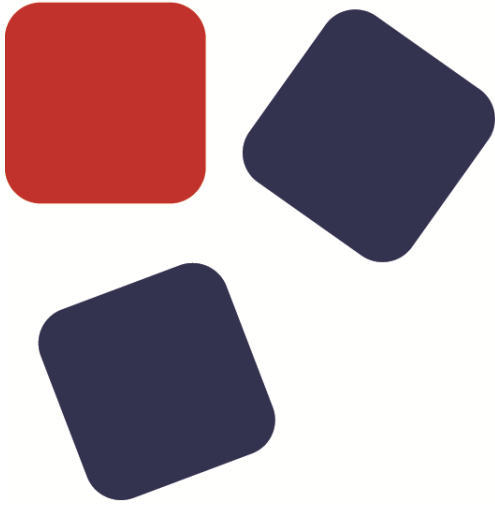


Int



# Migrating from WebML to IFML

1 VISUALLY PROGRAM TL



# MIGRATING FROM WEBML TO IFML

REV.01

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## TABLE OF CONTENTS

Table of Contents.....	3
Introduction.....	4
Main differences between WebML and IFML.....	4
Appendix 1 .....	10

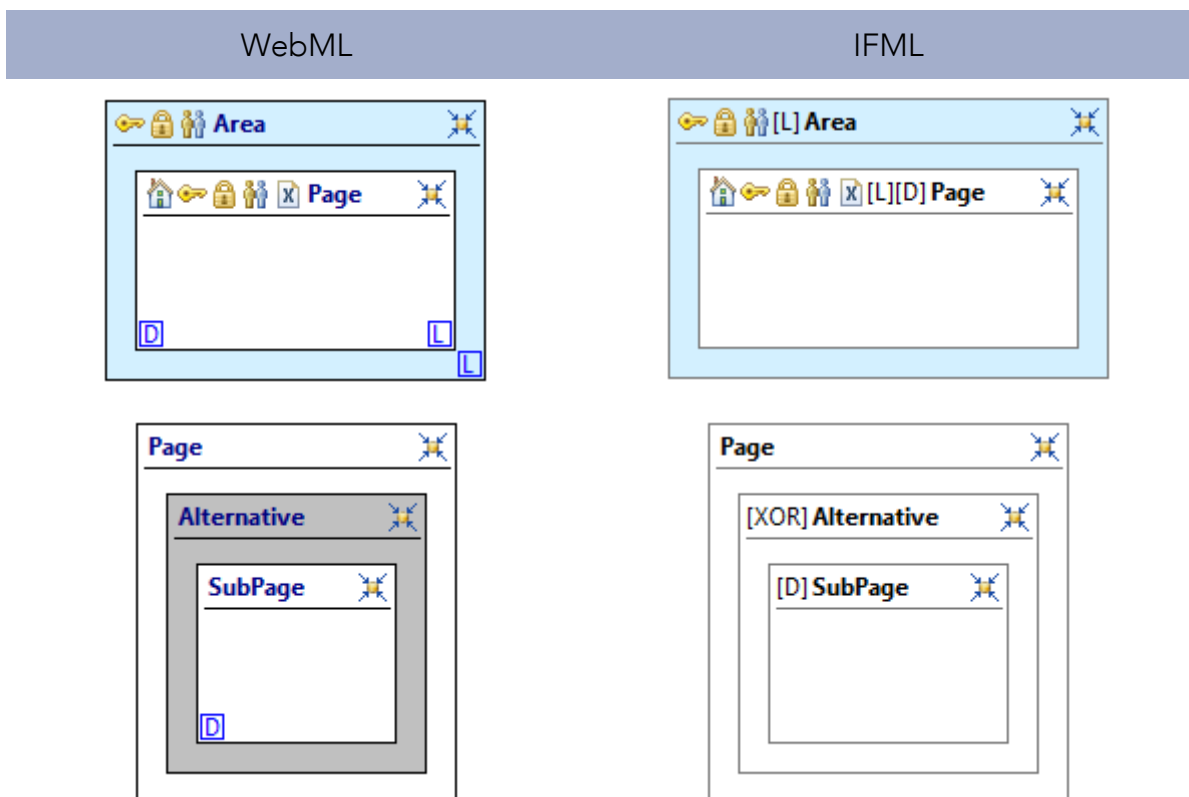
## INTRODUCTION

WebRatio 7.2 introduces the first steps for IFML compliance. IFML is the new OMG standard language for modeling the application front-end. IFML is available as beta version and results from two years of work involving the OMG and WebRatio. The starting point of this work was the standardization of the WebML language.

