# Modelling in multiple languages

**BOB BOISVERT** 

FEBRUARY 2016, OTTAWA, ONTARIO, CANADA

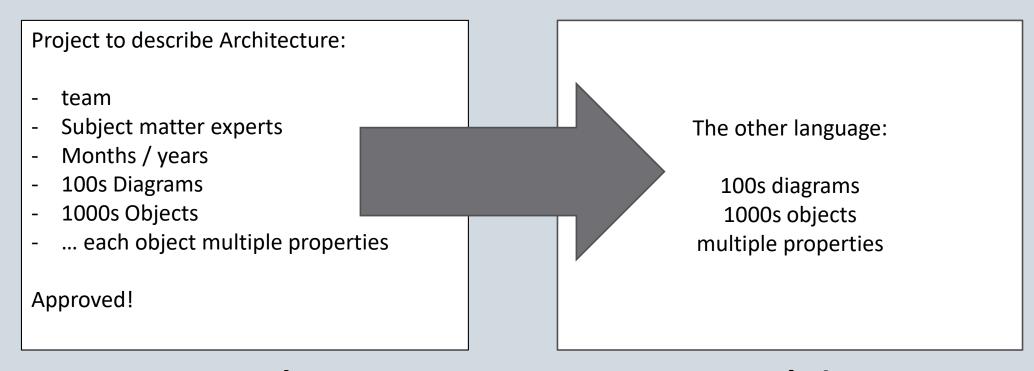
- -Contractor with CLOSEREACH
- -QualiWare since 2011
- -QLM / DNDAF Instructor
- -QLM Modeller
- -QCL Developer
- -QCL training courses

#### Today's presentation

Describe utilities used to help with language translation

Plus, a small gift for you...

#### The problem:



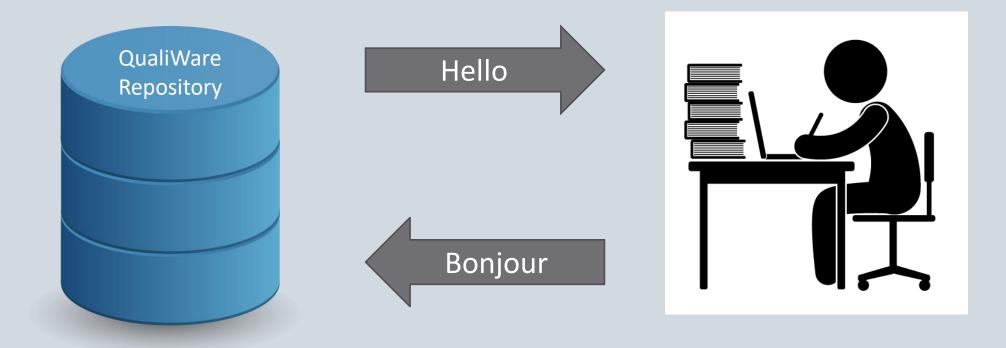
... and concepts must match!

#### Grammar and punctuation matters!

Let's eat, grandpa.

Let's eat grandpa.

### The task:



#### Approach:

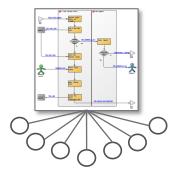


#### Vending machine simplicity:

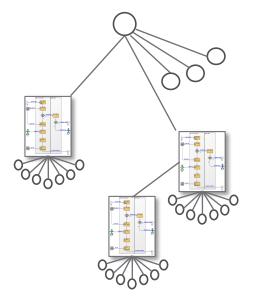
- Insert \$
- Push selection button
- Receive product

