

Name **cwLayoutNetwork** **Version**

Updated by Mathias PFAUWADEL 5.0

Patch Notes

- 5.0 : Adding Image, Save, Link Type
- 4.1 : Can now select multiple element in externalFilter
- 4.0 : Cluster, Download Image, display association custom display string
- 3.9 : External Association Filter work with zippedEdges
- 3.8 : Adding 2 buttons to zip and unzip Edge and to disable physics
- 3.7 : Network is now correctly zoom at start
- 3.6 : Adding Focus on (that all you to zoom on a node of the network)
- 3.5 : Adding Legend (only for fontawesome icon)
- 3.4 : Working with the LayoutMap
- 3.3 : Adding Complementary Item
- 3.2 : Can be display in a tab for objectPage and Indexpage (this change the evolveNode Structure, please update your evolve designer configuration)
- 3.1 : Correct double item, adding shape option, correct edge color
- 3.0 : RightClick, Highlight by External, merging (with bigger size) arrow if several associations
- 2.0 : Adding group, icon, Impact, globalFilter, arrow
- 1.0 : 1st version working

To be Done

- More Options
- Add Translations il 8n like Data/Common/il 8n

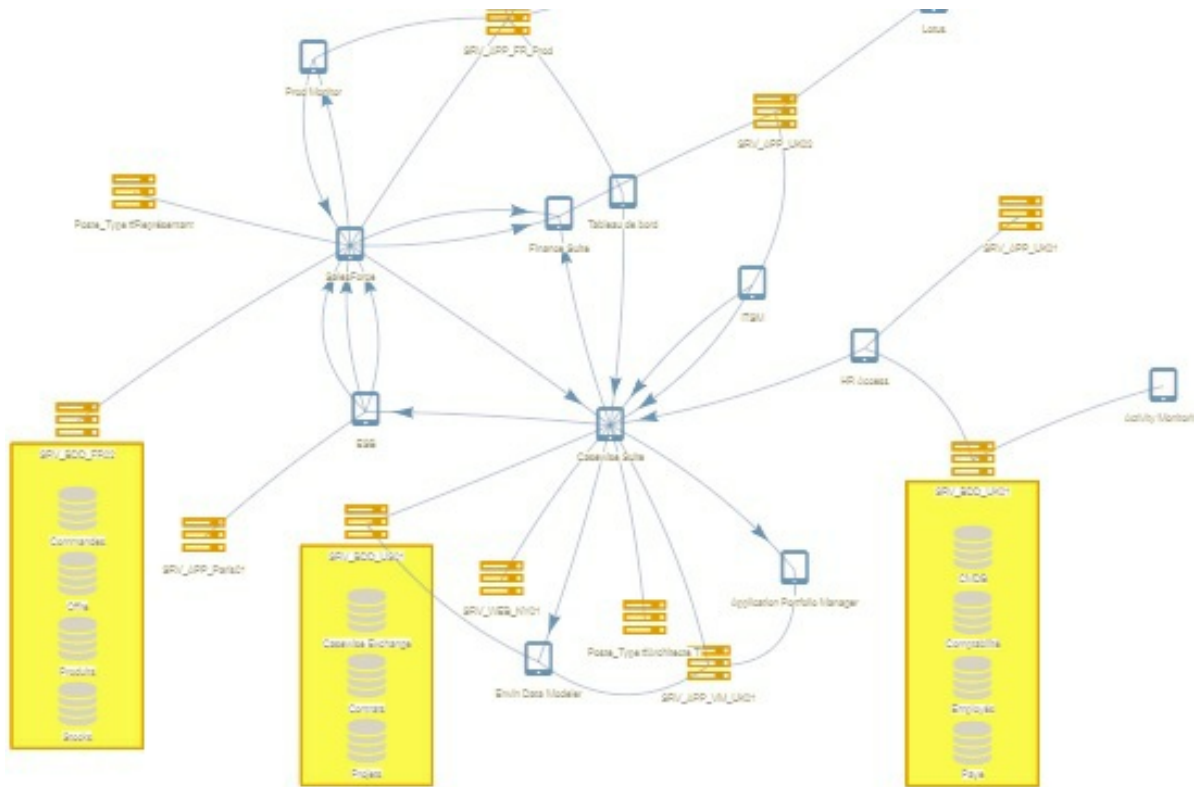
Description

Allow you to display objects and their associations in a network. The layout provide the same interaction than diagram, simple click for popOUT and double click to go on the objectPage. This layout can be use on IndexPage of ObjectPage.

