



ability engineering Ltd

Training, Consulting and Mentoring



# Model Management

Special for  
EA Global Summit 2020

The challenge of maintaining model quality and consistency grows exponentially as our models and modelling teams grow. This presentation will offer an approach to find and fix problems, and help your team model right first time.





# My biases – the ones I know about

- EA user since v3.5
- Business analyst, process modeller, team leader, consultant
  - So I don't know SysML or Archimate
- Rather spend 4 hours writing a script than 20 minutes doing something dull
  - BIG bias towards tools
- EA drives me CRAZY
  - But I never use anything else
- Used EA in teams of 2-20
- Worked with EA teams of 2-200



# Assumptions



## For the models and teams I work with:

- Models contain
  - lots of kinds of content
  - lots of projects
- Modellers have
  - Different needs
  - Different skill levels
- Modelling standards
  - Vary across the model
  - Evolve over time
- Model experts
  - Are hard to find
  - And they have enough to do already....

## So...

- Creating model-wide MDGs is too restrictive
  - But re-use the existing built-in and created MDGs
- We need to
  - link modellers to modelling knowledge
  - Take knowledge from model experts, and make it more available..
- ...so they can do more interesting things

# Agenda



**Discover** what you have in your model

**Find and fix** what's wrong

Capture standards in Reference (meta) Models

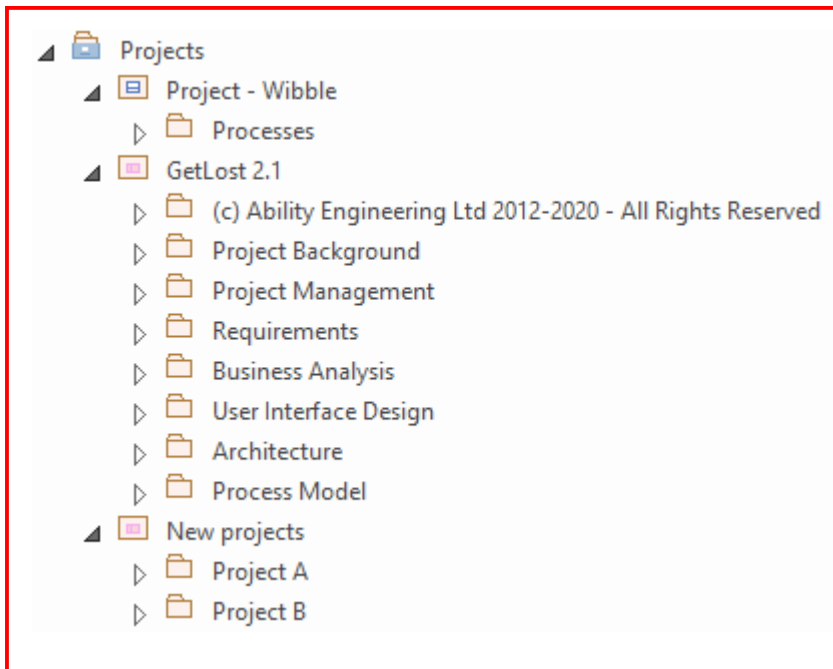
*No time for this today* 😞

Move to **Guided Modelling**, so it doesn't need fixing again



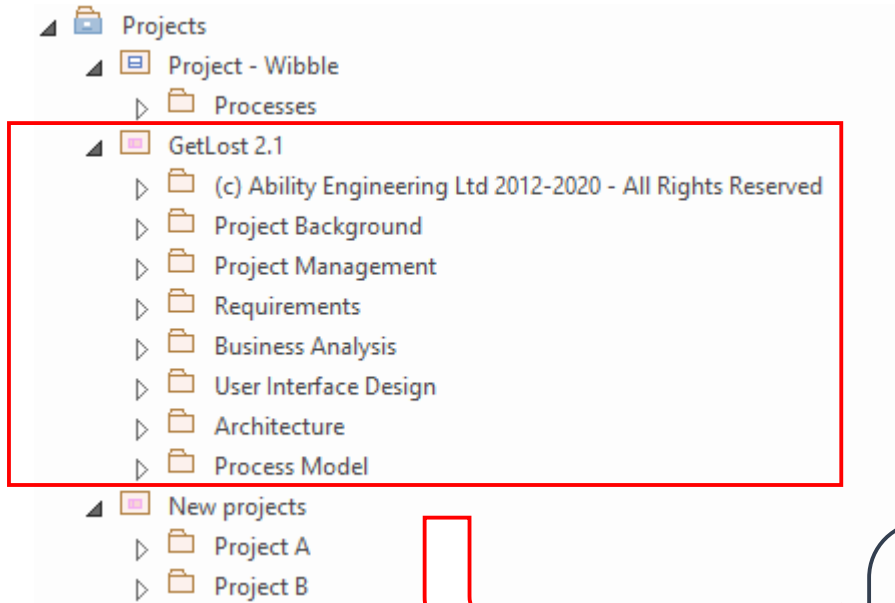
# Discovering what's in your Model

# What's in your model today



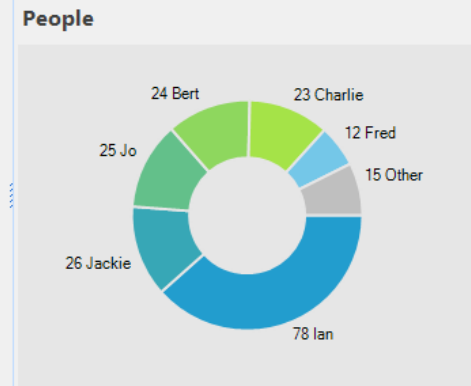
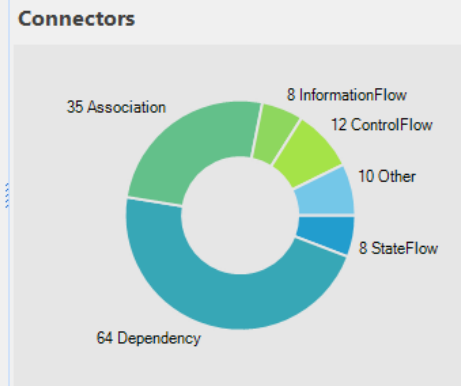
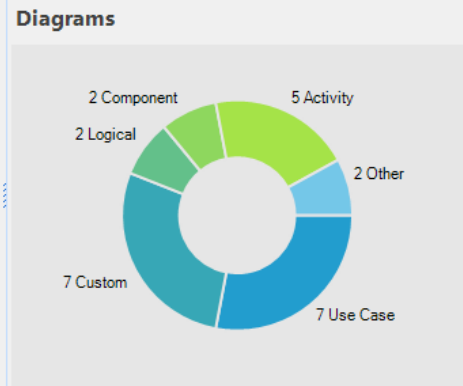
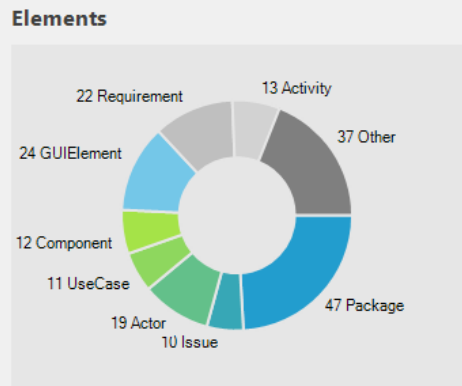
WAY too much to think about

