views\sample_inquiry\bin\release\sample_inquiry.exe).

To request a License Key from CTC, start the CTC Configurator, navigate to 'Help/How To Obtain a License Key...' and follow the instructions.

This release provides support for WPF 3.5 as well as WPF 4.0. Existing bundles created for WPF 3.5 will continue to be generated for WPF 3.5 and Visual Studio 2008. When creating a new bundle, the generator defaults to WPF 4.0 and Visual

Studio 2010. This can be changed using the CTC Configurator to set the WPF Version property to the appropriate value.

Configuration File

The file containing the runtime configuration parameters is named WPFClientConfig.xml and is located in the application directory of the views directory of the generated bundle (i.e.:

\views\[ApplicationName]_[BundleName]\WPFClientConfig.xml)

During the build of the generated application, depending on the type of build, the configuration file will automatically be copied to either the Debug or the Release directory of the application bin directory. Therefore, if choosing to edit the configuration file manually, the file in the above mentioned location must be edited.

Upgrading to CE 3.0/AB Suite 3.0

Users with existing bundles generated for VS2008 must make the following configuration changes when upgrading to CE 3.0/AB Suite 3.0:

1. Using the CTC Configurator, set option 'VisualStudioVersion' to 'VS2010'.

Users with existing bundles generated for VS2010 must make the following configuration changes when upgrading to CE 3.0/AB Suite 3.0:

1. Using the CTC Configurator, add the option 'ReInstallBundle' and set the value to 'true'.

New bundles must be created for Visual Studio 2010 when using CE 3.0/AB Suite 3.0. Using the CTC Configurator, set option 'VisualStudioVersion' to 'VS2010'.

Downgrading to a Previous Version

When installing a previous/older version of the CTC WPF Client Generator, you must first uninstall the current version from 'Programs and Features' or 'Add/Remove Products' in the Control Panel.

Installed Files

The following directories and files are installed:

[CEROOT]

- Bin
 - CTCWPFClientConfigurator.chm
 - CTCWPFClientConfigurator.dll
 - CTCWPFClientCustomControls.dll

- CTCWPFCClientGenerate.dll
- CTCWPFCClientInfrastructureFiles.xml
- CTCWPFCClientStandardControls.dll
- CTCWPFCClientStandardControls.xml
- CTCConfigurator.chm
- CTCConfigurator.exe
- CTCGeneratorConfig.xml
- CTC-Software
 - CTC WPF Client Generator
 - CustomControls
 - Properties
 - AssemblyInfo.cs
 - ChartingControl.cs
 - ClearFieldsButtonControl.cs
 - ClearFieldsButtonListControl.cs
 - CTCWPFCClientCustomControls-VS2008.csproj
 - CTCWPFCClientCustomControls-VS2010.csproj
 - DataGridControl.cs
 - DatePickerControl.cs
 - SliderControl.cs
 - TextBoxToButtonListControl.cs
 - VideoPlayerControl.cs
 - Documentation
 - CTC WPF Client Configurator.pdf
 - CTC WPF Client Generator.pdf
 - CTC WPF Client Generator ReadMe.pdf
 - UserControls
 - Properties
 - AssemblyInfo.cs
 - BlankUserControl.cs
 - CTCWPFCClientUserControls-VS2008.csproj
 - CTCWPFCClientUserControls-VS2010.csproj
 - Views
 - Bin
 - CTCWPFCControls.dll
 - CTCWPFCControls.xml
 - CTCWPFCStandardRuntime.dll
 - CTCWPFCStandardRuntime.xml
 - CTCWPFCVideoPlayer.dll
 - CTCWPFCExtendedRuntime
 - Properties
 - AssemblyInfo.cs
 - CTCExtendedIspecView.cs
 - CTCViewModelExtended.cs
 - CTCWPFCExtendedRuntime-VS2008-35.csproj
 - CTCWPFCExtendedRuntime-VS2010-35.csproj
 - CTCWPFCExtendedRuntime-VS2010-40.csproj
 - List_Row.cs
 - List_Row_Ext.cs
 - List_Row_Grid.cs
 - Images
 - blank.png
 - Lang

