



# **Tutorial Page Building**

Version 4.0.5

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## Overview

**1 – 2** Create a smart template for a simple product. The template contains three text frames and an image. Text frames can change their height. The image frame adjusts automatically.

### **Frame Identifier**

### **Friend Templates**

**3** **Template Book Description:** Create a smart template for a product with long text. The template contains a header and a text frame. If the text is too long, it can be continued in the next fitting page element.

**4** **Template Group Books:** Create a template group.

**5** **Page Template 3 Books:** Create a page template with space for three products. Products are allowed to be continued.

**6** **Page Template Light Table:** Create a page template with one big element, allowing any number of products to be sorted row wise.

**7** **Build:** Build products with a page template.

### **Product Selections**

**8** **Reorganization**

**9** **Document Products Panel**

**10** **Features and Extensions**

**A** **Page Reorganization**

## Time Required

3-4 hours

If you use the templates and page templates defined in the test case, and the pre-built documents in the Finish folder: 30-60 minutes

In any case, you should read the tutorial from the chapter *Document Products Panel* onwards.

## Requirements

- Comet 3.2 R2100 or higher
- InDesign CS3 or higher
- Knowledge about placeholders, templates and the product pool

## CS-Version

The following table shows which templates and page templates can be used with your InDesign version. Please note that automatic conversion takes some time. Before using your system productively, make sure to adjust your templates and page templates to the current InDesign version.

Your Version Templates	CS5.5	CS5	CC 2014	CC 2016
CS5.5	Yes	Yes <sup>1</sup>	Yes <sup>1,2</sup>	Yes <sup>1,2</sup>
CS5	No <sup>3</sup>	Yes	Yes <sup>1</sup>	Yes <sup>1,2</sup>
CC 2014	No	No <sup>3</sup>	Yes	Yes <sup>1</sup>
CC 2016	No	No	No <sup>3</sup>	Yes

- 1) Automatic conversion in background. When saving page templates, new data formats are used. The documents can then no longer be opened with previous InDesign versions.
- 2) Officially, Adobe only supports opening documents from one prior CS version.
- 3) Export of templates and page templates in INX/IDML, and reimport for the InDesign version used are possible.

## Smart Templates

For a complete build, you need templates that have one continuation each, in addition to a left page and right page variant. The continuation templates are needed when page elements can continue their content and the inserted product is too big for that element. The process of creating a smart template is explained further below. In the page template editor, page elements with the ability to continue are marked with a blue arrow and a label:



## Building and Reorganization

During page building, information required for reorganization is stored in the product frames. This is only done since Comet 3.2 R2100. All products in the document require this information. **That means you need at least v3.2 R2100 of the comet plugins.**



## Data Pools

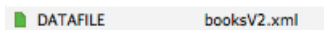
Page building and reorganization can be used on all data connections supported by comet. No special adjustments are required.

For this tutorial, we will use an XML data folder as our data pool.

## Settings

This tutorial uses the XML data folder from *Documents/xmldata-tutorial.zip* in your offline help. To install this as your data pool:

- Copy the zip file to your desktop (or any other directory you like) and unpack it. This creates the folder *xmldata-tutorial*.
- Connect to that folder with the InDesign menu **Plugins > Data Folder**. This setting will persist when restarting InDesign.
- In the *Settings* panel, you also need to ensure that the entry `DATAFILE` points to *booksV2.xml* in that folder. You can change the value by Alt-clicking the icon in the first column.



## Data Model

The data model has to support the following features:

- Continuation Templates : `continue/continueid` in `pageitmes`
- Template Groups : `membership` in `pageitems`
- Magnets in Templates : `magnets` in `pageitems`
- Visibility of Templates : `active` in `pageitems`
- Layout Rules : `File/Table framerules`

You can find more information about the extensions of the comet data model in the online documentation *InDesign/Plugins/extensions.html*.

## XML

Make sure that the following attributes/files are available. In the supplied data folder *xmldata*, you can find the respective definitions.

- Continuation Templates : `pageitems.pageitem.continue` in *pageitmes.xml*
- Template Groups : `pageitems.pageitem.memberships` in *pageitmes.xml*
- Magnets in Templates : `pageitems.pageitem.magnets` in *pageitmes.xml*
- Visibility of Templates : `pageitems.pageitem.active` in *pageitmes.xml*
- Layout Rules : `File/Table framerules.xml`



## SOAP

The configuration data are managed via XML files in SOAP, too. These files have to match those in an offline XML data folder (see above).

## ODBC and Oracle

Make sure that the following tables/attributes are available:

- Continuation Templates : `pageitems.continueid`
- Template Groups : `pageitems.memberships`
- Magnets in Templates : `pageitems.magnets`
- Visibility of Templates : `pageitems.active`
- Layout Rules : Table *framerules*

With the following (mySQL) statements, you can define the required tables and attributes:

```
alter table pageitems add continueid int (10);
update pageitems set continued=0;
commit;
```

```
alter table pageitems add magnets int (10);
update pageitems set magnets=0;
commit;
```

```
alter table pageitems add active int (10);
update pageitems set active=3;
commit;
```

```
create table framerules
{
    id
    pageitems
    prerule_id
    prerule_params
    postrule_id
    postrule_params
    grid_id
    element_id
    pagerelative
    intersection
    distance
    primary key (id)
};
```

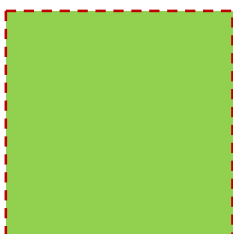
Commit;

## 1 Image Placeholder

The template should contain an image with the following properties:

- centered
- at least 2mm from the edge

### 1.1 Create a square image frame and style it appropriately



### 1.2 Link the frame with an image placeholder

Link the frame to the placeholder *Cover Image*.

The placeholder uses the following load command:

```
„$DATAFILE“  
select „$COMETDATA“ || „/“ || image, 5  
    node books.productgroup where productgroupID = <ID2>  
    node book where bookID = <ID>
```

The 5 after the image path is placement information (see docs [cscript/TaggedText.html#Bildpositionen](#)). As you'll see in the next step, you can omit this.



