

What's New in Adobe InDesign CS5 Products SDK

For the benefit of previous users, this document summarizes the changes to the SDK in this release, including:

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C++ IDE Requirements

On Windows®, the required C++ development environment is now Visual Studio 2008 with Service Pack 1 and Microsoft® Windows XP Service Pack 2 or higher.

On Mac OS®, the required C++ development environment is XCode 3.1.3 and Mac OS X 10.5.x.

Porting Content

Porting content is provided to help you transition to InDesign CS5. The *Adobe InDesign CS5 Porting Guide* discusses porting procedures and the main changes to the InDesign API. The changes discussed include impacts of multithreading, multiple page sizes, script providers, and other minor changes.

See `<sdk>/docs/references/APIAdvisorID6_vs_ID7.html` for a *diff* between the CS4 and CS5 APIs.

Scripting Events

Scripting events were introduced in CS3 but have been greatly improved in CS5. They allow scripting code to be called when particular changes occur in the application or to a document. CS5 adds numerous new events that allow more powerful solutions to be implemented with scripting.

The new events fall into the following categories:

- Application shutdown
- Window open/close

- Active context changes
- Selection and selection attribute changes
- Idle tasks
- Place
- Links
- Tools

The SDK now provides support for plug-ins to add custom events.

The InDesign CS5 Products SDK includes the following related material:

- "Events" chapter in the *Adobe InDesign CS5 Scripting Guide*
- Events documentation scripts:
 - ◆ `<SDK>/scripting/indesign/scriptingguide/scripts/JavaScript/events`
- Events in script editor references (such as the OMV for ExtendScript Toolkit)
- Events in the scripting DOM dumps:
 - ◆ `<SDK>/docs/references/scripting-dom-applescript-idr70.html`
 - ◆ `<SDK>/docs/references/scripting-dom-javascript-idr70.html`
 - ◆ `<SDK>/docs/references/scripting-dom-visualbasic-idr70.html`
- New document *Feature Development with Scripting*
- "Scripting Events" chapter in the *Adobe InDesign CS5 Programming Guide*
- CustomScriptEvents plug-in

InDesign-Specific Creative Suite SDK Sample

The SDK includes an InDesign-specific Creative Suite SDK sample here:

```
<SDK>/source/sdksamples/flexuistroke
```

This sample was rewritten in CS5 to make use of the Creative Suite SDK and InDesign CS5 selection script events.

Multithreading

InDesign CS5 contains some multithreaded features. This capability is not directly exposed to third parties, but it impacts porting. InDesign's multithreading support is model-based. This amounts to the ability to carry out model operations asynchronously on background threads. To support this, model/UI separation is mandatory in InDesign CS5. Model plug-ins must be made thread safe. UI plug-ins are executed only on the main thread.

The InDesign CS5 Products SDK includes the following content on the impact of multithreading:

- “Multithreading” section in the *Adobe InDesign CS5 Porting Guide*
- “Multithreading” chapter in the *Adobe InDesign CS5 Programming Guide*
- “Model/UI Separation” chapter in the *Adobe InDesign CS5 Programming Guide*
- Static/Global detection Tool: `<SDK>/devtools/statics_reporter`

Note: All model plug-in code is now thread safe.

Rich Interactive Documents

InDesign CS5 contains several new features and improvements that allow users to create interactive documents. These features, called *rich interactive documents* (RID), include the following:

- Animation — Page item position, size, and appearance can be altered over a period of time.
- Timing — Controls when and how animations are triggered. Animations can be ordered, grouped, and delayed. Timing also controls which events trigger the animations.
- Media support — InDesign supports a number of new media (audio and video) formats.
- Multistate objects — Multistate objects allow a single pageitem or a group of pageitems to be treated as a single state. States are analogous to layers in that their visibility can be turned on and off. However, only one state in a multistate object can be viewed at a time. There is no limit to the number of states that a multistate object can contain.

