

Database to InDesign

by Paul Erdman

Over the years I've found that companies often have diverse (and sometimes quite unusual) workflows for getting information from databases into InDesign. Many of these processes are so inefficient that they cost thousands of dollars per year more, in the long run, than either hiring a developer to create a custom XML export script or purchasing a database-to-InDesign plugin. This basic introduction to InDesign/database integration begins with a summary of available data sources and InDesign's built-in tools for working with them. I'll then discuss the essential components of a database-to-InDesign automated workflow and review several third party plugins.

Types of Data Sources

CSV. Comma Separated Values. Strictly speaking, this is a text file representing data where each value is separated by a comma and each row ends with a hard return. Since tabs are also commonly used as delimiters between columns, CSV is often the general designation for any text file containing a data set, even though this is technically inaccurate. CSVs can be exported from most databases and spreadsheet applications.

Spreadsheet. Created by applications such as MS Excel primarily for calculations and managing flat (2 dimensional) data sets, as well as generating charts and graphs.

XML. eXtensible Markup Language. A tag-based system for encoding documents. HTML is a subset of XML. Most databases can export XML.

Database. An often complex organization of data usually maintained by a database management system (DBMS) such as Oracle, Access, Filemaker, or MySQL. (wikipedia.org)

Data Source	How it can be used in InDesign
CSV	Data Merge
	Place as text and convert to table.
	Use with 3rd party plugins*
Spreadsheet	Place Excel sheet as a table to be able to edit in InDesign.
	export Excel charts & graphs as PDF and place to preserve formatting.
	Save the spreadsheet as a CSV
XML	XML Import
	Use with 3rd party plugins*
Database	Use with 3rd party plugins*
*see plugin discussion on following pages for more information	

Related Built-in InDesign Tools

Convert Text to Table. When placing a CSV you may want to convert the tab or comma separated text to a table. This is easily done by highlighting all the text then going to the table menu and selecting "convert text to table."

Data Merge. A utility included with InDesign that merges the content of a CSV with a template of your design. Great for static layouts such as forms, certificates, business cards, name tags, mailers, etc.

Please note that Data Merge does not create links to the original data source; it only imports the data.

XML Import. InDesign is capable of mapping XML tags to paragraph and character styles, so that text can be imported into your document fully formatted. Taking full advantage of this option often requires database export scripting knowledge in order to get just the right "flavor" of XML exported from the database so that InDesign will work well with it.

Connecting Directly to a Database

If you work with a database and InDesign, why not allow them to interface directly? Chances are you've been spending countless hours getting data back and forth "the hard way." While solutions to transfer data directly may be expensive "up front," they save money in the long run. Let's first break this down into the components you will need.

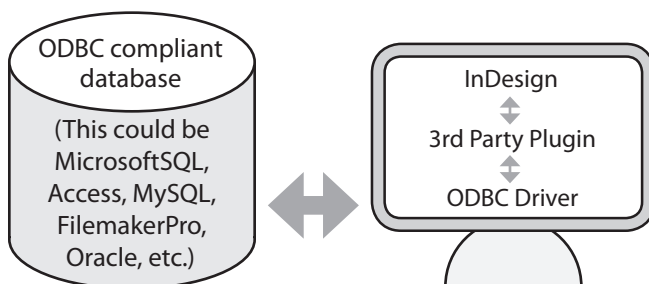
The **first** component to consider is the database itself. It can be in any location visible to the computer on which InDesign is installed; in other words, it can be on the same computer, on the local network, or on the Internet. You will need the necessary login and server information from your network administrator.

The database must support *Open Database Connectivity* (ODBC). Most modern DBMSs do, but you need to verify before proceeding.

Now we turn to the computer on which InDesign is installed. The **second** component is the ODBC Driver, which allows the computer to communicate with the database. This is built into the Windows operating system; unfortunately, Mac users must purchase them. One popular driver provider is actualtech.com; their drivers cost \$35 for a single user.

Once installed, you can use the driver to set up a connection on the computer to the database using the instructions that come with it.

Third comes the 3rd party plugin which allows InDesign to talk to the ODBC driver. The three plugins reviewed here are EasyCatalog, InCatalog, and Smart Catalog.



Why Use a Database-to-InDesign Plugin?

So why should you invest in one of these plugins? Because they allow:

- live-linked data: when data is inserted into your document from the datasource, it is linked. If the database is updated, all it takes is a couple clicks in InDesign to synchronize with the datasource and all values in your layout update.
- bi-directional data flow: you can also force changes in your InDesign document to update the database—in other words, you can use InDesign as a data entry tool. This requires that your administrator gives you read/write access to the database.

When to Choose XML Import Instead of Plugins

While Database-to-InDesign plugins are great, they're not always the best solution. In cases where (1) a live link to the data is not beneficial, and (2) the data must be prepared via scripting prior to import into InDesign, or (3) you wish to preserve formatting that may exist within the data as HTML (or some other format), then it may be wise to consider the XML solution. You may already be hiring and working with a developer to write custom server-side scripting to get the data into the right format for InDesign; chances are you don't want to spend even more for a plugin that you may not need.

For example, consider a database that contains a document archive. The documents in this archive rarely change. Therefore, live linking to the fields in this database is not important. Furthermore, there may be formatting in the documents that you wish to preserve when importing into InDesign; XML is capable of preserving the formatting, while the plugins may not. In this case, XML is clearly the preferred method to choose.