# What's in your PROJECT today

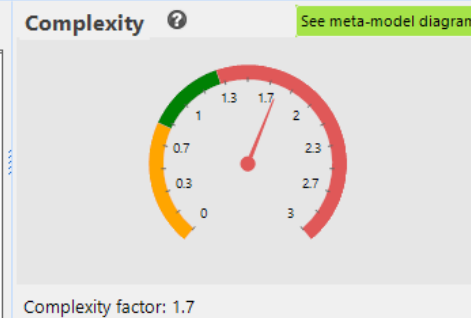
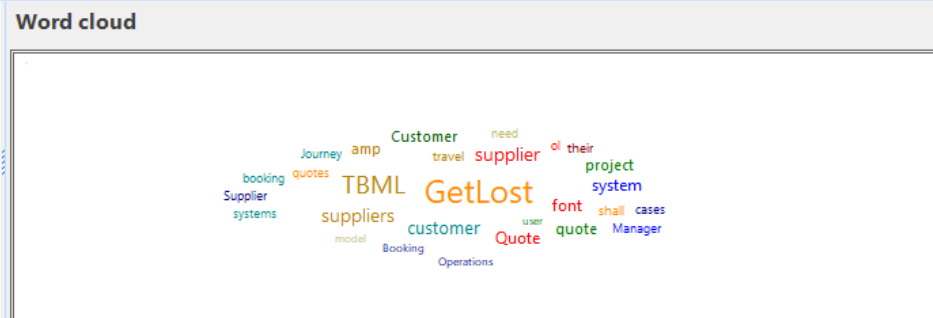


Still a lot to think about





<b>Elements</b>	225	<a href="#">More...</a>
Duplicates	1.8%	<a href="#">More...</a>
Types	30	
<b>Diagrams</b>	25	<a href="#">More...</a>
Empty	8%	<a href="#">More...</a>
<b>Connectors</b>	52	<a href="#">More...</a>



### Top 5 elements

Element	Type	Connections	Diagrams
Mark Ellsworth - CMO	Actor	20	4
Clare Smart - COO	Actor	10	5
Martin Jones - CEO	Actor	8	3
Pierre Carandini - CFO	Actor	7	3
GetLost TBML Interface	Component	7	2

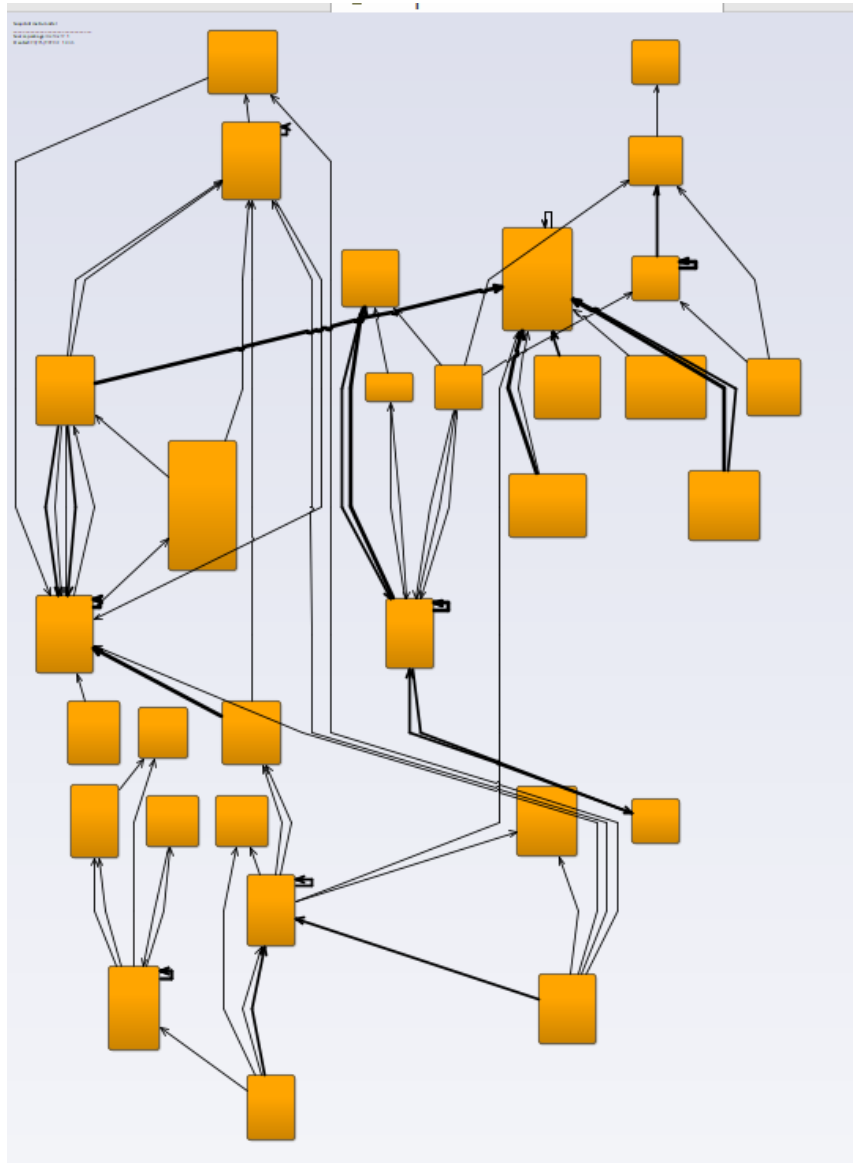
### Top 5 diagrams

Diagram	Type	Elements	Element types
Get Quote	Custom	22	6
Establish New supplier	Activity	21	5
Use Cases	Use Case	19	5
Board (High Level) Requirements - map to owners (hidd...	Use Case	14	4
Domain Model	Logical	18	3

