

Publishing DITA content reused in different context in EPUB and Eclipse Info Center by using DITA OT



DITAworks

DITA CMS FOR ENTERPRISE CONTENT SOLUTIONS

**DITA Open Toolkit Day 2014
organized by**



DITAworks product line integrates DITA OT as one of the standard publishing engines

Webtop

DITAworks Webtop

DITA CCMS with web-based interface.



Pro

DITAworks Pro

Desktop CCMS to manage complete DITA content lifecycle out of the box

Cloud

DITAworks Cloud

A completely hosted DITA CCMS at your fingertips

Model

DITAworks Model

DITA Specialization made easy with visual support

- Publishing to many formats like PDF, XHTML, ODT, EPUB,...
- Focus on EPUB and Eclipse help (info center)
- Publish context based content / context reuse

Context based publishing with DITA OT based on example of ice hockey rulebooks

- There are two major ice hockey leagues:
 - International Ice Hockey Federation (IIHF)
 - National Hockey League (NHL)

- Most of the rules (content) are the same, only few differences:
 - Ice Hockey organization name
 - Ice Hockey organization name short
 - Dimension area image (rink image) ¹

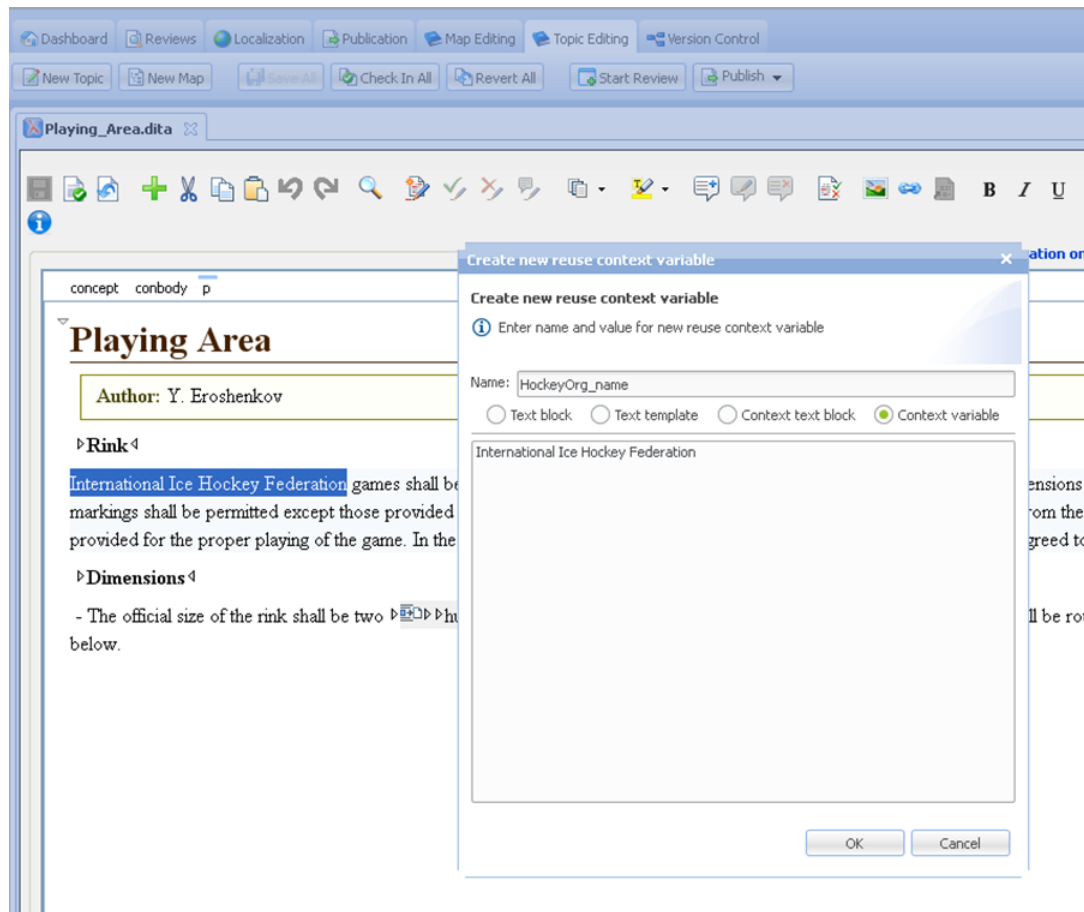
- Objectives:
 - minimize amount of redundant content
 - Create EPUB and Info center style deliverables