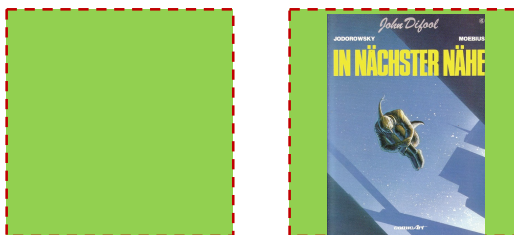
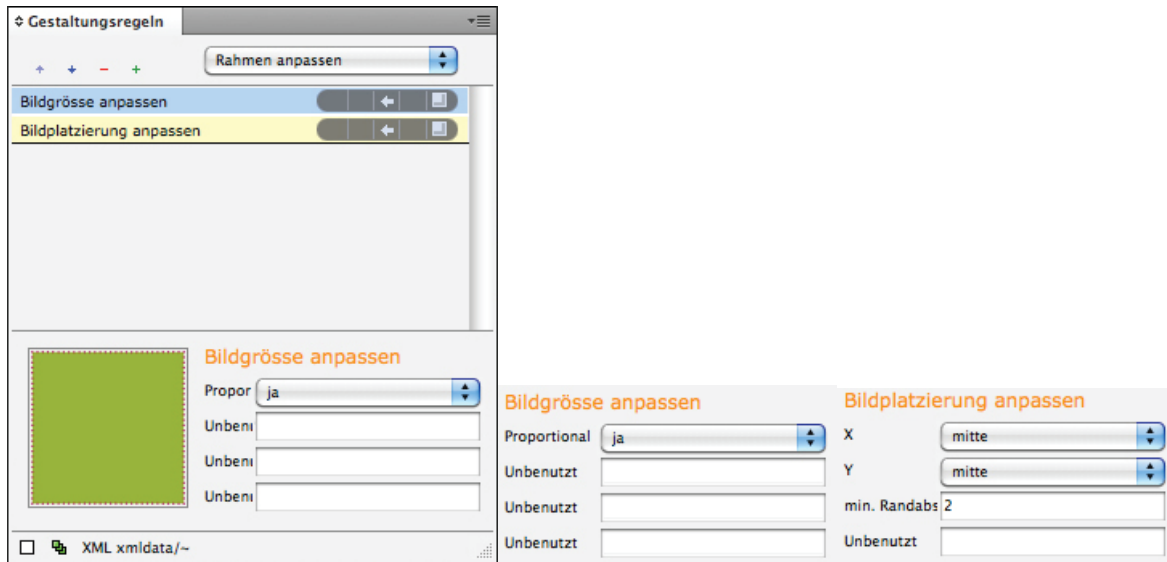
### 1.3 Layout Rules

All settings concerning size and position adjustments of the image can be made in the *Layout Rules* panel. Select the image frame and add the specified rules.

- The order of the rules is important.
- Execution times are shown in the grey area. Click to change the status.

- You can find the required parameters to the left in the image.

No additional rules are required. If the standard rules are not sufficient anymore, you can create your own. More information on that can be found in the online docs ([InDesign/Plugins/layoutrules.html](#)).



## 2 Template *Book Title*

The first template should show three short texts near the inside edge, the image frame defined above should be placed near the outer edge.

### 2.1 Create the three frames and style them



## 2.2 Link the texts with placeholders

Use any text placeholders that only produce short enough texts. Author and price should always fit into the defined frames. The title may be slightly longer.

From the data folder, please select Author, Title and Price. The € symbol should not be part of the placeholder.

## 2.3 Set layout rules

If the title text is too long, it will have some overset. To prevent that, add a layout rule to adjust the frame length to the text length. The rule should run every time the frame is loaded.

- During page reorganization (see below), a product may move to another page. If this changes the page type (left/right), the template also changes. Existing frame content can be adopted without reloading. To prevent overset, the rule does not need to run after page reorganization.

Select the frame and add the layout rule *adjust frame* as follows:



Why did we not set the layout rule to run on page reorganization for the image frame in chapter 1? The answer is simple: to allow manual changes to size and position to persist.

If image size and position should also be adjusted, simply set the layout rule in chapter 1 to run during page reorganization.





## 2.4 Set distances

The frame now has no more overset with the title. However, it now overlaps with the price frame. To fix that, follow these steps:

1. Set *Nails and Magnets* to visible: Right click into the document. In the submenu *Nails and Magnets* of the appearing context menu, click *Show*. You should now see four nails on the orange frame:



If you don't, set the document view from *Preview* to *Normal* in the tools panel.

2. In the tools panel, select the nail tool. Use normal nails, not relative ones.
3. Select the frame Author and click the middle of the upper edge once. A nail should be visible there now. This locks the edge in place during resizing.
4. Select the magnet tool and set magnets from *Author* to *Title*, and from *Title* to *Price*. Select the first frame, click the middle of the lower edge, then select the target frame and click the middle of the upper edge.



## 2.5 Add the image

Copy the image frame, paste it next to the text frames, and bring them to the same height. Adjust the width accordingly.

Because the title can change the height of the template, the image frame also has to be decorated with nails and magnets:

1. Set a nail on the upper edge.
2. Set a magnet from the lower edge of the Price frame to the lower edge of the image.
3. Test the template by selecting all four frames and Shift-clicking the status button of a product.



## 2.6 Create the Base Template

1. Open the panel *Templates* via *Windows > Comet Admin*.
2. Select the frame below.
3. Click in the *Templates* panel.
4. In the appearing window, give the template the name „Book Title“.
5. Set the template's page type to **left** page.
6. Optionally, you can assign the template to a region.

The panel should now show one such entry:



**Note:** The small magnet in the lower right of the preview should be visible. If it isn't, your data pool does not support nails and magnets. If so, you can find help in the online docs (*InDesign/Plugins/extensions.html*, search for the word „magnet“).

## 2.7 Create the Smart Template

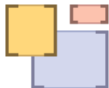
Smart Templates can contain up to four templates: The templates for left and right pages, and their respective continuation. The frames of the individual sub-templates are linked by unique identifiers (see below).

1. Open the *Templates* panel under *Windows > Comet Admin*.
2. Double click the **text** column of the *Book Title* entry. The Template Editor will be opened.





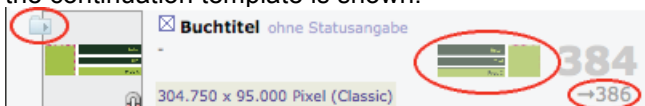
Template Editors are normal InDesign documents with some additional information that identifies them as editors for templates. The documents for spread templates, i.e. templates without left page/right page affiliation, consist of two pages; one for the base template, and one for the continuation. All other template editors have five pages; page 1 is unused, and is followed by the templates for the left and right page, followed by their respective continuation templates.

