



ARIS Find / Change ARIS Items

Hoe effectief methode veranderingen aan te pakken

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do your thing

Waar lopen we tegenaan?

- Query uitkomsten zijn niet voor 100% bruikbaar
- Je kunt queries (nog) niet scheduleren (scripts wel)
- Het draaien van queries duurt lang
- Na een impact analyse wil je ook de verandering toepassen
- Het liefst de verandering uitvoeren over alle databases heen en niet per database

Waar hebben we behoefte aan?

- Het maken van impact- en DQ analyses in de methode/configuratie/conventies: welke data wordt waar gebruikt.
- Het uitvoeren van wijzigingen als gevolg van bovenstaande analyses
- Het ontwikkelen van een set van scripts:
 - Die herbruikbaar zijn
 - Waarvoor niet elke keer een ontwikkelaar nodig is
 - En een snelle performance over alle databases tegelijk
- De gewenste vorm is met behulp van Excel gegevens uitwisselen
- Excel rapportages ook dienen als bron voor dashboards

Het hanteren van de scripts is en blijft specialistisch werk

Wat hebben we ontwikkeld

- Er zijn twee scripts ontwikkeld.
- Een script voor het analyseren:
 - Find ARIS Items
- En een tweede script voor het uitvoeren van wijzigingen
 - Change ARIS Items

Use Case: QA; worden de correcte symbolen gebruikt?

- Modellers zijn geneigd om symbolen naar gelieven te wijzigen in een ander symbool.

The screenshot shows a modeling tool interface. On the left, a diagram titled 'WPI Party Marking' is displayed on a grid. It contains several elements: a document icon labeled 'WPI Party Marking', a circular icon labeled 'Ringfencing letter (adding)', a rectangular box labeled 'Ringfencing Communication' with a plus sign on its left side, another circular icon labeled 'Ringfencing letter (removal)', and a rectangular box labeled 'Ringfencing letter' with a plus sign on its left side. On the right, a 'Properties - Object occurrence: Ringfencing letter' window is open. The 'Occurrences' tab is selected, showing a table with the following data:

Symbol	Model name	Type
	Administer ringfencing	Process steps

Below the table, the 'Default symbol:' dropdown menu is set to 'Communication'. At the bottom of the window are buttons for 'OK', 'Cancel', 'Preview', 'Reset', and 'Help'.

Use Case: QA; worden de correcte symbolen gebruikt?

- Modellers zijn geneigd om symbolen naar gelieven te wijzigen in een ander symbool.

Description of the administering process of the Ringfencing Party Marking: placing or removing of the Ringfencing marking during KYCC reviews (onboarding, periodic and event).

The screenshot shows a modeling tool interface. On the left, a diagram on a grid background contains three elements: 'WPI Party Marking' (a document icon), 'Ringfencing Communication' (an information icon), and 'Ringfencing letter' (an information icon with a rectangular border and four corner handles). On the right, a 'Properties - Object occurrence: Ringfencing letter' window is open. The 'Occurrences' tab is selected, displaying a table with one row:

Symbol	Model name	Type
	Administer ringfencing	Process steps

At the bottom of the properties window, there is a 'Default symbol' dropdown menu set to 'WorkPlace Instruction (WPI)', and buttons for 'Pass on symbol', 'Open model', 'OK', 'Cancel', 'Preview', 'Reset', and 'Help'.

Use Case

- Komt dit gedrag vaker voor, in welke databases en modellen ?
- Ontwikkel een rapport per database met gebruikte symbolen voor het information carrier object
- Laat zien waar het occurrence symbool verschilt van het default symbool
- Herstel gevonden issues

Find ARIS Items

- FAI is een script dat een excel output genereert op basis van
 1. De gekozen actie
 - Find Model
 - Find Occurrence
 - Find Connection
 - Find Object
 2. Een filter in de vorm van een input file met condities waaraan de data moet voldoen
 3. Een XML file met de beschrijving van de kolommen die in de Excel output moeten verschijnen

FAI – Filter

Excel voor filtering

The screenshot shows the Microsoft Excel interface with the following elements:

- Top Bar:** AutoSave (Off), File Name: inputfindInformationCarrier.xlsx, No Label, Search bar, User: Dick Deneer DD.
- Ribbon:** File, Home, Insert, Page Layout, Formulas, Data, Review, **View** (selected), Automate, Help, Acrobat.
- View Tab:** Includes options for Ruler, Gridlines, Formula Bar, Headings, and various window management tools like Zoom, Split, Hide, and Synchronous Scrolling.
- Formula Bar:** Cell A2 contains the GUID: 8060b1f1-7fce-11e6-688d-00505680477c.
- Table:** A table with 12 columns and 8 rows. The first row is highlighted in yellow. The data is as follows:

	A	B	C	D	E	F	G	H	I	J	K	
1	Occurrence Symbol Type Nr	Object Guid	Object Default Symbol Type Nr	Object Type Nr	Object Assigned Model Type Nr	Model Type Nr	#<====>	#Occurrence Symbol Name	#Default Symbol Name	#Object Type Name	#Object Assigned Model Type Name	#Model
2	8060b1f1-7fce-11e6-688d-00505680477c	*	*	27	#ignore	*		Emotion (65754)	Symbol Type Name	Information carrier (27)	#N/A	Model Type Name
3	218	*	*	27	#ignore	*		Communication (218)	Symbol Type Name	Information carrier (27)	#N/A	Model Type Name
4	347	*	*	27	#ignore	*		Consideration (347)	Symbol Type Name	Information carrier (27)	#N/A	Model Type Name
5	891	*	*	27	#ignore	*		WorkPlace Instruction (WPI) (891)	Symbol Type Name	Information carrier (27)	#N/A	Model Type Name
6	29	*	*	27	#ignore	*		Document (29)	Symbol Type Name	Information carrier (27)	#N/A	Model Type Name
7	563434f0-c782-11eb-1871-0050568bc76d	*	*	27	#ignore	*		Pre assessment question (66427)	Symbol Type Name	Information carrier (27)	#N/A	Model Type Name
8												

Bottom Bar: Filter tabs include Find Occurrence filter (selected), Find Object filter, Find Models filter, ConnectionFilter, ModelTypes, SymbolTypes, ObjectTypes, ConnectionTypes, AttributeTypes, and a search input field.

FAI – XML

XML bestand voor het definiëren van de output

```
145 <sheet id="findSymbol">
146   <name>Symbols</name>
147   <defaultColumnWidth>40</defaultColumnWidth>
148   <colList>
149     <col attr="name" ref="database">
150       <title>Database Name</title>
151     </col>
152     <col attr="name" ref="model">
153       <title>Model Name</title>
154     </col>
155     <col attr="guid" ref="model" width="35">
156       <title>Model Guid</title>
157     </col>
158     <col attr="type" ref="model">
159       <title>Model Type</title>
160     </col>
161     <col attr="path" ref="model">
162       <title>Model Path</title>
163     </col>
164     <col attr="#860c33d0-2ab3-11e9-4cd6-0050568bc76d" ref="model"
165       dateFormat="yyyy-MM-dd HH:mm:ss">
166       <title>RCM Last Publication Date</title>
167     </col>
168     <col attr="oid" ref="occ">
169       <title>Occ ObjectID</title>
170     </col>
171     <col attr="name" ref="occ">
172       <title>Object Name</title>
173     </col>
174     <col attr="symbolWithNum" ref="occ">
175       <title>Occ Symbol</title>
```

