

## SEA 6.3 Release Notes

SEA 6.3 implements new features:

- Create any kind of chains and use it to **baseline** objects or **generate Excel or Word document**,
- Manage **changes request** throw the Chain objects
- Create a network to group and propagate data between components thanks to the new **Message**,
- Control **impact analysis** and apply changes of the model **to the Chains**,
- Create your **Scenario** and use it in a **Validation** Campaign. Report Campaign result to your Requirements.

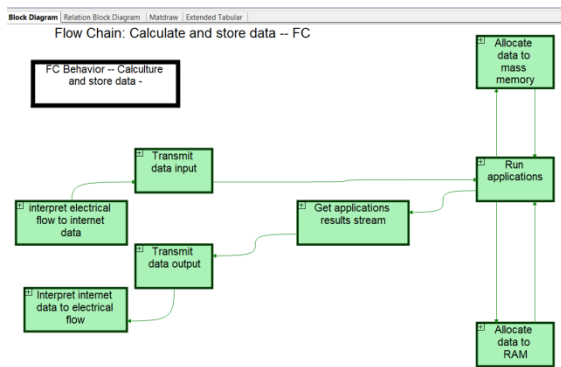
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## ➔ Baselining and change management

- ➔ The View 'Baseline Chain' allows creating a Chain and add any kind of object in it. Then, you can use arKitect Baseline mechanism to create revision and / or control changes on a set of objects. You can also generate Excel or Word document with the format you configure.



Preview and

Create

Generate

FSM Spreadsheet

Export to Excel Export to Word Settings Document history Configuration Management

Search:

Name	Type	Revision	desc	Attachment	ArkId	documentation chain version	Int
Calculate and store data -- FC	Flow Chain	*			CHAIN_0001	Yes	2
FC Behavior -- Calculate and store data -	FC Behavior	1.0			FUN_LT_0050		
Allocate data to mass memory	Function	*			FUN_LT_0067		
Mass memory instruction	Data flow	*			FUN_LT_0020		
Mass memory instruction results	Data flow	*	Get memori...		FUN_LT_0026		
Allocate data to RAM	Function	*			FUN_LT_0043		
Get applications results stream	Data flow	*			FUN_LT_0050		
Control result stream	Data flow	*			FUN_LT_0051		
Graphical data cmd	Data flow	*			FUN_LT_0052		
Internet demand	Data flow	*			FUN_LT_0057		
User demand response	Data flow	*			FUN_LT_0054		
Interpret electrical flow to internet data	Function	*			FUN_LT_0028		
Interpret internet data to electrical flow	Function	*			FUN_LT_0048		
Run applications	Function	*			FUN_LT_0044		
Transmit data input	Function	*			FUN_LT_0045		
Transmit data output	Function	*					

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Object Revision Management:

Configure Object Revisions Object link changes

Object Name	Previous Release	Current Revision	Planned Release	Status	Attribute	Value
3 Internet data stream	*	1.0		new object		
4 Internet demand transmitted	*	1.0		new object		
5 Internet demand	*	1.0		new object		
6 Mass memory instruction results	*	1.0		new object		
7 Mass memory instruction	*	1.0		new object		
8 RAM operating instruction results	*	1.0		new object		
9 RAM operating instruction	*	1.0		new object		
10 User demand response	*	1.0		new object		
11 User demand	*	1.0		new object		
12 control result stream	*	1.0		new object		
13 FC Behavior -- Calculate and store data -	1.0 [FC Behavior -- Calculate and store data -]	1.0 [FC Behavior -- Calculate and store data -]		new object		
14 Allocate data to RAM	*	1.0		new object		
15 Allocate data to mass memory	*	1.0		new object		
16 Get applications results stream	*	1.0		new object		

show stable object revisions Compare Revisions Create Revisions Apply Save Cancel

Calculate and store data -- FC\_1.0.xlsx - Microsoft Excel

Fichier Accueil Insertion Mise en page Formules Données WS Révision Affichage Développement Création

Copier Coller Reproduire la mise en forme Préparer les pages

Police Alignement Fusionner et centrer Révoquer à la ligne automatiquement Mettre sous forme conditionnelle

A1 Level 1

Level	Type	Revision	desc	Attachment	ArkId	documentation chain version
1	Flow Chain	1.0			CHAIN_00	Yes 2
2	FC Behavior	3.0			FUN_LT_00	
3	Allocate data to mass memory	1.0			FUN_LT_005	
4	Mass memory instruction	1.0			FUN_LT_006	
5	Mass memory instruction results	1.0	Get memorized programs		FUN_LT_00	
6	Allocate data to RAM	1.0			FUN_LT_00	
7	Get applications results stream	1.0			FUN_LT_00	

- ➔ In view 'Baseline Chain', you can also add object 'Change Request'. In the chain, all objects will be the scope to be updated to meet a need. Once the change is validate, Change object shall be passed to "Accepted"