WebRatio changes the elements names and visual representation inside Web Project in order to comply with IFML notation. This document explains the main differences between WebML and IFML terminology.

## MAIN DIFFERENCES BETWEEN WEBML AND IFML

The view container is the main concept of IFML. It represents one container, or unit, of information. A view container can be many things: a web browser page, a desktop window and so on. With WebML the concept of containers can apply to areas and pages. The representation of areas and pages is slightly different in IFML with respect of WebML. All the element properties are shown on the top left of the container itself. Look at the following tables for examples.





As you can notice from the previous image, the main difference is that the IFML notation places all the element properties in the left upper corner of the element itself, following the IFML notation. The WebML Alternative, a concept stating that in a specific moment only one of the possible subpages is shown to user, is the XOR IFML element. The Master Page, a logical container of common pieces of information, is a view container with the [Master] property.

The *view component*, one of the essential concepts of the IMFL notation, represents a piece of content inside a container. This is very similar to the content unit concept of the WebML notation.




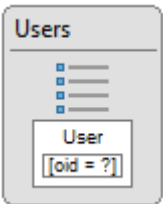
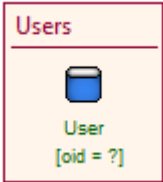
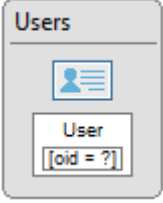

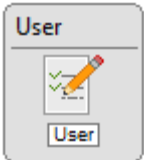
As you can see looking at the image above, the main differences are that the IFML view component has rounded borders and a gray background color, following the IFML notation.

It's possible to add further detail to the IFML view component definition using *view components parts*. For example it's possible to define the *data binding*. Data binding is a set of properties that represent the connection between the view component and the corresponding Domain Model. Data binding contains the definition of a *conditional expression* that specifies the conditions to be satisfied in order for a piece of content to be visible to the user. In WebML the data binding is already present and in particular it's implemented by the Entity property and by the Selector node. The representation of these properties is changed in order to be compliant with IMFL View Component Parts notation.

## MIGRATING FROM WEBML TO IFML

WebML	IFML
	






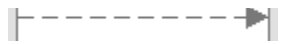
As you can see the main difference is that each IFML property is represented with a white rectangle with a black border. View components also have been renamed in order to follow the IFML naming convention. Finally, view components icons have been changed in order to be more intuitive. Let's see the IFML predefined view components.

WebML Figure	WebML Name	IFML Figure	IFML Name
	Power Index Unit		List
	Data Unit		Details
	Entry Unit		Form

Starting from these three basic view components, all other components included in WebRatio have also been renamed to follow the IFML naming convention. Appendix 1 shows the full list of all available WebRatio view components.



*Flow* is what allows components to connect and share information. IFML has different flow types that map to the WebML link concept. The following table summarizes the IFML flow types compared with WebML link notation.

WebML	IFML
 Normal Link	 Normal Navigation Flow
 Automatic Link	 Automatic Navigation Flow
 Transport Link	 Data Flow

To specify the information that passes through a flow, IFML uses *parameter binding*. In WebRatio, on each flow it's possible to specify the binding of a set of parameters. The *parameter binding group* is represented as a parallelogram.