- CUSTIspecView
 - Properties
 - AppIcon16x16.ico
 - AssemblyInfo.cs
 - Resources.Designer.cs
 - Resources.resx
 - Settings.Designer.cs
 - Settings.settings
 - CUSTIspecView.xaml
 - CUSTIspecView.xaml.cs
 - CUSTIspecView.xaml.custom.cs
 - CUSTIspecViewModel.cs
 - CUSTPrintForm.xaml
 - CUSTPrintForm.xaml.cs
 - L1_CUSTIspecView.csproj
- IspecView
 - Properties
 - AppIcon16x16.ico
 - AssemblyInfo.cs
 - Resources.Designer.cs
 - Resources.resx
 - Settings.Designer.cs
 - Settings.settings
 - IspecView-VS2008-35.csproj
 - IspecView-VS2010-35.csproj
 - IspecView-VS2010-40.csproj
- SINQIspecView
 - Properties
 - AppIcon16x16.ico
 - AssemblyInfo.cs
 - Resources.Designer.cs
 - Resources.resx
 - Settings.Designer.cs
 - Settings.settings
 - L1_SINQIspecView.csproj
 - SINQIspecView.xaml
 - SINQIspecView.xaml.cs
 - SINQIspecView.xaml.custom.cs
 - SINQIspecViewModel.cs
 - SINQPrintForm.xaml
 - SINQPrintForm.xaml.cs
- IspecView.xaml.custom.cs
- WPFApplication
 - Properties
 - AppIcon16x16.ico
 - AppIcon48x48.ico
 - AppIcon48x48.png
 - AssemblyInfo.cs
 - Resources.Designer.cs
 - Resources.resx
 - Settings.Designer.cs
 - Settings.settings
 - App.xaml

- App.xaml.cs
- CommandConsole.xaml
- CommandConsole.xaml.cs
- CTCMessageBox.xaml
- CTCMessageBox.xaml.cs
- Language.xaml
- Language.xaml.cs
- LoginForm.xaml
- LoginForm.xaml.cs
- MainWindow.xaml
- MainWindow.xaml.cs
- MainWindowMultiIspecs.xaml
- MainWindowMultiIspecs.xaml.cs
- MainWindowMultiSessions.xaml
- MainWindowMultiSessions.xaml.cs
- MainWindowTabs.xaml
- MainWindowTabs.xaml.cs
- MessageStrings.cs
- SelectIspec.xaml
- SelectIspec.xaml.cs
- SplashScreen.xaml
- SplashScreen.xaml.cs
- SystemMessage.xaml
- SystemMessage.xaml.cs
- TransactionError.xaml
- TransactionError.xaml.cs
- WPFApplication-VS2008-35.csproj
- WPFApplication-VS2010-35.csproj
- WPFApplication-VS2010-40.csproj
- WPFClientConfig.xml
- WPFClientDownloads
 - IspecList.xml
- CTCWPFApplication-VS2008.sln
- CTCWPFApplication-VS2010.sln
- MSBuildSolution-35.bat
- MSBuildSolution-40.bat
- CTC Configurator
 - CTC Configurator Framework Help.pdf

Known WPF Issues

1. When generating forms using the Charting Control from the WPF Toolkit, the WPF Designer in Visual Studio 2008 SP1 throws an unhandled exception when opening the WPF application. However this problem doesn't affect the running of the application. It is only an issue when opening the generated application in Visual Studio.
2. The WPF ComboBox control supports only the DropDown type and the DropDownList type. The Simple type, where the list normally would always be visible is not supported. Therefore, a ComboBox specified as Simple type is generated as the DropDown type.

CTC Generate Gateway Issue

Upgrading the CE environment de-installs the CTC Generate Gateway interface causing the CTC WPF Client Generator to stop working when running the generator from EAE 3.3. It is therefore required to re-install the CTC Generate Gateway after upgrading the CE environment. Re-run the CTC Generate Gateway Installer Package and select the 'Repair' option.

Version History

V1.0.0	30/November/2009	Initial Release
V1.0.0.12/13	22/December/2010	Added Video Player Custom Control as substitution for the standard Image control.
		Added HostSessionClosing event which occurs just before closing the session with the host system. The MainWindow.xaml.cs file has been updated to provide an example of how to use this.
		Added UserControl feature allowing adding standard Silverlight controls to the generated views/forms. UserControls are similar to CustomControls except UserControls are not associated with data items. Refer to UserControlAdd, ControlAdditionAdd and ControlAdditionRemove in the CTC Silverlight Client Configurator document.
		DefaultDateFormat option for specifying the default format of dates (UK, US or International) to be used by Date Controls has been added.
		Added ExcludeTeachScreen option, which when set will exclude teach screens from the generate process.
		Added TextBox AutoSelect option as a new feature. When setting this option, the text of a TextBox will be selected when the user puts focus on the TextBox.
		Added Description property to the Control Specifications allowing the user to enter a short description of the specifications.
		Updated installation script to allow installing the generator on 64 bit OS.
		Added AlternateViewOriginalRemove option that allows removing the original Ispec View from the generated project when an Alternate View has been created. This keeps the size of the package to be