You can recognize template editors by the symbol in the upper left corner of each page:



Additionally, the template's name and ID are displayed diagonally above each page. Template editors do not have to be saved on closing. If you get a save request anyway, just deny it with "Don't Save".

3. On page 2, you will find the template we just created. Other pages are numbered, but empty.
4. Open the *Template Behavior* panel under *Windows > Comet Admin*.
5. Click the  button. The missing templates are then auto-generated. All settings should already be correct.
6. The templates now only need to be saved: Bring the *Templates* panel into the foreground, make sure that *Book Title* is selected and click the  button while holding the Alt key.
7. The Smart Template is now complete. The list entry has changed slightly. The preview now shows a small folder icon, another preview is displayed before the big ID, and below it, the ID of the continuation template is shown:



8. Close the editor document.

## Test

Now we should test our smart template *Book Title*.

Open the *Templates* panel. Drag the template on a left page in the document by dropping its preview onto the page. Select the four frames and link them to a product by shift-clicking the first column of a product.

Next, open the *Product Pool* panel and select the product there. For that product, set the template to *Book Title* in the popup in the upper right corner of the panel. Drag the product onto a left document page.

Repeat these steps for a right page.

## Frame Identifiers

Text links between template and continuation, and content adoption between template and continuation, are controlled by identifiers of the templates' frames.

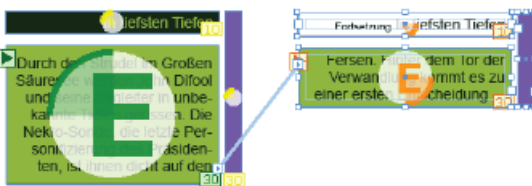
### Identifier

When you created the smart template *Book Title* in the last step, you surely noticed the large letters in the template frames:



With these identifiers, you determine which frames of the various sub-templates correspond to each other. Identifiers are used in the following contexts:

- Which text frames should be linked for continuations?  
If a text in frame E is overset, and a continuation can be used, the frame E of the continuation is linked.

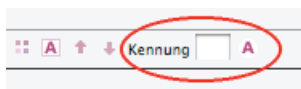


- Which frame contents are carried over by which frames when changing templates?
- The frame identifiers also determine the order in which layout rules are applied. The rules of frames with a lower identifier are executed first. You can use the identifier  $\infty$  to specify that the rules of that frame should be applied last.

In the image below, the frame B-left can carry over content from frame B-right, and vice-versa. This is why the same identifiers were entered automatically. However, you can move frame B arbitrarily – the link will persist.



You can change the frame identifiers in the *Template Behavior* panel. Any (Unicode) character can be used as an identifier. Just keep in mind that, depending on the installed fonts, not all characters can be displayed.



Also note that the number in the lower right of a template frame is not the identifier. It denotes the order in which frames are loaded and inserted into the text flow. This order can be changed independently of the identifiers with the two arrows shown in the image above.

## Friend Templates

Compatible templates allow carrying over document contents.


### Groups

In the last chapter, you saw how frame identifiers can be used to control how frame contents can be exchanged within a smart template.



Template Groups go one step further, and allow you to control content exchange between different smart templates.

When entire templates are changed during page reorganization, you cannot be sure that the frame identifiers match. For example, the identifier A in one template may be used for a title, while identifying a description in another template. Obviously, you would not want them to exchange content.

If you assign a template to a group, you allow it to exchange frame contents with the all templates in the group.

Group membership is managed in the Template panel. Click  next to the group popup and define a unique group name in the appearing dialog:



-  makes all selected templates members of this group.
-  removes all selected templates from the group.

Unused group names are freed when disconnecting from the data pool.

*Book Title* here is a member of three groups, whose colors are shown in the list:



## 3 Template *Book Description*

This template contains text frames for the title and the product text. For demonstration purposes, the inner frame border is colored clearly. The title should be prefixed with „Continued“ in the continuation template.

### 3.1 Create the text frames and set the distances

1. Create two text placeholders with the desired look.
2. Set the placeholders. The upper frame gets the placeholder *Title*, whose text is editable, but not too long. The lower frame gets the placeholder *Description*, whose text may be longer.




- Both text frames get the rule „Adjust frame“. The title frame needs to be adjusted when loading and during page reorganization.



The description should only be adjusted when loading.

- On the inside, add a narrow frame on the same height as the two text frames.
- Lock the distances and sizes with nails and magnets.
  - Two nails on the upper edges to lock their positions.
  - One magnet between the two text frames to lock the distance.
  - One magnet from the lower text frame to the inside frame ensures the correct height.

**Tipp:** To set nails and magnets, move and resize the frames if necessary. Set the appropriate values after setting nails and magnets.

- Test the template by linking it with a product (do not forget to undo this afterwards).
- Create the base template.
  - Select the three frames
  - Click  in the Template panel
  - In the appearing window, name the template „Book Description“
  - Set the template's page type to *left pages*
  - Optionally, you can assign the template to a region



## 3.2 Smart-Template for *Book Description*

- Double click the entry *Book Description* in the *Templates* panel.
- Open the panel *Template Behavior*
- The lower text frame with the description should be continued. Click the second column of the status field of the frame.

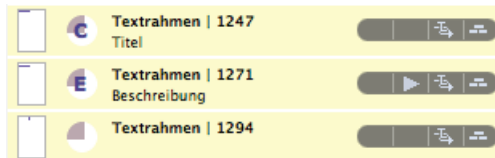
- The identifier should match the template *Book Title*. The following identifiers are used there:


- A – Image
- B – Author
- C – Title
- D – Price



The title is also used in the description. This frame should therefore also use the identifier C. The description should get a new identifier; the purple border frame does not require an identifier:

- C – Title
- E – Description

Border



-  Create the smart template
- To get the „Continued“ prefix for the title, follow these steps for both title frames on the continuation pages:
  - Add the text „Continued“ (with a space)
  - Remove the placeholder in the placeholder panel
  - Select the word „Title“ and set the placeholder again

**Hint:** For better visibility, you can disable the frame behavior display by alt-clicking .
- (optional) Change the look of the title texts on the continuation pages. This is only for better visibility.
- Save the changes by alt-clicking  in the Template panel. All four templates are now saved. Make sure the entry *Book Description* is selected in the panel.
- Test the template as described in the chapter **Test**.
- Test the continuation templates by holding the spacebar while dropping the products onto the document.


