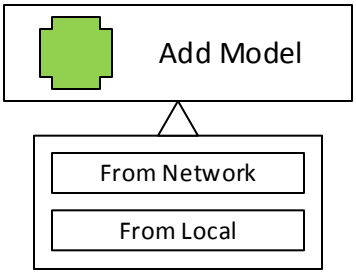
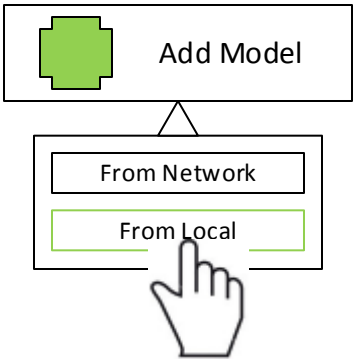
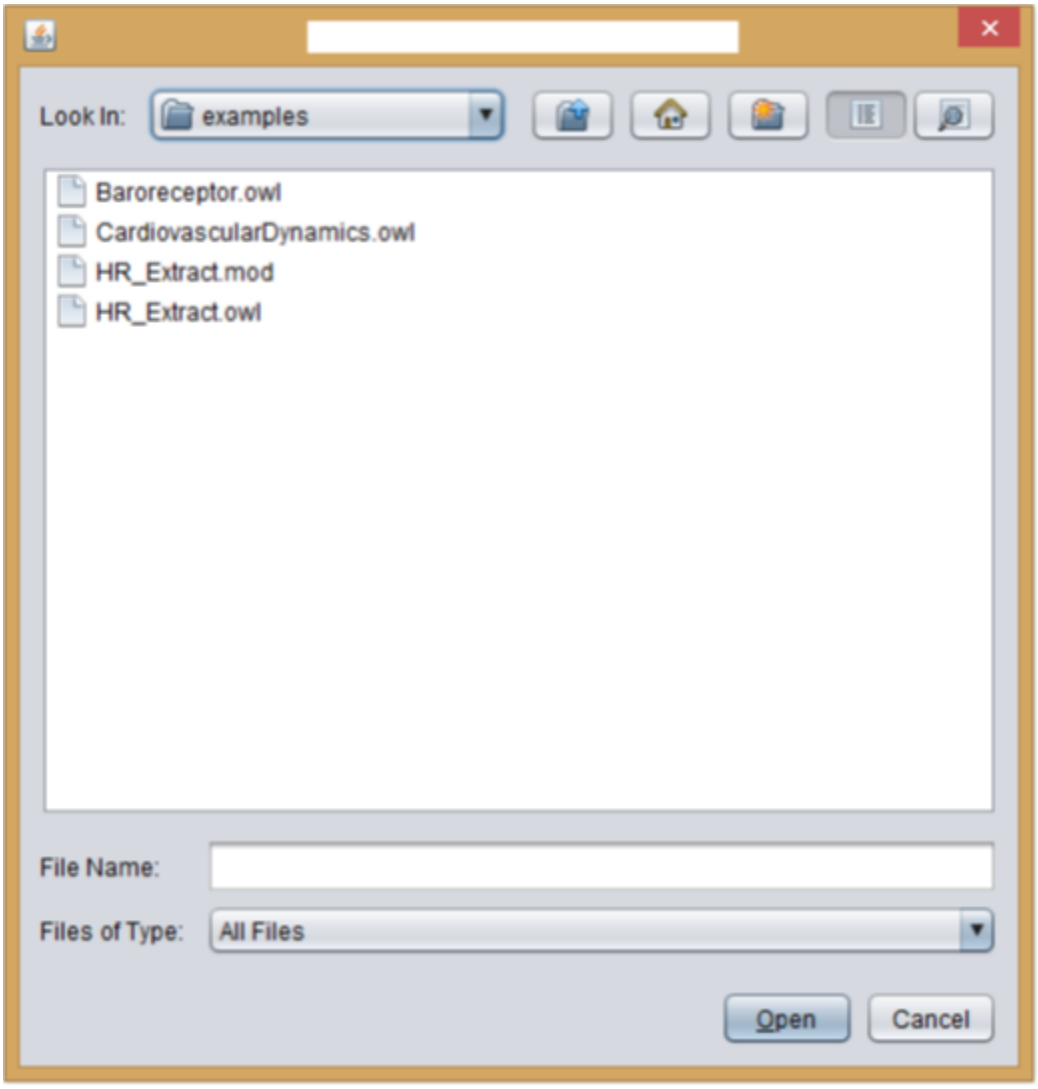


When the composer is empty the “Add Model” flyout is openned

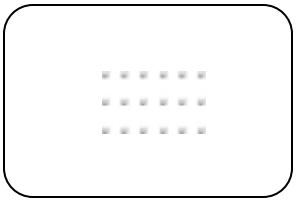


Users can choose a model from their local machine or the network

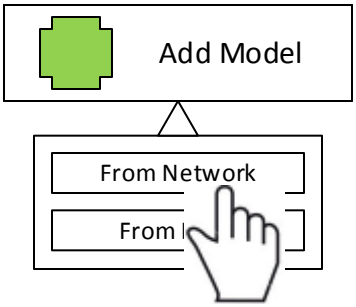
Users select a model from the file picker



