Please Read before Using this Software

Altia® Design 10.2 for Windows® XP/Vista®/7

HMI Development Software

To view this document at a later time, open the **AD_README.pdf** file from the Altia Design software installation `help` folder. For example, if the software is installed in **c:\usr\altia102**, open **c:\usr\altia102\help\AD_README.pdf** from a Windows Explorer file browser.

Beginning with Altia Design 10.2, DeepScreen targets and their documentation are delivered as separately installable products.

Altia Design 10.1 and older was delivered and installed as a package of Altia products, including Altia Design, DeepScreen, and DeepScreen targets. The 10.1 version of the Altia Design Enhancements Summary therefore included information about all of the Altia products. Beginning with Altia Design 10.2, only Altia Design information is included in the Altia Design Enhancements Summary. To see the history of DeepScreen enhancements, see the newly revised DeepScreen User's Guide. To see the history of a specific target's enhancements, see that target's Enhancements Summary. In addition, each target has a separate User's Guide describing unique features of the target, compiler/linker tool support, and any special configuration requirements.

If the software is provided on CD-ROM, the Altia Design installer normally executes automatically when the CD-ROM is loaded. To install a DeepScreen target after completing the Altia Design install, browse into the CD-ROM (for example, right click on its CD/DVD driver letter in Windows Explorer and choose **Open**), locate the setup executable for a DeepScreen target you wish to install and double-click on it to execute it.

Beginning with Altia Design 10.2, the default editor is a Unicode editor. Designs containing high/extended ASCII text characters and/or Unicode text characters must not be opened and saved in a non-Unicode editor.

A Unicode editor saves high/extended ASCII text characters (character values 128 to 255) and Unicode text characters (character values 256 to 65535) to a design (.dsn) file in a multi-byte format. This format is not recognized by any non-Unicode editors in earlier releases of Altia Design. A non-Unicode editor processes text characters only as single bytes. A non-Unicode editor will incorrectly display these special characters when it opens a design file that contains them. For example, it displays 2 or 3 unexpected byte characters for each special character. If the design is saved from the non-Unicode editor, the special characters are permanently replaced with the 2 or 3 unexpected single byte characters. The original special characters are only recovered by manually changing a Label, Text I/O or MLTO to show the special characters instead of the 2 or 3 unexpected single byte characters.

The FreeType font engine incorporated into Altia Design 10.0 and newer releases may change how individual characters, words, and spaces are rendered.

Projects created in Altia Design 9.2 or earlier releases that rely on very precise text placement should not be migrated to this release of Altia Design incorporating the FreeType font engine.

Recent Altia Design releases save design files in a new format.

A design (.dsn) file saved in Altia Design 9.0 or newer has a new format and will not open in earlier versions of Altia Design, Altia Runtime, or Altia FacePlate. Please back-up existing design files before saving to the same files with Altia Design 9.0 or newer. Doing so allows you to open a back-up version of a design in an earlier release if desired.

What's New

Altia® Design 10.2 for Windows® XP/Vista®/7

HMI Development Software

This document provides an overview of the Altia Design 10.2 changes relative to the Altia Design 10.1 release of November, 2011.

For additional details of new features, open the *Enhancements Summary*. To open the *Enhancements Summary*, choose the **Enhancements Summary** option from the **Altia Design 10.2** program group in the Windows **All Programs** menu. When the Altia Design editor is running, it is also possible to open the *Enhancements Summary* from the **Enhancements Summary** option in the Altia Design **Help** menu.

DeepScreen capabilities and enhancements are documented in the **newly revised** *DeepScreen User's Guide*. Open the *DeepScreen User's Guide* from the **Altia Design 10.2** program group or from the Altia Design **Help** menu.

What's New in Altia Design 10.2 ?

Install Altia Design and one or more Deepscreen Targets

Before you can generate DeepScreen code for a target device, you must install the Altia Design product and one or more DeepScreen products. Altia Design is the product in which an Altia HMI **`.dsn`** design file is created, modified, and even exercised in the unique **Run** mode of Altia Design.