## 4 Template Group *Books*

The templates *Book Title* and *Book Description* are exchangeable. They should be assigned of the same template group.

### Template Group *Books*

- Open the *Templates* panel



2. Click **+** next to the group popup in the *Templates* panel
3. In the appearing dialog, reserve the group name *Books*. After the reservation, the new entry is automatically selected in the popup.
4. Select the two templates *Book Title* and *Book Description* in the template list
5.  adds both templates to the group *Books*. (The color may be different for you.)

The panel should now signal their group membership:

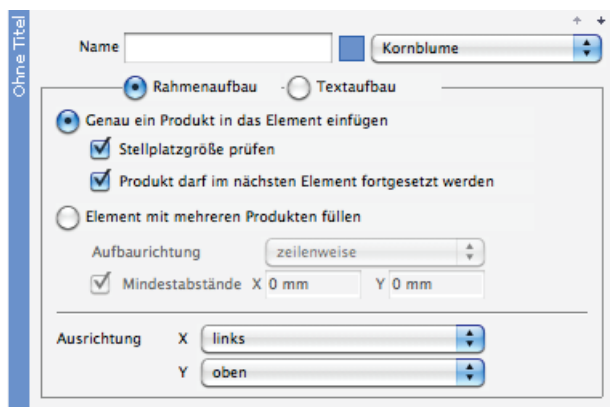


## 5 Page Template 3 Books

The page template should have spaces for three templates. The spaces allow templates with continuation.



### 5.1 Create the template for left pages

1. Open the *Page Templates* panel
2. Open a new document with a single page
3. Open the panel menu and select the entry *Use Document as Page Template*
4. Open the *Page Elements* panel
5. Name the template *3 Books*. The name is displayed diagonally above the page. Use the upper name field in the panel. The lower name field is for individual elements.
6. Set the page type to *left*
7. Create a (text or image) frame. The frame has to be large enough to fit the *Book Title* template.
8. Open the *Page Elements* panel again
9. In the frame list, select the created frame and set its properties as shown in this image:








10. Duplicate the frame twice and move the frames one below the other.
11. The order in which the spaces are used can be changed with the buttons  on the left below the list.
12. Save the page template with the save button  in the *Page Templates* panel.

## 5.2 Create the template for right pages

1. Move the frames created in step 1 a little.
2. Set the page type to *right*.
3. Select the previously saved page template as the opposite page.
4. Save the page template with the button  in the *Page Templates* panel.
5. You can now close the document without saving.

It is not absolutely necessary to make different page templates for left and right pages. If you would like to use identical page templates, set their page type to *any*.


## 5.3 Link the page template

1. Double click the entry *3 Books* in the *Page Templates* panel. Make sure to open the entry for the left page:



2. In the *Page Elements* panel, set the opposite page to *3 Books*. There is only one entry under “-- Right Pages ---“. The previews should be roughly similar to this:



3. Select the page template in the *Page Templates* panel and alt-click on . The changes to the page template are now saved.
4. In the list of page templates, there should now be two entries like this:



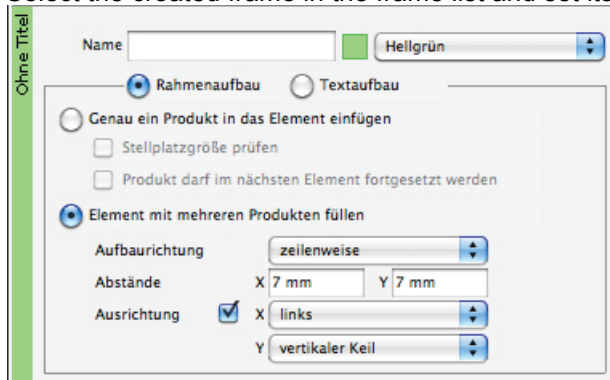
**Hint:** You should avoid managing page type specific page templates with successors (e.g. using 28 as successor to 29 and vice versa). In that case, you have to be careful to start the page build with the right page template. When new pages are inserted, the document can no longer be reorganized.

## 6 Page Template *Light Table*

This page template contains a grid space, in which products can be built row-wise. The rows should be left-aligned and distributed on the Y axis with a wedge.

### 6.1 Create the template for any page

1. Open the *Page Templates* panel.
2. Open a new document with a single page.
3. Open the panel menu and select the entry *Use Document as Page Template*.
4. Open the *Page Elements* panel.
5. Name the template *Light Table*. The name is displayed diagonally above the document page. Use the upper name field in the panel. The lower name field is for individual elements.
6. Set the page type to *any*.
7. Create a page-filling frame.
8. Open the *Page Elements* panel.
9. Select the created frame in the frame list and set its properties as shown in this image:



10. Save the page template with the button in the *Page Templates* panel.

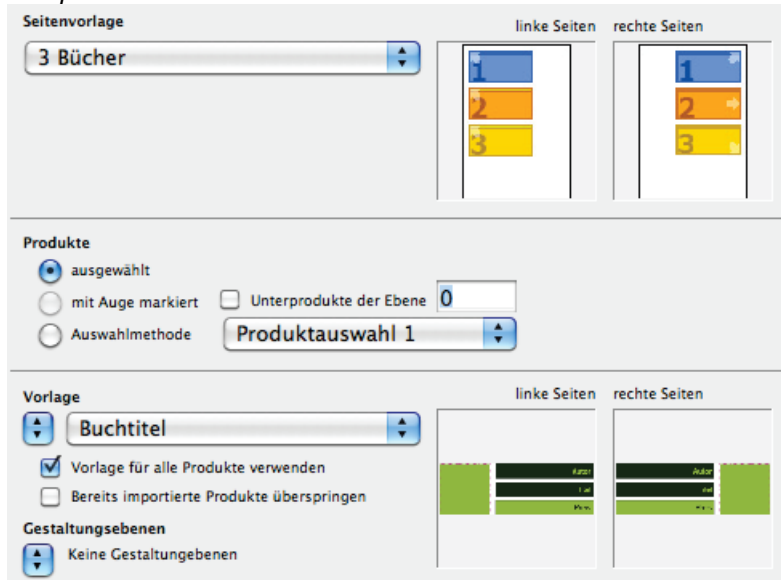
## 7 Build

Build four documents. A number of products is built with the templates *Book Title* and *Book Description*, and the page templates *3 Books* and *Light Table*.