¹ Ice Hockey rink diagrams are redesigned from [Wikimedia Commons file](#) licensed under CC BY-SA 3.0
<http://creativecommons.org/licenses/by-sa/3.0/>

Create content in DITA CMS with context variants, context variables and context text blocks

Context variants	NHL	IIHF
Context keys		
HockeyOrg_name	National Hockey League	International Ice Hockey Federation
HockeyOrg_short	NHL	IIHF
Rink image	link to paragraph with NHL rink image	link to paragraph with IIHF rink image

Start by creating context variables in reuse area of CMS



The screenshot shows a CMS interface with a document titled "Playing Area.dita". The document content includes a title "Playing Area", an author "Y. Eroshenkov", and sections for "Rink" and "Dimensions". A dialog box titled "Create new reuse context variable" is open, prompting the user to enter a name and value for a new reuse context variable. The name field contains "HockeyOrg_name" and the value field contains "International Ice Hockey Federation". The "Context variable" radio button is selected.

Dashboard | Reviews | Localization | Publication | Map Editing | Topic Editing | Version Control

New Topic | New Map | Save All | Check In All | Revert All | Start Review | Publish

Playing Area.dita

concept conbody p

Playing Area

Author: Y. Eroshenkov

▶ Rink ◀

International Ice Hockey Federation games shall be markings shall be permitted except those provided provided for the proper playing of the game. In the

▶ Dimensions ◀

- The official size of the rink shall be two ▶▶▶▶ below.