#### Extraction – selecting what to translate

#### Diagram



#### Recursive



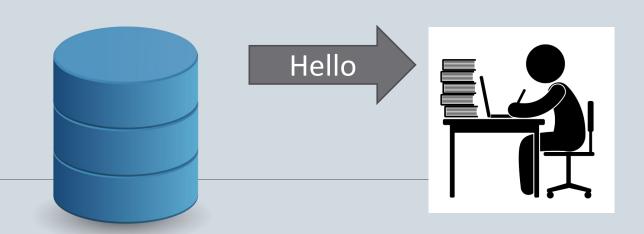
#### **Template**

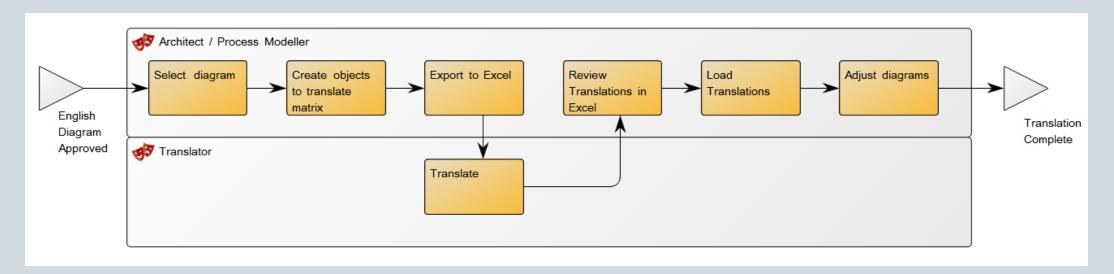
**Definitions** 

BusinessRules

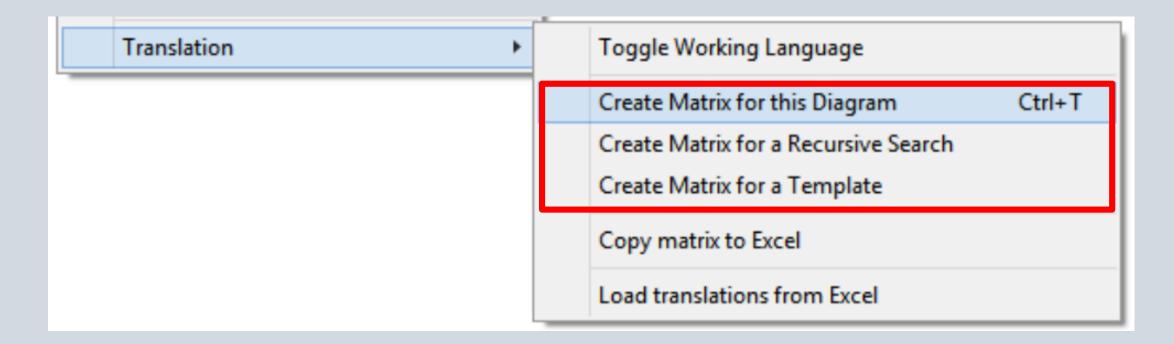
other templates

#### Extraction:





#### Extraction, new **Tool** menu entry:



Extraction WorkFlow_Translation	Rev	Mod. Date	Template	Object ID	Attribute	English text	French Text	Translator comments
// Source:						Created by: Bobqlm Repository: C:\Users\Bob\Dropbox\QualiWare NA User conf in Ottawa, 2016\Translation sample.qrp PWS :	* DO NOT TRANSLATE THIS ROW!	
Select diagram	0	2016 02 06 10.28:50 A	Activity	5e5fdbe3-5c2b-4da0-af31-4a94f8c1f09a	Name	Select diagram		
Create objects to translate matrix	0	2016 02 06 10.29:14 A	Activity	9d953e85-e2a3-44a3-82dd-4682a7266efe	Name	Create objects to translate matrix		
<u>Translate</u>	0	2016 02 06 10.37:42 A	Activity	62fd0032-c53a-4da2-8b9d-74d30455b0f2	Name	Translate		
<u>Translate</u>	0	2016 02 06 10.37:42 A	Activity	62fd0032-c53a-4da2-8b9d-74d30455b0f2	ShortDescription	Convert to French.		
<u>Translate</u>	0	2016 02 06 10.37:42 A	Activity	62fd0032-c53a-4da2-8b9d-74d30455b0f2	Description	Convert all English expressions to French. Consult user provided Lexicon.		
English Diagram Approved	0	2016 02 06 10.26:51 E	BusinessEvent	76cf75f2-338e-4492-a994-26d67a81ae77	Name	English Diagram Approved		
Architect / Process Modeller	0	2016 02 06 10.29:58 F	Role	551ecbeb-fdff-46ee-85c0-961812541f7b	Name	Architect / Process Modeller		
Translator	0	2016 02 06 10.41:40 F	Role	ade34c89-95c0-4ac0-b730-a2d95ea0b82e	Name	Translator		
Translator	0	2016 02 06 10.41:40 F	Role	ade34c89-95c0-4ac0-b730-a2d95ea0b82e	RiskOverview	Translator needs to understand customer context.		
Adjust diagrams	0	2016 02 06 10.34:02 A	Activity	be0d517b-5db6-4ee8-9b46-9e1fc1b79e6c	Name	Adjust diagrams		
<u>Load Translations</u>	0	2016 02 06 10.33:54 A	Activity	d64fc42c-83a7-43e2-a29d-39757bff2257	Name	Load Translations		
Extraction WorkFlow	0	2016 02 06 10.51:18 V	WorkFlowDiagram	dbf797e9-db49-4778-8d1f-2aae0e28c419	Name	Extraction WorkFlow		
Review Translations in Excel	0	2016 02 06 10.33:21 A	Activity	ebc2fd4e-9d9b-477e-94ba-a2077359c8cb	Name	Review Translations in Excel		
<u>Translation Complete</u>	0	2016 02 06 10.26:41 E	BusinessEvent	ed25d494-1eaa-44a7-9e02-aee22aef7b37	Name	Translation Complete		
Export to Excel	0	2016 02 06 10.30:39 A	Activity	f0ca8603-2b03-4572-92ac-c178ba7ae36e	Name	Export to Excel		