If the software is provided on CD-ROM, the Altia Design installer normally executes automatically when the CD-ROM is loaded. To install a DeepScreen target after completing the Altia Design install, browse into the CD-ROM (for example, right click on its CD/DVD driver letter in a Windows Explorer window and choose **Open**), locate the setup executable for a DeepScreen target you wish to install and double-click on it to execute it.

When the Altia Design installer is executed, it provides a default destination folder similar to **`c:\usr\altia`**. In this document, references to **`c:\usr\altia`** are intended to refer to the Altia Design software installation.

When a DeepScreen target installer is executed, it provides a default destination folder similar to **`c:\usr\AltiaDeepScreen\<target_type>`** where **`<target_type>`** is unique for a target and its version (for example, **`<target_type>`** of **`sw_renderwin32_542`** for the Intel x86 Software Render Windows target software version 5.4.2). References to **`c:\usr\AltiaDeepScreen\<target_type>`** in this document are intended to refer to a DeepScreen target software installation.

You can remove/uninstall an Altia Design or DeepScreen software product installation from the Windows Control Panel's Add/Remove Programs dialog (Programs and Features dialog on Windows 7). Uninstalling a product does not remove any of your own files that you may have created in the Altia Design or DeepScreen software product folder unless you pasted over an existing file that was part of the installation. If you have a DeepScreen software product installation for which patches have been applied (internally or from Altia), please note that uninstalling the product will very likely remove some or all of the files that were patched.

Installing Altia Design creates a program group with items to start the Altia Design editor and view documentation such as recent enhancements, product manuals, and tutorials.

On Windows 7, an Altia Design program group is found under **Start > All Programs > Altia > Altia Design**.

Installing a DeepScreen target creates a program group with items to view documentation such as recent enhancements, product manuals, and tutorials. Actual DeepScreen code generation is initiated from the Altia Design editor.

On Windows 7, a DeepScreen target program group is found under **Start > All Programs > Altia > Altia DeepScreen > <Target_Type> > <Target_Version>**. For example, **Start > All Programs > Altia > Altia DeepScreen > Intel x86 > Software Render Windows (v5.4.2)**.

As of Altia Design 10.2, the Unicode Editor is the Default Editor

From an Altia Design program group under the Windows **Start > All Programs > Altia > Altia Design** menu, select the **Altia Editor** item to start the Altia Design editor. The **Altia Editor** item now refers to the Unicode version of the Altia Design editor. The Unicode version of the Altia Design editor is now the only available editor. It can open, display, and save all existing design (**`.dsn`**) files that were saved with a non-Unicode version of the Altia Design editor. You can recognize when a Unicode Altia Design editor is running because the banner at the top of the editor's window identifies it as a Unicode editor. The picture below shows the top banner for a Unicode Altia Design editor running with the design file **`remote_car.dsn`** opened.

To enable code generation of Unicode (wide character) DeepScreen code, there is now a **Generate Unicode Font Characters** option in the Code Generation Options dialog. This option is explained in more detail in the *DeepScreen User's Guide* (open the *DeepScreen User's Guide* from the Altia Design **Help** menu). If this option is not enabled, the DeepScreen generated code is for 8-bit character support like the generated code from the previously available non-Unicode versions of the Altia Design editor.

Do Not Open/Save Designs Containing High/Extended ASCII Text Characters or Unicode Text Characters in a Non-Unicode Altia Design Editor

A Unicode editor saves high/extended ASCII text characters (character values 128 to 255) and Unicode text characters (character values 256 to 65535) to a design (**`.dsn`**) file in a multi-byte format. This format is not recognized by any non-Unicode editors from earlier releases of Altia Design. A non-Unicode editor processes text characters only as single bytes. A non-Unicode editor will incorrectly display these special characters when it opens a design file that contains them. For example, it displays 2 or 3 unexpected byte characters for each special character. If the design is saved from the non-Unicode editor, the special characters are permanently replaced with the 2 or 3 unexpected single byte characters. The original special characters are only recovered by manually changing Label objects, Text I/O objects or Multi-line Text objects (MLTOs) to show the special characters instead of the 2 or 3 unexpected single byte characters.