FAI – XML

XML bestand aanpassen

```
172         <title>Object Name</title>
173     </col>
174     <col attr="symbolWithNum" ref="occ">
175         <title>Occ Symbol</title>
176     </col>
177     <col attr="symbolNum" ref="occ">
178         <title>Occ Symbol Nr</title>
179     </col>
180     <col attr="defaultSymbolNum" ref="occ.obj">
181         <title>Default Symbol Nr</title>
182     </col>
183     <col attr="" ref="">
184         <title>Same Symbol</title>
185         <xlsformula>IF(J$ROW=K$ROW,"Y","N")</xlsformula>
186     </col>
187     <col attr="guid" ref="occ" width="35">
188         <title>Object Guid</title>
189     </col>
190     <col attr="typeWithNum" ref="occ">
191         <title>Object Type</title>
192     </col>
193     <col attr="path" ref="occ">
194         <title>Object Path</title>
195     </col>
196     <col attr="defaultSymbolGuid" ref="occ">
197         <title>Default Symbol Guid</title>
198     </col>
199     <col attr="" ref="">
200         <title>If Unique Model => 1</title>
201         <xlsformula>IF(COUNTIF(C$2:C$ROW,C$ROW) > 1,0,1)</xlsformula>
202     </col>
203     <col attr="" ref="">
204         <title>If Unique Object => 1</title>
205         <xlsformula>IF(COUNTIF(M$2:M$ROW,M$ROW)>1,0,1)</xlsformula>
```

FAI – RUN

Start het script op een database

The screenshot displays the 'Report Wizard' application window. On the left, a tree view lists various project folders, with 'ZZZ_2024-02-01_BeneDevelopment' selected. The main window is titled 'Report Wizard' and has a 'Steps' tab selected, showing a progress indicator for '1. Select report' and '2. Select output settings'. The '1. Select report' section contains a 'Category' dropdown menu set to 'Migration' and a 'Report' list box. The 'Report' list includes 'Change ARIS Items', 'Find ARIS Items' (highlighted), 'PCAT Delta', and 'Schedule PCAT Merge'. Below the list is a 'Description' field containing the text 'Search Aris items based on a supplied filter'. At the bottom right, there are three buttons: 'Next' (highlighted), 'Cancel', and 'Help'.

FAI – RUN

Geef output locatie

- ▶ Test configure and track old acc
- ▶ TestMerge_Development
- ▶ Tracking GDPP 2.0
- ▶ Tracking test Tycho
- ▶ United Motor Group
- ▶ Variant Rollout testing
- ▶ Wholesale Banking
- ▶ Wholesale Banking_Archive
- ▶ Wholesale Banking_Development
- ▶ xxx_development
- ▶ zOLd Tracking GDPP for testing
- ▶ ZZZ_2024-02-01_BeneDevelopment
- ▶ ZZZ_2024-02-01_Luxembourg_Development
- ▶ ZZZ_2024-02-01_Poland_Development
- ▶ ZZZ_2024-02-01_Spain_Development
- ▶ ZZZZ Monitoring

essages on executable processes

Description

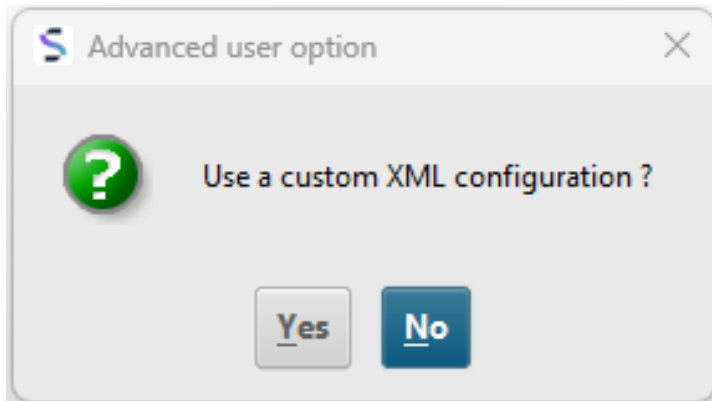
The screenshot shows the 'Report Wizard' dialog box, specifically the '2. Select output settings' step. The dialog has a title bar with the 'S' logo and 'Report Wizard' text. Below the title bar are two tabs: 'Steps' and 'Help'. The 'Steps' tab is active, showing a list of steps: '1. Select report' and '2. Select output settings'. The '2. Select output settings' step is selected and expanded, showing the following configuration options:

- Language:** English (United States) (dropdown menu)
- Evaluation filter:** No evaluation filter (dropdown menu)
- Output format:** Excel 97-2003 Workbook (*.xls) (dropdown menu)
- Save output as:** .mp\AGNL Demo\FindInformationCarrier\Run 2 adapted XML\Report.xls (text field with a browse button '...')
- Display result

At the bottom of the dialog, there are four buttons: 'Back', 'Finish', 'Cancel', and 'Help'. The 'Finish' button is highlighted in blue.