3rd Party Plugin Review

There are a number of plugins on the market that provide dynamic links between a data source and InDesign. In my research I've found three competing plugins that, on the surface, all appear to offer similar options at comparable (rather expensive) prices. Searching the net led me to conclude that there was a real shortage of comparative studies on the relative merits of these three plugins, so I decided to embark on my own research. Here is a brief summary of each plugin, in alphabetical order:

EasyCatalog from 65bit Software. The only plugin to offer a truly simple, intuitive drag-and-drop interface. Connect to a datasource, insert placeholders into your document from the EasyCatalog Panel, apply formatting as you usually would to design elements, group related elements together into a "Product Style," store your Product Styles in an EasyCatalog Library, and then populate copies of your product styles with records from your database. It's also the most expensive plugin, if you consider the need to get the ODBC and Pagination modules—but in my opinion, it's worth it.

InCatalog from EmSoftware. Although I make every attempt to be objective, I must point out that while the software may have been updated, the product manual has not been updated since 2004 and it still has instructions for InDesign CS. The only tutorial is written for XCatalog for Quark. The interface is extremely limited when compared with the other two plugins. In short, I do not recommend this plugin.

Smart Catalog. Designed to integrate with Woodwing's Enterprise publishing system. Uses a rule-based system which is configured using dialog boxes. Connect to a data source using the Smart Catalog Panel, Define Formatting Rules and Rule Sets, then assign the rule sets to text frames in your layout to place the content into your layout. Harder to use than EasyCatalog, but quite powerful.

My Observations. First, a disclaimer. These are my own observations, based on the last several weeks of research and testing of these plugins. I may be guilty of misrepresenting or oversimplifying based on my inexperience, but unfortunately there don't seem to be many other sources of information available.

EasyCatalog by itself is incapable of pagination or connecting to an ODBC database. You must purchase extra modules to add these capabilities. SmartCatalog is specifically for pagination; that's really what it excels at. So for importing and formatting many pages of data quickly and easily, you get more bang for your buck with SmartCatalog. However, if you're willing to pay the extra money, I believe EasyCatalog is the better product.

If you are working with a layout consisting of many non-threaded layout elements, EasyCatalog is what you need. SmartCatalog is intended for working with textflows. EasyCatalog is intended more for working with non-threaded layouts (unless you purchase and use the pagination module).

When using ODBC, EasyCatalog seems to grab a copy of the database once and store it in a local work folder. This is GOOD. It only updates the local copy from the real database when you ask it to. It seems Smart Catalog doesn't keep a local copy; rather, it goes out to the database every time it needs data, and therefore is more prone to losing connectivity and puts a higher demand on your database/sever/network. I lost my connection to my database repeatedly when using Smart Catalog, while I never had a problem with EasyCatalog.

Updating Smart Catalog's Rules will not update content already placed using those rules. The content must be deleted and then re-placed.

Data can be easily sorted and rearranged in an EasyCatalog Panel. Also, EasyCatalog allows multiple panel views. Smart Catalog does not seem to allow this amount of control.

Smart Catalog's installer (Mac) is an enormous download (145MB). It apparently includes all versions of the plugin, as well as a lot of components that are part of Woodwing's Enterprise system which you may never use.

What's worse, when I ran the Smart Catalog uninstaller (Mac), it didn't actually remove anything. I even ran it twice to make sure. I'm left with a lot of extra files on my computer that I must manually remove.

The EasyCatalog installer weighs in at only 5.6MB and includes all the expansion modules. On the Mac, EasyCatalog's installer does not ask for an install destination; it simply dumps the files in the default install folder for InDesign. If you have InDesign installed in a custom location they'll land in the wrong place, and you have to move them into the correct folder. Once moved, they work properly.

All three plugins install as fully-functional demo versions that last for a trial period of 30 days. At any time you can purchase the software online which gives you a serial number, which you enter into the demo screen in InDesign to activate the full version.

In conclusion, Woodwing is a reputable software company which makes a powerful Enterprise publishing system used by many major magazine, newspaper, and other publishing companies. When integrated as part of the Enterprise system, I have no doubt that SmartCatalog is truly amazing. But if you're choosing between EasyCatalog and the Standalone version of Smart Catalog because you wish to connect InDesign to your database in order to automatically update information in your layouts, **I recommend EasyCatalog.**

	EasyCatalog Pro*	InCatalog Pro*	Smart Catalog Pro*
Developer & website	65Bit Software www.65bit.com	EmSoftware www.emsoftware.com	Woodwing Software www.woodwing.com
Price	\$1299 (+\$199 ODBC module) (+\$599 Pagination Module) =\$2097	\$1200	\$1500
Datasources supported:			
CSV	Yes	Yes	Yes
XML	Requires XML Module (\$499)	No	Yes
ODBC	Requires ODBC Module	Yes	Yes
Assorted Feature comparison:			
Controls format of data on import	Yes, using Product Styles and EasyCatalog Libraries	no	Yes, using Formatting Rules
Mass import of data	only with Pagination Module	no	Yes
Bi-Directional Data Flow with ODBC	Yes	Yes	Yes
Additional Online Resources:			
User Guide download	on 65bit's download page (click here for direct link)	on EmSoftware's site (click here for direct link)	on Woodwing's manuals page (click here for direct link)
Tutorial Videos	By Gabriel Powell, listed on 65bit's home page (click here for direct link)	none found	on Woodwing's site (click here for direct link)
*for simplicity, only the Pro versions of these plugins is included in this comparison. Less expensive lite versions of the plugins are available; for InCatalog and SmartCatalog, lite versions do not allow ODBC. For EasyCatalog, Lite can still use the ODBC module but has a limited set of features available in the full Easycatalog Pro plugin. More information is available on the developers' sites.			