

CTC Silverlight Client Generator

Version 2.0.2

ReadMe

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Prerequisites

The following software levels are required for the CTC Silverlight Client Generator version 2.0.3 and the generated user interface application.

Microsoft Software requirements:

- .NET 3.5 SP1 or higher
- IIS 5.0 or higher (see note below on IIS 7 Configuration)
- Silverlight 3, Silverlight 4 or Silverlight 5:
 - Silverlight 3 with the following requirements:
 - Visual Studio 2008 SP1
 - Microsoft Silverlight 3.0 Tools for Visual Studio 2008 SP1 (obtained from <http://www.microsoft.com/downloads/details.aspx?familyid=9442B0F2-7465-417A-88F3-5E7B5409E9DD>)
 - Silverlight 4 with the following requirements:
 - Visual Studio 2010 SP1
 - Microsoft Silverlight 4.0 Tools for Visual Studio 2010 SP1 (obtained from <http://www.microsoft.com/downloads/en/details.aspx?FamilyID=b3deb194-ca86-4fb6-a716-b67c2604a139>)
Note: The Silverlight 4.0 Tools for Visual Studio 2010 package is included with Visual Studio 2010 SP1.
 - Silverlight 5 with the following requirements:
 - Visual Studio 2010 SP1, Visual Studio 2012 or Visual Studio 2013
 - Microsoft Silverlight 5.0 Tools for Visual Studio 2010 SP1 (obtained from <http://www.silverlight.net/downloads>).
- Internet Explorer 7 or higher

Optional

- Silverlight 3 Toolkit.
This is required to use any of the additional controls from the Toolkit such as Charting Control and Themes Control. The Silverlight 3 Toolkit can be downloaded from <http://silverlight.codeplex.com/releases/view/24246>. The CTC Silverlight Client Generator 2.0.2 has been tested with the July 2009 release of the toolkit.
- Silverlight 4 Toolkit.
This is required to use any of the additional controls from the Toolkit such as Charting Control and Themes Control. The Silverlight 4 Toolkit can be downloaded from <http://silverlight.codeplex.com/>. The CTC Silverlight Client Generator 2.0.2 has been tested with the April 2010 release of the toolkit.
- Silverlight 5 Toolkit.
This is required to use any of the additional controls from the Toolkit such

as Charting Control and Themes Control. The Silverlight 5 Toolkit can be downloaded from <http://silverlight.codeplex.com/> . The CTC Silverlight Client Generator 2.0.2 has been tested with the December 2011 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

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.

Install Instructions

Download the installation package CTCSilverlightClientGeneratorSetupV2.0.1.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 Silverlight 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 Silverlight 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 "**CTCSilverlightClientGenerate.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 Silverlight 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 Silverlight 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 2.0.3.

To start the generated Silverlight User Interface Application, open the browser and enter the URL of the application. The URL which is created by default by the generator is:

[http://\[MachineName\]/\[ApplicationName\]_\[BundleName\]/default.aspx](http://[MachineName]/[ApplicationName]_[BundleName]/default.aspx) (i.e. http://localhost/Sample_Inquiry/default.aspx).

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 Silverlight 3, Silverlight 4 and Silverlight 5 RC. Existing bundles created for Silverlight 3 and Silverlight 4 will continue to be generated for those versions. When creating a new bundle, the generator defaults to Silverlight 4 and Visual Studio 2010. This can be changed using the CTC Configurator to set the Silverlight Version property to the appropriate value.

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 'SilverlightVersion' to 'Silverlight 4' or 'Silverlight 5'.

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 Visual Studio 2010, set 'Target Framework' to '.NET Framework 4.0' of the generated Web project.
2. Using IIS Manager, set 'Application Pool' to 'ASP.NET v4.0' of the virtual directory for the Silverlight Client Application.
3. Add '<pages controlRenderingCompatibilityVersion="3.5" clientIDMode="AutoID"/>' to the <system.web> section of the web.config file.
4. Change the compilation tag of the <system.web> section of the web.config file to '<compilation debug="true" targetFramework="4.0" />'.