Create new reuse context variable

Create new reuse context variable

Enter name and value for new reuse context variable

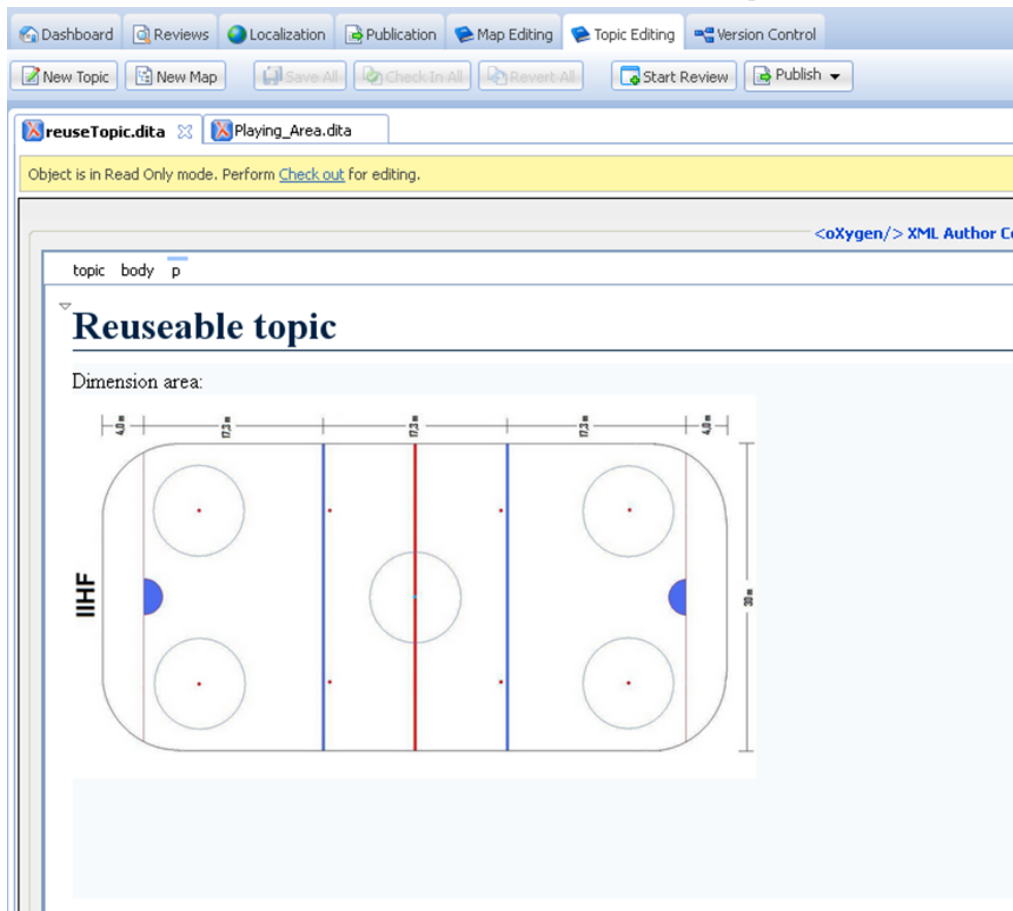
Name: HockeyOrg_name

Text block Text template Context text block Context variable

International Ice Hockey Federation

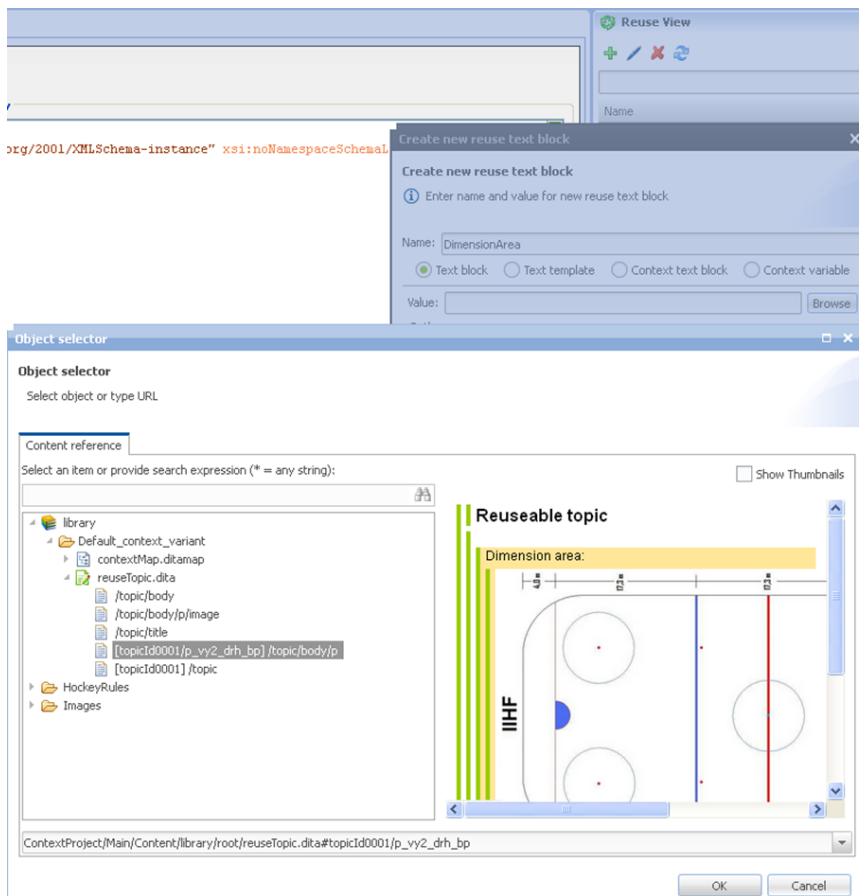
OK Cancel

Create reusable content block in ReuseTopic.dita in context folder of the library