In case of several association, the layout will display only one edge between node, if arrow are in different way, it will display both. The size of the edge will depend of the number of association.

Screen Shot

The layout will scan all of your hierarchy tree, and put it in a network.
You can use filter to choose which item to display



Node setup

IndexPage

index_network_organisations	
Organisation	
Layout Network	
Organisation - Processus-niveau 2 (réalise)	
Layout Empty	
Processus-niveau 2 - Processus-niveau 3 (Elec)	
Processus-niveau 2 - Processus-niveau 3 (Info)	
Processus-niveau 2 - Processus-niveau 3 (Other)	
Organisation - Processus-niveau 2 (supervise)	
Layout List (Simple)	
Processus-niveau 2 - Processus-niveau 3 (Elec)	
Processus-niveau 2 - Processus-niveau 3 (Info)	
Processus-niveau 2 - Processus-niveau 3 (Other)	
Organisation - Ville (est dedans)	
Layout List (Simple)	
Ville - Pays (appartient)	

Layout Name	Network
Layout ID	
Custom Display String	
Hidden Nodes	ville_20062_279036700
popOut List	macroprocess,macroprocess_diagram_popout#ville,ville_diagram_popout#microprocess,microprocess_diagram_popout
Specific Group List	processus_niveau_3_20004_410243396,Processus Electronique#processus_niveau_3_20004_2025026472,Processus Inform
Assign Icon to Group	Organisation,f2ad,#foa30a
Arrow Direction	processus_niveau_3_20006_883051288,'to'#processus_niveau_3_20005_1079817132,'from'

ObjectsPage with Tab



Options in the evolve Designer

MultiLines Count :

Enter the limit number of character where you will return line for the label of the node of the network

Hidden Nodes :

Set the ID of the nodes you don't want to appear in the tree, the children will be display instead. (Can be use for application flux See exemples below)

popOutList :

List the popOut that you want to be used.

(ex:scriptname1,popOutName1#scriptname2,popOutName2)

Layout Name	Network
Layout ID	
Custom Display String	
Hidden Nodes	ville_20062_279036700
popOut List	macroprocess,macroprocess_diagram_popout#ville,ville_diagram_popout#microprocessus,microprocessus_diagram_popout
Specific Group List	processus_niveau_3_20004_410243396,Processus Electronique#processus_niveau_3_20004_2025026472,Processus Informatique
Assign Icon to Group	Organisation,f1ad,#f0a30a
Arrow Direction	processus_niveau_2_20006_883051288,'to'#processus_niveau_2_20005_1079817132,'from'

Diagram Popouts

- macroprocess_diagram_popout
- microprocessus_diagram_popout
- pays_diagram_popout
- ville_diagram_popout

Specific Group List :

Group are the different filter box of the network, by default object are sort in to different group by ObjectType(name of the group is the name of the objecttype).

If you want objects of a node to be in a different group use this option :

NodeID,GroupName#NodeID2,GroupName2#

(ex:processus_niveau_3_20004_410243396,Processus

Electronique#processus_niveau_3_20004_2025026472,Processus Informatique)

PS : If an object is present twice in the JSON object, one time in a group and one time in another group, it will only appear in the first group. So if you need to have different icon according to category or other, define all your node for them with filter and add a 3rd node after with all the objet without filter.

Group To Select On Start

List the groups you want to display when the network is started. Use comma separator

Assign Icon or Shape to Group :

You can assign a shape (ellipse, circle, database, box, diamond, dot, star, triangle, triangleDown, square) to a group.