New bundles must be created for Visual Studio 2010 when using CE 3.0/AB Suite 3.0. Using the CTC Configurator, set option 'SilverlightVersion' to 'Silverlight 4' or 'Silverlight 5'.

Downgrading to a Previous Version

When installing a previous/older version of the CTC Silverlight 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
 - CTCSilverlightClientConfigurator.chm
 - CTCSilverlightClientConfigurator.dll
 - CTCSilverlightClientCustomControls.dll
 - CTCSilverlightClientGenerate.dll
 - CTCSilverlightClientInfrastructureFiles.xml
 - CTCSilverlightClientStandardControls.dll
 - CTCSilverlightClientStandardControls.xml
 - CTCCConfigurator.chm
 - CTCCConfigurator.exe
 - CTCGeneratorConfig.xml
- CTC-Software
 - CTC Silverlight Client Generator
 - CustomControls
 - Properties
 - AssemblyInfo.cs
 - ChartingControl.cs
 - ComboBoxSLControl.cs
 - CTCSilverlightClientCustomControls-VS2008.csproj
 - CTCSilverlightClientCustomControls-VS2010.csproj
 - DataGridControl.cs
 - DatePickerControl.cs
 - DomainUpDownControl.cs
 - NumericUpDownControl.cs
 - SliderControl.cs
 - ThemesFormControl.cs
 - VideoPlayerControl.cs
 - Documentation
 - CTC Silverlight Client Configurator.pdf
 - CTC Silverlight Client Generator.pdf
 - CTC Silverlight Client Generator ReadMe.pdf
 - UserControls
 - Properties
 - AssemblyInfo.cs
 - BlankUserControl.cs
 - CTCSilverlightClientUserControls-VS2008.csproj
 - CTCSilverlightClientUserControls-VS2010.csproj
 - Views
 - Bin
 - CTCSilverlightCEServices.dll
 - CTCSilverlightCEServices.xml
 - CTCSilverlightControls-SL3.dll
 - CTCSilverlightControls-SL4.dll
 - CTCSilverlightControls-SL5.dll
 - CTCSilverlightControls.xml
 - CTCSilverlightStandardRuntime-SL3.dll
 - CTCSilverlightStandardRuntime-SL4.dll
 - CTCSilverlightStandardRuntime-SL5.dll
 - CTCSilverlightStandardRuntime.xml
 - CTCSilverlightVideoPlayer-SL3.dll
 - CTCSilverlightVideoPlayer-SL4.dll
 - CTCSilverlightVideoPlayer-SL5.dll
 - DevExpress.AgMenu.v8.2-SL3.dll

- DevExpress.AgMenu.v8.2-SL3.xml
 - DevExpress.AgMenu.v8.2-SL4.dll
 - DevExpress.AgMenu.v8.2-SL4.xml
 - DevExpress.AgMenu.v8.2-SL5.dll
 - DevExpress.AgMenu.v8.2-SL5.xml
- CTCSilverlightExtendedRuntime
 - Properties
 - AssemblyInfo.cs
 - CTCExtendedIspecView.cs
 - CTCSilverlightExtendedRuntime-SL3.csproj
 - CTCSilverlightExtendedRuntime-SL4.csproj
 - CTCSilverlightExtendedRuntime-SL5.csproj
 - CTCViewModelExtended.cs
 - List_Row.cs
 - List_Row_Ext.cs
 - List_Row_Grid.cs
- Lang
 - CUSTIspecView
 - Properties
 - AppManifest.xml
 - AssemblyInfo.cs
 - CUSTIspecView.xaml
 - CUSTIspecView.xaml.cs
 - CUSTIspecView.xaml.custom.cs
 - CUSTIspecViewModel.cs
 - CUSTPrintForm.xaml
 - CUSTPrintForm.xaml.cs
 - L1_CUSTIspecView.csproj
 - IspecView
 - Properties
 - AppManifest.xml
 - AssemblyInfo.cs
 - IspecView-SL3.csproj
 - IspecView-SL4.csproj
 - IspecView-SL5.csproj
 - SINGIspecView
 - Properties
 - AppManifest.xml
 - AssemblyInfo.cs
 - SINGIspecView.xaml
 - SINGIspecView.xaml.cs
 - SINGIspecView.xaml.custom.cs
 - SINGIspecViewModel.cs
 - SINGPrintForm.xaml
 - SINGPrintForm.xaml.cs
 - L1_SINGIspecView.csproj
 - IspecView.xaml.custom.cs
- SilverlightApplication
 - Icons
 - Icon16.png
 - Icon32.png
 - Icon48.png
 - Icon128.png