### 7.1 Build with the template *Book Title* and the page template *3 Books*

1. Open the *Product Pool* panel.
2. Select all products with .
3. Click the build button in the panel.

4. Fill in the appearing dialog as shown below. It's especially important to check the option *Use Template for all Products*.



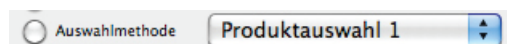
5. Click *Okay*.
6. After a short time, the eight products are built.  
**Hint:** The product *What Is Above* is not among the built products. It was marked for deletion in the data pool. This is signified by the product name being set in italics in the panel. These products are automatically excluded from page builds.
7. With the context menu for frame selection (right click on frame selection) *Show Page Templates*, you can see the spaces in the page background.
8. Save the document as *Finish/Book Title on 3 Books.indd*.

## Product Selections

Creating product sets.

### Creation


Surely, you, too, found making the selection in the product pool tiring. For commonly used selections, you can define sets. The list of product sets is shown in the build dialog:



You can define your own sets like this:

1. Create an action with classid 37.
2. Name the action.
3. Define the commands of the action.



You can do this in the Workbench, or directly in the data pool. In the *Placeholdervalues* panel, you can edit the commands. To do so, enter the action's ID in the Script field in the lower part of the panel and click the edit button . A (relatively static) example script follows.

You can now repeat the build of the previous page with this script. The product list also contains the product *What Is Above*, which is marked for deletion. The list takes priority over this setting, and the product is now built as well.

## Product Selection Scripts

```
#include „internal/types.h“
#include „internal/products.h“

int append_product (ProductList pp, int id1, int id2, int id3, char * ids)
{
    Product p;

    p = product::alloc (kGlobalStack);
    product::set (p, kID, id1);
    product::set (p, kID2, id2);
    product::set (p, kID3, id3);
    product::set (p, kStringID, ids);

    productlist::append (pp, p);
}

int main ()
{
    append_product (gProducts, 100, 10, 0, "");
    append_product (gProducts, 300, 10, 0, "");
    append_product (gProducts, 400, 10, 0, "");
    append_product (gProducts, 500, 10, 0, "");
    append_product (gProducts, 600, 10, 0, "");

    append_product (gProducts, 1000, 20, 0, "");
    append_product (gProducts, 1001, 20, 0, "");
    append_product (gProducts, 1002, 20, 0, "");
    append_product (gProducts, 1003, 20, 0, "");

    // *gPageTemplate = 12;
    // strcpy (gErMess, „This was your error!“);

    return 0;
}
```

## 8 Reorganization


Cleaning up documents

Inserting products and documents

### 8.1 Clean up a page

1. Open the document *Finish/Book Title on 3 Books.indd*.



2. Change the document scale such that all three pages are visible (around 75%).
3. Move a product group on each page a little.
4. Select a frame of the page.
5. CMD-Click (Mac OS)/Ctrl-click (Windows)  in the product pool to repair the changes to page two. The changes to pages 1 and 3 will persist.

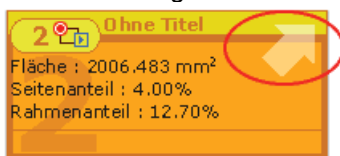
**Hint:** You can also move or change individual frames of the product group. This can have several effects:



- If a frame overlaps the page element, the frames of the product group are distributed onto two page elements. The remaining products are then moved to page 3.
  - Changes to the title and price are partially adopted – the magnet between the image frame undoes movements along the Y-axis.
  - Try some changes and observe their effects. This can be very educational.
6. You can now discard all changes to the document.

## 8.2 Changes to the page template

After changing the page template, the document has to be reorganized.

1. From the *Page Templates* panel, open the entry *3 Books (right)*.
2. Bring the *Page Elements* panel into the foreground.
3. Select all three frames of the page template document *3 Books*.
4. Now set the alignment for all three frames to *top right*:




5. Save the changes by alt-clicking  in the *Page Templates* panel. Make sure that the entry *3 Books (right)* is selected.
6. Open the document *Finish/Book Title on 3 Books.indd* from chapter 7.
7. With the reorganize button  in the product pool, the changes to the page template are applied in the document.  
On right document pages, all products are now flush on the right page margin.
8. Save the document.

### 8.3 Removing Products

For the following steps, the document *Finish/Book Title on 3 Books II.indd* was modified slightly; Each author frame was decorated with an orange counter, and the image for book 4 was rotated, and a drop shadow was added.

These changes only serve to improve visibility of changes. You can also continue with the unchanged document.



1. Open the document *Finish/Book Title on 3 Books II.indd*.
2. Remove all frames of the product **2** *What Is Below* on the first page.
3.  in the product pool removes the resulting gap


These changes show multiple things:

1. The gap is filled.
2. The orange counters show that the order of the products is still correct.
3. Some templates had to be changed because of page changes.  
Book **4** moved from page 2 to page 1. For each page change, a template was changed. Manual changes to the book (the orange counters, image rotation and shadow, in this example) were carried over, however.

**Hint:** You can discard manual changes by starting the reorganization while holding the shift key. In this case, all frames inserted when changing templates, are reloaded as well. The new frames do not carry over manual changes. Frames that were only moved, however, will carry this change over. To discard that as well, the frames have to be reloaded.

You can now discard the changes to the document *Finish/Book Title on 3 Books II.indd*.

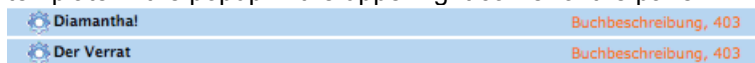
### 8.4 Reordering


1. Open the document *Finish/Book Title on 3 Books II.indd*.
2. Select all four frames of book **3**.
3. Move these frames between books **1** and **2**.
4.  in the product pool cleans up the document.

You can now discard the changes to the document *Finish/Book Title on 3 Books II.indd*.