Row(s) for each object on diagram

Resulting Matrix:

... and the diagram itself

Extraction WorkFlow_Translation	Rev	Mod. Date	Template	Object ID	Attribute	English text	French Text	Translator comments
// Source:						Created by: Bobqlm Repository: C:\Users\Bob\Dropbox\QualiWare NA User conf in Ottawa, 2016\Translation sample.qrp PWS :	* DO NOT TRANSLATE THIS ROW!	
Select diagram	0	2016 02 06 10.28:50	Activity	e5fdbe3-5c2b-4da0-af31-4a94f8c1f09a	Name	Select diagram		
Create objects to translate matrix	0	2016 02 06 10.29:14	Activity	9d953e85-e2a3-44a3-82dd-4682a7266efe	Name	Create objects to translate matrix		
<u>Translate</u>	0	2016 02 06 10.37:42	Activity	62fd0032-c53a-4da2-8b9d-74d30455b0f2	Name	Translate		
<u>Translate</u>	0	2016 02 06 10.37:42	Activity	62fd0032-c53a-4da2-8b9d-74d30455b0f2	ShortDescription	Convert to French.		
<u>Translate</u>	0	2016 02 06 10.37:42	Activity	62fd0032-c53a-dda2-8b9d-74d30455b0f2	Description	Convert all English expressions to French. Consult user provided Lexicon.		
English Diagram Approved	0	2016 02 06 10.26:51	BusinessEvent	76cf75f2-338e-4492-a994-26d67a81ae77	Name	English Diagram Approved		
Architect / Process Modeller	0	2016 02 06 10.29:58	Role	551ecbeb-fdff-46ee-85c0-961812541f7b	Name	Architect / Process Modeller		
Translator	0	2016 02 06 10.41:40	Role	ade34c88-95c0-4ac0-b730-a2d95ea0b82e	Name	Translator		
Translator	0	2016 02 06 10.41:40	Role	ade34x89-95c0-4ac0-b730-a2d95ea0b82e	RiskOverview	Translator needs to understand customer context.		
Adjust diagrams	0	2016 02 06 10.34:02	Activity	be0g/517b-5db6-4ee8-9b46-9e1fc1b79e6c	Name	Adjust diagrams		
Local Translations	^	2040 02 00 40 22-54	Anticity.	d64fc42c-83a7-43e2-a29d-39757bff2257	Name	Load Translations		
Extraction WorkFlow	0	2016 02 06 10.51:18	WorkFlowDiagram	1bf797e9-db49-4778-8d1f-2aae0e28c419	Name	Extraction WorkFlow		
Review Franslations in Excel	U	2016 02 06 10.33:21	Activity	ebc2fd4e-9d9b-477e-94ba-a2077359c8cb	Name	Review Translations in Excel		
<u>Translation Complete</u>	0	2016 02 06 10.26:41	BusinessEvent	ed25d494-1eaa-44a7-9e02-aee22aef7b37	Name	Translation Complete		
Export to Excel	0	2016 02 06 10.30:39	Activity	f0ca8603-2b03-4572-92ac-c178ba7ae36e	Name	Export to Excel		

#### Revision number and last modification date kept

Extraction WorkFlow_Translation	Rev	Mod. Date	Template		Object ID	Attribute	English text	French Text	Translator comments
// Source:							Created by: Bobqlm Repository: C:\Users\Bob\Dropbox\QualiWare NA User conf in Ottawa, 2016\Translation sample.qrp PWS :	* DO NOT TRANSLATE THIS ROW!	
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Create objects to translate matrix	0	2016 02 06 10.29:14	Activity	9d953e85-e2	a3-44a3-82dd-4682a7266efe	Name	Create objects to translate matrix		
Translate	0	2016 02 06 10.37:42	Activity	62fd0032-c53	3a-4da2-8b9d-74d30455b0f2	Name	Translate		
Translate	0	2016 02 06 10.37:42	Activity	62fd0032-c53	3a-4da2-8b9d-74d30455b0f2	ShortDescription	Convert to French.		
Translate	0	2016 02 06 10.37:42	Activity	62fd0032-c53	3a-4da2-8b9d-74d30455b0f2	Description	Convert all English expressions to French. Consult user provided Lexicon.		
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Translator	0	2016 02 06 10.41:40	Role	ade34c89-95	c0-4ac0-b730-a2d95ea0b82e	Name	Translator		
Translator	0	2016 02 06 10.41:40	Role	ade34c89-95	c0-4ac0-b730-a2d95ea0b82e	RiskOverview	Translator needs to understand customer context.		
Adjust diagrams	0	2016 02 06 10.34:02	Activity	be0d517b-5d	b6-4ee8-9b46-9e1fc1b79e6c	Name	Adjust diagrams		
Load Translations	0	2016 02 06 10.33:54	Activity	d64fc42c-83a	a7-43e2-a29d-39757bff2257	Name	Load Translations		
Extraction WorkFlow	0	2016 02 06 10.51:18	WorkFlowDiagram	dbf797e9-db4	49-4778-8d1f-2aae0e28c419	Name	Extraction WorkFlow		
Review Translations in Excel	0	2016 02 06 10.33:21	Activity	ebc2fd4e-9d9	9b-477e-94ba-a2077359c8cb	Name	Review Translations in Excel		
Translation Complete	0	2016 02 06 10.26:41	BusinessEvent	ed25d494-1e	aa-44a7-9e02-aee22aef7b37	Name	Translation Complete		
Export to Excel	0	2016 02 06 10.30:39	Activity	f0ca8603-2b0	03-4572-92ac-c178ba7ae36e	Name	Export to Excel		