- Properties
 - AppManifest.xml
 - AssemblyInfo.cs
 - OutOfBrowserSettings.xml
- 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
- MessageStrings.cs
- Page.xaml
- Page.xaml.cs
- PageMultiIspecs.xaml
- PageMultiIspecs.xaml.cs
- PageMultiIspecsChildWindows.xaml
- PageMultiIspecsChildWindows.xaml.cs
- PageMultiSessions.xaml
- PageMultiSessions.xaml.cs
- PageScaling-SL3.xaml
- PageScaling-SL4-SL5.xaml
- PageScaling.xaml.cs
- PageTabs.xaml
- PageTabs.xaml.cs
- PageWindows.xaml
- PageWindows.xaml.cs
- PrintPreview.xaml
- PrintPreview.xaml.cs
- SelectIspec.xaml
- SelectIspec.xaml.cs
- SilverlightApplication-SL3.csproj
- SilverlightApplication-SL4.csproj
- SilverlightApplication-SL5.csproj
- SplashScreen.xaml
- SplashScreen.xaml.cs
- SystemMessage.xaml
- SystemMessage.xaml.cs
- TransactionError.xaml
- TransactionError.xaml.cs
- WaitIndicator.xaml
- WaitIndicator.xaml.cs
- SilverlightApplication.web
 - ClientBin
 - Images
 - blank.png
 - Properties
 - AssemblyInfo.cs
 - CTCSilverlightViewControllerServices.aspx
 - CTCSilverlightViewControllerServices.aspx.cs

- CTCSilverlightViewControllerServices.aspx.designer.cs
- Default-SL3.aspx
- Default-SL4.aspx
- Default-SL5.aspx
- Default.aspx.cs
- Default.aspx.designer.cs
- Global.asax
- Global.asax.cs
- IspecList.xml
- Silverlight-SL3.js
- Silverlight-SL4.js
- Silverlight-SL5.js
- SilverlightApplication-SL3.Web.csproj
- SilverlightApplication-SL4.Web.csproj
- SilverlightApplication-SL5.Web.csproj
- Web-SL3.config
- Web-SL4.config
- Web-SL5.config
- CTCSilverlightApplication-SL3.sln
- CTCSilverlightApplication-SL4.sln
- CTCSilverlightApplication-SL5.sln
- DeploySolution.bat
- MSBuildProjects-SL3.bat
- MSBuildProjects-SL4.bat
- MSBuildProjects-SL5.bat
- MSBuildSolution-SL3.bat
- MSBuildSolution-SL4.bat
- MSBuildSolution-SL5.bat
- CTC Configurator
 - CTC Configurator Framework Help.pdf