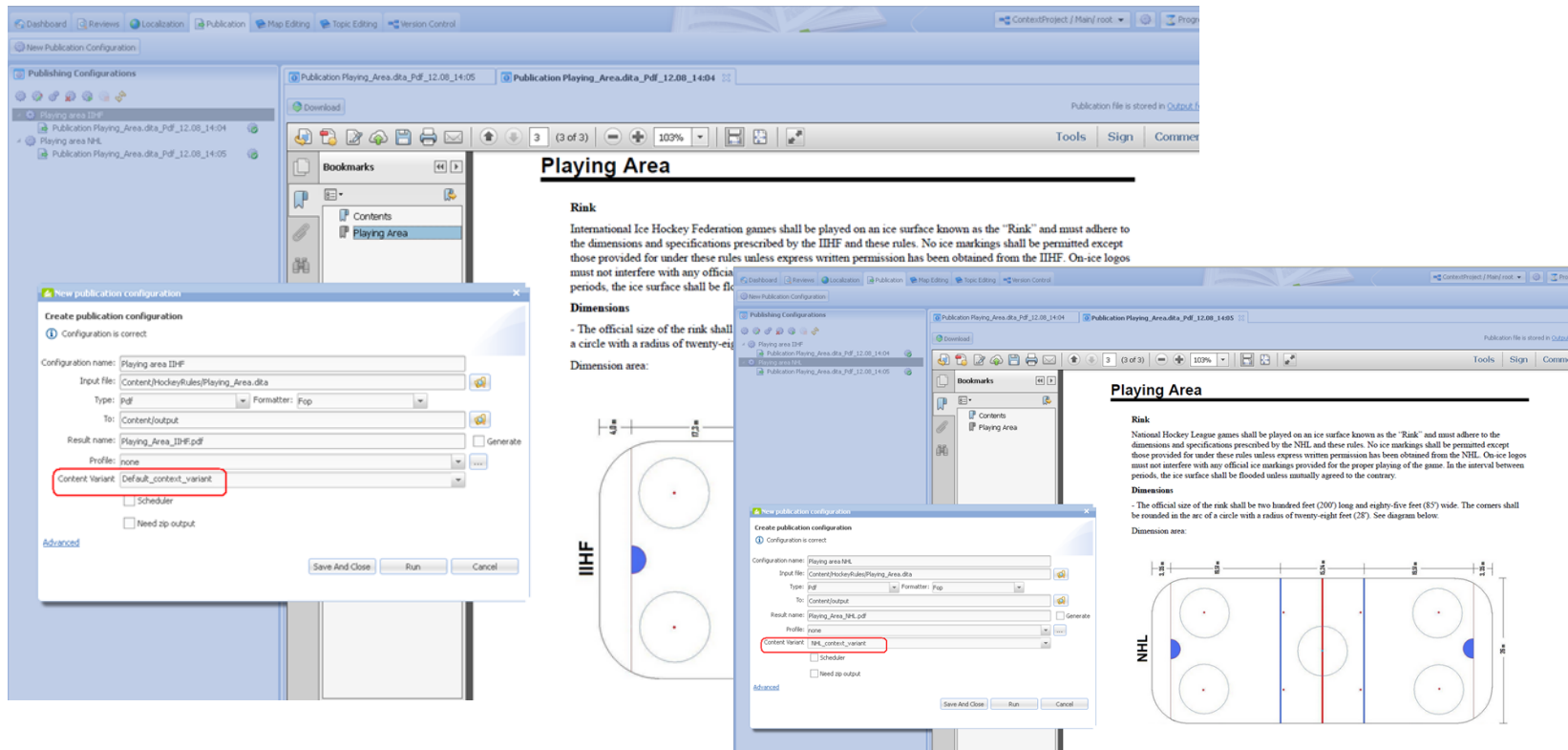
The screenshot shows the Oxygen XML Editor interface. The top menu bar includes Dashboard, Reviews, Localization, Publication, Map Editing, Topic Editing, and Version Control. Below the menu bar are buttons for New Topic, New Map, Save All, Check In All, Revert All, Start Review, and Publish. The current topic is 'reuseTopic.dita' and the selected element is 'Playing_Area.dita'. A yellow warning bar indicates 'Object is in Read Only mode. Perform [Check out](#) for editing.' The main content area shows the XML structure: <code>topic body p</code>. The topic title is 'Reusable topic'. Below the title is the text 'Dimension area:' followed by a diagram of an IJHF (International Judo Federation) playing area. The diagram shows a rectangular field with rounded ends, divided into sections by blue and red lines. Dimensions are indicated: 4.0 m for the end sections, 0.3 m for the width of the end sections, 0.3 m for the width of the central sections, and 0.3 m for the width of the central sections. The total width is 20 m. The IJHF logo is visible on the left side of the diagram.