		downloaded to the client to a minimum.
		Added CopyFromMultiLineAsSingle option that allows generating a CopyFrom spanning multiple lines as single lines.
		<p>Added Unsolicited Message event to the CTCWPFViewController. This allows the application to listen to and receive messages from the host system and to determine how to display the messages to the user.</p> <p>The MainWindow.xaml and MainWindow.xaml.cs files have been updated to provide an example of how to use this.</p>
		<p>Added CopyFromColumnGrouping option allowing to group fields in a CopyFrom row into columns.</p> <p>See section 'Generating CopyFrom As Table' in the CTC Silverlight Client Generator document for further information.</p>
		<p>Enhancement added to ComboBox and ListBox controls allowing specifying Xml List parameters as items on the control in the EAE/AB Suite painter when painting the controls on the form.</p> <p>This is an alternative to specifying the Xml List parameters on the Control Specifications in the CTC Configurator.</p>
		Provided workaround for the Silverlight DatePicker control to allow the user to enter dates in formats other than the default dd/MM/yyyy.
		<p>Added new feature allowing multiple ispec, including multiple copies of the same ispec, to be opened at the same time within the same session.</p> <p>This feature is only suitable for use with EAE/AB Suite application that are designed and programmed as stateless systems.</p> <p>The following new methods and properties has been added to the CTCWPFViewController:</p> <ul style="list-style-type: none"> • OpenIspec (string ispecName, bool saveCurrentIspec, OpenIspecDelegate callback)

	<p>This method opens or reopens the specified ispec and returns an instance of the IspecView User Control. The caller displays the IspecView in a ContentControl on the user interface.</p> <ul style="list-style-type: none"> • CloseIspec (string ispecName) This method removes the specified ispec from the collection of open ispecs. • CloseAllIspecs () This method removes all open ispecs from the collection of open ispecs. • CurrentIspecView property. This property points to the current active IspecView User Control. • DefaultIspecViewContainer property. This property is set by the caller as the default ContentControl on the user interface. • CurrentIspecViewContainer property. This property points to the ContentControl in which the current IspecView is displayed. • CurrentIspecInfo property This property points to the current IspecInfo object. IspecInfo object holds pointers to the IspecModel, IspecView and IspecViewModel objects. • OpenIspecs property. This property is a dictionary collection of currently open ispecs. This key to the collection is the IspecName and the value is the IspecInfo object. <p>The MainWindowMultiIspecs.xaml and MainWindowMultiIspecs.xaml.cs files in the [ceroot]\CTC-Software\CTC WPF Client Generator\views\WPFApplication folder provide an example of how to use the new methods/properties.</p>
	<p>Enhanced the MainWindowMultiIspecs.xaml.cs example to include Ctrl+Tab to move to the previous ispec in the list of open ispecs and Ctrl+Shift+Tab to move to the next ispec in the list of open ispecs.</p>
	<p>Added TextBox Character Casing option to configure a textbox to be Upper, Lower or Normal case when entering text into a textbox associated with a field defined as alphanumeric.</p>

		<p>The following infrastructure source files has been updated for this version:</p> <ul style="list-style-type: none"> - MainWindow.xaml - MainWindow.xaml.cs
		<p>Provided workaround for hidden fields not being passed through by the CE Generate Environment.</p>
V2.0.0	27/June/2011	<p>CTC WPF Generator upgrade to be qualified with WPF 4.0 and Visual Studio 2010.</p>
		<p>Enhanced the CTC Configurator to manage Multi Configuration Files.</p> <p>The Multi Configuration Files feature is activated when using the SaveAs function or the Import function the first time.</p> <p>When activating the Multi Configuration feature, a catalog of configuration files will be maintained in the CTCGeneratorConfigCatalog.xml file located in [ceroot]\bin.</p>
		<p>Enhanced the List management to allow specifying sub columns on the List.Columns property on the ListBox control.</p> <p>Specifying sub columns provides a way to create a multi column list even when the host system returns a single column list without making any changes to the host system.</p>
V2.0.0.2/3	31/January/2012	<p>Fixed issue causing wrong name generated in ISpecViewModel for insertable pushbutton.</p>
V2.0.0.6/7/8	26/March/2013	<p>CTC WPF Client Generator upgrade to be qualified with AB Suite 3.0.</p>
V2.0.1.0/1/2	13/November/2013	<p>CTC WPF Client Generator upgrade to be qualified with Visual Studio 2012.</p>
V2.0.1.0/1/2/3	23/January/2014	<p>CTC WPF Client Generator qualified with CE 4.0.</p>