## 8.5 Inserting Products

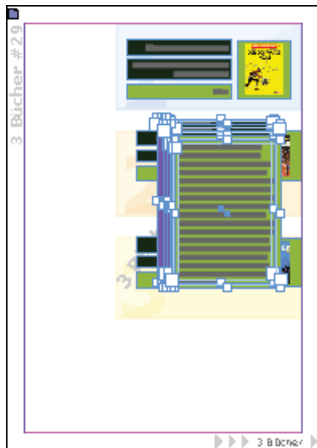
1. Open the document *Finish/Book Title on 3 Books II.indd*.
2. Open the *Product Pool* panel.
3. Open the product *Alef-Thau*.
4. For the entries *Diamantha!* and *The Betrayal*, set the template *Book Description* by selecting the template in the popup in the upper right corner of the panel.



5. Drag both products between books **2** and **3** page 1 of the document.
6.  in the product pool cleans up the document. At the end of the document, a new page is automatically inserted.

## 8.6 Inserting Placed Products

Perform the steps from chapter 8.5 while holding the CMD-key (Mac OS)/Ctrl-key (Windows) to insert the products into the document and automatically clean up the document beginning with the place of insertion.



Normal Paste



Placed Paste

## 8.7 Master Page Elements

Master Pages can contain any number of design elements. Build and reorganization ignore this frame. Extracted master page elements are ignored in page building and reorganization.

1. Open the document *Finish/Book Title on 3 Books II.indd*.
2. Open the *Pages* panel.
3. Double click with the right master page
4. Create a page-filling frame in a stringing color.
5. Double click the first document page. The striking background should be visible.
6. Shift-CMD-click (Mac OS)/Shift-Ctrl-click (Windows) the background frame.



7. Change the frame color (or its position). The frame is now extracted on this page.
8. Select the frame of the first product and move it a little.
9. cleans up the document. The frames of the moved product are now back in the right position.

**Hint:** You can make any layer into a design layer. For more, see „Applications Document Products“.

## Panel *Document Products*

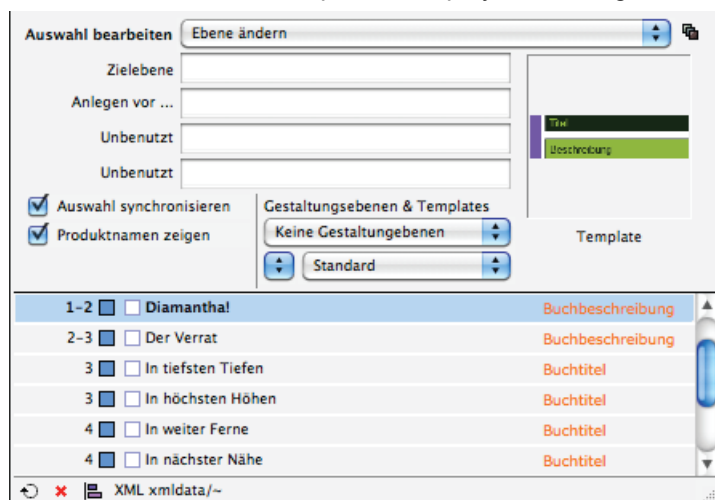
### Product List

Open the panel *Document Products*. If the list is empty, click once.

The panel contains all comet groups (frame and text groups) in the document, in the same order they appear in the document. The document may contain more products in text placeholders, tables and frames – usually this should be sub-products or variations of products in the group. The products of placeholders are not listed.

The entries highlighted in light green are the page templates used for the following products. Each page template also implies a page change.

The name of the used template is displayed in orange.



If *Synchronize Selection* is checked, the frames belonging to a list entry are also selected in the document.

**Warning:** This allows you to simultaneously select frames on multiple pages. This is not fully supported by Adobe; moving the frames on different spreads makes InDesign crash, for instance.


In the list, either the ID or the name of the products is shown. The name is only available when the product was loaded in the product pool at least once. The name continues to be available when the product is no longer visible in the product pool, however.



## Editing the Product List


The product list is the basis page reorganizations run on. You can:

- Delete products
- Change templates
- Insert products from the product pool
- Insert page templates
- Define design layers

**Hint:**  recalculates the list. The list is also reloaded when you send the document to the background or close the panel temporarily. Changes, especially inserted page templates, are lost in this process.

- When preparing the list for reorganization, you should not perform any changes on the document.  
The list contains a multitude of information about the current document, which is required for the reorganization. Changing this info during the process can lead to problems.
- When preparing the list for reorganization, you should disable the option *Synchronize Selection*.

## Reorganizations

Click  to reorganize the document. Hold the alt-key to begin the reorganization with the first selected product, otherwise it starts at the beginning of the document.

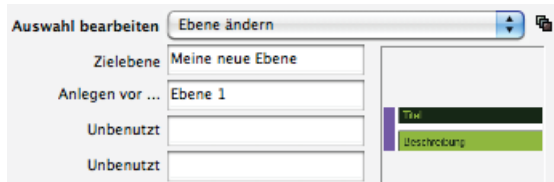
During reorganization, the products in the list and their templates are applied to the respective page templates. Thereby the following rules apply:

- New document pages are only created on demand, and only at the end of the document.
- All page templates (except the first one) force a page break.
- Page template changes are automatic.
- All frames of the product not contained in a list entry are deleted from the document.
- When changing to a different page type, the type-specific template is used. The content of frames with the same identifier is carried over. Other templates are reloaded.
- Frames of continuation groups are always recreated. The text that is continued in these frames persists if available.

**Hint:** Only documents built completely with Comet 3.2 R2100 (or higher) can be reorganized. This is because product frames store additional information required for the build. Older versions store only part of this data, if any.

## Frame Actions

In the upper part of the panel, there is the list *Edit Selection*. With the Run button, the selected action is run with the parameters specified below.



The popup can be filled by custom scripts. Custom actions can be defined in the data pool with the classid 39 (see also the chapter Product Selection above). By alt-clicking the popup, you can directly edit the scripts defined in the pool.

Alt-clicking the default entry *Change layer* shows an example script for moving to a different layer.