Create new reuse element "Context text block" in Reuse View of CMS



- Use context variables and text blocks for building content
- Create PlayingArea.dita topic and write content for the IIHF case
- Use same topic for NHL content but in different context

Now we can publish our content variants by just selecting the according context in the publishing profile



Playing Area

Rink
International Ice Hockey Federation games shall be played on an ice surface known as the "Rink" and must adhere to the dimensions and specifications prescribed by the IIHF and these rules. No ice markings shall be permitted except those provided for under these rules unless express written permission has been obtained from the IIHF. On-ice logos must not interfere with any official periods, the ice surface shall be flat.

Dimensions
- The official size of the rink shall be a circle with a radius of twenty-eight feet (8.53 m).

Dimension area:

IIHF

Playing Area

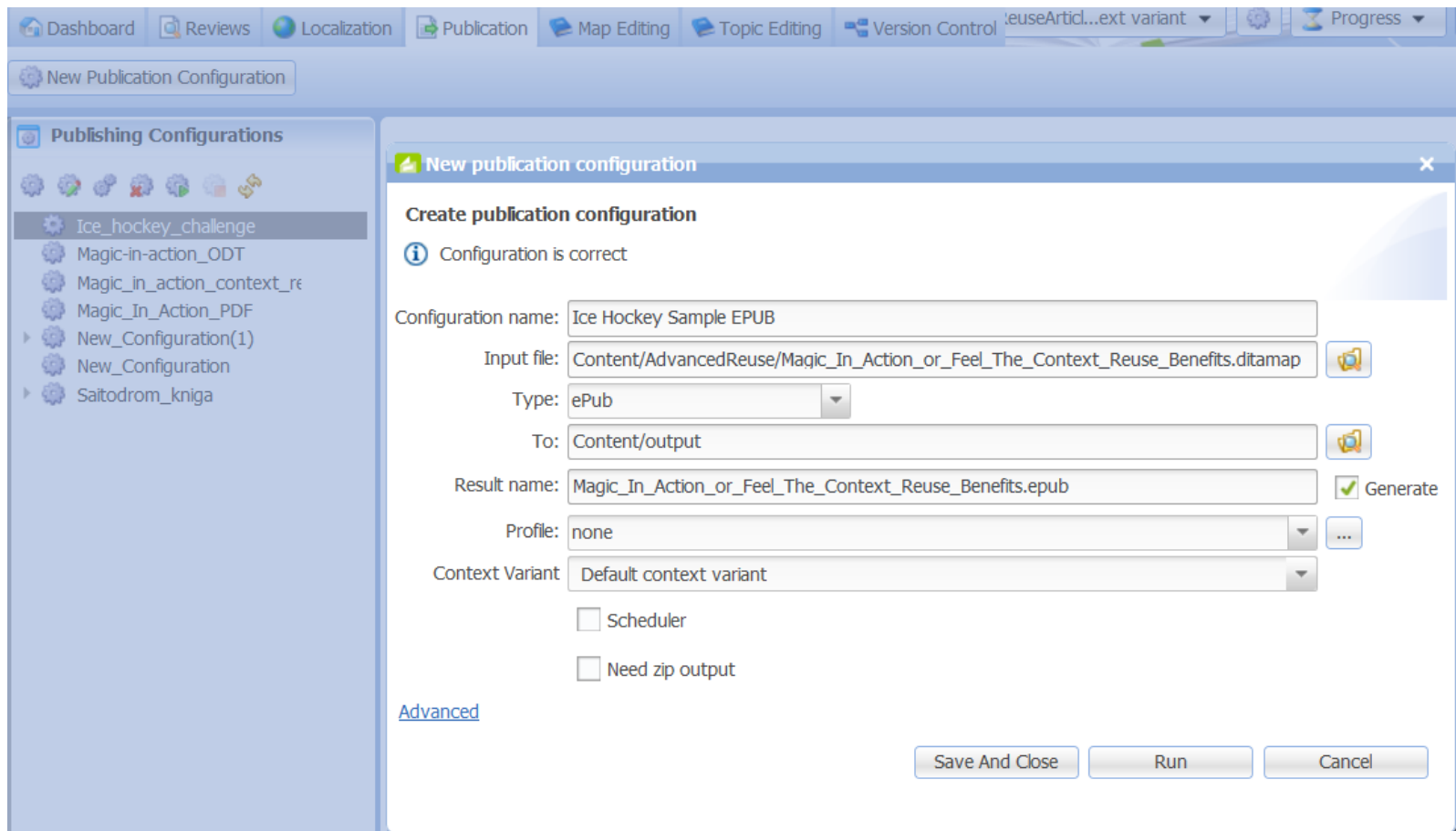
Rink
National Hockey League games shall be played on an ice surface known as the "Rink" and must adhere to the dimensions and specifications prescribed by the NHL and these rules. No ice markings shall be permitted except those provided for under these rules unless express written permission has been obtained from the NHL. On-ice logos must not interfere with any official ice markings provided for the proper playing of the game. In the interval between periods, the ice surface shall be flooded unless mutually agreed to the contrary.