Display Object for DeepScreen Freescale Rainbow and Vybrid Targets

The Display Object was developed to allow designers to effectively manage multi-layer design assets as well as develop for multiple displays within one Altia model. The Display Object allows the user to easily manage layer attributes such as background, color format, chroma, size, position, alpha and much more. For more details, see the separate Freescale Rainbow or Vybrid *Target User's Guide*.

3D Object with Support for Freescale i.MX51 and i.MX53 OpenGL ES 2.0 Targets

The 3D Object is a graphical object that allows the designer to embed 3D content in an Altia 2D design. This content is created in 3D modeling software such as 3ds Max, Cinema 4D, Maya, or Blender. Any tool that can export to the COLLADA 3D interchange format is likely to be compatible with the 3D Object. Some tools may interpret certain aspects of COLLADA differently than others. COLLADA files exported by Blender are known to be compatible with Altia's 3D Object. A good understanding of 3D modeling is a prerequisite to using the 3D Object.
3D content includes the mesh data that makes up the 3D model, material and textures, and 3D animation. The material of the 3D model may include solid colors or UV mapped image textures. 3D animations defined may be initiated by the 3D Object. Lights in the 3D content will be overridden by a single light defined and controlled by the 3D Object. The 3D Object also controls the eye or camera that views the 3D world.

The 3D Object uses the OpenGL pipeline to render 3D meshes. As such, the performance of Altia Design while using the 3D Object is dependent on the GPU, memory, and the OpenGL implementation of the graphics card.

Altia Design allows the 3D Object to be embedded in OpenGL ES 2.0 devices. Because rendering 3D content requires a large amount of computation and memory, the designer must take care to keep the 3D content as simple as possible. This includes keeping the number of polygons in the mesh to the minimum required to achieve the needed visual quality. Keeping the number and quality of the texture images to the minimum will also help decrease the rendering time.

A 3D Object is brought into a design (**.dsn**) file from the Altia Design **3DObject.dsn** library. To open this library in a Models View, press the **Libraries** button in Altia Design and open the **3DOobject.dsn** file from the Altia Design software installation **models** folder.

A license key is required to use the Altia 3D Object. To learn more about the 3D Object see the Altia Design *Enhancements Summary*.

Multi-line Text Object Supports Setting Font Color for Individual Characters

The Multi-line Text object (MLTO) now supports the ability to set colors for individual characters. Individual words or letter colors can be specified as part of the MLTO text using its **text** or **character** animation. The color is specified in an html-like style tag as such:

will make this text blue.

The color value must be a hexadecimal six character RGB value. Any number of tags can be set and there is no limit on the length of a font color tagged section of text. Nested tags are not supported.

Multi-line Text Object Supports Different Vertical Padding Styles and Negative Vertical Pad Values

The Multi-line Text object (MLTO) has a new built-in animation **vert_style** to control the style of the vertical padding. MLTOs in an existing design will automatically get this new built-in animation when the design (**.dsn**) file is opened into Altia Design 10.2 or newer and its value will default to 0. The new **vert_style** animation takes these values:

0 – This is the default value and it represents the only style previously available. It provides 1x the **vert_pad** value as padding (in pixels) at the top and bottom of the MLTO and 2x the **vert_pad** value as padding (in pixels) between lines.

1 – A new style that provides .5x the **vert_pad** value (rounded to a whole number) as padding (in pixels) at the top and bottom of the MLTO and 1x the **vert_pad** value as padding (in pixels) between lines.