Two critical actions are hardcoded:

- Change layer
- Change page

## 9 Applications *Document Products*

Using the panel in a few sample cases

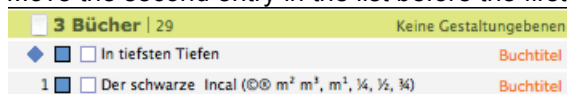
### 9.1 Removing products

1. Open the document *Finish/Book Title on 3 Books.indd*.
2. Delete *What Lies Beneath* in one of three ways.
  - a. Delete the frames of the comet group from the document directly. In this case, make sure that all frames in the group are deleted.
  - b.  in the panel. The product is removed from the list, but remains in the document.
  - c. Alt-click  in the panel. The product is deleted from both the list and the document.
3. 
4. After reorganization, the title *What Lies Beneath* is no longer in the document.

You can remove any number of products in one step.

### 9.2 Changing product order

1. Open the document *Finish/Book Title on 3 Books.indd*.
2. Move the second entry in the list before the first one.



The blue rhombus to the left of the entry indicates that the entry has been moved. The page number of the following entries relates to the current state of the document, and may change during reorganization.



3. 

4. After reorganization, the title *What Lies Beneath* is the first in the document.

## 9.3 Inserting products

1. Open the document *Finish/Book Title on 3 Books II.indd*.

2. Make sure the panels Product Pool and Document Products are open and assigned to different windows.

3. Select the entry *The Sword* and set its template to *Book Description* using the popup menu. The template selected in the product pool is used when inserting the product.

 Der Verrat	Buchtitel
 <b>Das Schwert</b>	<b>Buchbeschreibung</b>
 Planet der Illusionen	Buchtitel

4. Drag the book *The Sword* between the first two products in the *Document Products* panel

5. 

6. After reorganization the title *The Sword* is in the document.

**Hint:** You can insert any number of products in a single step. The list may contain deleted, moved and new products.




## 9.4 Changing templates

In this step you will learn how to change the template used for a product. Friend templates can carry over content from frames with identical identifiers. To highlight this feature, we will start by manually changing the text in one placeholder.

1. In the document, change the title text of the first book by prepending „This is a simple change“. This should create overet in the title frame.

2. Select the entry *The Black Incal* in the *Document Products* panel.

3. In the templates popup menu, select the entry *Book Description*. This changes the template for all selected entries in the list. Changed templates are underlined:

3 Bücher   29		Keine Gestaltungsebenen
1	 Der schwarze Incal (©© m² m¹, m¹, ¼, ½, ¾)	<u>Buchbeschreibung</u>
1-2	 Das Schwert	<u>Buchbeschreibung</u>
2	 In tiefsten Tiefen	Buchtitel

4. 

5. After reorganization, The Black Incal is replaced using the template Book Description. The changes to the title persist, but the overset has been fixed.

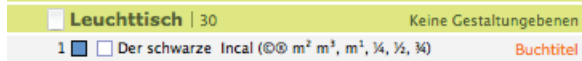
## 9.5 Changing page templates


Change the page template used to layout products on the page. This will drastically change the look of the document.


1. Open the document *Finish/Book Title on 3 Books.indd*.



2. Make sure the panels *Page Templates* and *Document Products* are open and assigned to different windows.
3. Select the entry *Light Table* in the *Page Templates* panel. Drag the entry to the first entry of the panel *Document Products*.



4. Select the green entry *3 Books* in the list *Document Products*.
5.  deletes the entry.  
**Hint:** As shown above, the button deletes all selected elements. Make sure to only select one entry.

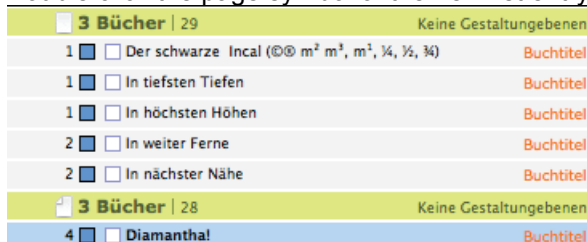
6. 
7. After reorganization, the whole document will look differently. The products are now laid out according to the page template *Light Table*. The order of the products persists. Content was carried where possible.


## 9.6 Page Breaks

Page templates in the list force a page break each. The products following the page template are joint in one chapter each. When deleting products from one chapter, the page breaks persist. Only when all products in one chapter are deleted, the chapter – and thus the page break – is removed.

**Hint:** Multiple page templates in direct succession force the same number of page breaks. Because the corresponding chapters are empty, however, they are deleted in the reorganization after the next one.

1. Open the document *Finish/Book Title on 3 Books II.indd*.
2. Make sure the panels *Page Templates* and *Document Products* are open and assigned to different windows.
3. In the *Page Templates* panel, select the entry *3 Books*. Drag this entry before the element *Diamantha! (1000, 20, 0, ,,)*.
4. Double click the page symbol of the new list entry until you see the symbol for a left page:



5. 
6. Page 3 of the document is now empty. On page 4, product **6** is the first one.
7. In the context menu (right mouse button), you can now select *Show Page Template*. Now you can see the page template change from page 3 to page 4 (which is a left page!).

The following steps highlight that this page break persists during reorganization.

1. In the list, drag the products *The Black Incal* through *The Fifth Essence – Planet DiFool* before the new page template:

3 Bücher   29		Keine Gestaltungsebenen
1	<input type="checkbox"/> Der schwarze Incal (©© m² m³, m¹, ¼, ½, ¾)	Buchtitel
1	<input type="checkbox"/> In tiefsten Tiefen	Buchtitel
1	<input type="checkbox"/> In höchsten Höhen	Buchtitel
2	<input type="checkbox"/> In weiter Ferne	Buchtitel
2	<input type="checkbox"/> In nächster Nähe	Buchtitel
+	<input type="checkbox"/> Der schwarze Incal (©© m² m³, m¹, ¼, ½, ¾)	Buchtitel
+	<input type="checkbox"/> In tiefsten Tiefen	Buchtitel
+	<input type="checkbox"/> In höchsten Höhen	Buchtitel
+	<input type="checkbox"/> In weiter Ferne	Buchtitel
+	<input type="checkbox"/> In nächster Nähe	Buchtitel
3 Bücher   28		Keine Gestaltungsebenen
4	<input type="checkbox"/> Diamantha!	Buchtitel
4	<input type="checkbox"/> Der Verrat	Buchtitel
4	<input type="checkbox"/> Das Schwert	Buchtitel
5	<input type="checkbox"/> Planet der Illusionen	Buchtitel

- 2.
3. After reorganization, the new products should now be in the document. Product 6 still starts on a left page.