Dimensions
- The official size of the rink shall be two hundred feet (200') long and eighty-five feet (85') wide. The corners shall be rounded in the arc of a circle with a radius of twenty-eight feet (28'). See diagram below.

Dimension area:

NHL

Create publication profile for EPUB



The screenshot shows the 'New Publication Configuration' dialog box in the Instinctools software. The dialog is titled 'New publication configuration' and contains the following fields and options:

- Configuration name:** Ice Hockey Sample EPUB
- Input file:** Content/AdvancedReuse/Magic_In_Action_or_Feel_The_Context_Reuse_Benefits.ditamap
- Type:** ePub
- To:** Content/output
- Result name:** Magic_In_Action_or_Feel_The_Context_Reuse_Benefits.epub
- Profile:** none
- Context Variant:** Default context variant
- Scheduler
- Need zip output
- Generate

At the bottom of the dialog, there are three buttons: 'Save And Close', 'Run', and 'Cancel'. A link labeled 'Advanced' is visible at the bottom left of the dialog area.

Result EPUB in DITAworks EPUB preview

Advanced Reuse in EPUB_17.11_19:17
Download
Publication file is stored in [Output folder](#)

21 - MAGIC IN ACTION OR FEEL THE CONTEXT REUSE BENEFITS MAIN BOOK TITLE

Chapter 4. About context variants

In order to understand our next approach, we have to clarify the meaning of a *context reuse element* and *context variant*.

Context variant is a list of values of reuse elements related to a particular context. For example in our case we have two context variants: IIHF and NHL. In the IIHF context keys like *Hockey organization name*, *Hockey organization name short* and *Dimension area image* equal respectively to "International Ice Hockey Federation", "IIHF" and link to the paragraph with appropriate IIHF rink image placed in some topic. On the other hand, in the NHL context the same keys have NHL-like values and links to other topics. All keys for each context variant are defined in the appropriate "context"-map. These ditamaps are stored in the Library folder inside the appropriate context folder.

Users are always working inside a certain context variant. Every project branch or particular locale have its own set of context variants - at least one, named "Default context variant". This is a root context, and if users do not define specific sub-contexts, all context reuse elements are defined in this default context.

There are two kind of context reuse elements: **context**

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variable and **context text block**.

Context variable - is a simple variable which can have different values in different contexts. Usually, it is a single word (for example, a product name or product version) or a short phrase. In DITAworks keyword element is used for variables. The value of this keyword does not define directly where this keyword is placed, but define a *key*, which has a certain value in the current context.

Context text block - is a content reference like a conref, but it refers to different content in different contexts. In DITA version 1.2 provides a conkeyref attribute for this context-sensitive linking. Like in the context variable case, for conkeyrefs the key approach is used.

Now let's see, how it is working.