Use

NameGroup,shape,color,borderColor(optionnal)||NameGroup2,shape2,color2,borderColor2(optionnal)

You can also assign a FontAwesome Icon to a group.(go to this website to find the code

<https://fontawesome.com/v4.7.0/>) Use

NameGroup,icon,FontAwesomeUnicode,color||NameGroup2,icon,FontAwesomeUnicode2,color2.

You can also assign image. (the color is used for the edge color)

Use NameGroup,image,imageURL,color

You can mix Icon and shape like that :

Flux,icon,f0ec,#FF8C00||Application,icon,f10a,#4F90C1||Entité,box,#FF8C00,#4F90C1

Arrow Direction :

This option allows you to set arrows between nodes. The syntax is the following:

node_id,'direction'

You can use symbol # as a separator to set a list of directions.

The direction can be 'to' or 'from'.

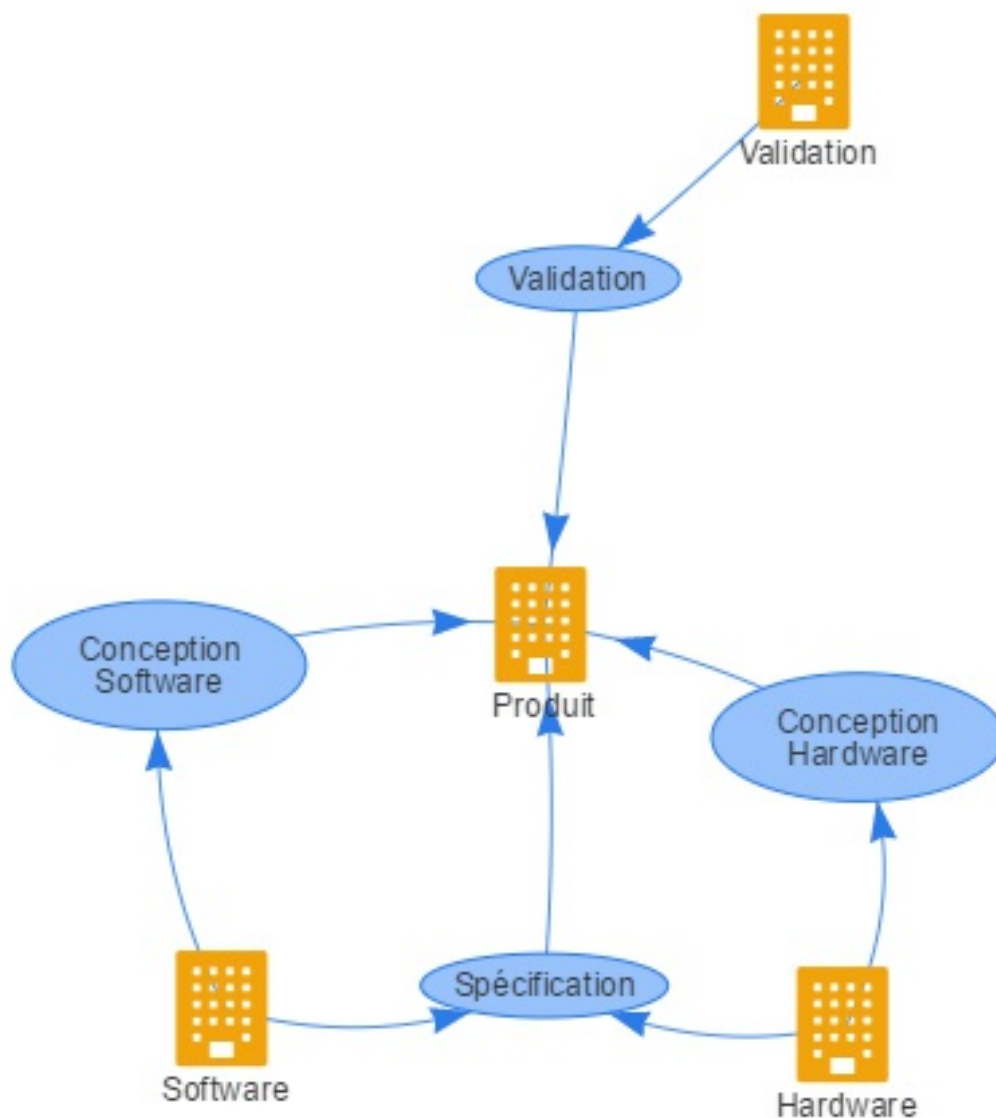
For exemple,

processus_niveau_2_20006_883051288,'to'#processus_niveau_2_20005_1079817132,'from'

Use to, if you want the arrow that arrive to this node.