2 – A new style that provides no padding at the top and bottom of the MLTO and 1x the **vert_pad** value as padding (in pixels) between lines.

Additionally, the **vert_pad** animation now takes negative values. A negative value reduces the spacing between lines. Lines can even overlap if the negative value is large enough until the entire MLTO collapses into a single line for very large negative **vert_pad** values. When the **vert_pad** is negative, the padding at the top and bottom of the MLTO remains constant at 0 pixels from the top of the top line and 0 pixels from the bottom of the bottom line.

For more details regarding Altia Design enhancements and fixes, please see the *Enhancements Summary* document. For example, choose the **Enhancements Summary** option from the **Altia Design 10.2** program group. When the Altia Design editor is running, it is also possible to open the *Enhancements Summary* from the **Enhancements Summary** option in the Altia Design **Help** menu.

System Configuration Requirements

This release of Altia Design for Windows supports Intel® Pentium® and Core™ processor personal computers running Microsoft Windows XP, Vista or Windows 7. A minimum processor speed of 1 GHz is required (2 GHz is recommended for editing typical designs).

A display and graphics card with a minimum of 65535 colors and a 1024x768 pixel resolution are required (32-bit color and higher display pixel resolutions are recommended for editing typical designs). Altia Design requires a minimum of 1GB of RAM (2GB for Windows Vista/7). For editing typical designs, 2 GB of RAM is recommended (4 GB for Windows Vista/7). The installation itself requires approximately 300 MB of hard disk space. Additional hard disk space is required for designs that you create.

Installing the Software

During the software installation, be sure to choose a destination folder that does not contain another version of Altia Design or any other software product. The recommended destination folder is c:\usr\altia102.

If the software is provided on CD-ROM, the Altia Design installer normally executes automatically when the CD-ROM is loaded. If it does not execute automatically, browse into the CD-ROM (for example, right click on its CD/DVD driver letter in a Windows Explorer window and choose **Open**), go the CD-ROM \pcwin folder and double-click on setup.exe.

To install a DeepScreen target after completing the Altia Design install from CD-ROM, browse into the CD-ROM (for example, right click on its CD/DVD driver letter in a Windows Explorer window and choose **Open**), locate the setup executable for a DeepScreen target you wish to install and double-click on it to execute it.

If the software was made available as a self-extracting InstallShield executable (.exe extension) download, execute the .exe file after downloading it.

Do Not Install Over Existing Altia Design DeepScreen Software

Do not install Altia Design 10.2 into the same folder (e.g., c:\usr\altia) as any previous software release (e.g., Altia Design 10.1 DeepScreen 6.0)!

If you must install it in the same folder as a previous release, uninstall the previous version from the Windows Control Panel's Add/Remove Programs dialog. Just choose to remove the appropriate "Altia Design" component. Using this approach will not remove any of your own files that you may have created in the Altia Design work folder nor will it remove the existing code words or FLEXlm license file(s) in the "license" folder.

Running Altia Design 10.2

After installing the software, the new **Altia Design 10.2** program group contains various options including the **Altia Editor** option to start the Altia Design editor and other options to open manuals and tutorials.

Licensing for New Customers

This software requires a license to run.

For FLEXlm license key installation, please open the file **flexlm\README.txt** for further instructions. If the new Altia Design software is installed in **c:\usr\altia**, this file is **c:\usr\altia\flexlm\README.txt**.

For FLEXlm licensing from a USB hardware key, you must install an additional driver. For complete instructions, open the file **flexlm\flexid\README.txt**. On Windows Vista, execute the driver installation program as administrator (that is, right click on the driver installation program and choose **Run as administrator**).

Windows 7 FLEXid USB Key Support Note: Windows 7 does not support the FLEXid USB hardware key as of January 2012 because there is no Windows 7 compatible driver.