- Create context reuse elements
- Build the content
- New context variant definition
- Run publication

Preview
Log
Details

Result EPUB in Adobe Digital Editions or Browser

Adobe Digital Editions - Magic In Action or Feel The Context Reuse Benefits Main Book Title

Datei Bearbeiten Lesen Hilfe

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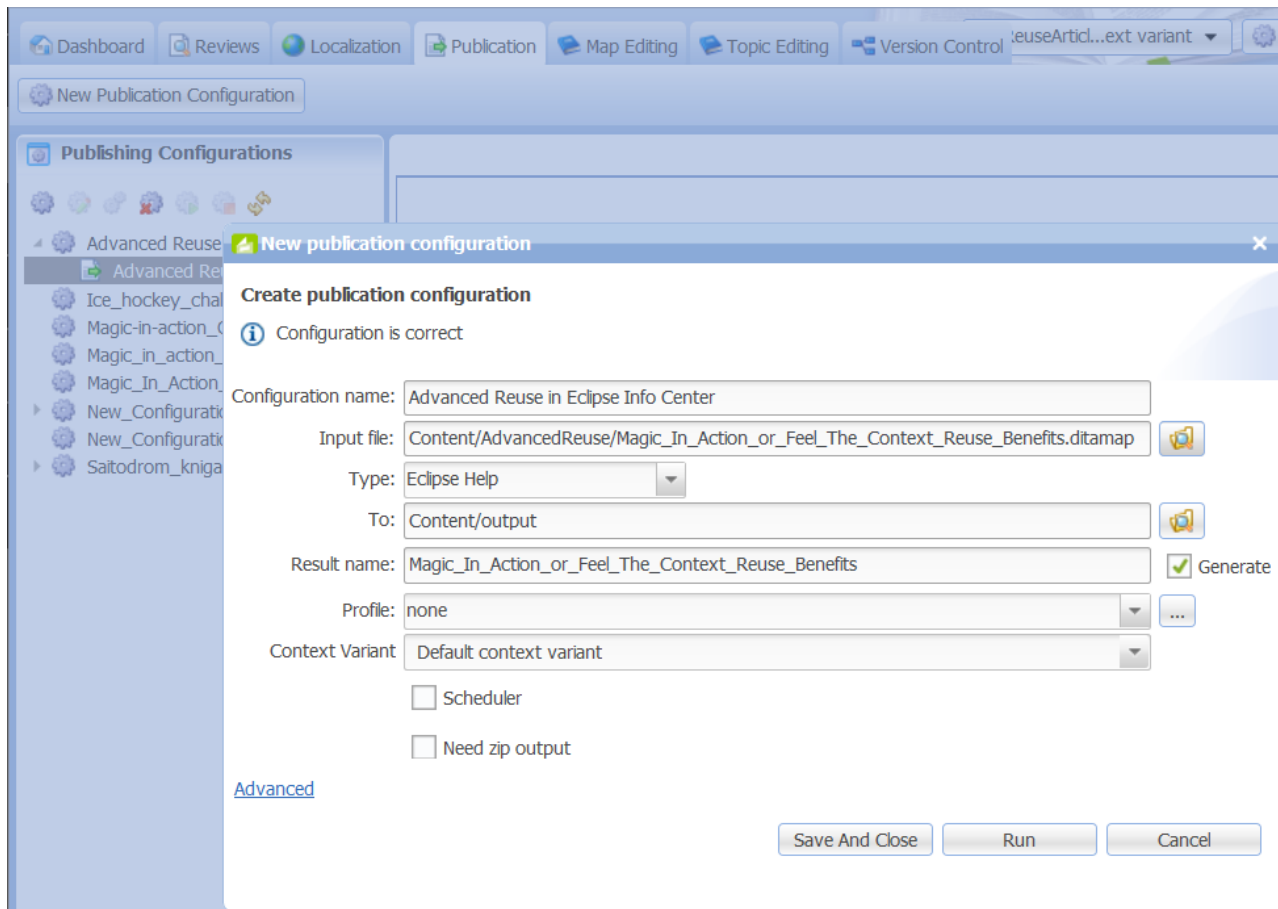
Build the content

Now we will use our context variables and text blocks for building our content.