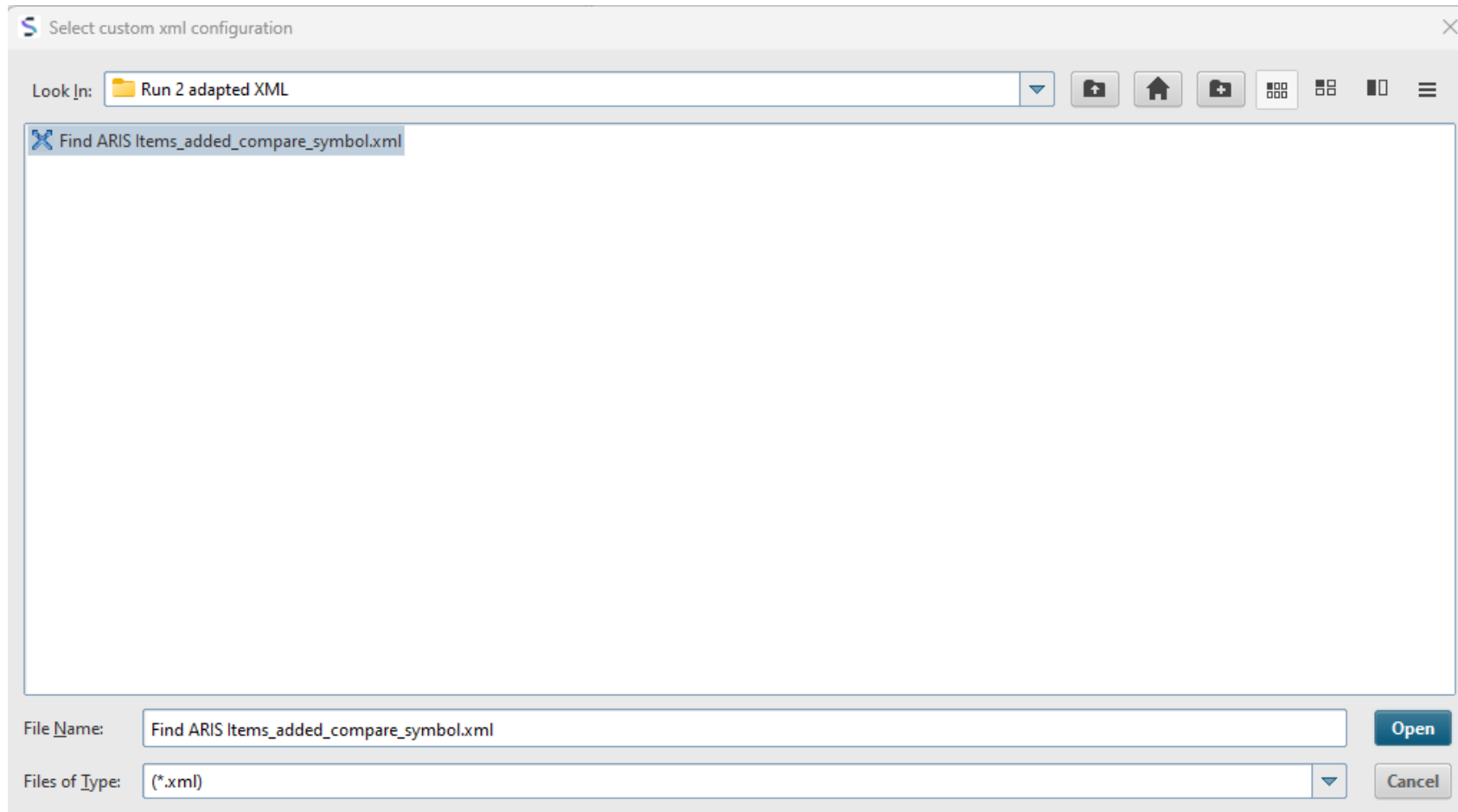
FAI – RUN

Geef aan of je een eigen XML wil gebruiken



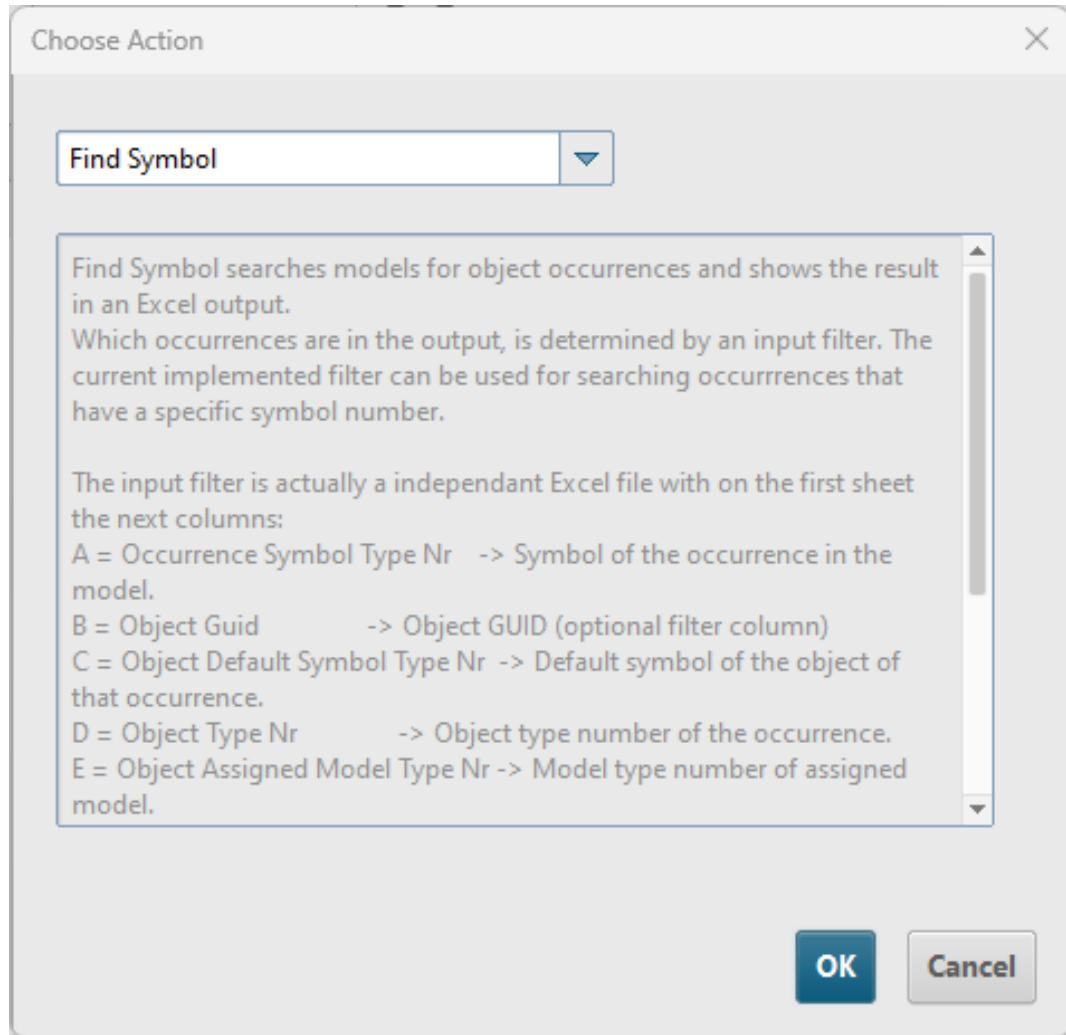
FAI – RUN

Selecteer het custom XML bestand



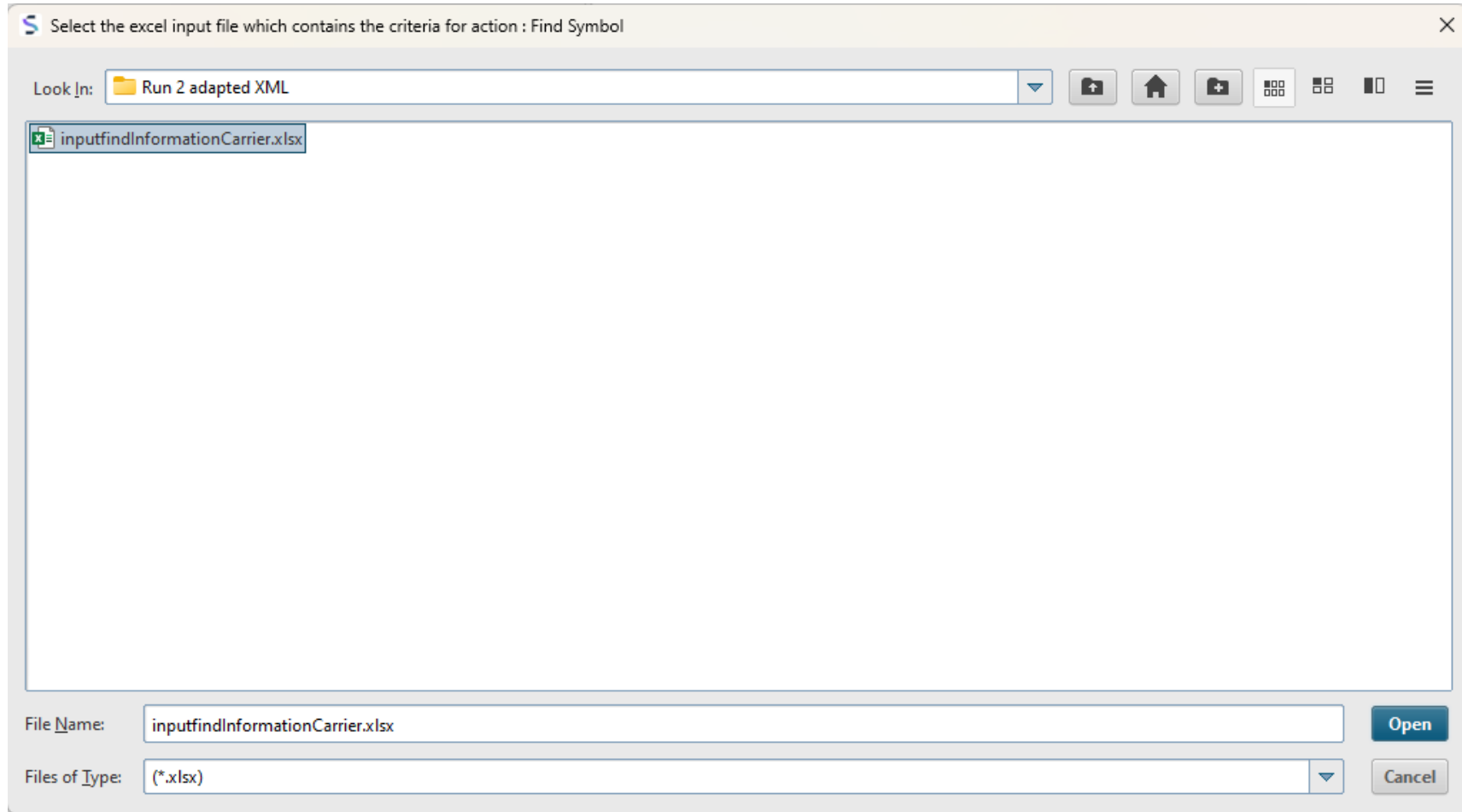
FAI – RUN

Selecteer de actie die je wilt doen



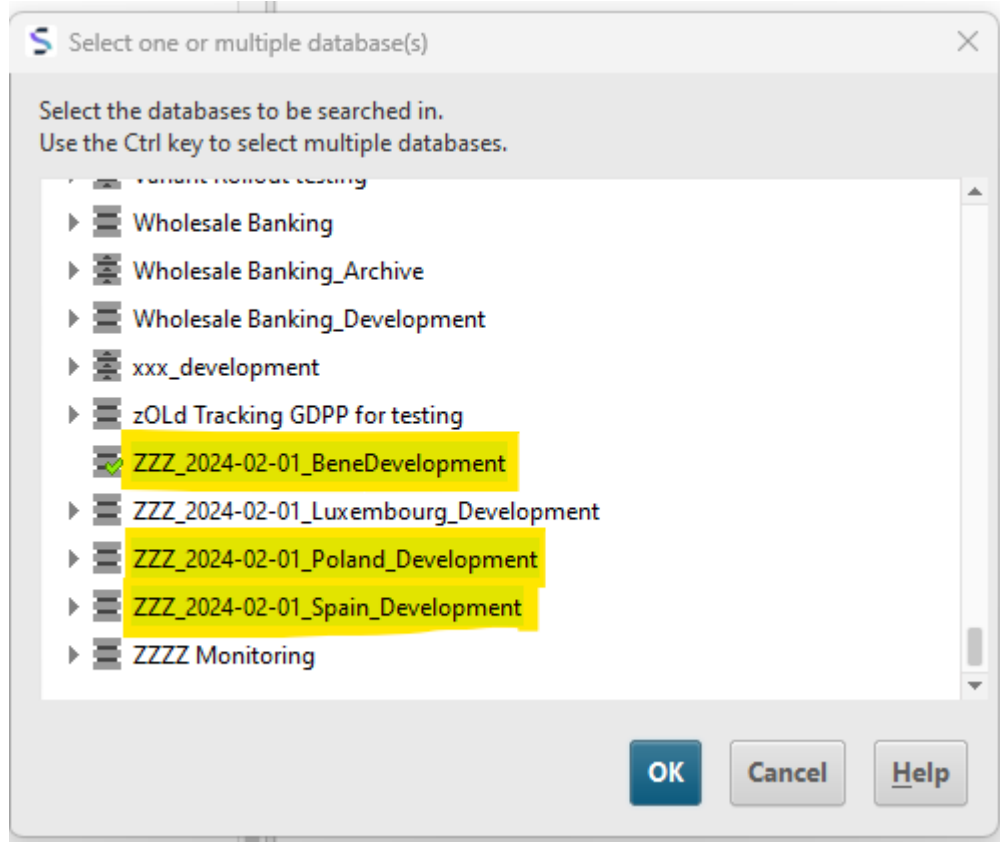