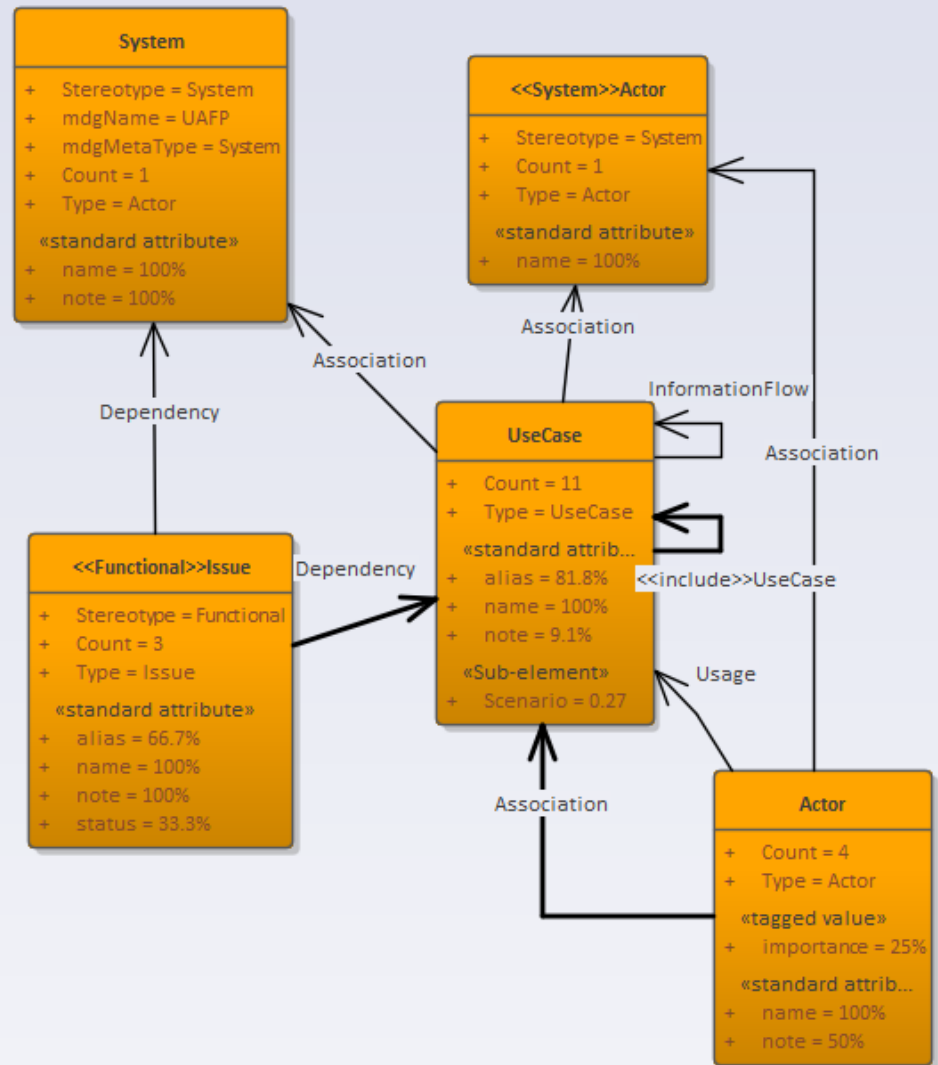
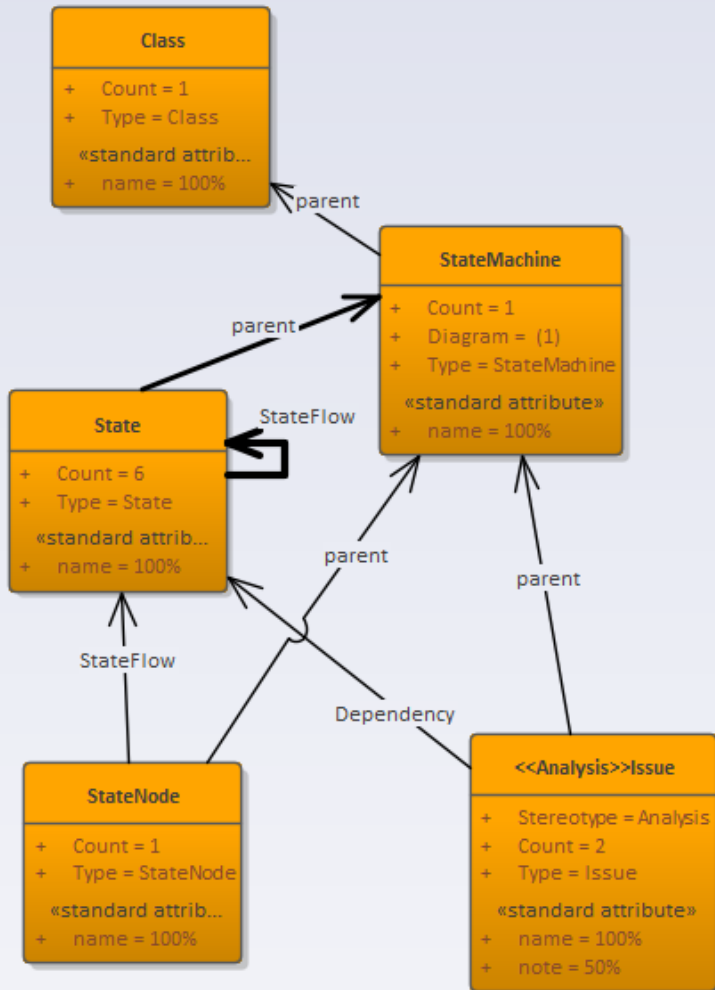
- One-page summary of what's happening in this part of the model
- **FREE** function of Model Expert



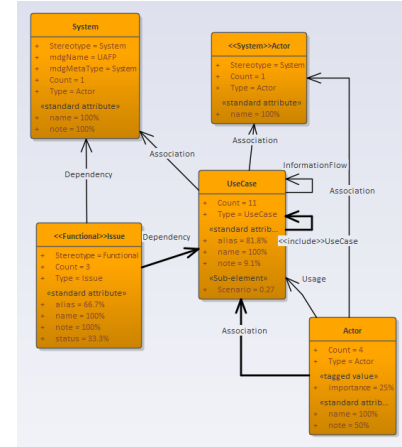
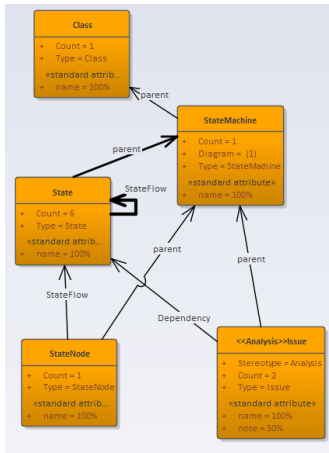
# Project Meta-model