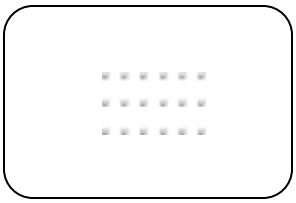
Model D

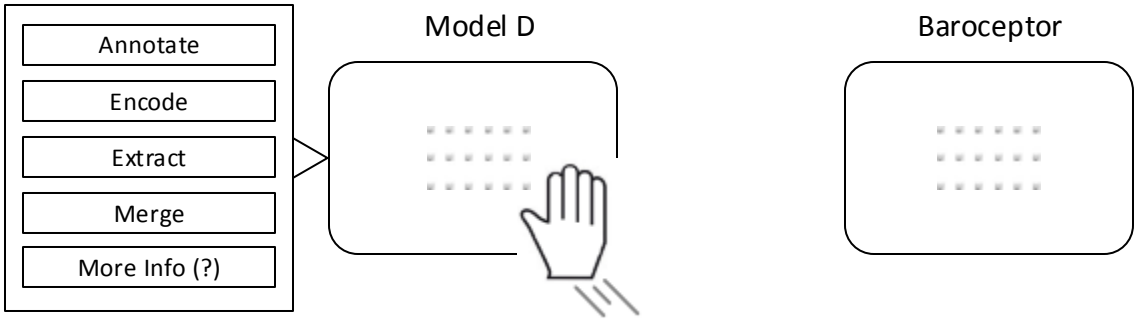


Models are added to the workflow canvas

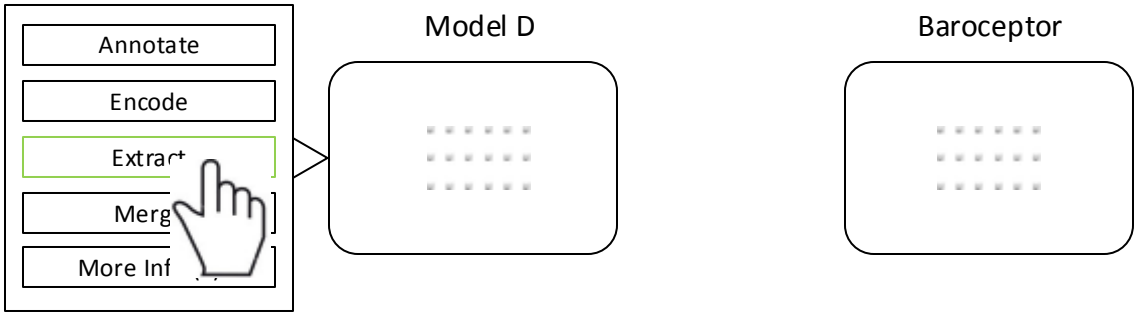


Model D

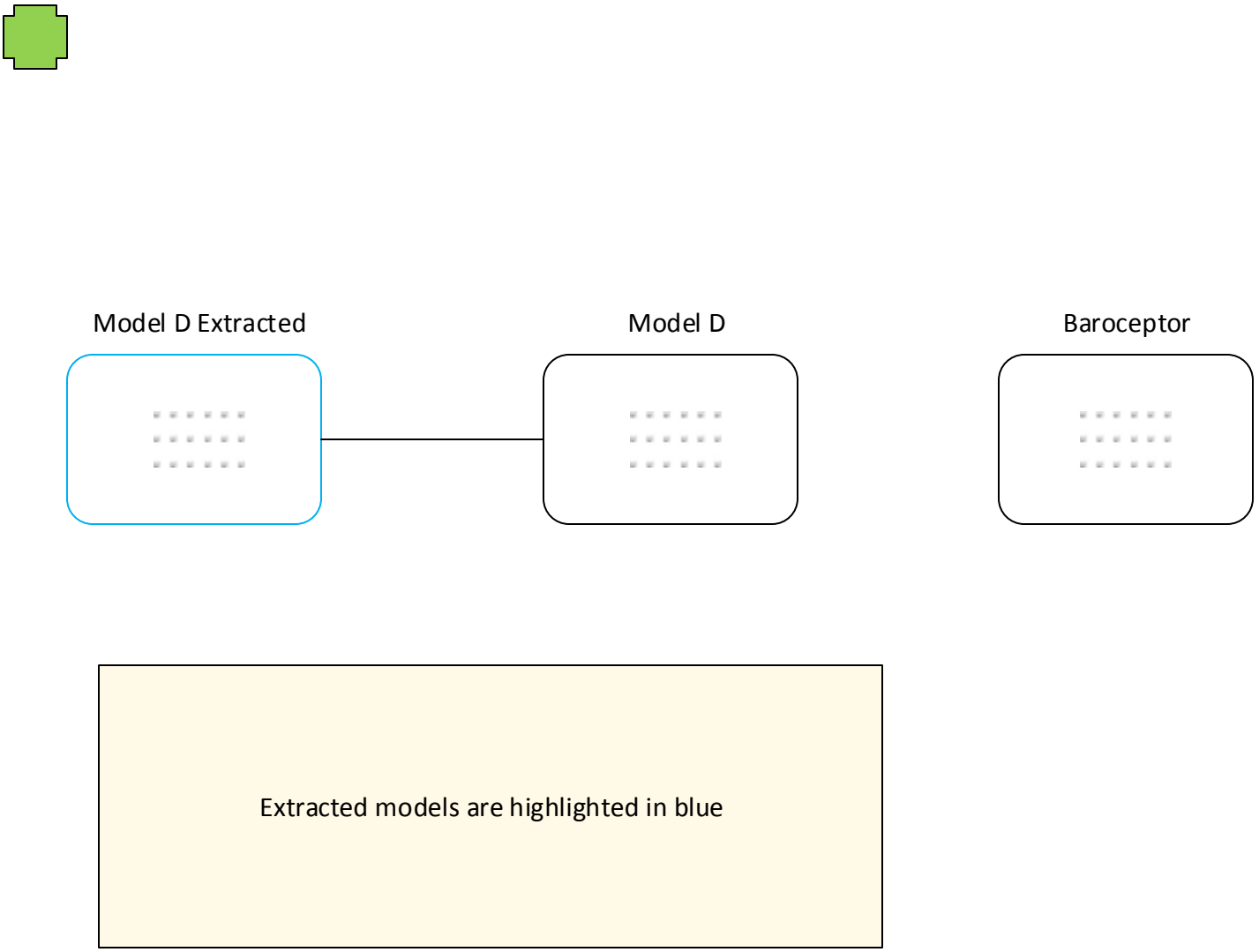




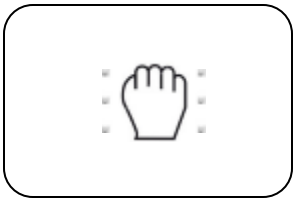
Hovering over a model opens the command flyout



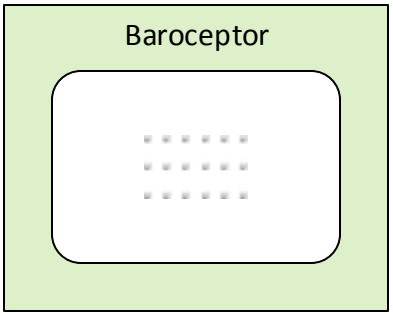
Clicking a command opens its corresponding tool


Model D Extracted
Model D
Baroceptor
Extracted models are highlighted in blue

Model D

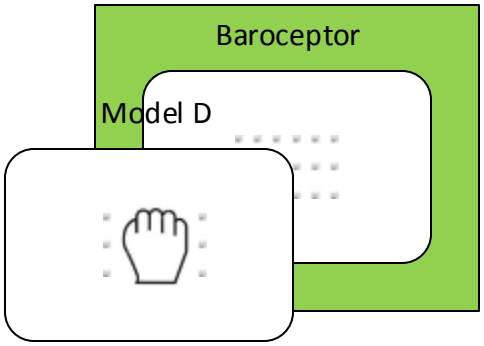


Baroceptor

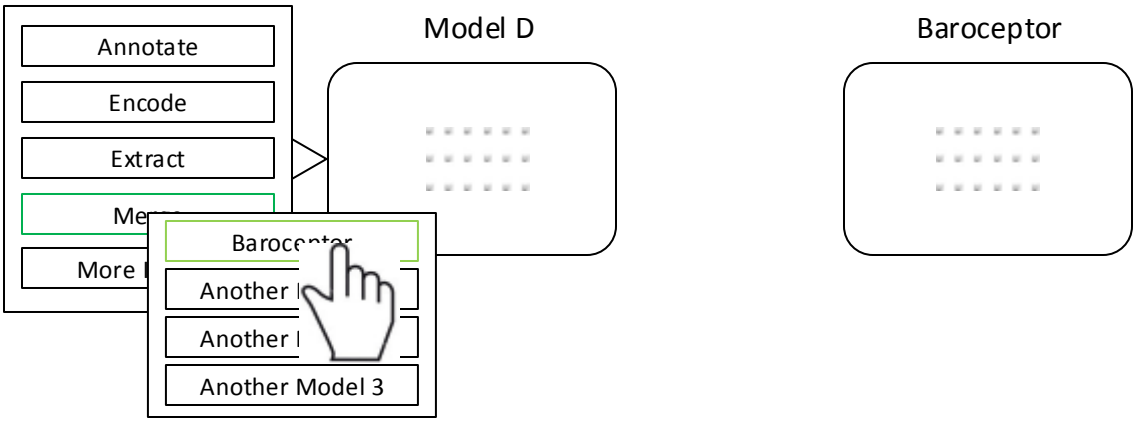


Models are draggable

Models are merged when one is released on top of another



You can also merge models by selecting the Merge command then selecting a model to merge with



Property Mappings

Model D ? Baroceptor ?

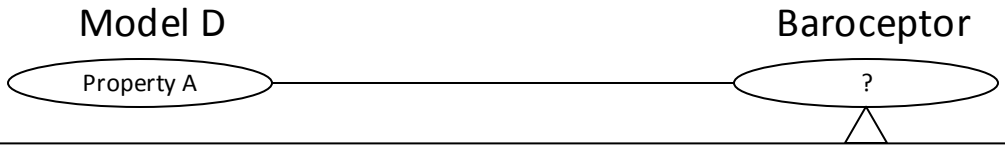
Choose Model D Property

Search...

Name	Symbol	Value	Simularity
Property A	A	mx + b	N/A
Property B	B	mx + b	N/A
Property C	C	mx + b	N/A
Property D	D	mx + b	N/A
Property E	E	mx + b	N/A
Property F	F	mx + b	N/A
Property G	G	mx + b	N/A
Property H	H	mx + b	N/A
Property I	I	mx + b	N/A
Property J	J	mx + b	N/A

Choose a property in Model D to map to a property in Baroceptor

Property Mappings



Choose Model D Property

Search...

Name	Symbol	Value	Simularity
Aortic blood pressure	Paop	User defined input	90%
Baroceptor firing rate	Nbr	t = Nbr_t	83%
Baroceptor gain	K	1	47%
Contractility control offset	amin	-2	76%
Heart Rate	HR	h1 + h2*F_hrs - h3*F_hrs^2 ...	100%
Simulation end ti	t.max	12	20%
Simulation start ti	t.min	0	5%
Sympathetic discharge rate at CNS for ...	N_con	If(t > L_con) (N_con* (-1) ...	0%
Time domain for simulation	t	User defined input	10%
Volume of systemic arteries	Vsa	225	0%

Choose a property in Baroceptor to map to “Property A” in Model D.