FAI – RUN

Selecteer het filter bestand



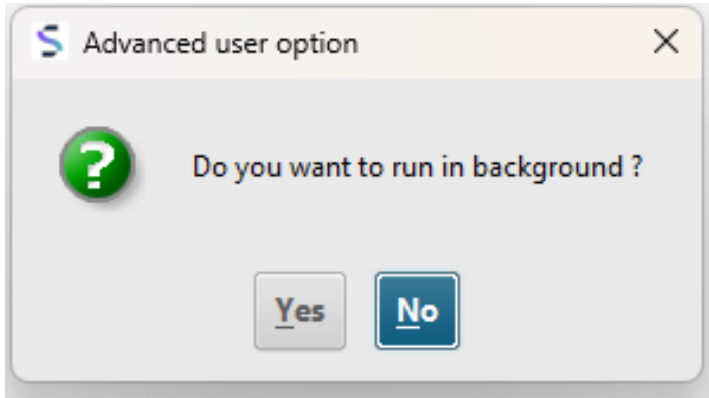
FAI – RUN

Selecteer alle databases waarop je wilt draaien



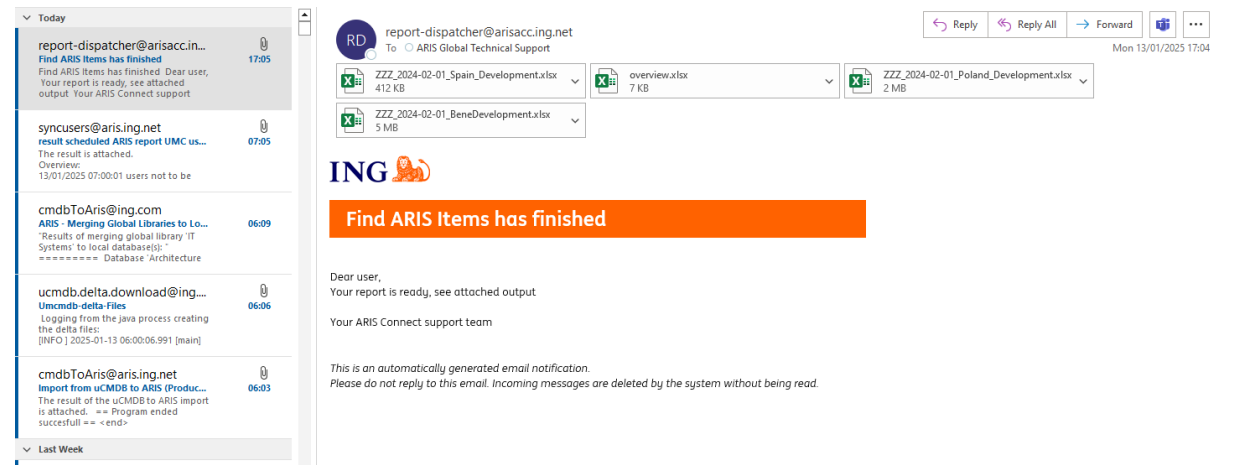
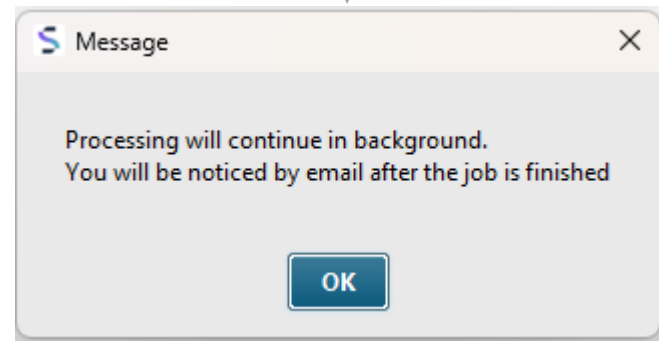
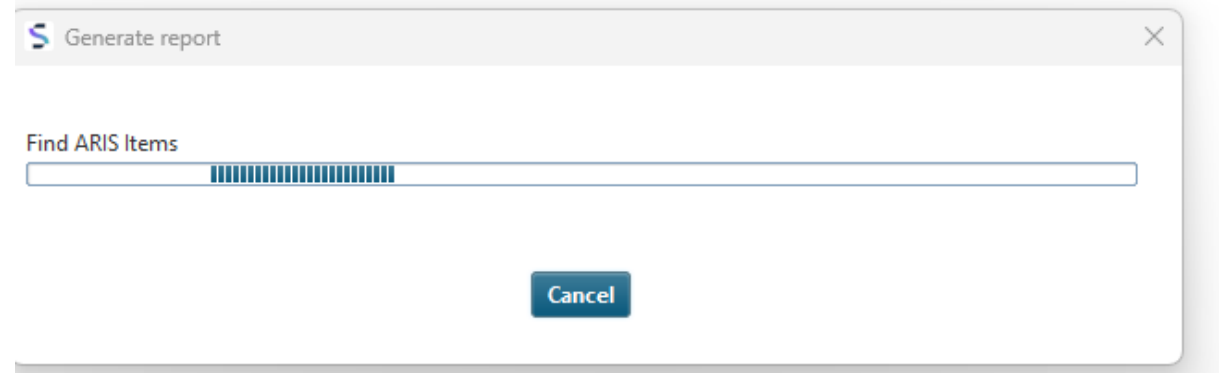
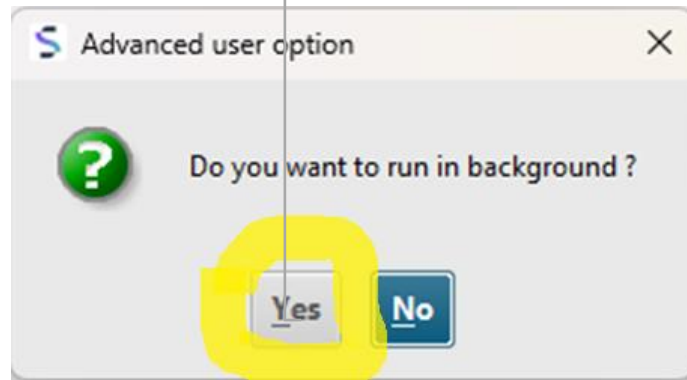
FAI – RUN