- Lots going on here
- This may be a small project, but it has many kinds of model in it
- Pick a small area: Business Analysis



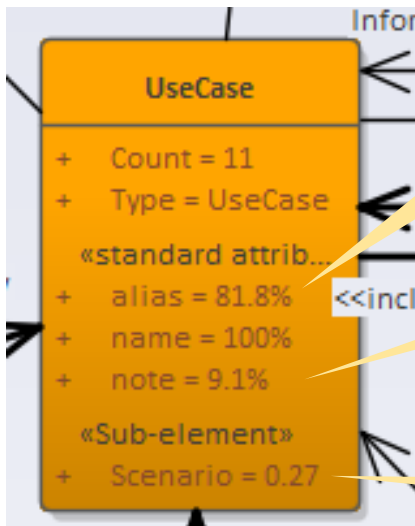
# What's interesting

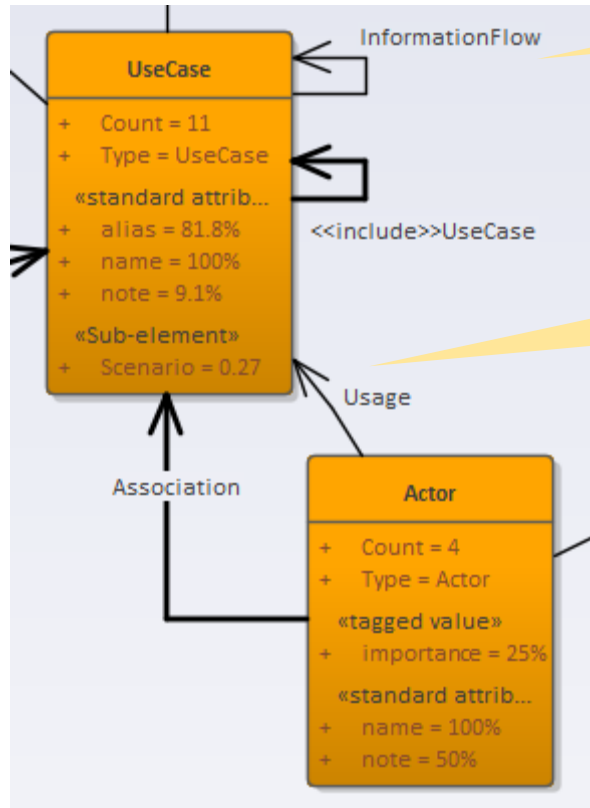


*Alias is used - mostly*

*Not many notes*

*Or scenarios*

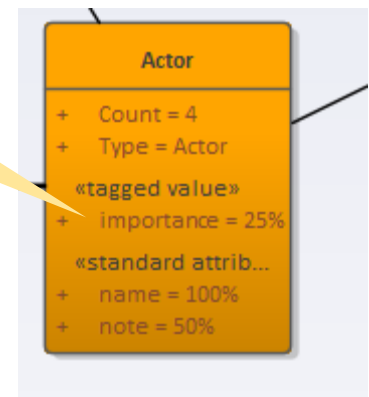


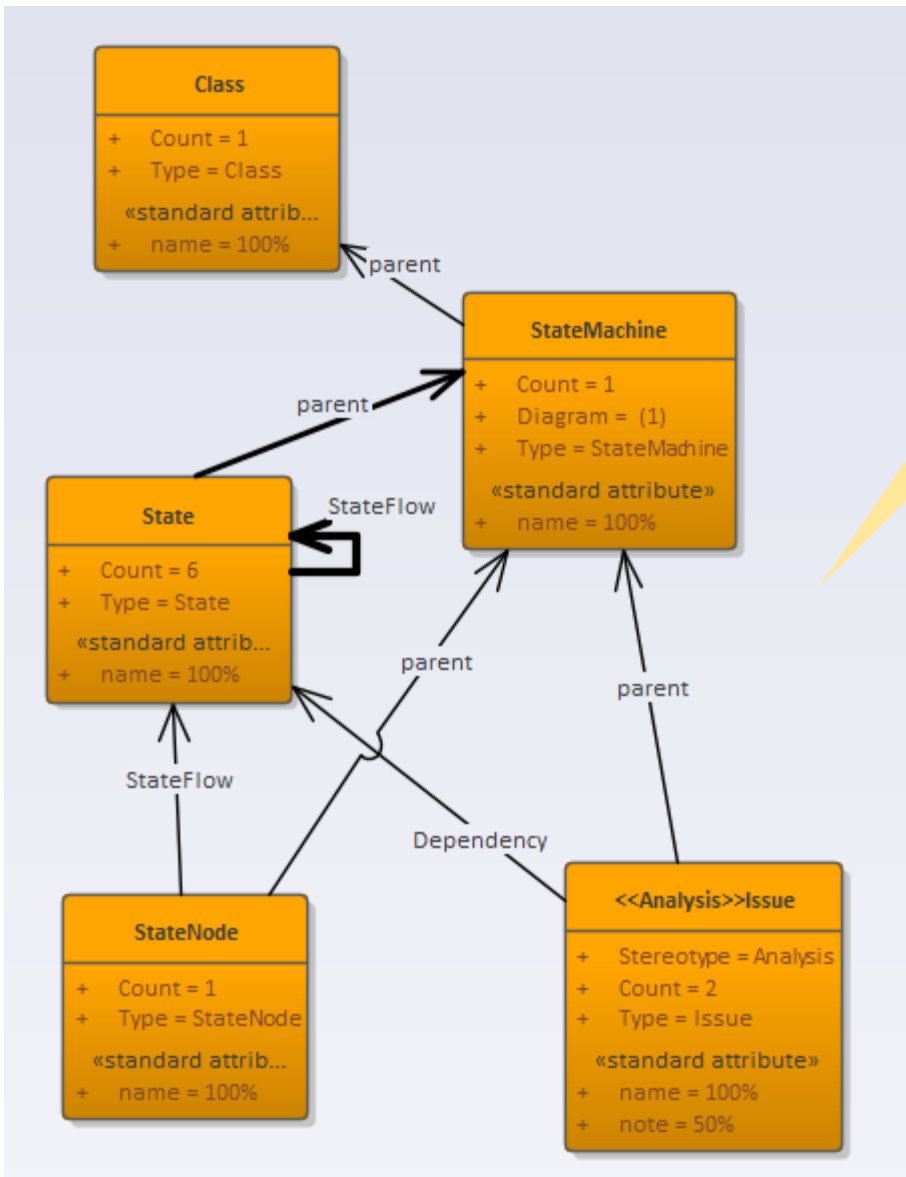


*Strange connection*

*Another strange connection*

*Someone has created this TV, for just one Actor element*





*Nothing interesting here. This is standard UML state modelling 😊*

# Find and Fix



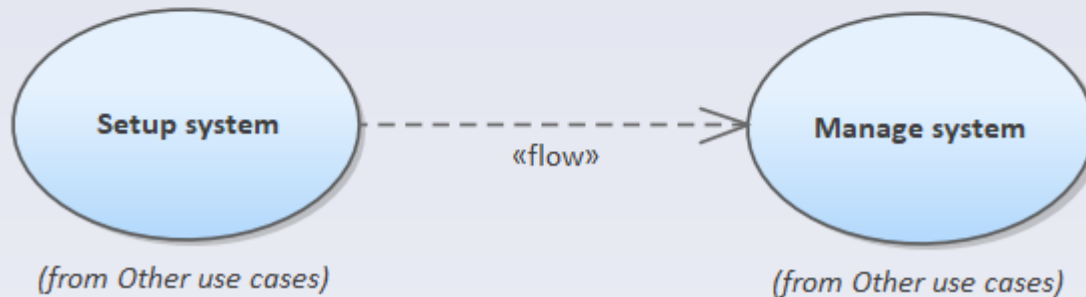