Heart Rate seems like the right choice.

Property Mappings

Model D

Baroceptor

Property A

A = mx + b

Choose Value ...

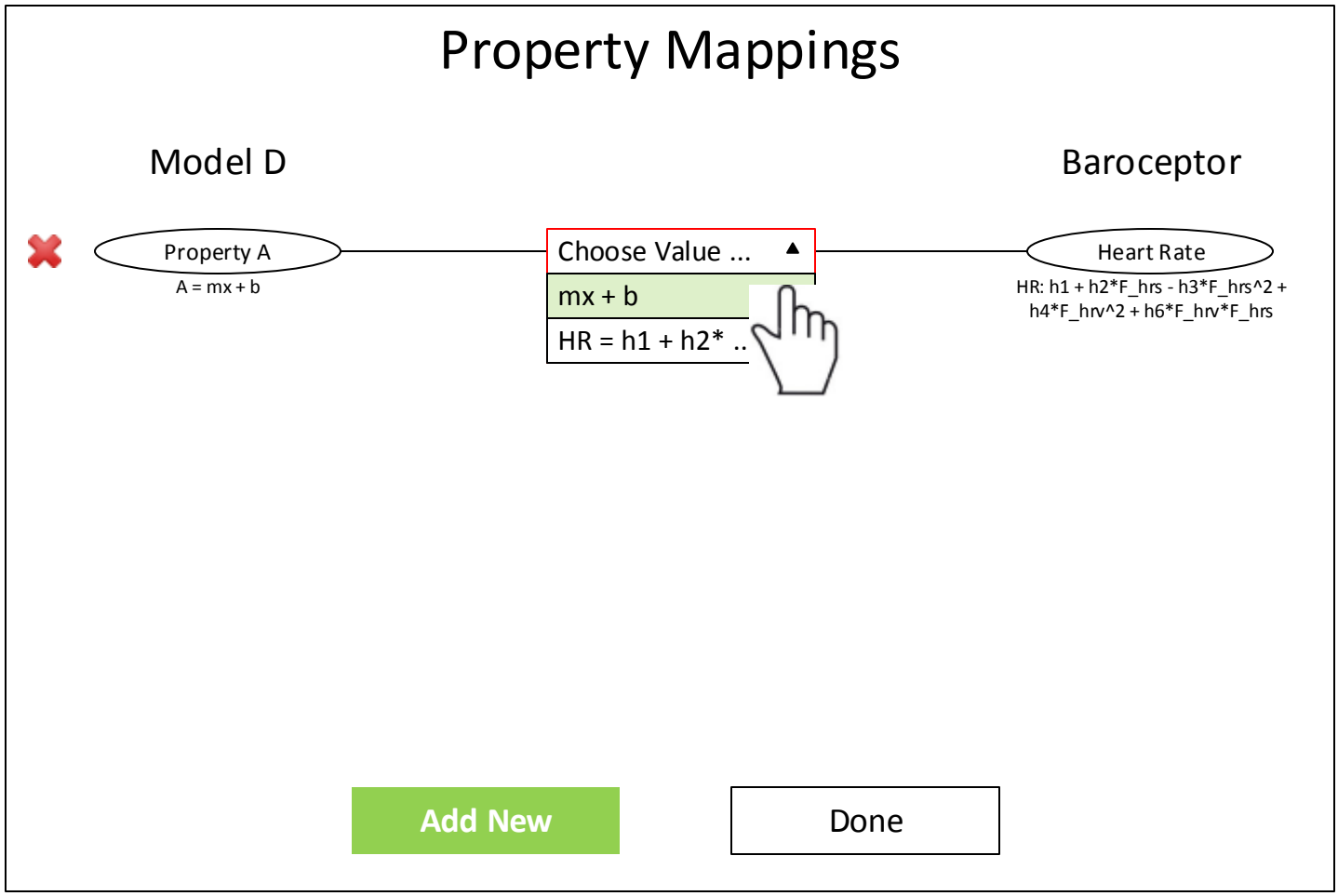
Heart Rate

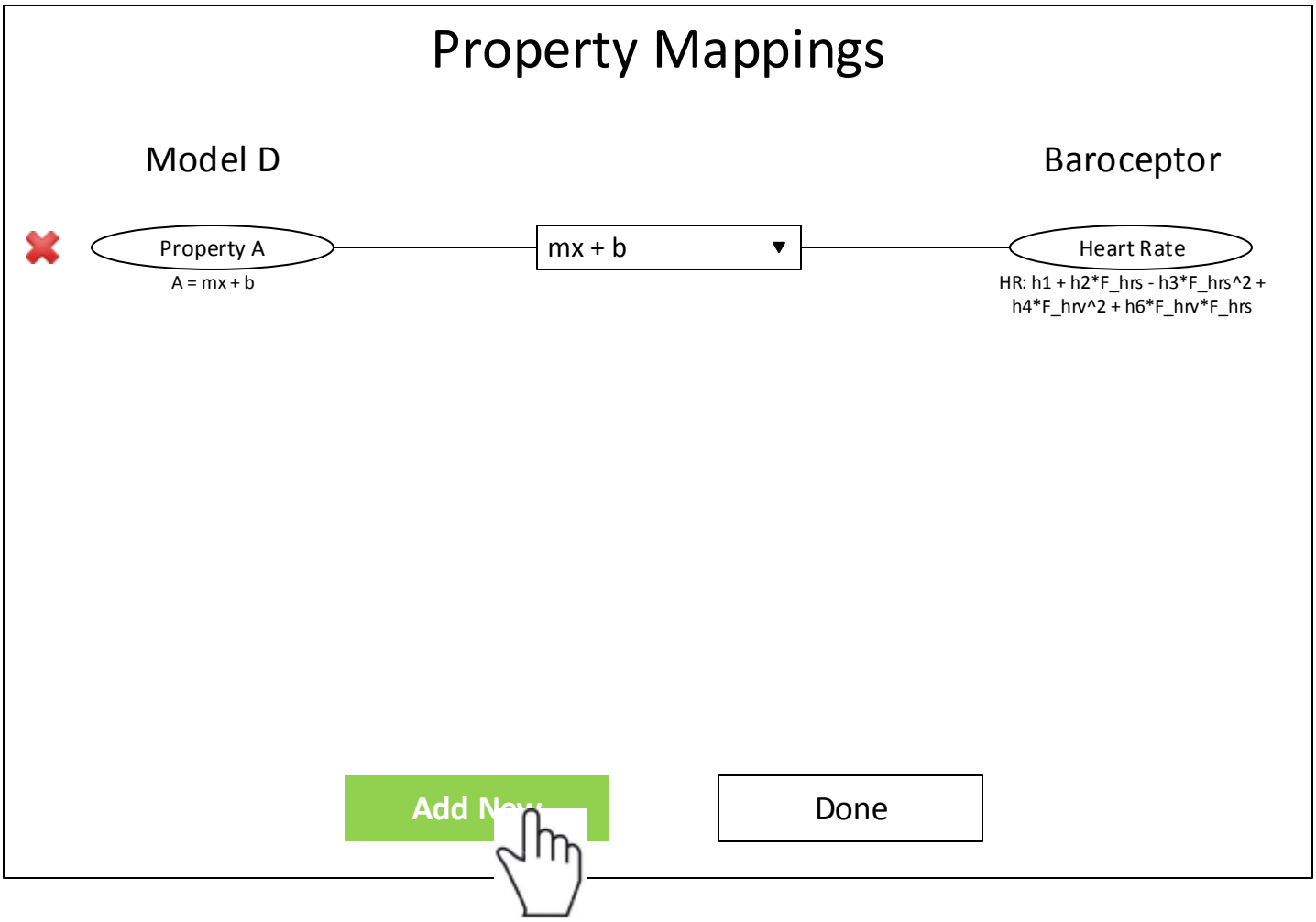
HR: h1 + h2*F_hrs - h3*F_hrs^2 + h4*F_hrv^2 + h6*F_hrv*F_hrs

