



# METAOPTION

## Case Study of CRH

### About the client:

Managing Editor Inc. (MEI) is providing innovative software solutions to a rapidly evolving publishing market. The company delivers a variety of automated pagination and workflow solutions to newspaper and magazine publishers, as well as to other print and electronic publishing markets.

MEI is a portfolio company of Adobe Systems Inc.

### Overview:

Custom Rule Handler (CRH) is a Plug-In for Adobe InDesign. CRH is a part of ALS Direct. ALS Direct connects Page Director ALS with SoftCare's K4 Publishing System. When ALS Direct is installed, ALS users can link their ad layouts to K4 layouts, enabling them to see previews of editorial pages as they dummy pages in ALS, and allowing designers and editors to see the progress of ad layout as they work. This can reduce the time and labor normally associated with communicating updates across the organization. Once ALS layouts are linked to properly configured InDesign templates, page folios are automatically generated in InDesign.

ALS Direct consists of two products: the ALS Direct PlugIn for ALS, and the Custom Rule Handler (CRH) Plug-In for Adobe InDesign. Both ALS Direct and CRH communicate bi-directionally with K4.

### SoftCare K4 – Integrated Publishing Solution:

SoftCare K4 is a powerful and flexible editorial system for magazines and newspapers, book and corporate publishers, as well as creative agencies, designed to organize the work of graphic designers and editors. It enhances the functionality of Adobe InDesign and Adobe InCopy, and provides a transparent editorial workflow as well as a convenient method of monitoring production progress.

### Requirement:

The Custom Rule Handler InDesign Plug-In is added to K4 user's configurations; K4 users receive the ALS ad placement and folio information from the K4 database. In addition, when K4 users move ads in their layouts, the placement changes are saved to K4, so ALS users can see the changes.

### MetaOption provided solution with following features:

- CRH Receive ad placements from ALS.
- When check out a layout with placed ads or changed ad placements, K4 prompts object rules dialog. Each ad placement, added page, and folio from ALS will create a K4 object rule. Ad rules display the name of the ad, other rules describe changes needed. Once object rules are applied, **CRH will place the ad placement, added page, and folio in the InDesign layout.**
- After resolving the object rules, the ads appear in a new layer, called "Pending," in InDesign document. You can now view the ad placements. All ad placements should be reviewed to ensure they fit into the InDesign layout. The Pending palette is used to mark ad placements as reviewed, which moves them from the "Pending" layer to the "Ad" layer. By default, the "Pending" and "Ad" layers are locked.

## Architecture:

InDesign is a small host application with features implemented through client plug-ins. InDesign defines an architecture that determines how a plug-in interacts with the host. It also provides the building blocks from which each plug-in is made.

### Object Models:

An object model is a set of rules or conventions that describes how objects are created and handled within a system. The C++ language implements an object model, describing an object as a contiguous block of memory (at its most basic level) and defining how that object is instantiated, behaves during its lifetime, and can be destroyed.

Object models can be used to map out how large, complex systems behave. The Microsoft® COM (Component Object Model) defines objects with functionality that is accessible through interfaces, making it possible to have distributed components.

### Model-View-Controller (MVC)

The model-view-controller (MVC) architecture formalizes the relationships among input, output, and data processing.

InDesign Plug-ins uses COM Object Model, MVC architecture and various Design Patterns like, Observer, Façade, Chain of Responsibility, and Command etc.

## Technology and Environment:

- Adobe InDesign CS3 SDK, K4 SDK
- C++
- Development Environment:
  - Visual Studio .Net 2005
  - XCode 2.4.1
- Operating System:
  - Windows:
    - Windows XP or later
  - Macintosh (Power PC/MacIntel):
    - Mac OS X 10.4.9 or later