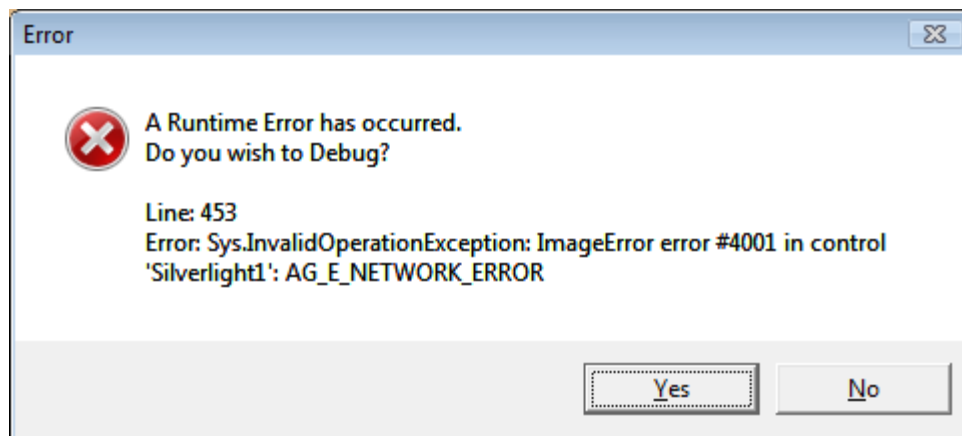
Silverlight Constraints/Limitations

- 1) Image formats are limited to JPG and PNG.
- 2) Fonts are limited to: Arial, Arial Black, Comic Sans MS, Courier New, Georgia, Lucida Sans Unicode, Portable User Interface, Times New Roman, Trebuchet MS, Verdana, and Webdings. However, the CTC Silverlight Client Generator provides facilities for configuring font substitutions as well as embedding fonts with the generated forms. When no font substitutions are configured and the font doesn't match any of the fonts supported by Silverlight, Silverlight defaults to 'Portable User Interface' font.
- 3) Strikethrough text decoration is not supported.
- 4) Access Key/Short Cut to controls using Alt-Key is not supported.
- 5) Background image is not supported on Radio Buttons and Check Boxes.
- 6) Border style is always a solid line.

- 7) Menu control and right-click context menu are not available (see Menu Control section below).
- 8) Printing is not supported in Silverlight 3. However, Silverlight 4 provides support for printing.
- 9) Silverlight 5 has a known problem when pages for printing include images.

Images Directory

The default location of images is the **images** directory of the **ClientBin** within the **.Web** folder of the generated solution (i.e. `views\sample_bundle.web\ClientBin\images`). When Silverlight cannot find an image, the following error message will pop up on the client workstation when running the application:



When opening the generated forms in Visual Studio, images are not shown. This is because the URL pointing to the image source is not known at design time.

Note that a warning "The file 'images/logo.png' is not part of the project or its 'Build Action' property is not set to 'Resource'." will appear in Visual Studio 2010 when opening forms generated for Silverlight 4. This message can be ignored.

Menu Control

As Silverlight doesn't provide a menu control, included with the installation is a redistributable dll 'DevExpress.AgMenu.v8.2.dll' from the company DevExpress, which provides a menu control for Silverlight. As an example of how to include a menu bar, the CTC default generated Silverlight application use the DevExpress Menu control for providing 'standard' menu items such as Open/Close Session, Select Spec, Change Language, Copy To Clipboard, and others. For further information and to download the latest release of the AgMenu control visit the DevExpress web site www.devexpress.com.

Note that Silverlight 3 does not provide support for right-click context menu. However, support for right-click event is provided in Silverlight 4.

IIS 7 Configuration

When using IIS 7, the CTC Silverlight Client Generator requires the IIS 6 Management Compatibility Component to be installed in order for the generator to set up the virtual directory for the generated solution.

To install the IIS 6 Management Compatibility Components by using the Windows Vista Control Panel:

1. Click **Start**, click **Control Panel**, click **Programs and Features**, and then click **Turn Windows features on or off**.
2. Open **Internet Information Services**.
3. Open **Web Management Tools**.
4. Open **IIS 6 Management Compatibility**.
5. Select the check box for **IIS 6 Metabase and IIS 6 configuration compatibility**.
6. Select the checkbox for **IIS 6 Management Console**.
7. Click **OK**.

.xaml and .xap Extensions Not Configured in IIS

On some versions of IIS, such as IIS 5 and IIS 6, application extensions used by Silverlight may not be configured in IIS. When running the Silverlight application from the browser, an error "**Unhandled error in Silverlight Application, Code: 2104, Category: InitializeError**" may occur. This error is likely to be caused by IIS not being configured to recognize MIME types used by Silverlight.