Flow Chain: STEP 1 Charge modification

[Battery]  
autonomy

Hibernate

MF2 - Enable  
laptop supply

Support  
Ethernet  
connection

CR 10750

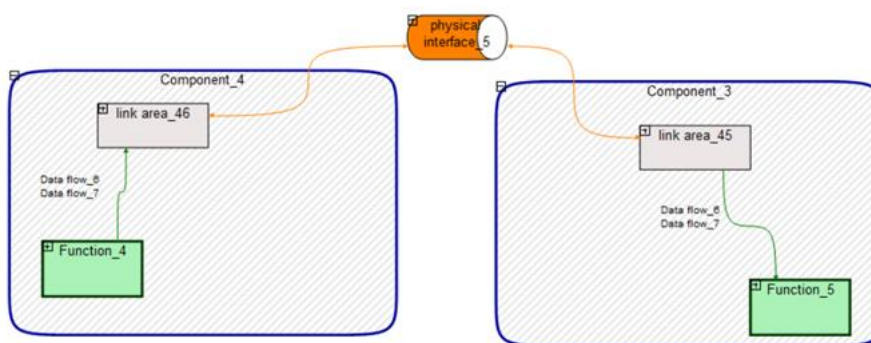
CR 10750

<b>General</b>	
Type	Change Request
Name	CR 10750
Revision	1.1
<b>Attributes</b>	
active (Enum)	OPENED
desc (Markup)	
Implementation Status (Enum)	3. Accepted
Priority (Enum)	Unspecified

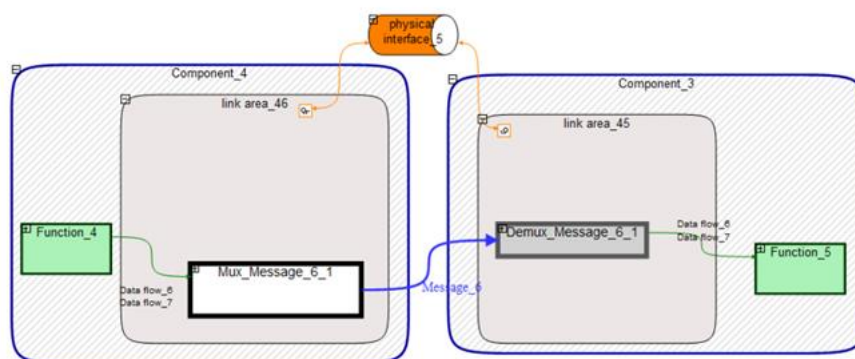


## → Message mechanism

- Build a network easily thanks to the new Message mechanism. Propagate data through the network, construct automatically the mux and demux that host messages and data sharing between two components.



Propagate data to link area by copy them into interface



- Automatic creation of mux/demux on adding message flow
- Propagation of data in the network on allocating data to message

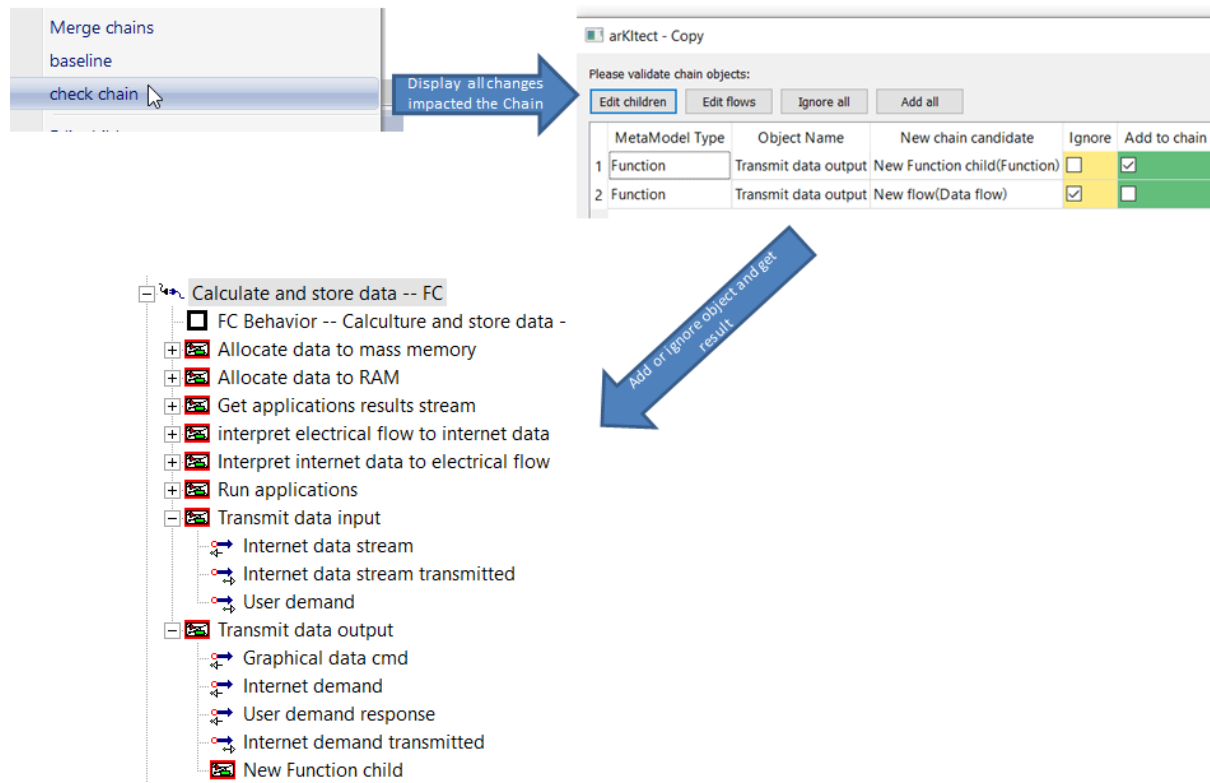


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## → Impact analysis of model changes in a Chain

- All view where Flow Chain can be added have been updated to integrate “check chain” script.