The InDesign CS5 Products SDK includes the following RID-related content:

- “Rich Interactive Documents” chapter in the *Adobe InDesign CS5 Programming Guide*.
- A number of new code snippets that demonstrate RID capabilities. The following snippets are available in the `<SDK>/source/sdksamples/codesnippets` folder:
 - ◆ `SnExportDynamicDocument.cpp` — Updated to specify web intent and to use the `iAppearanceltemFacade` to create buttons.
 - ◆ `SnAddMediaFile.cpp` — Displays a media file and applies a controller skin to it.
 - ◆ `SnCreateCustomAnimation.cpp` — Exports an existing motion preset to a file or imports a new motion preset from a file.
 - ◆ `SnCreateAnimatedMultiStateObject.cpp` — Demonstrates how to use multistate objects, timings, and animations in C++.
- “Creating Dynamic Documents” chapter in the *Adobe InDesign CS5 Scripting Guide*.
- *Scripting Guide* scripts:
 - ◆ `<SDK>/scripting/indesign/scriptingguide/scripts/JavaScript/RID`

Straddle Heads

InDesign CS5 introduces straddle heads. A straddle head is a paragraph that stretches across multiple columns in a multicolumn text frame. A *full straddle* refers to a paragraph that stretches across all columns, while a *partial straddle* is a paragraph that spans more than a single column but less than all columns. In

addition to spanning columns, a straddling paragraph also gathers all preceding text and forces that text to push upward into equally balanced columns.

The InDesign CS5 Products SDK includes the following straddle head related content:

- The “Text Fundamentals” chapter of the *Adobe InDesign CS5 Programming Guide* contains information on straddle heads.
- `<SDK>/scripting/indesign/scriptingguide/scripts/JavaScript/text/SpanColumns.jsx`

Multiple Page Sizes

InDesign CS5 introduces support for multiple page sizes in a single document. Earlier versions limited documents to a single page size. The multiple page size feature allows different sizes of pages within a single InDesign document. There are two primary use cases:

- The user wants to create a gate-fold page that is narrower than the standard pages in the document.
- The user wants a single InDesign document to contain a few different single pages of differing size. An example would be an Ad Campaign that contains a 3” by 5” postcard, 8 1/2” by 11” flyer, a web banner ad, and an 18” by 24” poster.

The InDesign CS5 Products SDK includes the following content related to multiple page sizes:

- Updates in the “Documents” chapter in the *Adobe InDesign CS5 Scripting Guide* that explain multiple page sizes.
- Scripts that alter page sizes:
 - ◆ `<SDK>/scripting/indesign/scriptingguide/scripts/JavaScript/documents/MasterPageTransform.jsx`
 - ◆ `<SDK>/scripting/indesign/scriptingguide/scripts/JavaScript/documents/PageReframe.jsx`
 - ◆ `<SDK>/scripting/indesign/scriptingguide/scripts/JavaScript/documents/PageResize.jsx`
 - ◆ `<SDK>/scripting/indesign/scriptingguide/scripts/JavaScript/documents/PageSelect.jsx`
 - ◆ `<SDK>/scripting/indesign/scriptingguide/scripts/JavaScript/documents/PageTransform.jsx`
- The *Adobe InDesign CS5 Porting Guide* contains a section on multiple page sizes.
- `<SDK>/source/sdksamples/codesnippets/SnpManipulateSpreadsAndPages.cpp`

Middle Eastern Language Support

InDesign CS5 introduces Middle Eastern (ME) language support in the InDesign model. This includes scripting and API support in all InDesign CS5 products, but not user interface support. The license restricts partners from creating a localized user interface for these features. The ME features provide support for Arabic, Hebrew, and Greek. Arabic and Hebrew are significant in that they compose right to left.

InDesign CS5 includes the following ME-related content:

- ME-related content in the “Text Fundamentals” chapter in the *Adobe InDesign CS5 Programming Guide*
- New *Middle Eastern Scripting Guide* in the InDesign CS5 Server SDK

Document Installed Fonts

InDesign documents are often shared between computers that do not have the same fonts installed. The document installed fonts feature was introduced to avoid missing fonts. This feature allows users to package a document with the necessary fonts needed to share the document across installations of InDesign.

The InDesign CS5 Products SDK includes the following content related to document installed fonts:

- New information in the “Fonts” section of the *Adobe InDesign CS5 Programming Guide*.
- “Fonts folder for Package” section in the *Adobe InDesign CS5 Porting Guide*.
- A code snippet that shows how to use related APIs:
 - ◆ `<SDK>/source/sdksamples/codesnippets/SnpInspectFontMgr.cpp`

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