Diagram showing:

**Start element:** UseCase

**End element:** UseCase

**Joined by connector type:** InformationFlow

**Note:** other connectors may be shown







- Right-click on the 'Information Flow' link in the MM
- Lucky there is only one!
- (Not part of the free Model Expert)

# Find and Fix (2)

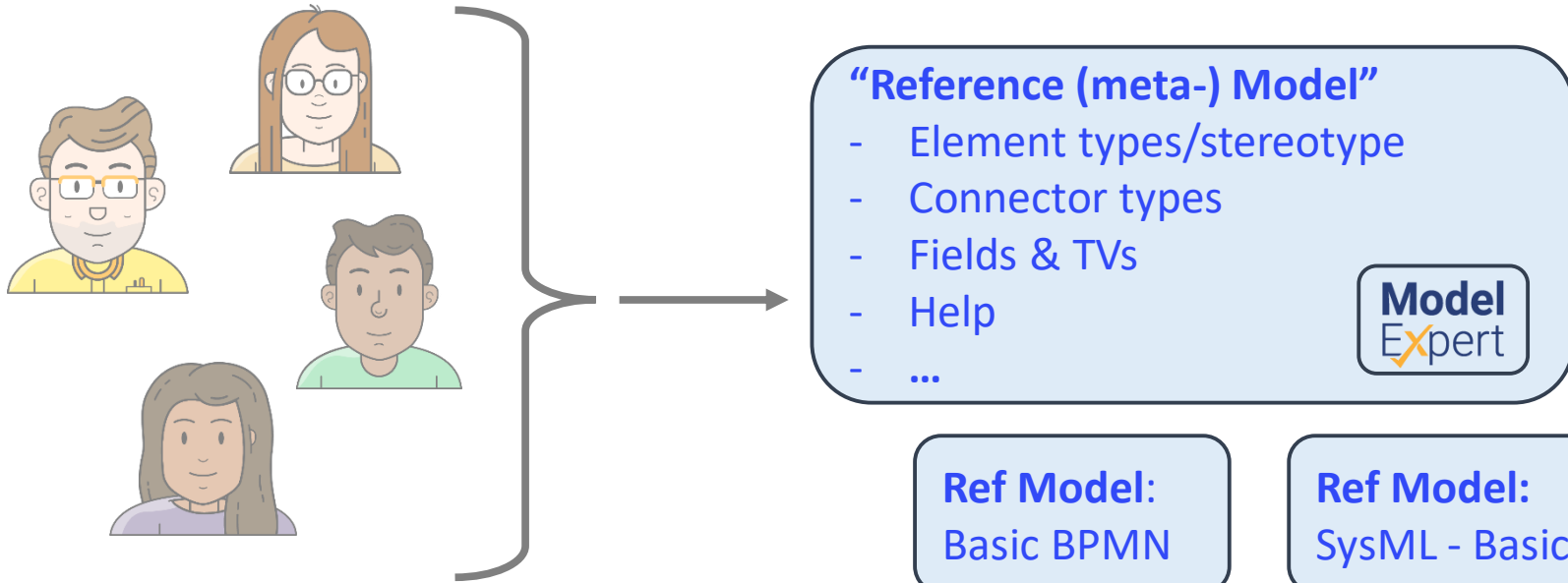


All occurrences of the 'Actor' element type

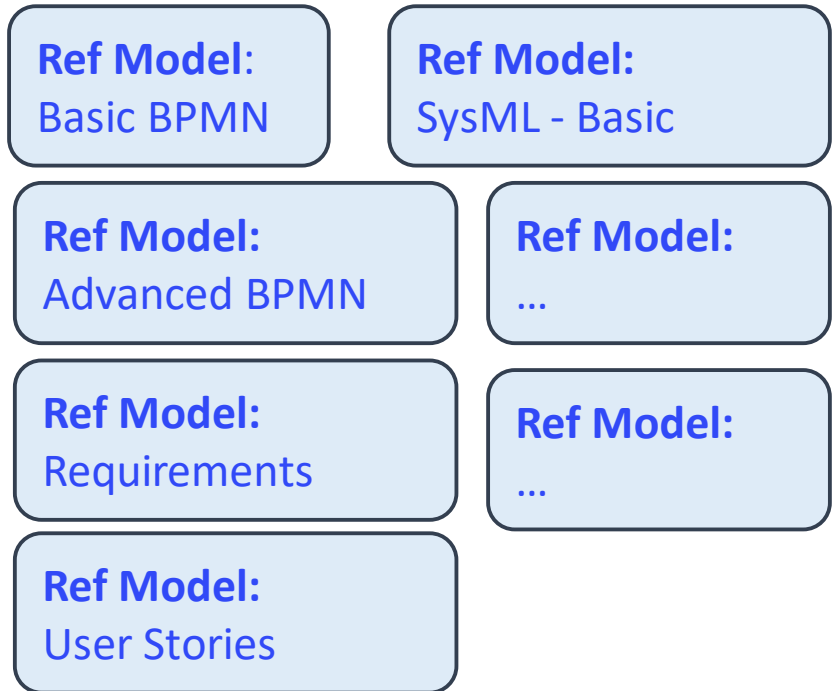
			
<b>Browser</b>	<b>Customer</b>	<b>Manager</b>	<b>Supplier</b>
<i>(from Actors)</i>	<i>(from Actors)</i>	<i>(from Actors)</i>	<i>(from Actors)</i>