Add New

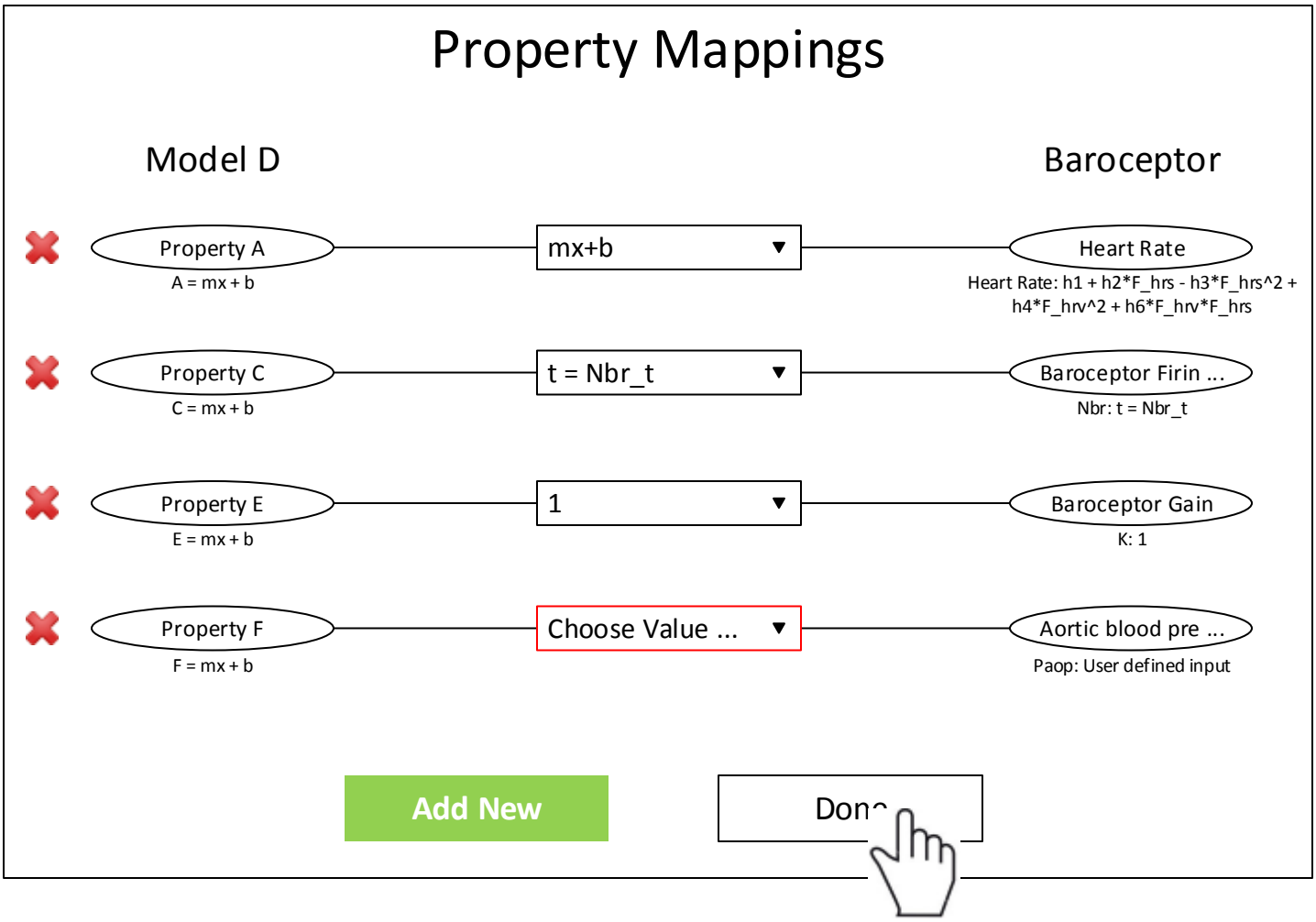
Done

Choose a property value to use in the merged model

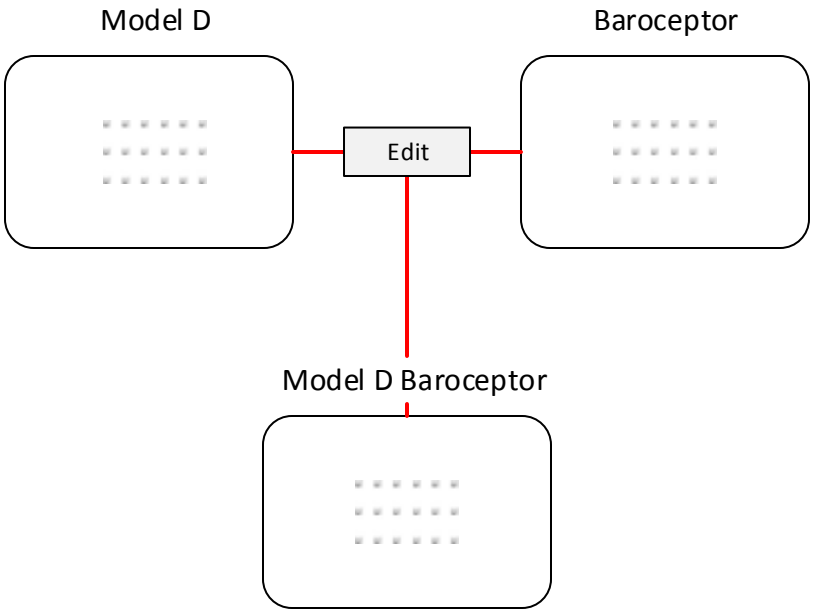

Property Mappings
Model D
Baroceptor
Property A
A = mx + b
Choose Value ...
mx + b
HR = h1 + h2* ..
Heart Rate
HR: h1 + h2*F_hrs - h3*F_hrs^2 + h4*F_hrv^2 + h6*F_hrv*F_hrs
Add New
Done