To add the MIME types required by Silverlight to IIS 6:

1. Open the **IIS Management Console** and choose the **Default Web Site**.
2. Open the context menu and choose **Properties**.
3. Select the **HTTP-headers** tab.
4. Click **Files Types** button in **MIME Map** section.
5. Choose **New Type** and add the **extension** and **application type** for each of the three MIME types below:

| Extension | MIME Type |
|-----------|-------------------------------|
| .xaml | application/xaml+xml |
| .xap | application/x-silverlight-app |
| .xbap | application/x-ms-xbap |

6. Click **OK**.
7. Click **Apply**.

CTC Generate Gateway Issue

Upgrading the CE environment de-installs the CTC Generate Gateway interface causing the CTC Silverlight 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

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| V1.0.0 | 15/June/2009 | Initial Release |
| V1.0.1 | 7/August/2009 | CTC Silverlight Generator upgrade to be qualified with Silverlight 3.0 and Visual Studio 2008. |
| V1.0.2 | 9/September/2009 | Additional enhancements. |
| V2.0.0 | 5/November/2010 | CTC Silverlight Generator upgrade to be qualified with Silverlight 4.0 and Visual Studio 2010. |
| V2.0.0.2/3 | 29/November/2010 | Fixed issue with Copyfrom DataGrid causing a hidden column to appear as the last column in the grid. |
| | | Fixed issue with Copyfrom DataGrid containing lists, such as ComboBox and ListBox, causing the list data not to appear. |
| V2.0.0.4/5 | 7/December/2010 | Provided workaround for issue with Silverlight 3 which throws exception when a DataGrid column is empty. Empty columns in a CopyFrom DataGrid will be removed at generate time. |
| | | Fixed issue causing ComboBox within a CopyFrom using XML List Data to lose the XML specifications when using column grouping. |
| | | Enhanced the SelectIspec form to allow the selected ispec to be opened using the OpenIspec method. |
| V2.0.0.6/7 | 9/December/2010 | Fixed issue with lists (ComboBox and ListBox) in a CopyFrom area causing the list control to appear empty at runtime. |
| V2.0.0.8/9 | 21/December/2010 | Fixed issue with hidden fields in a CopyFrom area. |
| V2.0.0.10/11 | 3/January/2011 | Added Client-Side logging. |
| V2.0.0.12/13 | 4/January/2011 | Fixed issue with the GetCopyFromList() method causing the method not to return to the callback. |
| V2.0.0.14/15 | 28/January/2011 | Enhanced List Management to improve the loading of lists within a CopyFrom area. |
| | | Added CTC Silverlight IspecPrint control |

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| | | with support for multipage printing. |
| V2.0.0.16/17 | 31/January/2011 | Fixed issue with missing VisualTreeWalker method for IspecPrint. |
| V2.0.0.18/19 | 7/February/2011 | Enhanced the performance of the CTCComboBox when using the DropDownStyles 'DropDown' and 'DropDownList'. |
| V2.0.0.20/21 | 21/February/2011 | Added generic CTC ChildWindow control. |
| | | Added PrintPreview function that shows a preview of pages being created using the CTC Silverlight IspecPrint control. |
| | | Added PageMultiIspecsChildWindows.xaml and xaml.cs as an example of how to open multiple concurrent ispecs and show them in Windows using the CTC ChildWindow control. |
| | | The following forms has been updated to use the CTC Child Window control: <ul style="list-style-type: none"> • SplashScreen • TransactionError • SystemMessage • CTCMessageBox • SelectIspec • Language • Login • CommandConsole |
| V2.0.0.22/23 | 11/March/2011 | Added workaround to convert the Decimal Key on the Numeric Key Pad to comma when Decimal Character is defined as comma in EAE/AB Suite Developer. |
| V2.0.0.24/25 | 16/March/2011 | Added workaround for generating hidden fields as properties on the IspecViewModel.cs class. |
| | | Added workaround for generating Radio Buttons and Check Boxes with labels on right hand side or left hand side of the Circle/Check mark according to how the controls are specified in the EAE/AB Suite Painter. |
| V2.0.0.26/27 | 1/April/2011 | Fixed issue with Radio Button and |