Kies run in foreground of background



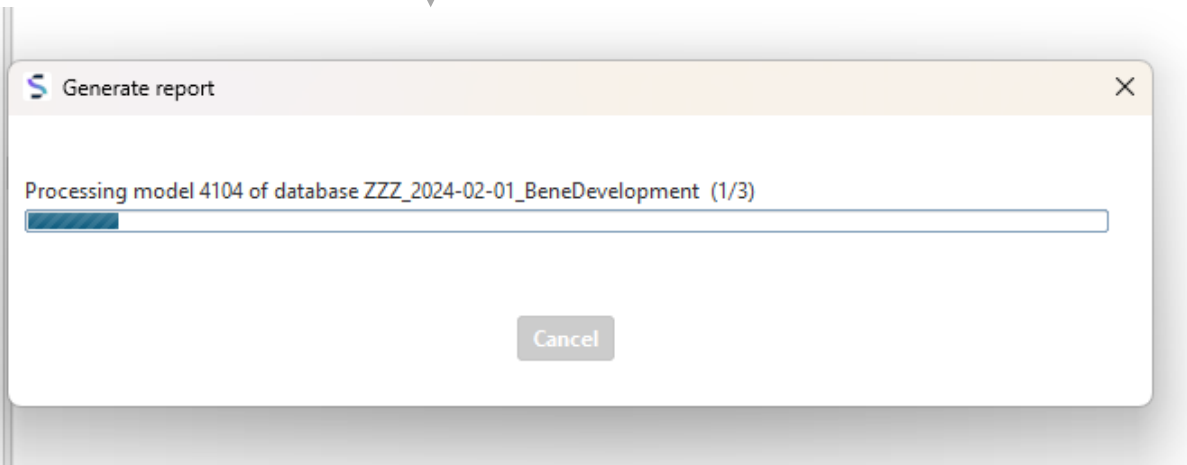
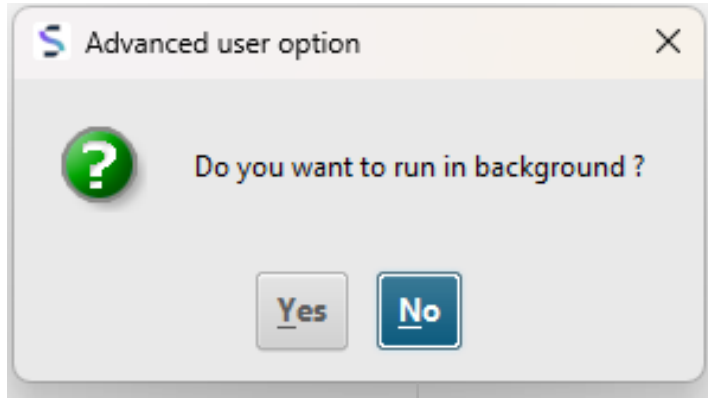
FAI – RUN

Background run



FAI – RUN

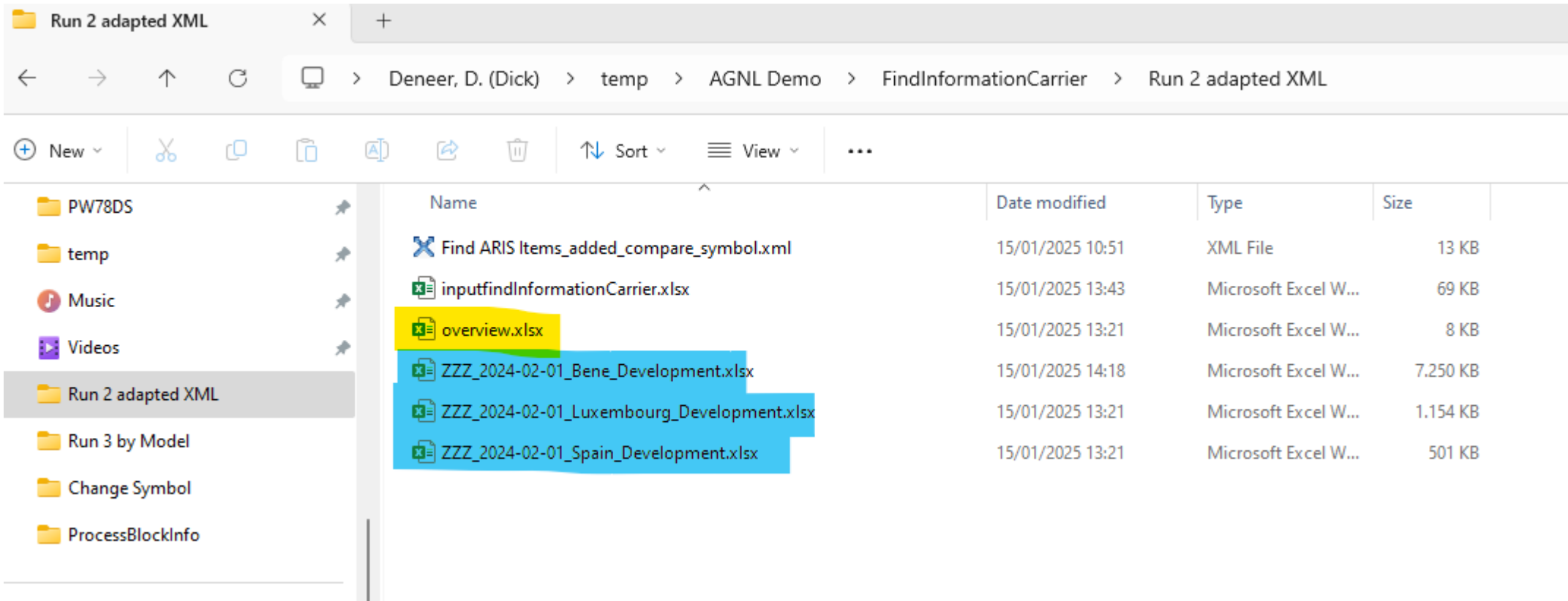
Foreground run



FAI – OUTPUT

De output bestaat uit :

- Een overview excel
- En een excel voor iedere verwerkte database



The screenshot shows a Windows File Explorer window with the following details:

- Address bar: Deneer, D. (Dick) > temp > AGNL Demo > FindInformationCarrier > Run 2 adapted XML
- Navigation pane (left): Shows folders including PW78DS, temp, Music, Videos, Run 2 adapted XML (selected), Run 3 by Model, Change Symbol, and ProcessBlockInfo.
- Main pane (right): Displays a table of files with columns for Name, Date modified, Type, and Size.