Add a new property mapping

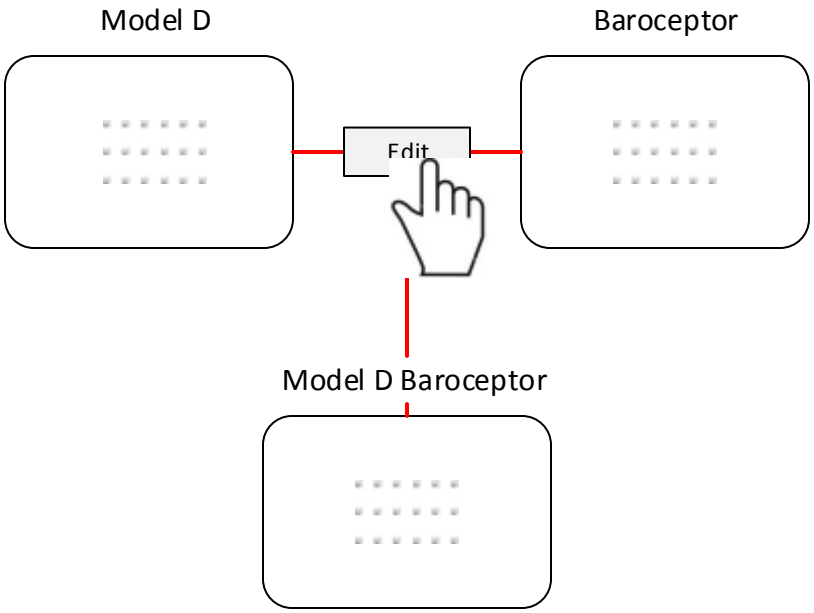


Select Done to return to workflow

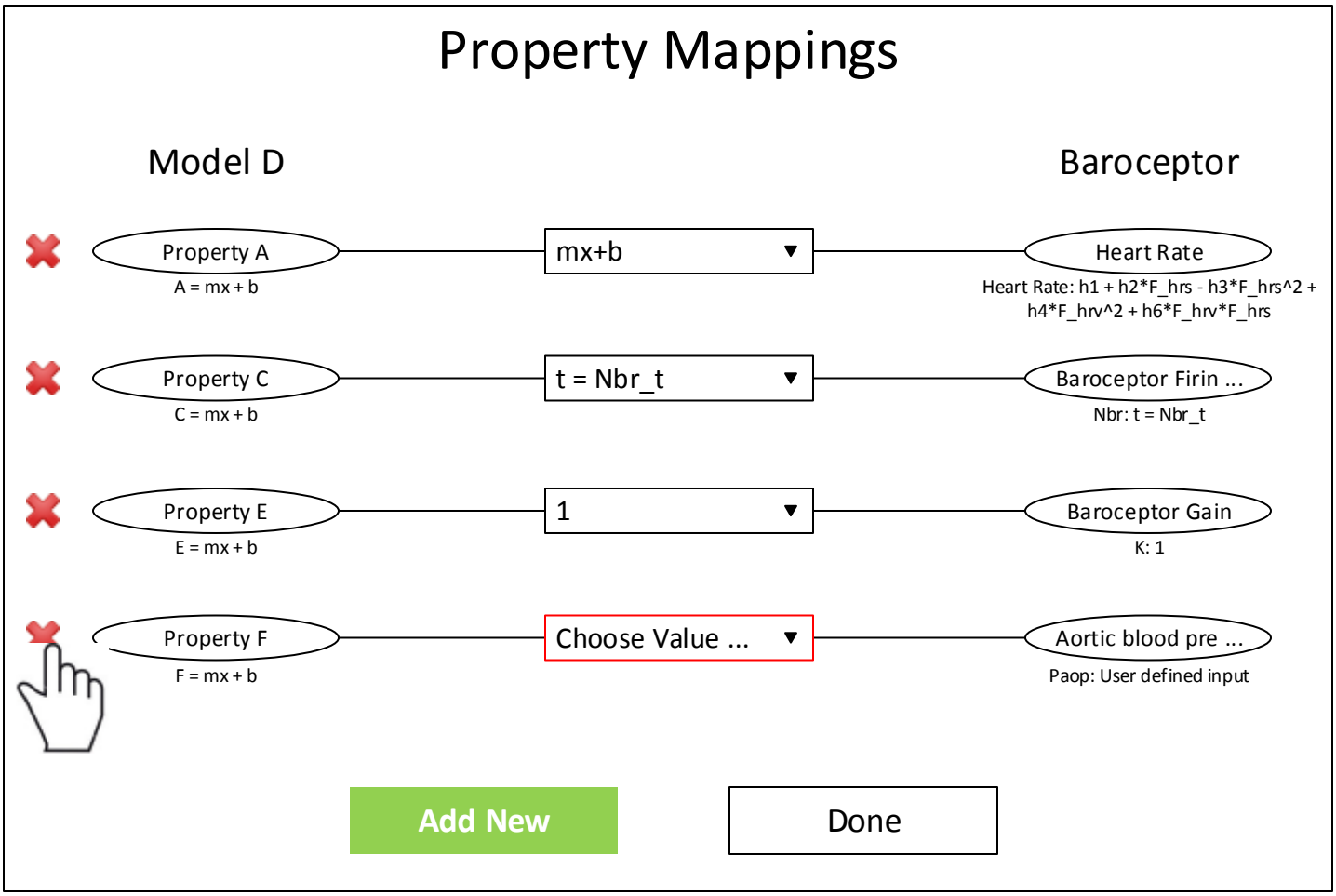