*Child actors? 😊*

# Capture modelling knowledge

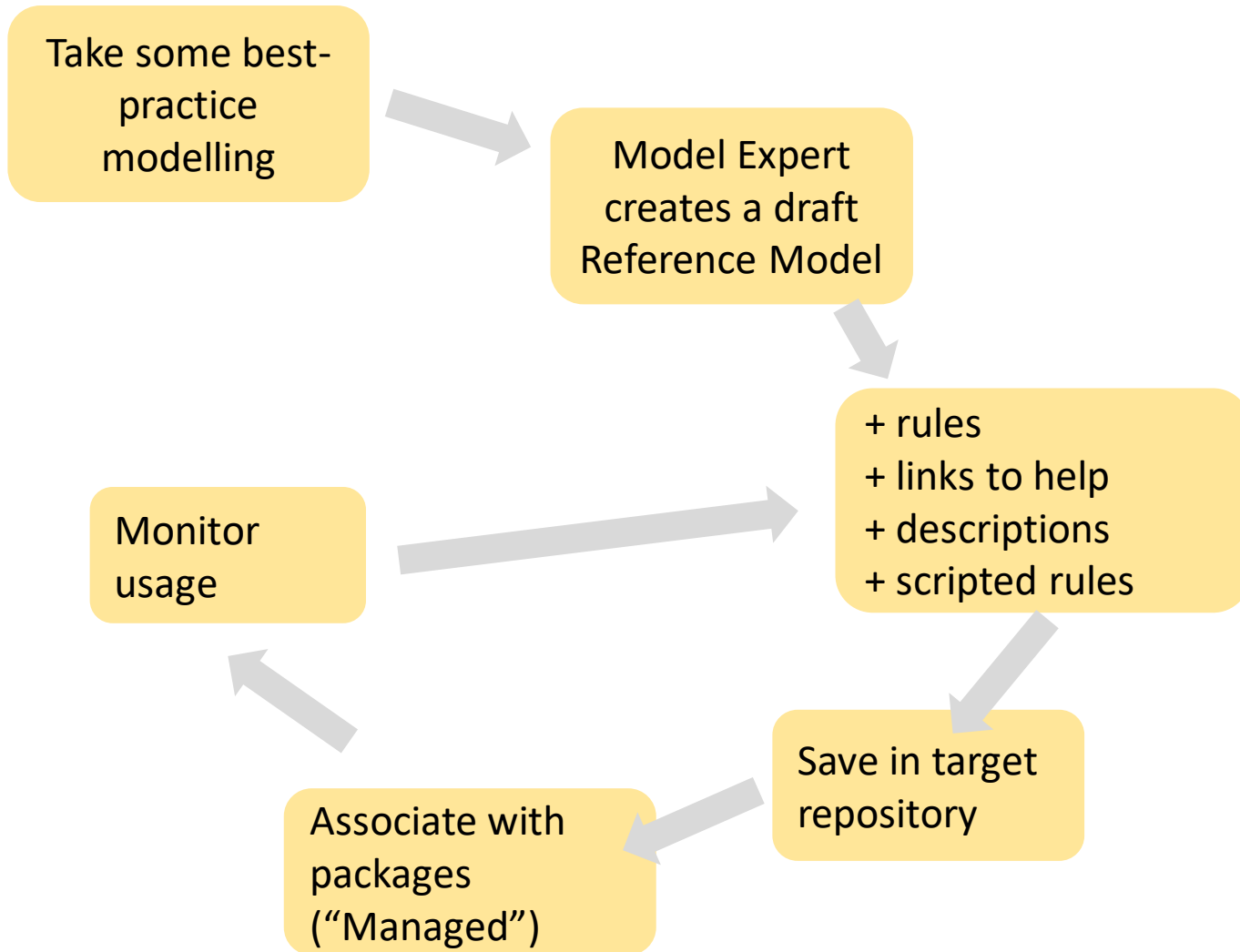


ALL RMs can live in the SAME MODEL  
at the SAME TIME





# Capture modelling knowledge(2)





# Guided Modelling

## The Modeller experience

# Guided Modelling – Setup



Project Management

Requirements

Business Analysis

User Interface Design

Architecture

Process Model

New projects

Project A

Processes

Project B

Example Reference Models

Test cases

Demo

Features

Regression

Example Projects

Scratch

Manage a package

Package Processes

Choose a reference model to manage this package

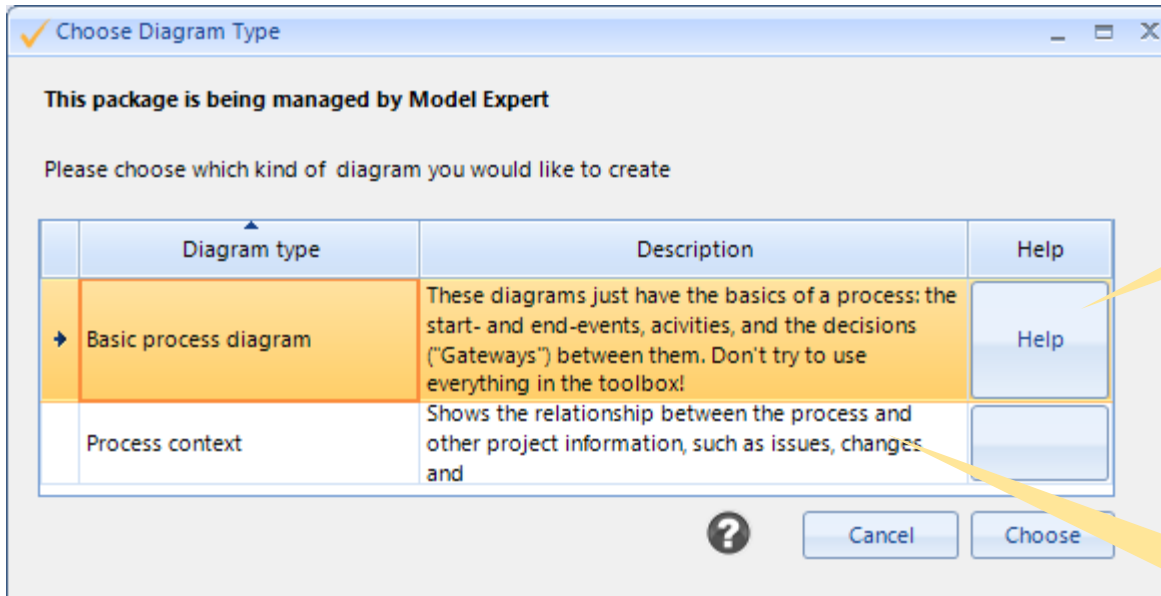
Core BPMN

This is a simplified version of the BPMN language, with a restricted set of Activity and Gateway types. Its also allows for Issues and Domain Model classes to be linked.