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| | | Checkbox when the control has been painted with no label. |
| V2.0.0.28/29 | 29/April/2011 | Fixed issue causing the AfterInitializeView and AfterHostResponse custom methods to be called every time when using multiple open ispecs and the end user navigates to already open ispecs. |
| V2.0.0.30/31 | 1/May/2011 | Provided workaround for hidden fields not being passed through by the CE Generate Environment. |
| V2.0.0.32/33 | 3/May/2011 | Enhance the CopyFrom DataGrid to generate column Width="Auto" for column that contains multiple controls on a line when using the CopyFromColumnGrouping option to group multiple controls into one column. |
| V2.0.0.34/35 | 22/June/2011 | Fixed issue causing incorrect list parameters to be generated when specifying the List.AddBlankRow list parameter. |
| V2.0.0.36/37 | 6/July/2011 | Fixed issue with AutoTabbing in CopyFrom ispecs generated as a DataGrid. |
| V2.0.0.38/39 | 21/July/2011 | Fixed issue with IspecPrint causing List Item Headers not to be printed and non-copyfrom ispecs to fail during printing. |
| V2.0.0.40/41 | 1/August/2011 | Enhanced the GetMoveToIspec() method to provide options for moving forward/back according to the order/history in which the user opens/creates and navigates to ispecs. |
| | | <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</p> |

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| | | will be maintained in the CTCGeneratorConfigCatalog.xml file located in [ceroot]\bin. |
| V2.0.0.42/43 | 3/August/2011 | Fixed issue with determining the TabIndex value of the CopyFrom Grid Control. |
| V2.0.0.44/45 | 8/August/2011 | Added HyperlinkButton custom control. |
| | | Added options PositionLeftAdjustment and PositionTopAdjustment to allow specifying a value to adjust the positioning of controls and move them in the horizontal and vertical direction. |
| | | Enhanced the ClearAllFields method to also clear Password fields. |
| V2.0.0.46/47 | 13/August/2011 | Provided workaround for issue with ComboBox specified as Simple and DropDown with Inline list cause by mismatch of versions of the CEGenerateDotNET.dll. |
| V2.0.0.48/49 | 17/August/2011 | Added new option SingleSolutionFile, which specifies whether to create a single solution file containing references to all ISpecView projects or to create each of the ISpecView projects as individual projects and keep the main application solution file as small as possible. When the bundle contains about 20 or more ispecs, it can take a long time for Visual Studio to open the solution and when that is the case, it is recommended to set this option to false. |
| V2.0.0.50/51 | 18/August/2011 | Fixed issue with the ClearAllFields() method related to ComboBoxes where the user has entered an invalid value for a ComboBox defined as Simple/Dropdown and AddBlankRow=false. |
| | | Enhanced the List management to allow specifying sub columns on the List.Columns property on the ListBox control. |

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| | | 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. |
| V2.0.0.52/53 | 30/August/2011 | Added option <code>ListBoxSubmitOnDoubleClick</code> allowing the user to submit the form when double clicking on an item in a <code>ListBox</code> or <code>DataGrid</code> . |
| V2.0.0.54/55 | 2/September/2011 | Fixed issue with <code>DynamicAttributes</code> when generating <code>CopyFrom</code> spec as a <code>Grid</code> . |
| V2.0.0.56/57 | 12/September/2011 | Enhanced the CTC Configurator to validate Control Specifications for valid xml syntax. |
| | | Added ' <code>ClientSideLoggingEnabled</code> ' parameter to the web.config allowing separately specifying logging of the Silverlight application running on the client machine. |
| | | Fixed issue causing the <code>PositionY</code> value used in <code>MatchOnField</code> expressions to be calculated incorrectly. |
| V2.0.0.58/59 | 20/September/2011 | Added option <code>VirtualDirectoryAutoCreate</code> to allow for configuring automatic creation of virtual directory. On machines without IIS, it will be necessary to set this option to false. |
| V2.0.0.60/61 | 23/September/2011 | Fixed issue with validating xaml specifications for valid xml format causing incorrect error message to be displayed by the CTC Configurator. |
| V2.0.0.62/63 | 25/September/2011 | Fixed issue related to multi-threaded generates causing an error when evaluating <code>MatchOnField</code> expressions. |
| V2.0.0.64/65 | 30/September/2011 | Fixed issue with validating xaml specifications for Chart Control causing incorrect error message to be displayed by the CTC Configurator. |
| V2.0.0.66/67 | 3/October/2011 | Added <code>FormName</code> to Predefined <code>MatchOnField</code> Expressions allowing |