If (and only if) your permanent code words require a Sentinel hardware key for Windows XP, you must install the Sentinel driver for Windows NT. For complete instructions, open the SentinelNT folder on the product CD-ROM (this folder is not part of the software installation itself, but it is on the product CD-ROM) and double-click on **README.TXT**.

Licensing for Existing Customers

The license keys from an existing active Altia Design software installation prior to 9.0 will not allow you to run Altia Design 10.2 software.

Please contact your Altia software representative for new license keys to run this new software release if license keys are not available from a previous Altia Design 9.0 DeepScreen 6.0 or newer software shipment.

Software licensing is generally through Altia FLEXlm license keys. Be sure to copy all active FLEXlm **.lic** files to the new software's **license** folder.

Installing Only the Altia FLEXlm Server on a PC Windows Machine

To install only the Altia FLEXlm Server on a PC Windows machine that has been designated as the license server machine, open the product CD-ROM **\pcwin\FLEXlm** folder and double-click on **README.txt** for more instructions.

If new Altia Design software is installed and the product CD-ROM is not available: open **flexlm\README.txt** in the Altia Design software installation for help. For example, if Altia Design is installed in **c:\usr\altia**, open **c:\usr\altia\flexlm\README.txt**. Installing the Altia FLEXlm Server is only applicable for a FLEXlm floating license configuration. Licenses configured for a single machine do not require the Altia FLEXlm Server.

Installing Only the FLEXlm License Server on a Linux/UNIX Machine

To install the Altia FLEXlm Server on a supported Linux or UNIX platform, open the product CD-ROM **\unix\<platform>\flexlm\README** file for more instructions where **<platform>** describes a supported Linux/UNIX hardware/OS platform.

Installing Additional Connections after Installing Altia Design

If you already have Altia Design installed and you want to simply install or reinstall a specific connection package, open the product CD-ROM **\pcwin\Connect** folder and double-click on its **README.txt** file for further instructions.

If the product CD-ROM is not available, check with your Altia representative for download instructions.

Installing Additional Component Libraries

If you have purchased one or more optional component libraries, open the product CD-ROM **\libraries** folder and double-click on its **README.txt** file for further instructions.

If the product CD-ROM is not available and the purchased component libraries are not available from a previous Altia software installation, please contact your Altia representative for assistance.

Altia Runtime

Altia Runtime is the run-only version of Altia Design. Open the product CD-ROM **\pcwin\RTDemo** folder and double-click on **README.txt** for more information.

If the product CD-ROM is not available, but the new Altia Design software is installed, Altia Runtime is the following files in the Altia Design software installation:

- **bin\altiart.exe**
- **bin\colors.ali**
- **bin\fonts.ali**

See the *Altia Runtime* chapter of the *Altia Design User's Guide* for more information. To open the *Altia Design User's Guide*, choose **Manual - Altia Design User's Guide** from the **Altia Design** software program group or choose **User's Guide...** from the **Help** menu in the Altia Design editor.

Altia Runtime is supported on Windows XP/Vista/7. It is not supported on Windows 3.1, 95, 98, NT or 2000.

Questions

For further assistance, send an email to: support@altia.com

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============

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  various tools and  contributions which rely on, or  relate to, the
  FreeType Project.

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  which do not  fall under their own explicit  license.  The license
  affects  thus  the  FreeType   font  engine,  the  test  programs,
  documentation and makefiles, at the very least.

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  (Independent JPEG  Group) licenses, which  all encourage inclusion
  and  use of  free  software in  commercial  and freeware  products
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      full form, without having to pay us. (`royalty-free' usage)

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4. Contacts

There are two mailing lists related to FreeType:

- freetype@nongnu.org

  Discusses general use and applications of FreeType, as well as future and wanted additions to the library and distribution. If you are looking for support, start in this list if you haven't found anything to help you in the documentation.

- freetype-devel@nongnu.org

  Discusses bugs, as well as engine internals, design issues, specific licenses, porting, etc.

Our home page can be found at

http://www.freetype.org