WebML	IFML
	

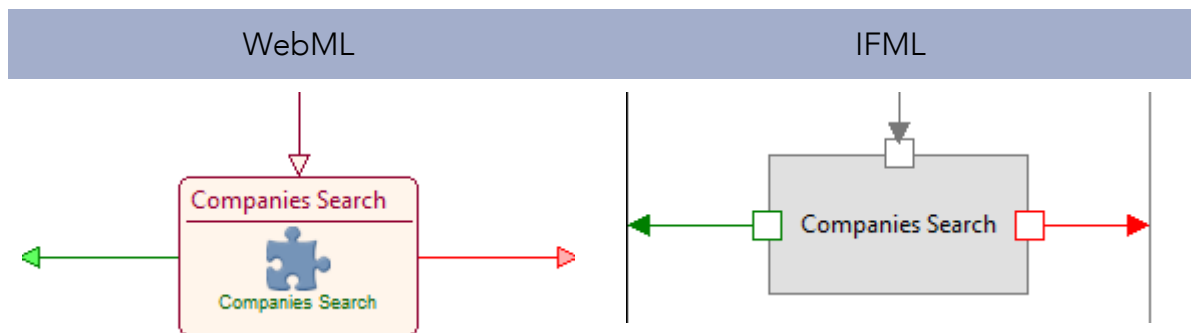
IFML provides also the concept of *module* as a piece of user interface and its corresponding actions, which may be reused for improving IFML model maintainability. The following figure compares the WebML and IFML representations of the module.



## MIGRATING FROM WEBML TO IFML

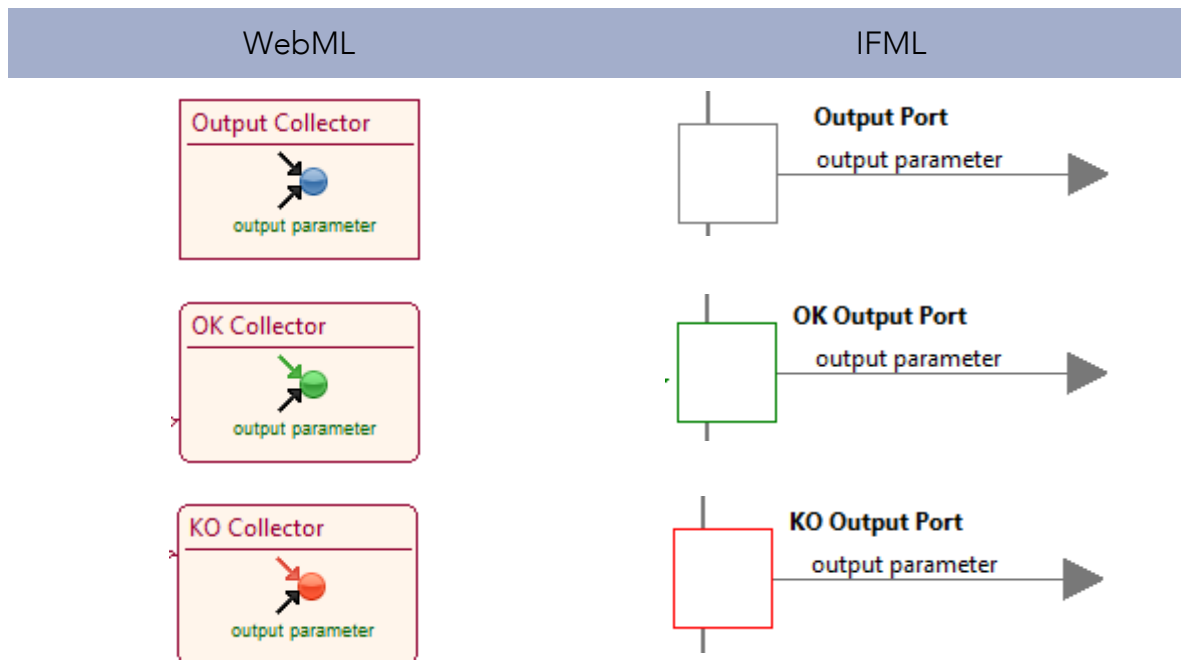


*Input port* and *output port* connect the module with the rest of the IFML model. An input port is an interaction point between a module and its environment that collects navigation flows and parameters arriving at the module. An output port is an interaction point between the module and its environment that collects the navigation flow and parameters going out from the module. The representation of a port is a square placed on the border of the module, as shown in the next figure.