"Model D Baroceptor" results from merging "Model D" and "Baroceptor"

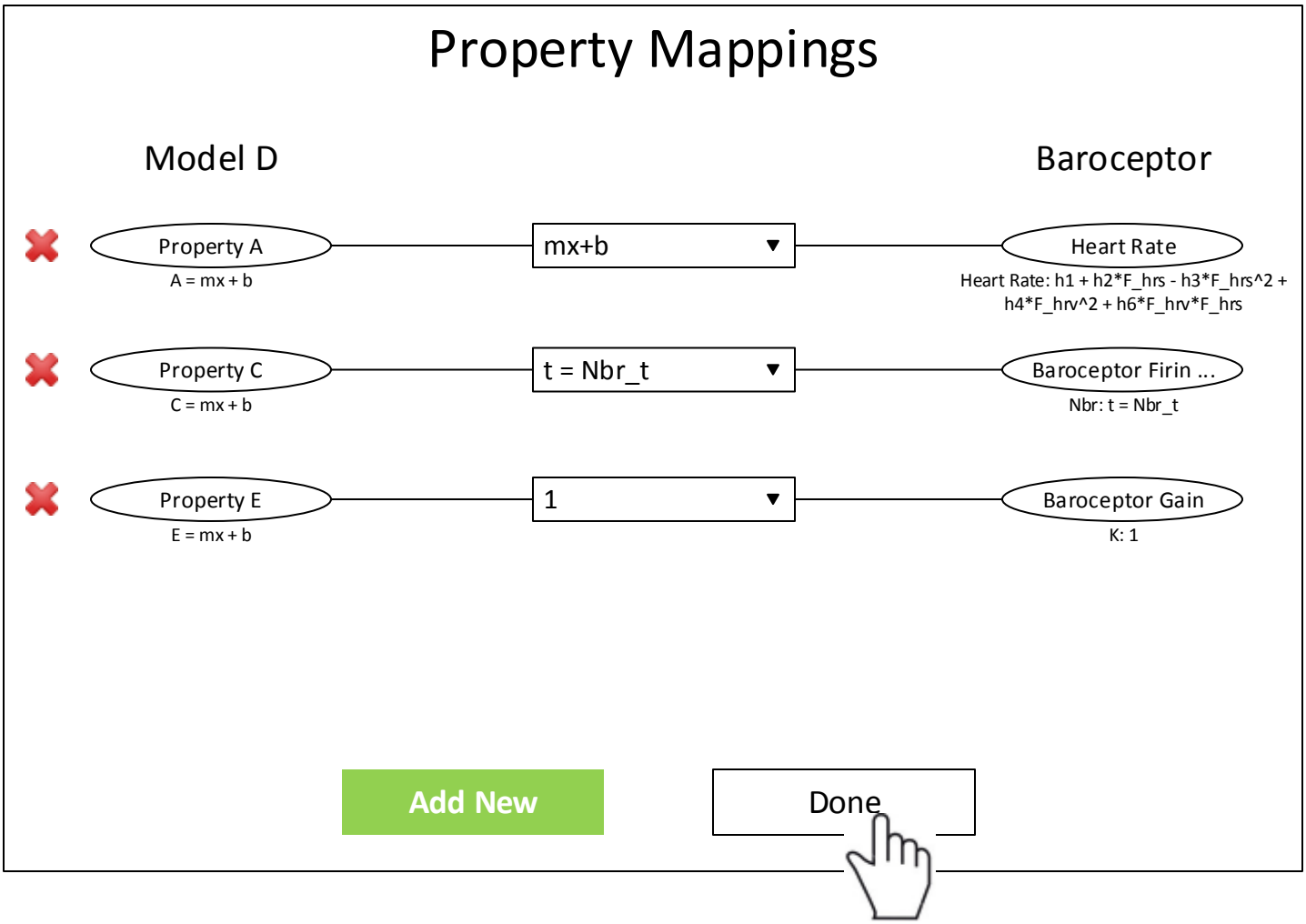
The red merge lines indicate there's an unresolved property mapping issue.