## 9.7 Page template changes

Repeat steps 1 through 6 from chapter 9.6. Use the page template *Light Table* in place of *3 Books*, though.

3 Bücher   29		Keine Gestaltungsebenen
1	<input type="checkbox"/> Der schwarze Incal (©© m² m³, m¹, ¼, ½, ¾)	Buchtitel
1	<input type="checkbox"/> In tiefsten Tiefen	Buchtitel
1	<input type="checkbox"/> In höchsten Höhen	Buchtitel
2	<input type="checkbox"/> In weiter Ferne	Buchtitel
2	<input type="checkbox"/> In nächster Nähe	Buchtitel
Leuchttisch   30		Keine Gestaltungsebenen
2	<input type="checkbox"/> Diamantha!	Buchtitel

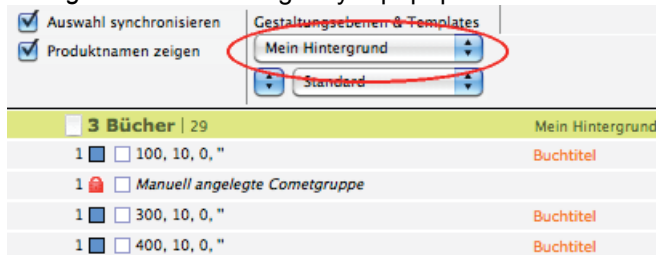
Here, too, page 3 will be empty. Page 4 will start using a new page template. The order of the products did not change. Frame contents have been carried over where possible.

## 9.8 Design Layers

You can declare any layers in the document as „Design Layers“. Frames on these layers are ignored during reorganization. Each page template can use any number of design layers.

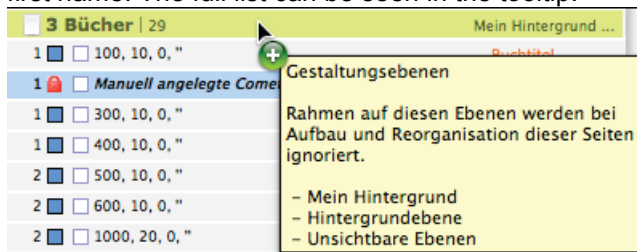
1. Open the document *Finish/Book Title on 3 Books II.indd*.
2. In the InDesign panel *Layers*, add a new layer *My Background*. We recommend making this the lowest layer.
3. Make a page-filling frame on this layer, and give it a background color.
4. Select the document frame of *The Black Incal* and move the frame a little.

5. Select the list entry *3 Books* and expand its list of design layers by selecting the entry *My Background* in the design layer popup menu:



in the page template entry *3 Books*, you should now see the name of the design layer on the right.

If multiple layers are assigned to the page template, this is signified by three periods after the first name. The full list can be seen in the tooltip:



All products/frames on design layers are marked in the list with a lock symbol the color of the respective layer.

6. In the InDesign panel Layers, add the layer *My Background*. We recommend making this the lowest layer.
- 7.
8. Product 1 now is placed correctly again. The “Background” frame did not move nor disrupt the reorganization.

## A Page Reorganization

In the panels *Product Pool* and *Document Products*, there is a button for reorganizing the document



The following table shows which key chords can affect the reorganization:



	Product Pool	Document Products
Alt-Click	<p>Only the current page is reorganized.</p> <p><b>Hint:</b> Products that do not fit on the page, are moved to the next page (without clean up). They are placed with a 1x1 point distance to retain their order.</p>	
Shift-Click	<p>The whole document is reorganized, no matter the document selection.</p> <p>If the Alt-Key is held simultaneously, this key does not take effect.</p>	
Control-Click	<p>The contents of friend frames are also reloaded.</p> <p><b>Warning:</b> The control key has to be pressed before releasing the button.</p>	
Used Page Templates		
<b>Without</b> CMD-Key	<p>The page templates set in the document are not changed.</p> <p>For new pages, the page template defined as the successor of the page template on the last page is used.</p>	<p>Each page template entry in the list forces a page break with the desired page template.</p> <p>Afterwards, reorganization continues according to the successor settings of the page templates.</p> <p>If the first selected list entry is not a page template, the page template defined for the start of the document is used.</p>
<b>With</b> CMD-Key	<p>The page template used for the first page to be reorganized persists. The page templates for all following pages are determined by the successor settings.</p>	<p>The page templates set in the document persist.</p> <p>For new document pages, the page template defined as the successor of the page template for the last page is used.</p>



## 10 Features and Extensions

### 10.1 Fixed Spaces

Products can be placed in fixed spaces (page elements). Set the property „grid space“ (ElementID) of the product to the desired sequence number of the page element (see below). The page build checks whether the desired space is free and large enough, and then places the product in that element. If the element is too small or already occupied, a new page is created.

Sequence numbers in products do not have to be ascending. Products can also be placed before already placed products.

Continuations of product templates are placed on the following page elements. Of course, the page build does not attempt to place products on the same sequence number (on the same page).

**Hint:** 1:N frames are not suited for fixed placement. There is no general solution for the conflict between fixed elements and free placement within the element.

You can set sequence numbers for products like this:

*Panelstatement/Findstatement* – The column `gridElementID` of the extended statements contains the sequence number.

*cScript* – `product::set(p, kElementid, yourSequence);`





## Closing Words

This concludes the tutorial.

When working on your own projects, you will surely notice the power of both page build and reorganization. Should you run into problems anyway, you can find help in many ways:

### 1. Online Documentation

In the comet plugins folder, you will find a help folder (Doku\_enEN). The help menus in the comet panels also refer to this folder. Often, the InDesign menu *Plugins:Additional Help* can help as well.

### 2. Client and Partner Support

Your counselor responsible knows your projects best. He will be the fastest help you can get. In cooperation with project managers and developers, he will be able to help in most cases.

### 3. FogBugz

Should you run into a bug, have suggestions or desire extensions, our error report is available to you. Your client or partner support can grant you access to this.

FogBugz entries should always contain a detailed description of the bug, including the version and release you are using, your platform, operating system, InDesign version and data connection. We can also fix bugs much more quickly if you provide test documents and test cases.

### 4. support@priint.com

For general information, our support team is also readily available. They will find the right contact for you and help solve your problem.

### 5. paul@priint.com

In especially severe cases, you can contact me personally. Even then, you should provide a detailed description and test cases, of course.