#### Object ID, critical to know what to translate later

Extraction WorkFlow_Translation	Rev	Mod. Date	Template	Object ID	Attribute	English text	French Text	Translator comments
// Source:						Created by: Bobqlm Repository: C:\Users\Bob\Dropbox\QualiWare NA User conf in Ottawa, 2016\Translation sample.qrp PWS :	* DO NOT TRANSLATE THIS ROW!	
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<u>Translate</u>	0	2016 02 06 10.37:42	Activity	62fd0032-c53a-4da2-8b9d-74d30455b0f2	Name	Translate		
<u>Translate</u>	0	2016 02 06 10.37:42	Activity	62fd0032-c53a-4da2-8b9d-74d30455b0f2	ShortDescription	Convert to French.		
<u>Translate</u>	0	2016 02 06 10.37:42	Activity	62fd0032-c53a-4da2-8b9d-74d30455b0f2	Description	Convert all English expressions to French. Consult user provided Lexicon.		
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<u>Translator</u>	0	2016 02 06 10.41:40	Role	ade34c89-95c0-4ac0-b730-a2d95ea0b82e	Name	Translator		
<u>Translator</u>	0	2016 02 06 10.41:40	Role	ade34c89-95c0-4ac0-b730-a2d95ea0b82e	RiskOverview	Translator needs to understand customer context.		
Adjust diagrams	0	2016 02 06 10.34:02	Activity	be0d517b-5db6-4ee8-9b46-9e1fc1b79e6c	Name	Adjust diagrams		
Load Translations	0	2016 02 06 10.33:54	Activity	d64fc42c-83a7-43e2-a29d-39757bff2257	Name	Load Translations		
Extraction WorkFlow	0	2016 02 06 10.51:18	WorkFlowDiagram	dbf797e9-db49-4778-8d1f-2aae0e28c419	Name	Extraction WorkFlow		
Review Translations in Excel	0	2016 02 06 10.33:21	Activity	ebc2fd4e-9d9b-477e-94ba-a2077359c8cb	Name	Review Translations in Excel		
<u>Translation Complete</u>	0	2016 02 06 10.26:41	BusinessEvent	ed25d494-1eaa-44a7-9e02-aee22aef7b37	Name	Translation Complete		
Export to Excel	0	2016 02 06 10.30:39	Activity	f0ca8603-2b03-4572-92ac-c178ba7ae36e	Name	Export to Excel		

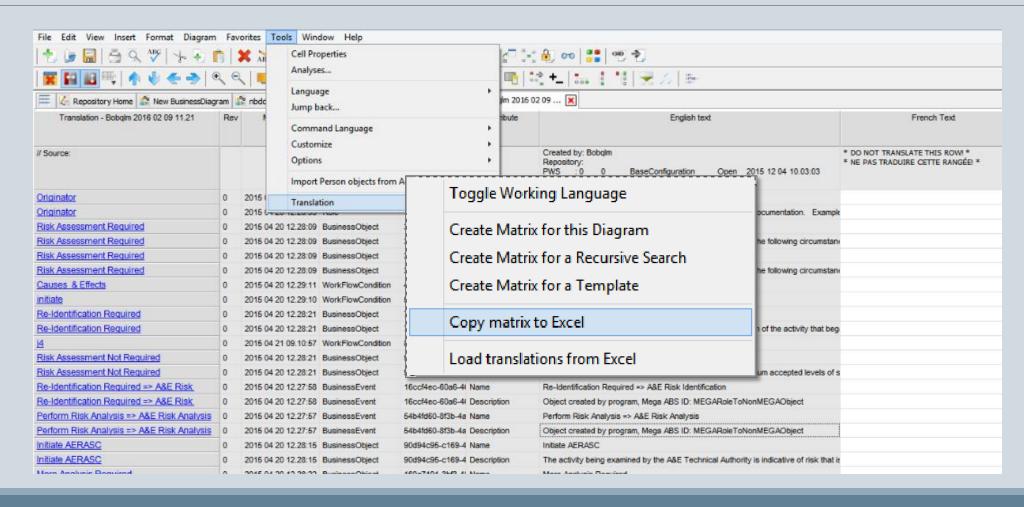
#### One row created for each attribute to be translated