? Cancel Save

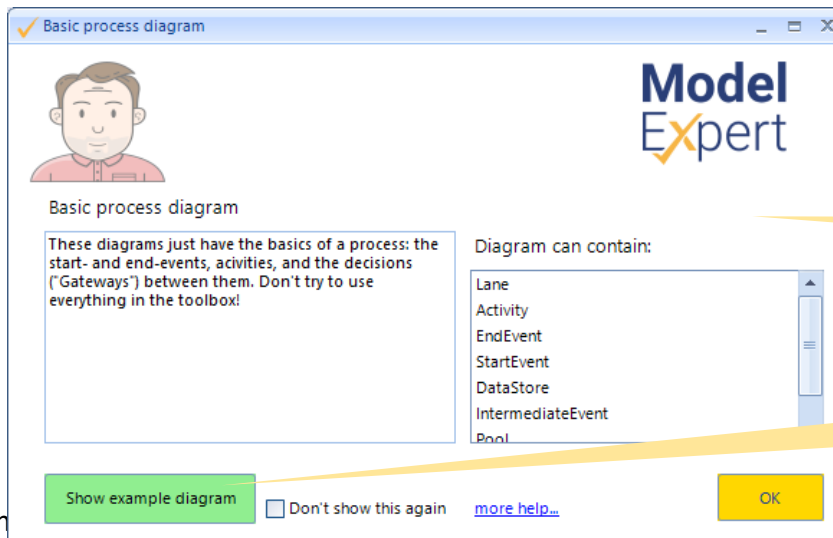
DONE!

# Guided Modelling – user experience



*Link to Intranet, wiki, training material...*

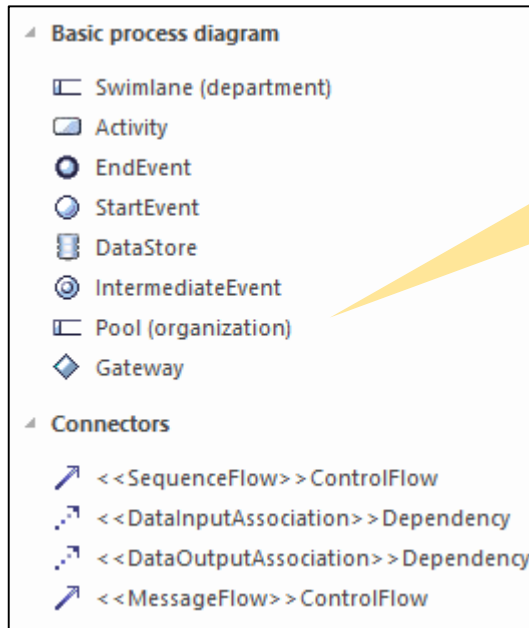
*Your description of this diagram type*



*More help*

*Show another diagram from this repository*

# Guided Modelling – user experience



*Option to generate a diagram toolbox direct from the RM – user just sees a simpler toolbox*