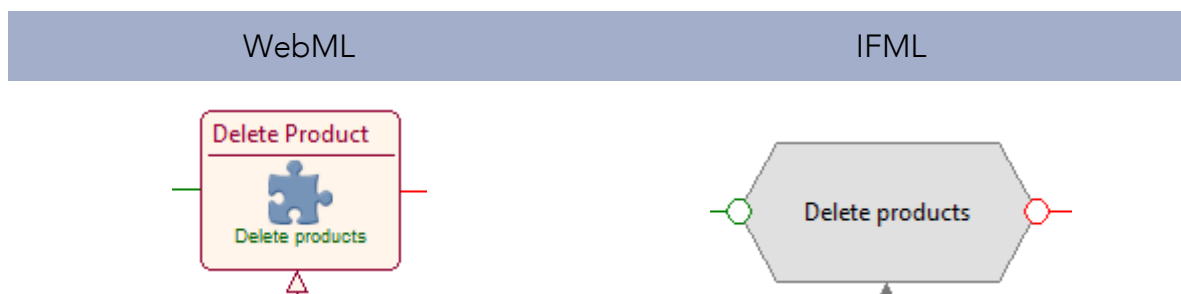


The module implementation also changed in order to show input and output ports compliant with the IFML notation. This table summarizes the differences between the concepts of WebML and the corresponding IFML concepts.




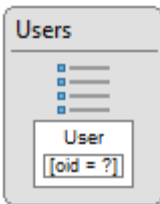



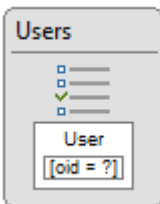
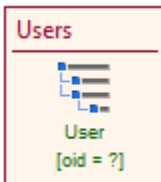

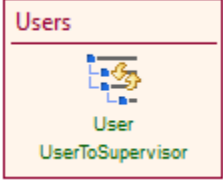
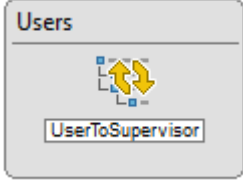
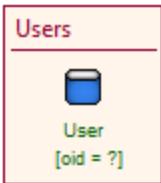
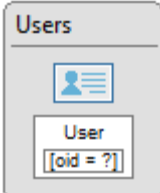


*Action* is a piece of business logic triggered by an event; it can be server side (the default) or client-side, denoted as [Client]. In WebML this is the concept of operations chains. IFML does not allow to place operations inside the IFML model so operations must be encapsulated inside an operation module that becomes an action. Look at the following figure for an example.

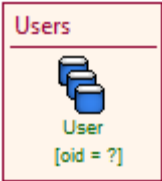
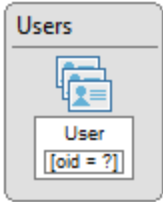
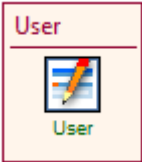

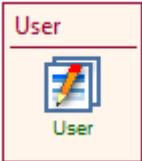


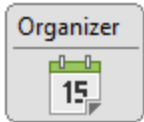


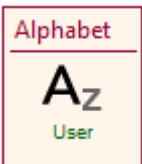

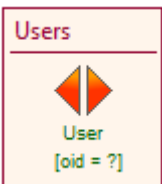

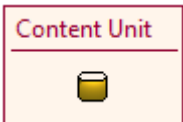
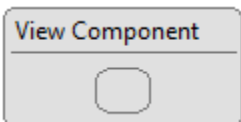


## APPENDIX 1

This is the full list of all IFML view components and names, and their equivalent WebML names.

WebML Figure	WebML Name	IFML Figure	IFML Name
	Power Index Unit		List
	Index Unit		Simple List
	Multi Choice Index Unit		Checkable List
	Hierarchical Index Unit		Hierarchy
	Recursive Hierarchical Index Unit		Recursive Hierarchy
	Data Unit		Details



WebML Figure	WebML Name	IFML Figure	IFML Name
	Multi Data Unit		Multiple Details
	Entry Unit		Form
	Multi Entry Unit		Multiple Form
	Event Calendar Unit		Calendar
	Multi Message Unit		Message
	Alphabet Unit		Alphabet
	Scroller Unit		Scroller
	No Op Content Unit		View Component

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