Extraction WorkFlow_Translation	Rev	Mod. Date	Template	Object ID	Attribute	English text	French Text	Translator comments
// Source:						Created by: Bobqlm Repository: C:\Users\Bob\Dropbox\QualiWare NA User conf in Ottawa, 2016\Translation sample.qrp PWS :	* DO NOT TRANSLATE THIS ROW!	
Select diagram	0	2016 02 06 10.28:50	Activity	5e5fdbe3-5c2b-4da0-af31-4a94f8c1f09a	Name	Select diagram		
Create objects to translate matrix	0	2016 02 06 10.29:14	Activity	9d953e85-e2a3-44a3-82dd-4682a7266efe	Name	Create objects to translate matrix		
<u>Translate</u>	0	2016 02 06 10.37:42	Activity	62fd0032-c53a-4da2-8b9d-74d30455b0f2	Name	Translate		
Translate	0	2016 02 06 10.37:42	Activity	62fd0032-c53a-4da2-8b9d-74d30455b0f2	ShortDescription	Convert to French.		
Translate	0	2016 02 06 10.37:42	Activity	62fd0032-c53a-4da2-8b9d-74d30455b0f2	Description	Convert all English expressions to French. Consult user provided Lexicon.		
English Diagram Approved	0	2016 02 06 10:26:51	BusinessEvent	/6ct/5t2-338e-4492-a994-26d6/a81ae//	Name	English Diagram Approved		
Architect / Process Modeller	0	2016 02 06 10.29:58	Role	551ecbeb-fdff-46ee-85c0-961812541f7b	Name	Architect / Process Modeller		
Translator	0	2016 02 06 10.41:40	Role	ade34c89-95c0-4ac0-b730-a2d95ea0b82	Name	Translator		
Translator	0	2016 02 06 10.41:40	Role	ade34c89-95c0-4ac0-b730-a2d95ea0b82	RiskOverview	Translator needs to understand customer context.		
Adjust diagrams	0	2016 02 06 10.34:02	Activity	be0d517b-5db6-4ee8-9b46-9e1fc1b79e6c	Name	Adjust diagrams		
Load Translations	0	2016 02 06 10.33:54	Activity	d64fc42c-83a7-43e2-a29d-39757bff2257	Name	Load Translations		
Extraction WorkFlow	0	2016 02 06 10.51:18	WorkFlowDiagram	dbf797e9-db49-4778-8d1f-2aae0e28c419	Name	Extraction WorkFlow		
Review Translations in Excel	0	2016 02 06 10.33:21	Activity	ebc2fd4e-9d9b-477e-94ba-a2077359c8ct	Name	Review Translations in Excel		
Translation Complete	0	2016 02 06 10.26:41	BusinessEvent	ed25d494-1eaa-44a7-9e02-aee22aef7b37	Name	Translation Complete		
Export to Excel	0	2016 02 06 10.30:39	Activity	f0ca8603-2b03-4572-92ac-c178ba7ae36e	Name	Export to Excel		

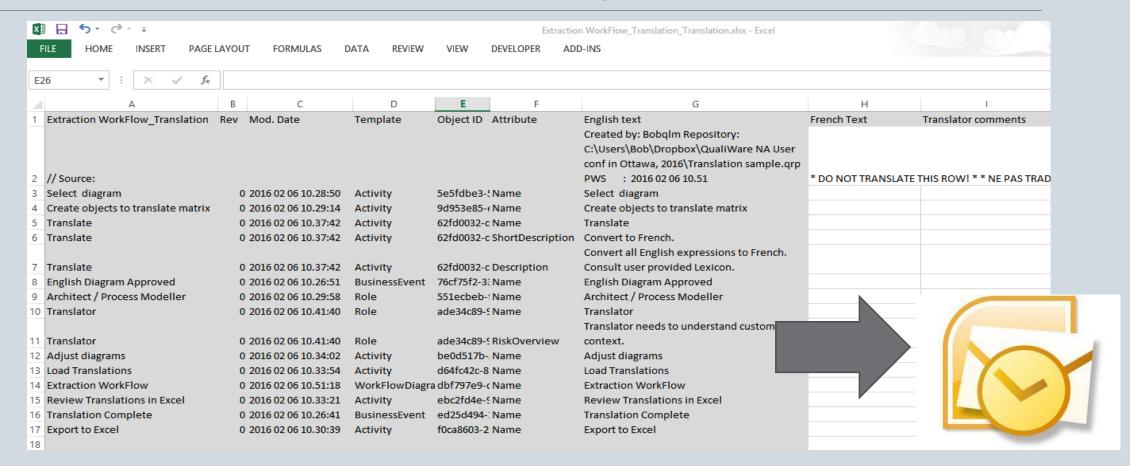
#### If already translated in QualiWare, French values extracted here