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| | | matching on ispec name. |
| V2.0.0.68/69 | 5/October/2011 | Enhanced the calculation of the form size to exclude the dropdown height of ComboBox controls defined with dropdown style Dropdown and DropDownList. |
| V2.0.0.70/71 | 14/October/2011 | Added IdentifyGroupBox option allowing identifying Rectangles with Labels painted overlapping the top line of the rectangle. This then enables using the IsGroupBox expression in a MatchOnfield expression for specifically identifying Labels and Rectangles as groupboxes. |
| | | Fixed issue causing incorrect background color on Radio Buttons and Check Boxes with AB Suite. |
| | | CTC Silverlight Generator qualified with Silverlight 5.0 and Visual Studio 2010 to enable Vector Printing on PostScript-enabled printers, which is new in Silverlight 5. |
| V2.0.0.72/73 | 20/October/2011 | Added RemoveButtonGroupPanel option for removing the panel around Button Groups which is added by AB Suite as a group container for Button Groups when importing a model from EAE. |
| | | Fixed issue with Radio Buttons and Check Boxes positioning labels on the left. |
| | | Fixed issue with IdentifyGroupBox when a label overlaps more than one rectangle. |
| V2.0.0.74/75 | 21/October/2011 | Fixed issue calculating width of the list of ComboBox Simple style. |
| | | Enhanced TextBox as Label when ReadOnly to show border. |
| V2.0.0.76/77 | 26/October/2011 | Added LabelPosition property to Radio Buttons and Check Boxes to allow specifying the position of the label on the Left or Right. When not specified, this defaults to how the label position is |

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| | | specified in the EAE/AB Suite Painter. |
| | | Enhance the ViewController to raise event when a SwitchTo has occurred on the host system. The default Page.xaml.cs has been updated to include an example of the OnSwitchTo event handler. |
| V2.0.0.78/79 | 27/October/2011 | Enhanced the GroupBox feature to recognize multiple labels on top of a rectangle and also recognize labels on top of horizontal lines as part of a GroupBox. |
| V2.0.0.80/81 | 1/November/2011 | Added workaround for Silverlight 5 printing to the CTC IspecPrint Control. |
| V2.0.0.82/83 | 7/November/2011 | Added new option TwoDigitYearCutoff used for determining the century for a two digit year of 6 digit date fields used by controls such as the Silverlight DatePicker. The default is 2056, which is the equivalent of the EAE/AB Suite Base Year of 1957. |
| | | Enabled nodes in the Configuration tree to be dragged and dropped to rearrange the order in which the nodes appear in the tree. |
| V2.0.0.84/85 | 16/November/2011 | Changed the TwoDigitYearCutoff option to validate date input for years between 1957 and 2056. |
| | | Fixed problem with the Configurator causing spaces in the MatchOnField Editor to be compressed. |
| V2.0.0.86/87 | 19/November/2011 | Fixed issue causing wrong Computer Token being created. |
| V2.0.0.88/89 | 23/November/2011 | Fixed issue related to SingleSolutionFile option causing the CTCSilverlightExtendedRuntime project to be built in the wrong order. |
| | | Fixed issue related to MatchOnField expressions causing reserved names between quotes to be wrongly converted to upper case. |
| V2.0.0.90/91 | 24/November/2011 | Fixed issue related to MatchOnField expressions causing reserved names between quotes to be wrongly |