*User*

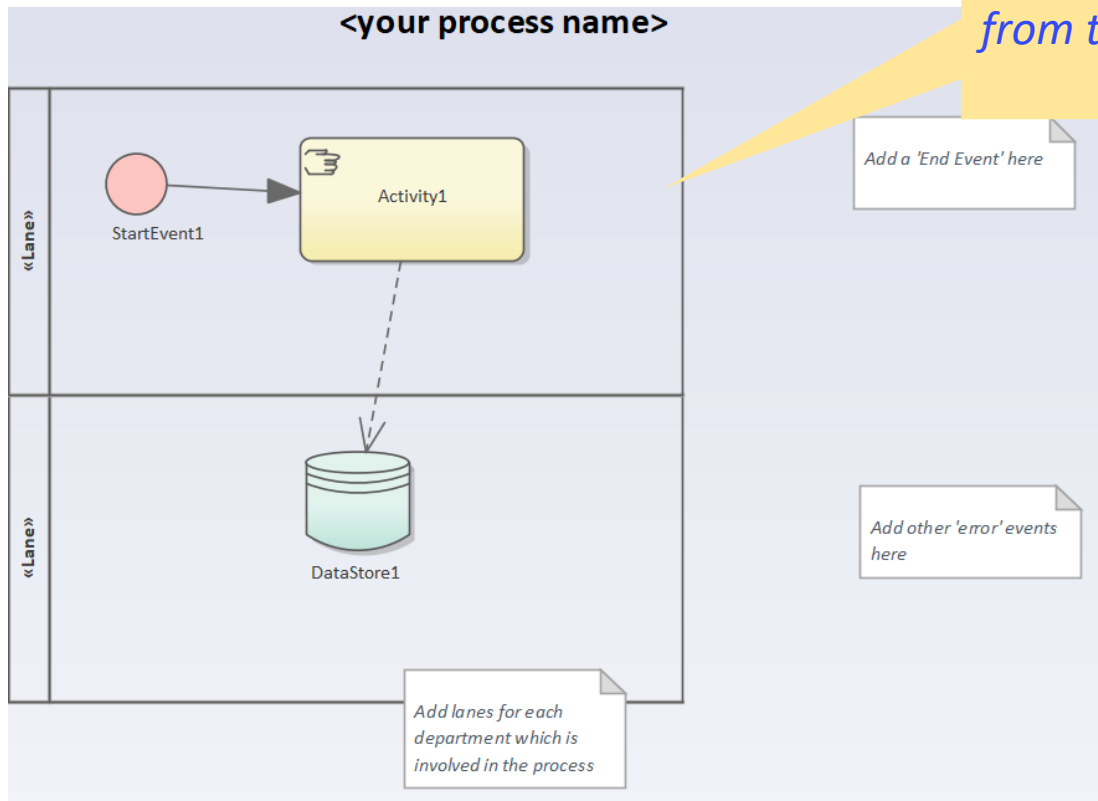
*More help*

*Show another diagram from this repository*

# Guided Modelling – user experience



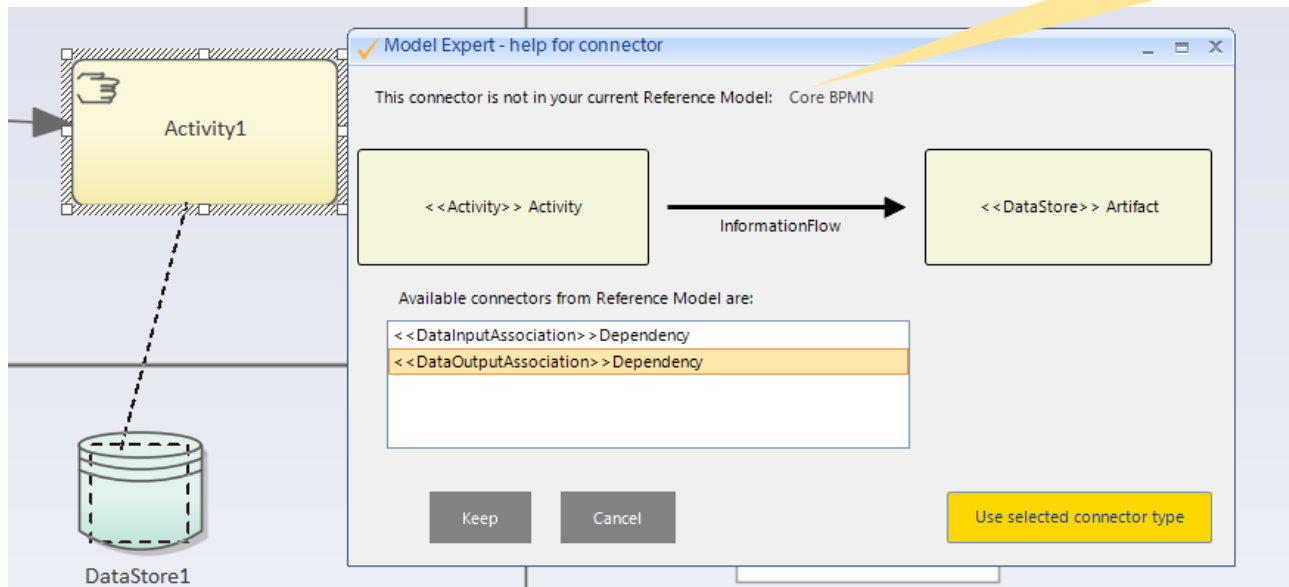
*Add elements and connectors from the toolbox or quick linker*



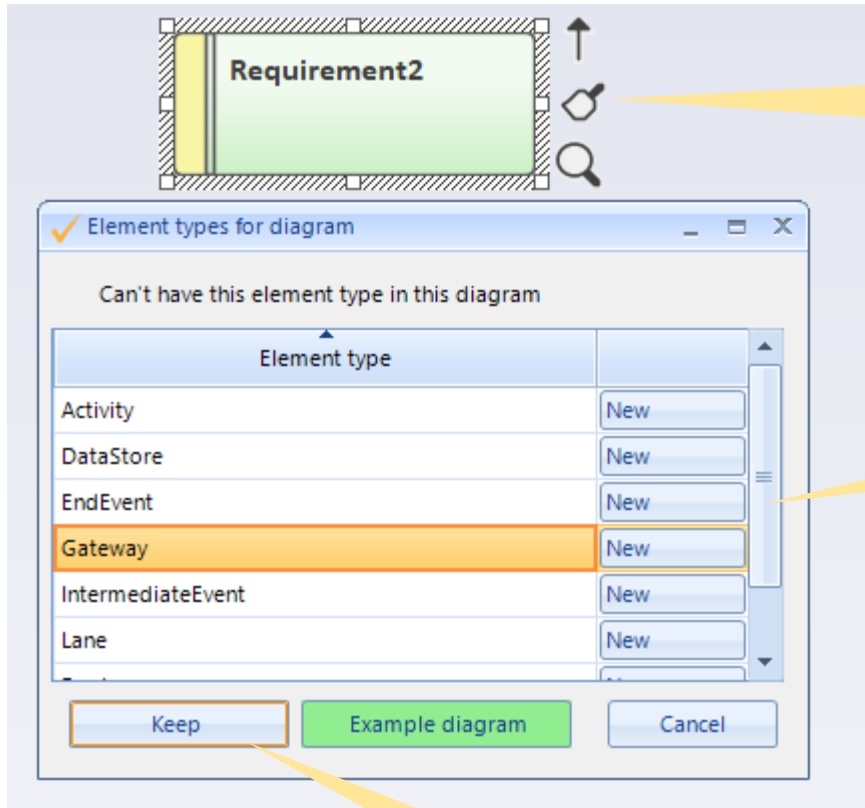
# Guided Modelling – user experience



*If user picks the wrong connector, help them*



# Guided Modelling – user experience



*Element type not allowed in this kind of diagram*

*Choose something else*

*RMs can have Hard or soft option: Soft means users can break the rules*



# Guided Modelling



Larger stakeholder requirements matrix

Title: Larger stakeholder requirements matrix

Notes: Shows the RACI relationship between stakeholders ("Actors") and Requirements. Shows how a relationship matrix is a good way to view and edit this kind of data. May also be validated using a suitable MX Reference Model.

Use Reference Model: Actors and Requirements RACI

Legend

- Responsible
- Consulted
- Accountable
- Informed
- Error

Relationship matrix for: Larger stakeholder requirements matrix

Target

Source

name	Requirement1	Requirement2	Requirement3	Requirement4	Requirement5	Requirement6	Requirement7	Requirement8	Requirement9	Requirement10	Requirement11	Requirement12	Requirement13	Requirement14	Requirement15	Requirement16	Requirement17	Requirement18	Requirement19	Requirement20	Requirement21	Requirement22	Requirement23	Requirement24	Requirement25	Requirement26	Requirement27
Actor1	Responsible														Responsible												
Actor2																											
Actor3																											
Actor4																											
Actor5																											
Actor6																											
Actor7																											
Actor8																											
Actor9																											
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Actor15																											
Actor16																											
Actor17																											
Actor18																											
Actor19																											

Reference models can be applied to a Relationship Matrix

# Summary



**Discover** what you have in your model

**Find and fix** what's wrong

Capture standards in Reference (meta) Models

Move to **Guided Modelling**, so it doesn't need fixing again