Extraction WorkFlow_Translation	Rev	Mod. Date	Template	Object ID	Attribute	English text	French Text	ranslate comment
// Source:						Created by: Bobqlm Repository: C:\Users\Bob\Dropbox\QualiWare NA User conf in Ottawa, 2016\Translation sample.qrp PWS :	* DO NOT TRANSLATE THIS ROW!	
Select diagram	0	2016 02 06 10.28:50	Activity	5e5fdbe3-5c2b-4da0-af31-4a94f8c1f09a	Name	Select diagram		
Create objects to translate matrix	0	2016 02 06 10.29:14	Activity	9d953e85-e2a3-44a3-82dd-4682a7266efe	Name	Create objects to translate matrix		
<u>Translate</u>	0	2016 02 06 10.37:42	Activity	62fd0032-c53a-4da2-8b9d-74d30455b0f2	Name	Translate		
<u>Translate</u>	0	2016 02 06 10.37:42	Activity	62fd0032-c53a-4da2-8b9d-74d30455b0f2	ShortDescription	Convert to French.		
<u>Translate</u>	0	2016 02 06 10.37:42	Activity	62fd0032-c53a-4da2-8b9d-74d30455b0f2	Description	Convert all English expressions to French. Consult user provided Lexico	n.	
English Diagram Approved	0	2016 02 06 10.26:51	BusinessEvent	76cf75f2-338e-4492-a994-26d67a81ae77	Name	English Diagram Approved		
Architect / Process Modeller	0	2016 02 06 10.29:58	Role	551ecbeb-fdff-46ee-85c0-961812541f7b	Name	Architect / Process Modeller		
<u>Translator</u>	0	2016 02 06 10.41:40	Role	ade34c89-95c0-4ac0-b730-a2d95ea0b82e	Name	Translator		
<u>Translator</u>	0	2016 02 06 10.41:40	Role	ade34c89-95c0-4ac0-b730-a2d95ea0b82e	RiskOverview	Translator needs to understand customer context.		
Adjust diagrams	0	2016 02 06 10.34:02	Activity	be0d517b-5db6-4ee8-9b46-9e1fc1b79e6c	Name	Adjust diagrams		
Load Translations	0	2016 02 06 10.33:54	Activity	d64fc42c-83a7-43e2-a29d-39757bff2257	Name	Load Translations		
Extraction WorkFlow	0	2016 02 06 10.51:18	WorkFlowDiagram	dbf797e9-db49-4778-8d1f-2aae0e28c419	Name	Extraction WorkFlow		
Review Translations in Excel	0	2016 02 06 10.33:21	Activity	ebc2fd4e-9d9b-477e-94ba-a2077359c8cb	Name	Review Translations in Excel		
Translation Complete	0	2016 02 06 10.26:41	BusinessEvent	ed25d494-1eaa-44a7-9e02-aee22aef7b37	Name	Translation Complete		
Export to Excel	0	2016 02 06 10.30:39	Activity	f0ca8603-2b03-4572-92ac-c178ba7ae36e	Name	Export to Excel		

### Create MS Excel spreadsheet



#### Save, send or translate spreadsheet



A new Excel spreadsheet is created, formatted and opened.

~ Translator does his/her thing here ... ~

Automated?