Name	Date modified	Type	Size
Find ARIS Items_added_compare_symbol.xml	15/01/2025 10:51	XML File	13 KB
inputfindInformationCarrier.xlsx	15/01/2025 13:43	Microsoft Excel W...	69 KB
overview.xlsx	15/01/2025 13:21	Microsoft Excel W...	8 KB
ZZZ_2024-02-01_Bene_Development.xlsx	15/01/2025 14:18	Microsoft Excel W...	7.250 KB
ZZZ_2024-02-01_Luxembourg_Development.xlsx	15/01/2025 13:21	Microsoft Excel W...	1.154 KB
ZZZ_2024-02-01_Spain_Development.xlsx	15/01/2025 13:21	Microsoft Excel W...	501 KB

FAI – OUTPUT

Overview Excel –sheet Overview

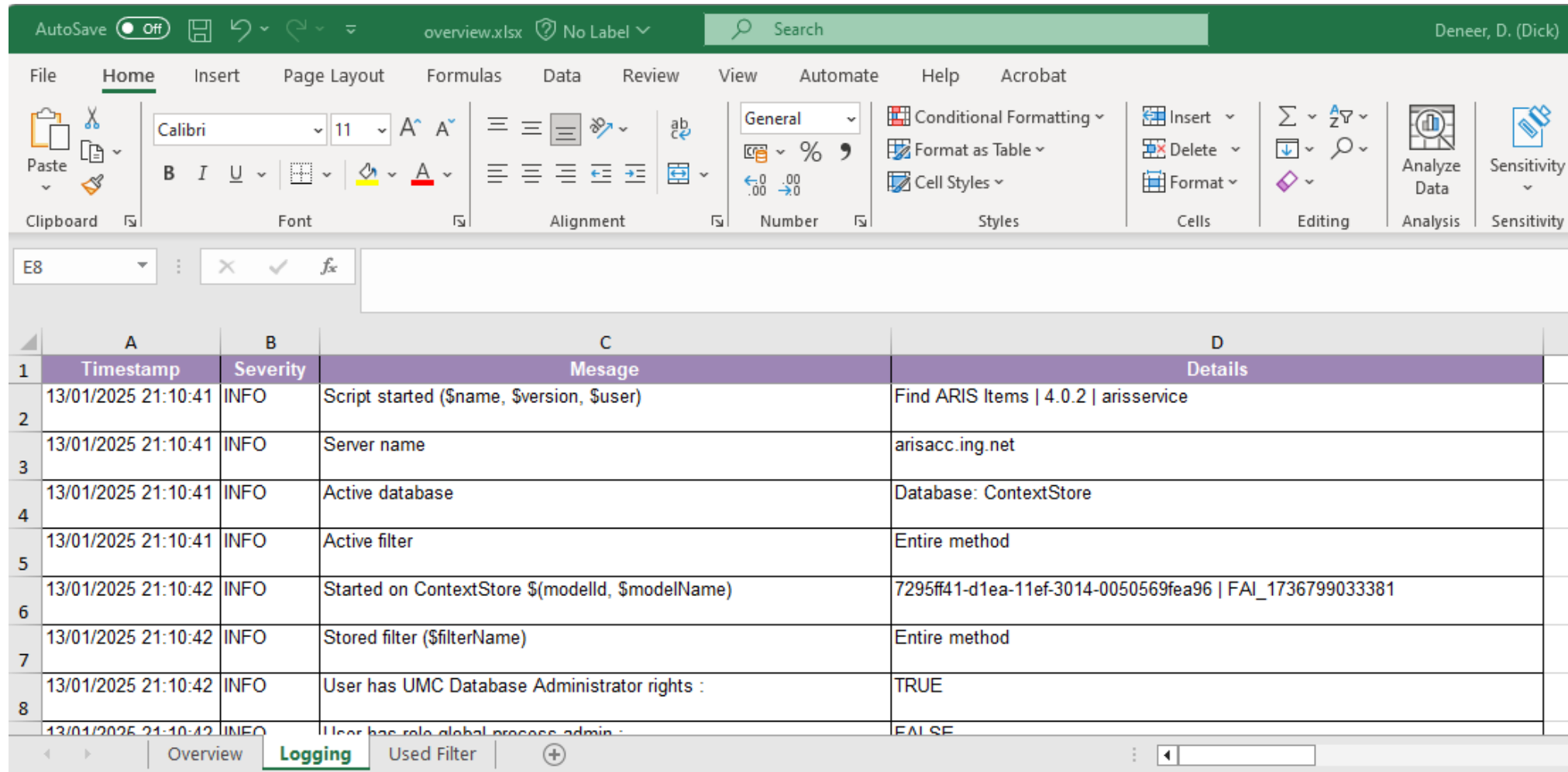
The screenshot displays the Microsoft Excel interface with the following data table:

	A	B	C	D	E
1	Database	Nr of checked models	Nr of affected models	Nr of printed symbols	Processing time (HH:MM:SS)
2	ZZZ_2024-02-01_Bene_Development	14902	5897	58539	00:08:24
3	ZZZ_2024-02-01_Luxembourg_Development	3505	1302	11291	00:01:29
4	ZZZ_2024-02-01_Spain_Development	2878	565	4831	00:00:45
5					
6		<i>Total nr of processed models</i>	<i>Nr of models where filtered situation exists</i>	<i>Nr of found situations specified in filter</i>	
7					
8					
9					

The interface also shows the ribbon with tabs for File, Home, Insert, Page Layout, Formulas, Data, Review, View, Automate, Help, and Acrobat. The status bar at the bottom indicates 'Ready', 'Accessibility: Investigate', 'Count: 5', and 'Display Settings'.

FAI – OUTPUT

Overview Excel –Sheet Logging



The screenshot shows the Microsoft Excel interface with the following data in the 'Logging' sheet:

	A	B	C	D
1	Timestamp	Severity	Message	Details
2	13/01/2025 21:10:41	INFO	Script started (\$name, \$version, \$user)	Find ARIS Items 4.0.2 arisservice
3	13/01/2025 21:10:41	INFO	Server name	arisacc.ing.net
4	13/01/2025 21:10:41	INFO	Active database	Database: ContextStore
5	13/01/2025 21:10:41	INFO	Active filter	Entire method
6	13/01/2025 21:10:42	INFO	Started on ContextStore \$(modelId, \$modelName)	7295ff41-d1ea-11ef-3014-0050569fea96 FAI_1736799033381
7	13/01/2025 21:10:42	INFO	Stored filter (\$filterName)	Entire method
8	13/01/2025 21:10:42	INFO	User has UMC Database Administrator rights :	TRUE
9	13/01/2025 21:10:42	INFO	User has role global process admin :	FALSE

FAI – OUTPUT

Overview Excel –Sheet Used Filter

The screenshot shows the Microsoft Excel interface with the 'Used Filter' sheet selected. The table contains the following data:

	A	L	M	N	O
1	Occurrence Symbol Type Nr	#Occurrence Symbol Name	ZZZ_2024-02-01_Bene_Development	ZZZ_2024-02-01_Luxembourg_Development	ZZZ_2024-02-01_Spain_Development
2	8060b1f1-7fce-11e6-688d-00505680477c	Emotion (65754)	825	0	25
3	218	Communication (218)	9889	1074	857
4	347	Consideration (347)	0	0	0
5	891	General documentation (891)	868	0	0
6	29	Document (29)	551	361	134
7	563434f0-c782-11eb-1871-0050568bc76d	Pre assessment question (66427)	46406	9856	3815
8					
9					
10					
11					

FAI – OUTPUT

Excel databestand per database gegenereerd door FAI

The screenshot shows the Microsoft Excel interface with the following data table:

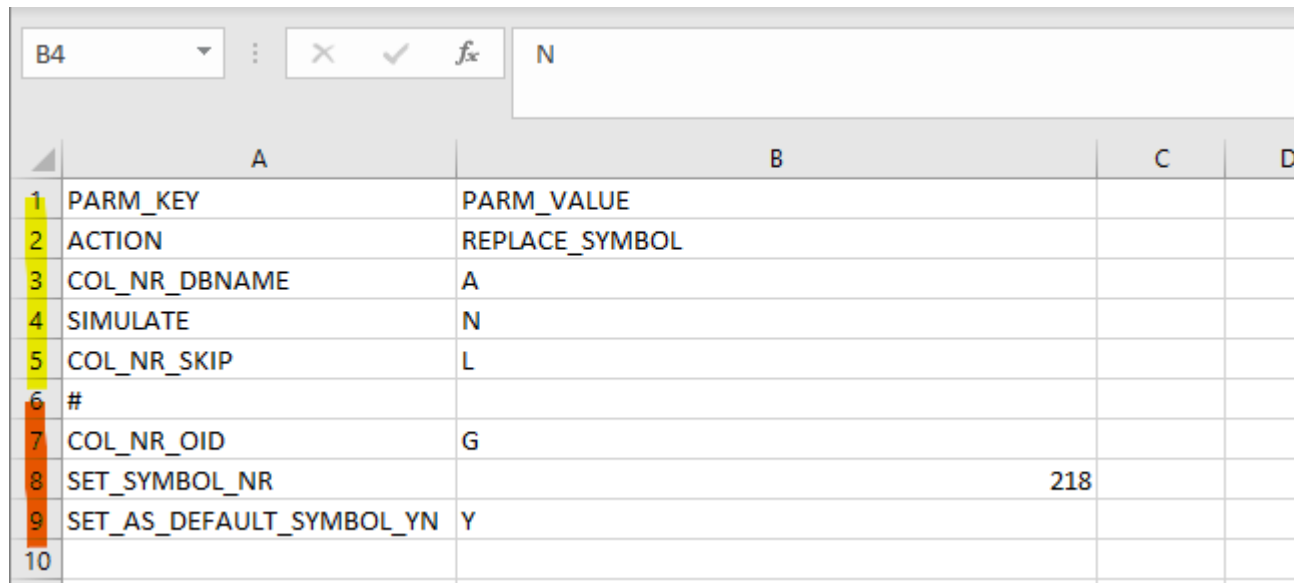
	A	B	C	D	G	H	I	J	K	L	M
	Database Name	Model Name	Model Guid	Model Type	Occ ObjectID	Object Name	Occ Symbol	Occ Symbol Nr	Default Symbol Nr	Same Symbol	Object Guid
1	ZZZ_2024-02-01_Bene_Development	Administer ringfencing	1d60937b-de3a-11eb-2ade-0050568bd9a	Process steps	bv:u:L+7XATx4m9wQy:x:L+33+c)	Ringfencing Communication	Communication (218)	218	218	Y	f8016ddf-9403-11ee-51ee-0050568bd88a
2	ZZZ_2024-02-01_Bene_Development	Administer ringfencing	1d60937b-de3a-11eb-2ade-0050568bd9a	Process steps	bv:u:L+5XQ1jJML6L#M:x:L+33+c)	Ringfencing letter	Communication (218)	218	891	N	f8016dc5-9403-11ee-51ee-0050568bd88a
3	ZZZ_2024-02-01_Bene_Development	Administer ringfencing	1d60937b-de3a-11eb-2ade-0050568bd9a	Process steps	bv:u:L+1FuwWd9DtF:x:L+33+c)	WPI Party Marking	WorkPlace Instruction (WPI) (891)	891	891	Y	05ef1350-0ced-11ed-145a-0a0027000004

Change ARIS Items

Wijzig een symbool

De output bestanden van FAI kunnen gebruikt worden als invoer voor Change ARIS Items.

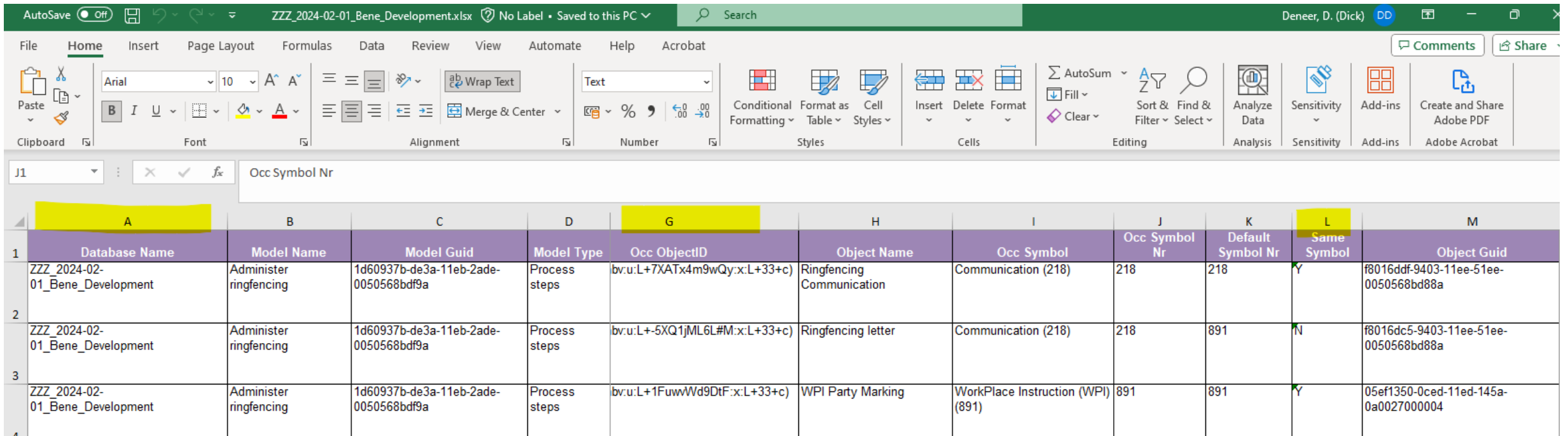
We moeten ook een input bestand maken waarmee we aangeven welke actie we willen uitvoeren en waar sommige waarden gevonden kunnen worden in de FAI output.