1. Create *PlayingArea.dita* topic and build the content for the IIHF case. We are staying in the default context meaning that IIHF specific will be the default. We have 3 variables (keywords) and 1 context content reference (conkeyref). We can insert these reuse elements the same way as non-context dependent reuse elements (conrefs) or text templates (just simple text) via Reuse View.
2. For the NHL specific variant the same topic will be used, but in different context. We create a new context variant and re-define the variables with new, NHL related values. How to do this you can learn in topic [New context definition](#). If you have already defined the values for NHL context - just switch the context and the content will automatically change in oXygen Topic Editor with new context-dependent reuse element values:

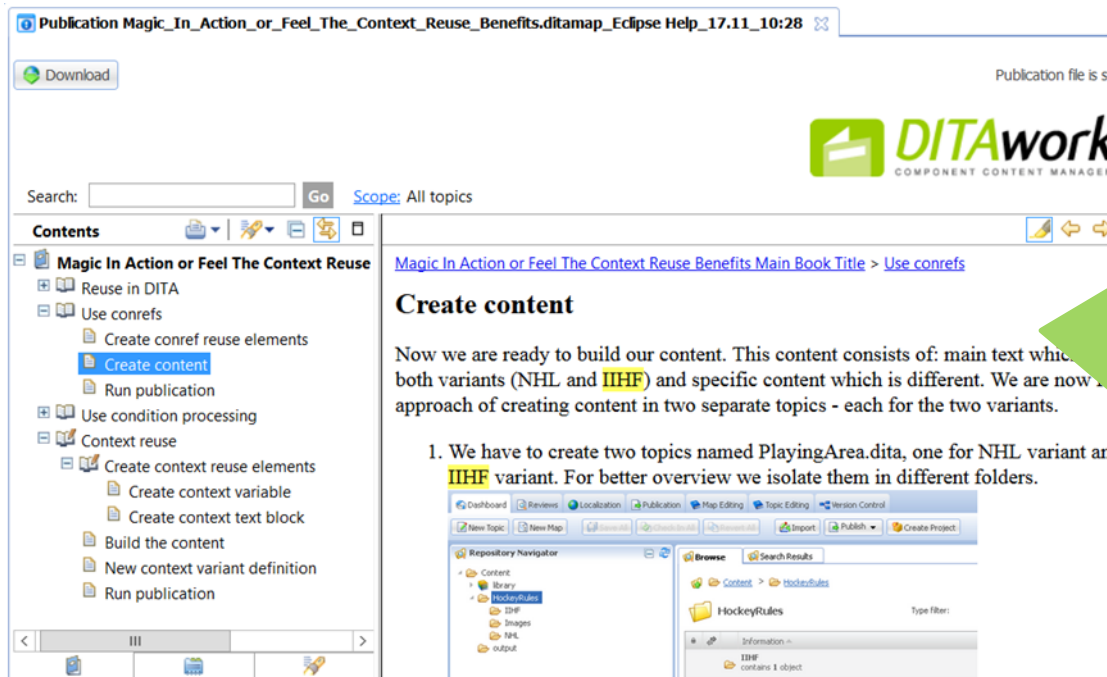
Open a Context Selector in the header of the page and choose the context variant you need. Click "OK" and see that context is changed in the entire system: in oXygen Topic Editor, Reuse View, Preview View. The magic in action!

Create publication profile for Eclipse Help / Info Center



Result Eclipse Help in DITAworks Help Engine

- Result: Eclipse Plug-in (.zip with meta XMLs and content HTMLs)
- Eclipse web help engine or Eclipse app is needed to see the result
- DITAworks has embedded help engine



Navigate ToC
Search
Go forward
Go backward
Print
...

Our objectives have been met

- Minimize amount of redundant content
 - Major text parts for rule books are the same
 - Only context variables and context text blocks have to be changed for new variants
 - Changes for new variants only in form of new values for context keys
- EPUB and Info center style deliverables
 - EPUB by publication type "EPUB" and DITA OT with preview in DITAworks
 - Info center by publication type "Eclipse Help" and DITA OT with preview in DITAworks



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A decorative graphic in the bottom right corner consisting of a grid of thin, light gray lines that curves and warps, creating a 3D effect.