#### Translated work returns

Bonjour

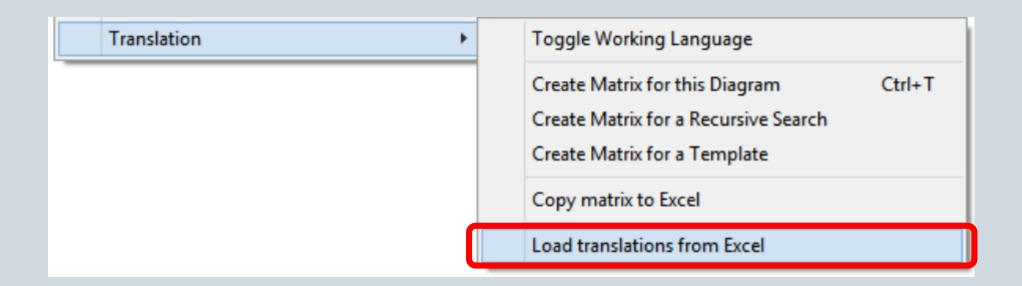


M H 2 + G + ±			Extr	raction WorkFlow_Translath		
FILE HOME INSERT PAGE LA	AYOUT FORMULAS [	DATA REVIEW	VIEW DEVELOPER	ADD-INS		
A1 • : × ✓ fx	Extraction WorkFlow Ti	ranslation				
7. 7. 7. 7.	Extraction Working	distactori				
A	B C	D	E F	Ü	***	,
	Rev Mod. Date	Template	Object ID Attribute	English text	French Text	Translator comments
// Source:				Created by: Bobqlm Repository:	* DO NOT TRANSLATE THIS ROW! * *	
				C:\Users\Bob\Dropbox\QualiWare NA User	NE PAS TRADUIRE CETTE RANGÉE! *	
				conf in Ottawa, 2016\Translation sample.qrp		
2				PWS : 2016 02 06 10.51		
3 Select diagram	0 2016 02 06 10.28:50	Activity	5e5fdbe3-! Name	Select diagram	Choisir diagramme	
Create objects to translate matrix	0 2016 02 06 10.29:14	Activity	9d953e85-(Name	Create objects to translate matrix	Créer un matrice des objets à	
4					traduire	
5 Translate	0 2016 02 06 10.37:42	Activity	62fd0032-c Name	Translate	Traduire	
6 Translate	0 2016 02 06 10.37:42	Activity	62fd0032-c ShortDescr		Traduire vers le français	
Translate	0 2016 02 06 10.37:42	Activity	62fd0032-c Description	Convert all English expressions to French.	Traduire toutes les textes anglais	
7				Consult user provided Lexicon.	vers le français	
8 English Diagram Approved	0 2016 02 06 10.26:51	BusinessEvent	76cf75f2-3: Name	English Diagram Approved	Diagramme anglais approuvé	
Architect / Process Modeller	0 2016 02 06 10.29:58	Role	551ecbeb-i Name	Architect / Process Modeller	Architecte é Modelisateur de	
9					processus	
10 Translator	0 2016 02 06 10.41:40	Role	ade34c89-5 Name	Translator	Traducteur, traductrice	
Translator	0 2016 02 06 10.41:40	Role	ade34c89-9RiskOverview		Le traducteur, traductrice doit	
				context.	comprendre les besoins	
11					linguistiques du client.	
12 Adjust diagrams	0 2016 02 06 10.34:02	Activity	be0d517b Name	Adjust diagrams	Ajuster les diagrammes	
13 Load Translations	0 2016 02 06 10.33:54	Activity	d64fc42c-8 Name	Load Translations	Charger les traductions	
14 Extraction WorkFlow	0 2016 02 06 10.51:18		a dbf797e9-c Name	Extraction WorkFlow	Flux de l'extraction	SVP vérifier.
Review Translations in Excel	0 2016 02 06 10.33:21	Activity	ebc2fd4e-5 Name	Review Translations in Excel	Revoir les traductions au chiffrier	
15					Excel	
16 Translation Complete	0 2016 02 06 10.26:41	BusinessEvent	ed25d494-: Name	Translation Complete	Traduction terminée	
17 Export to Excel	0 2016 02 06 10.30:39	Activity	f0ca8603-2 Name	Export to Excel	Transférer vers Excel	

#### Translated work returns

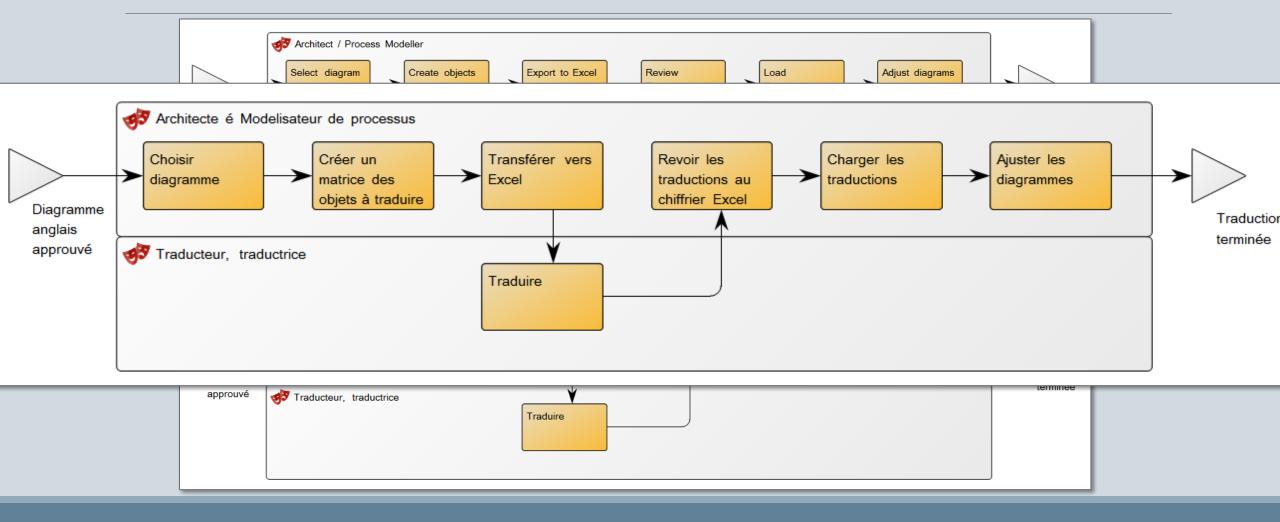
Opportunity to review the translations with local subject matter experts

#### Load translations into QualiWare



You will be prompted for a filename, MS Excel will open...