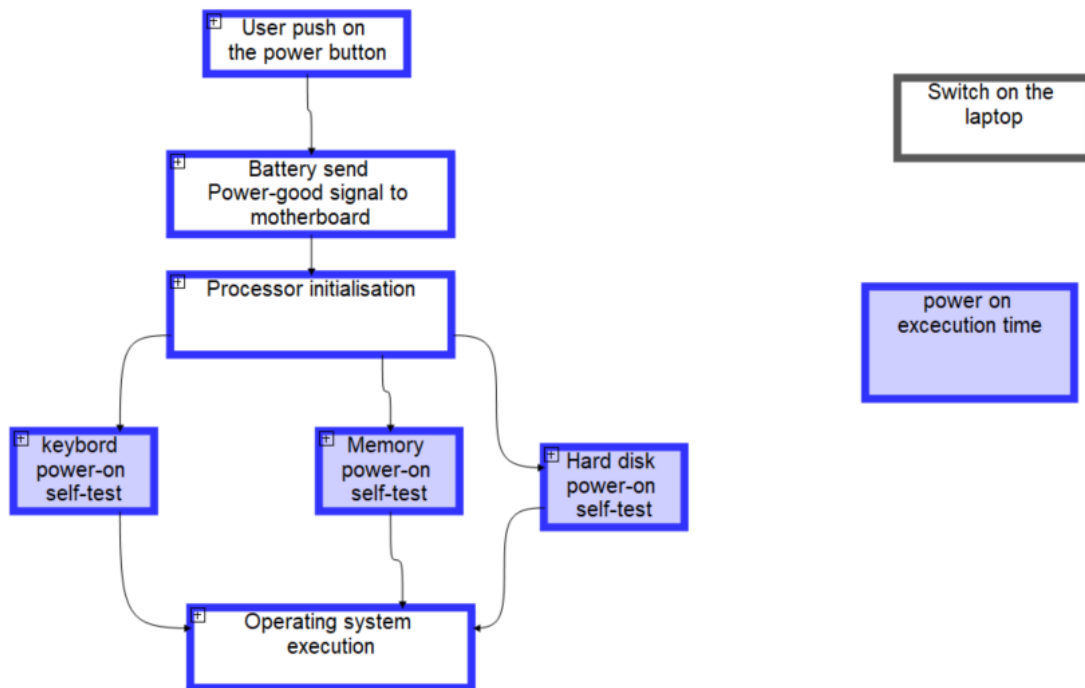
This script analyses the model and list of candidate objects to be added to the Chain



## → Validation Plan

In SEA 6.3, Validation campaigns are a set of “Scenario” where you can describe all sequences of Tests / Test steps to be realized to validate your system.

Flow Chain: Switch on the laptop



An Operation will be created automatically for each Test / Scenario and their results will be propagated to Scenario, Tests and parent Requirements

power on execution time	
<b>General</b>	
Type	Test
Name	power on execution time
Revision	1.0
<b>Attributes</b>	
00. Validation State (Attribute Group)	
Validation Campaign results (M...	VC (CHAIN_0020, VC - Switch on the laptop, 11/10/2021) - Scenario (CHAIN_0017, Switch on the laptop, 1.0): Test revision 1.0 OK
Verdict (Enum)	Pass



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Type	Scenario Properties
Name	Switch on the laptop
Revision	1.0
<b>Attributes</b>	
00. Validation State (Attribute Group)	
Validation Campaign results (M...	Revision 1.0: VC (CHAIN_0020, VC - Switch on the laptop, 11/10/2021) : Pass
Verdict (Enum)	Pass
01. Scenario definition (Attribute G	

Switch ON-OFF the Laptop	
<b>General</b>	
Type	Requirement
Name	Switch ON-OFF the Laptop
Revision	1.0
<b>Attributes</b>	
Main (Attribute Group)	
Arkild (String (255))	REQ_LT_0101
Attachment (Saved File)	
desc (Markup)	
Rationale (MEMO)	
Requirement type (Enum)	Functional requirement
state (Enum)	Draft
Secondary (Attribute Group)	
1. Global (Attribute Group)	
2. Safety (Attribute Group)	
3. Export formatting (Attribute...	
4. Validation (Attribute Group)	
Validation result (MEMO)	Revision 1.0: VC (CHAIN_0020, VC - Switch on the laptop, 11/10/2021) : Pass - Scenario (CHAIN_0017, Switch on the laptop, 1.0): Test (TU_LT_0026, power on execution time) revision 1.0 OK