	A	B	C	D
1	PARM_KEY	PARM_VALUE		
2	ACTION	REPLACE_SYMBOL		
3	COL_NR_DBNAME	A		
4	SIMULATE	N		
5	COL_NR_SKIP	L		
6	#			
7	COL_NR_OID	G		
8	SET_SYMBOL_NR		218	
9	SET_AS_DEFAULT_SYMBOL_YN	Y		
10				

Change ARIS Items

Excel databestand gegenereerd door FAI

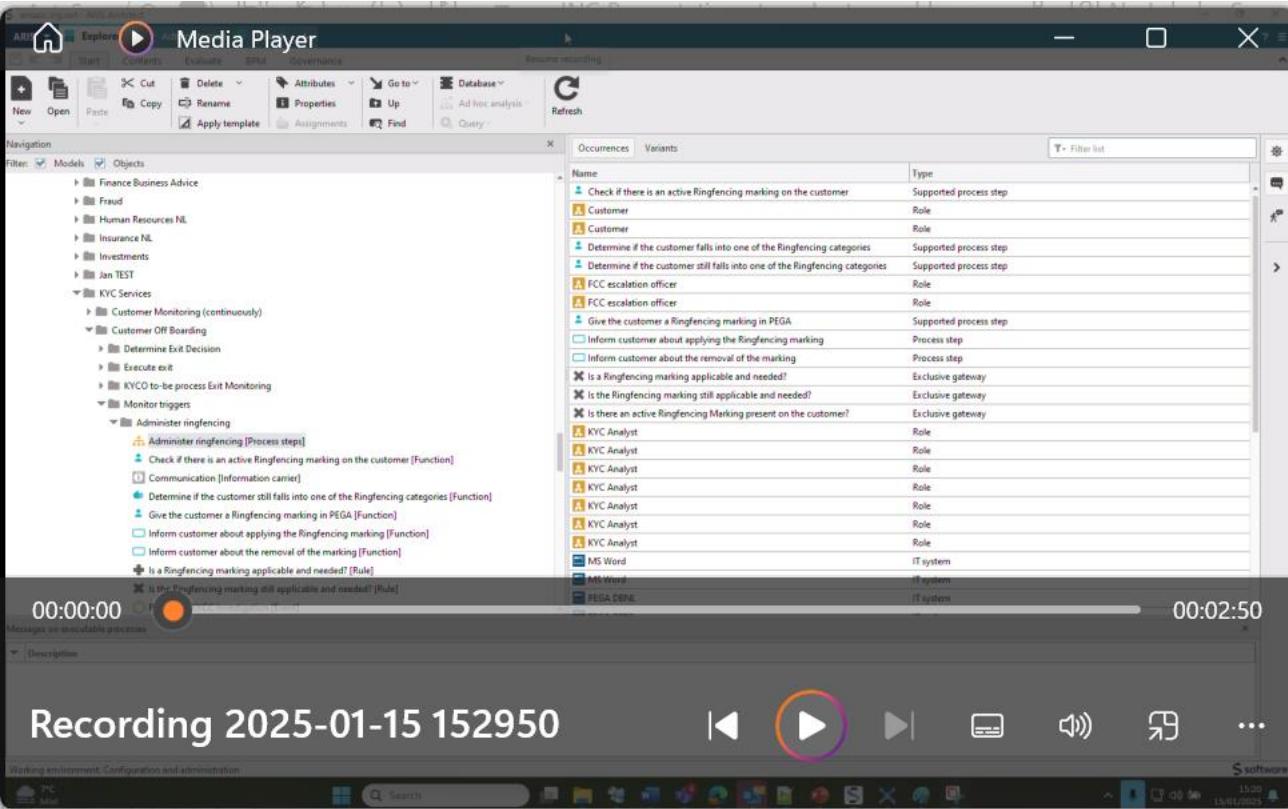


The screenshot shows the Microsoft Excel interface with the following data table:

	A	B	C	D	G	H	I	J	K	L	M
	Database Name	Model Name	Model Guid	Model Type	Occ ObjectID	Object Name	Occ Symbol	Occ Symbol Nr	Default Symbol Nr	Same Symbol	Object Guid
1	ZZZ_2024-02-01_Bene_Development	Administer ringfencing	1d60937b-de3a-11eb-2ade-0050568bdf9a	Process steps	bv:u:L+7XATx4m9wQy:x:L+33+c)	Ringfencing Communication	Communication (218)	218	218	Y	f8016ddf-9403-11ee-51ee-0050568bd88a
2	ZZZ_2024-02-01_Bene_Development	Administer ringfencing	1d60937b-de3a-11eb-2ade-0050568bdf9a	Process steps	bv:u:L+5XQ1jML6L#M:x:L+33+c)	Ringfencing letter	Communication (218)	218	891	N	f8016dc5-9403-11ee-51ee-0050568bd88a
3	ZZZ_2024-02-01_Bene_Development	Administer ringfencing	1d60937b-de3a-11eb-2ade-0050568bdf9a	Process steps	bv:u:L+1FuwWvd9DtF:x:L+33+c)	WPI Party Marking	WorkPlace Instruction (WPI) (891)	891	891	Y	05ef1350-0ced-11ed-145a-0a0027000004

Change ARIS Items

Run Change ARIS Items



Een alternatief overzicht

Stel dat de gebruiker eigenlijk alleen maar geïnteresseerd was in welke modellen de betreffende symbolen voorkomen.

Dus in de output per model maar 1 rij met aantallen.

Actie: **Find Model**

Filter

	A	B
1	Model Guid	Model Type Nr
2	*	*

XML

```
335         <uue>URL</uue>
336     </col>
337     <col attr="count" ref="model.occlList(8060b1f1-7fce-11e6-688d-00505680477c)">
338         <title>#Emotion</title>
339     </col>
340     <col attr="count" ref="model.occlList(218)">
341         <title>#Communication</title>
342     </col>
343     <col attr="count" ref="model.occlList(347)">
344         <title>#Consideration</title>
345     </col>
```

Een alternatief overzicht

ZZZ_2024-02-01_BeneDevelopment.xlsx No Label

Home Insert Page Layout Formulas Data Review View Automate Help Acrobat

Normal Page Break Preview Page Layout Custom Views

Workbook Views

Ruler Headings Gridlines Formula Bar

Show

Zoom 100% Zoom to Selection

New Window Arrange All Freeze Panes

Split Hide Unhide

Window

View Side by Side Synchronous Scrolling Reset Window Position

Switch Windows

Macros

ZZZ_2024-02-01_Bene_Development

A	B	C	P	Q	R	S	T	S
Database Name	Model Guid	Reported Model	#Communication	#Consideration	#WPI	#Document	#Prea Assessment Question	
_2024-02-Bene_Development	0006f161-7178-11e9-37bf-0050568b5c9f	Execute case manager tasks		0	0	0	0	1
_2024-02-Bene_Development	00098ed1-3e9f-11ea-069d-0050568ba1eb	Provide metadata to documents belonging to consumer loans maintenance process and send to Documentum		0	0	1	0	1
_2024-02-Bene_Development	001782b1-af62-11ed-400b-0050568b8405	14-12-2020 15:02:19		0	0	0	11	11
_2024-02-Bene_Development	001a1fc1-af2b-11ed-5ebe-0050568bda8e	17-06-2021 16:18:42		0	0	0	11	11
_2024-02-Bene_Development	00889b52-96ae-11ea-5dad-0050568bdf9a	STATER - Modify borrower		0	0	1	0	1

Chaining syntax examples

Find Model

```
<col attr="count" ref="model.superiorObjectList(22).item.occlList(82c67ac1-30bc-11e7-2185-000c29e603e6)">  
  <title>Nr of Process Step models with assignmenmet to this block</title>  
</col>  
<col attr="count" ref="model.superiorObjectList(22).item.occlList(f4ceade1-30bc-11e7-2185-000c29e603e6)">  
  <title>Nr of Process Blocl models with assignment to this block</title>  
</col>
```

Find Connection

```
<!-- from source get the outgoing "contributes" connections-->  
<!-- that will lead you to the function step-->  
<col attr="guid" ref="cxn.source.cnxOcclList(OUT,233).item.target.obj">  
  <title>Function Step Guid</title>  
</col>
```


Hoe nu verder

FAI is inmiddels bij ons een populair tool voor het maken van analyses.

Of dit de ultieme oplossing voor onze vragen moeten we zien. FAI zou ook de basis kunnen vormen om de data als tabellen te importeren in POWER BI of in een SQL database. Impact analyses, Data Quality en Dashboarding zou dan daar gebruik van kunnen maken.

Ook XML exports van de complete database zouden als basis kunnen dienen om informatie te laden in een database.