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| | | converted to upper case. |
| V2.0.0.92/93 | 12/December/2011 | Added ForceVector and OpacityThreshold properties to the CTC Print Control. |
| V2.0.0.94/95 | 4/January/2012 | Enhanced DependentList property on ComboBox and ListBox to allow specifying a comma separated list of dependent fields |
| V2.0.1 | 13/January/2012 | CTC Silverlight Generator upgraded to be qualified with Silverlight 5.0 and Visual Studio 2010. |
| V2.0.1.2/3 | 9/March/2012 | Enhanced blocking users from submitting the form while receiving lists from the host. |
| V2.0.1.4/5 | 13/March/2012 | Fixed issue causing MatchOnField warning to be displayed when generating from AB Suite and doing Multi Threaded generates. |
| V2.0.1.6/7 | 14/March/2012 | Enhanced blocking users from submitting the form until the data from the host has been displayed on the form. |
| | | Enhanced the CTC ComboBox to enable checking for max field length when the user types into the combo box. This is enabled when the AutoComplete option is false. |
| V2.0.1.8/9 | 15/March/2012 | Fixed issue with dynamic attributes and setting background color on Check Box and Radio Button. |
| | | Enhanced blocking users from submitting the form until the data from the host has been displayed on the form. |
| V2.0.1.10/11 | 18/March/2012 | Enhanced blocking users from submitting the form until the data from the host has been displayed on the form. |
| V2.0.1.12/13 | 5/April/2012 | Fixed issue related to using Multiple Open Specs and state of inquiry fields not being restored and send back to the host system when user switching specs on the client side. |
| V2.0.1.14/15 | 11/April/2012 | Reset WaitIndicator to version |

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| | | 2.0.1.2/3. |
| V2.0.1.16/17 | 22/April/2012 | Fixed issues with dependent list when using XML list causing dependent list not to be renewed from the host and the current value is not shown as selected. |
| V2.0.1.18/19 | 20/May/2012 | Fixed issues with dependent list when using XML list causing dependent list not to be renewed from the host and the current value is not shown as selected. |
| V2.0.1.20/21 | 6/June/2012 | Fixed issues with lists that are shared and the same for multiple List boxes and Combo boxes, which is causing the initial value not to be selected. |
| V2.0.1.22/23 | 7/June/2012 | Fixed issues with lists that are shared and the same for multiple List boxes and Combo boxes, which is causing the initial value not to be selected. |
| V2.0.1.24/25 | 25/July/2012 | Fixed issues causing button value not be cleared when using multiple open ispecs. |
| V2.0.1.26/27 | 28/August/2012 | Fixed issue with Date Cut off year. |
| V2.0.1.28/29 | 16/November/2012 | Enhanced Combo Box and List Box to allow TabIndex within CopyFrom area. |
| V2.0.1.30/31/32 | 26/March/2013 | CTC Silverlight Client Generator upgrade to be qualified with AB Suite 3.0. |
| V2.0.1.36/37/38 | 17/April/2013 | Workaround added for printing issues caused by images not in memory before starting the printing. |
| V2.0.1.40/41/42 | 26/April/2013 | Enhancement to workaround for printing issues in v2.0.1.36/37/38 to make it more efficient. |
| V2.0.1.46/47/48 | 6/May/2013 | Added enhancement for retrieving lists from the host in one transaction reducing the network requests resulting in performance improvement. |
| V2.0.2 | 13/November/2013 | CTC Silverlight Generator upgrade to be qualified with Visual Studio 2012. |
| V2.0.2.0/1/2/3 | 23/January/2014 | CTC Silverlight Generator qualified with CE 4.0. |
| V2.0.2.10/11/12/13 | 5/January/2015 | CTC Silverlight Generator upgrade to be qualified with Visual Studio 2013. |

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| | 12/February/2020 | Modified 'CTC.SL.Controls.ServerListProperties' to 'com.CTC.SL.Controls.ServerListProperti es' |
| V2.0.2.20/21/22/2 3 | 15/February/2020 | Modified 'CTC.SL.Controls.ServerListProperties' to 'com.CTC.SL.Controls.ServerListProperti es' |
| V2.0.2.33 | 25/November/202 3 | Fixed issue generating TabIndex caused by AB Suite using different property name for passing TabIndex value to the UI generate environment. |
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