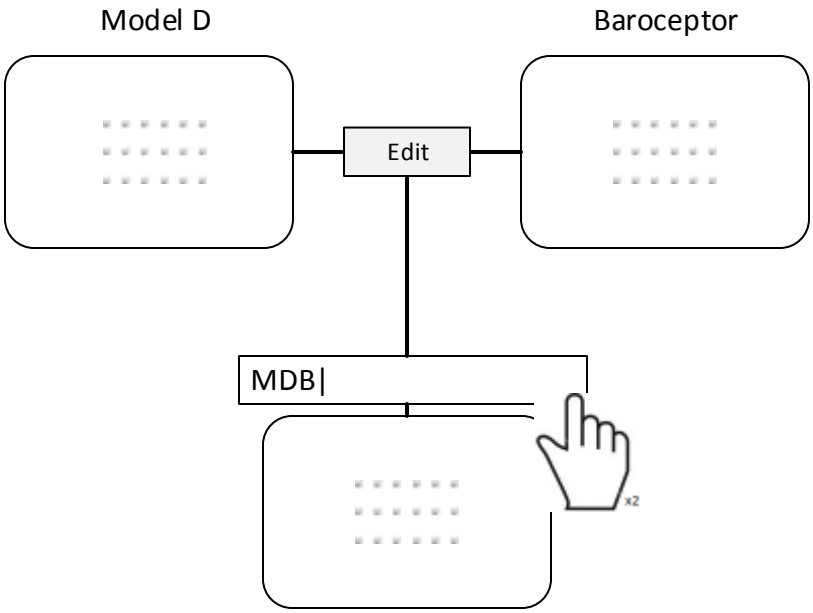


Click Edit to edit property mappings

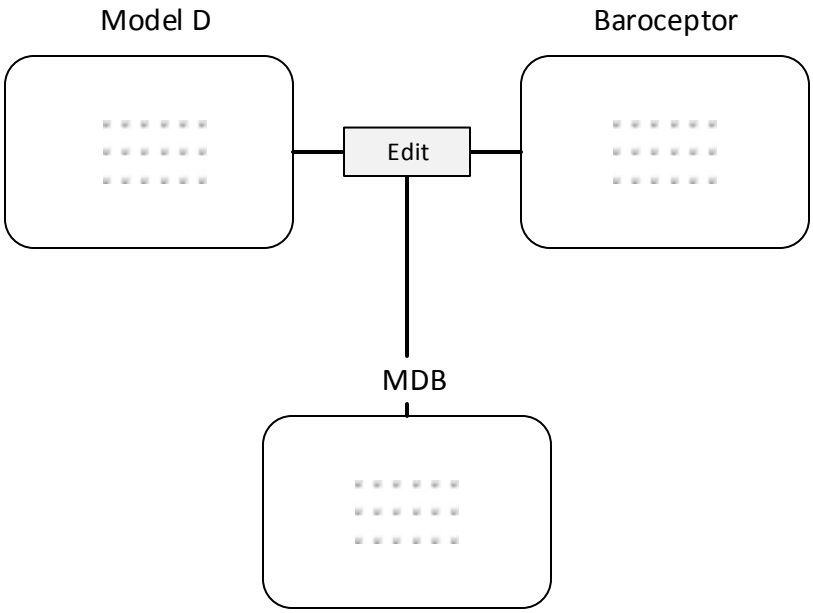


Remove the unresolved property mapping


Property Mappings
Model D
Baroceptor
Property A
A = mx + b
mx+b
Heart Rate
Heart Rate: h1 + h2*F_hrs - h3*F_hrs^2 + h4*F_hrv^2 + h6*F_hrv*F_hrs
Property C
C = mx + b
t = Nbr_t
Baroceptor Firin ...
Nbr: t = Nbr_t
Property E
E = mx + b
1
Baroceptor Gain
K: 1
Add New
Done



Rename a model by double clicking it’s name.



Viola, a merged model with valid property mappings.