#### Done! (unretouched)



### Verify loaded diagram

Symbol sizes/position may need adjustments

Size adjustments will also affect diagrams in other language

#### Size adjustment example



Manual adjustments

### What if models changed?

- Translation matrix sent out
- Models modified in QualiWare
- Translation returns

#### **WARNING:**

The following objects have been modified since the translation file was created. You may want to consider re-doing the translation to check if updates are needed.

Sample 2 [WorkFlowDiagram]
Activity 2 [Activity]

(2) Objects have changed since translation was sent out.

#### A consideration:

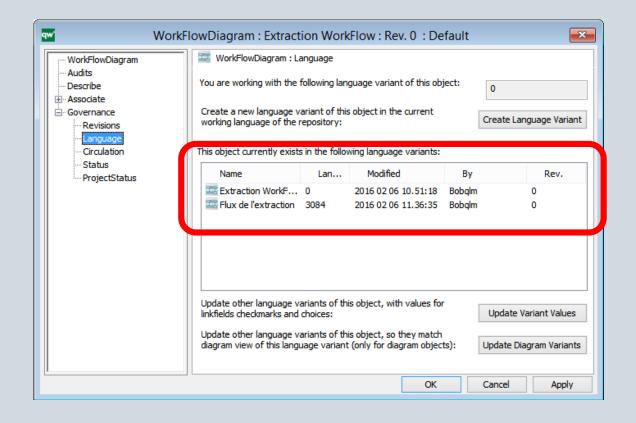
Treat translated content as new content that needs approval!

(Are both language variants saying the same thing?)

#### Language variant information:

Each object has language variant information attached.

Information can be leveraged to create reports, matrices.



#### Translation Tool deployment:

At my workplace, 100+ diagrams

Near future, available to all DND users

Currently translating English to French

#### This code can be customized

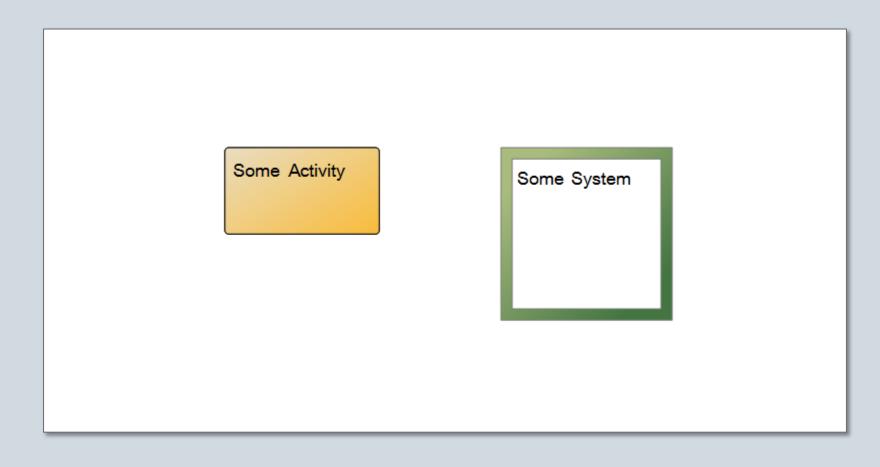
- can easily accommodate other languages

- could be adapted for other frameworks

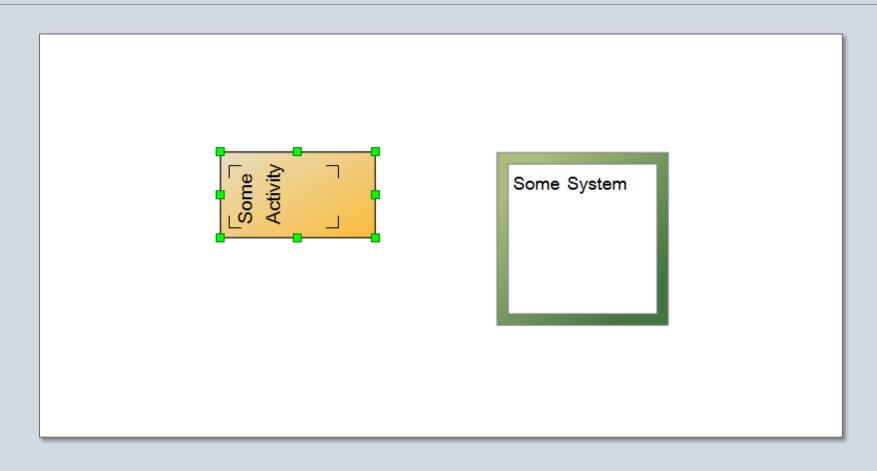
#### On a different topic: change sample

# A small gift for you, from CLOSEREACH

## Symbol labels on a diagram



#### New macro – horizontal/vertical labels



#### To receive a copy of this:

## available at no charge from CLOSEREACH

qualiware@closereach.ca

## Thank You / Merci / Tak

? Questions?