Use from, if you want the arrow to leave from this node.

If you don't a direction to a node, it will be display without arrow.



Filter Association:

Select Evolve Nodes that will be use to filter your nodes.

nodeID:Label of the filter

For exemple : entite_20022_1066555881:Entity Filter

(Can be use for application flux See exemples below)

spliter is #

PS : the filter node should always be in first,

Filter Association Behaviour

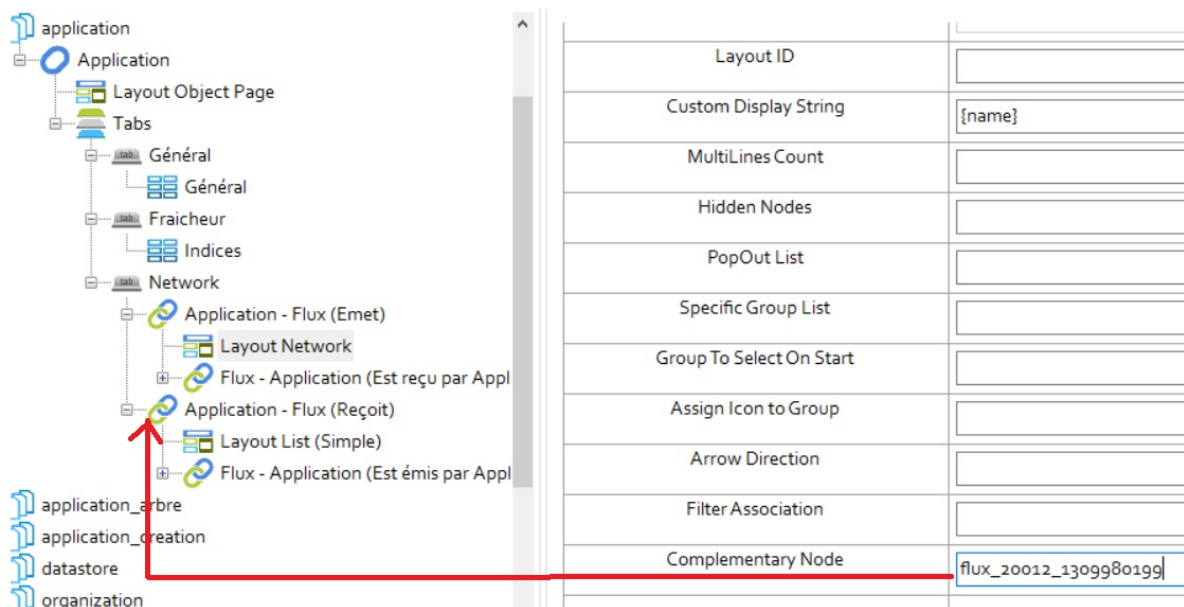
This option will define the way your action(add close node, add connected node..., and also association filter) will work

add : this will add the selected node to your network

highlight : this will highlight the selected node

absolute : this will only display the selected node

Complementary Node :



If you want to add a side Node, use this option

For exemple, if you are on the objectPage of an application, you want to display sent and received flux.

Put the network under the associationNode of the sent flux, then add the node id of the received flux in this option. Use comma as a splitter

Activate Cluster

Activate the cluster option, that allow you to cluster element according to the group.

PS : the cluster doesn't duplicate the object, and it try to put the element in the bigger cluster.

To move a cluster click on the first element

Hide Cluster Menu

Hide the cluster menu, you can still init the cluster

Cluster To Select On Start

List the cluster you want to apply when the network started. The syntax is Head#Child,Child2.

Activate UnzipEdge Option

Activate the button to unzip edge

Hide Zip Edge At Start

Hide the button to zip or unzip edge

Edge Zip at Start

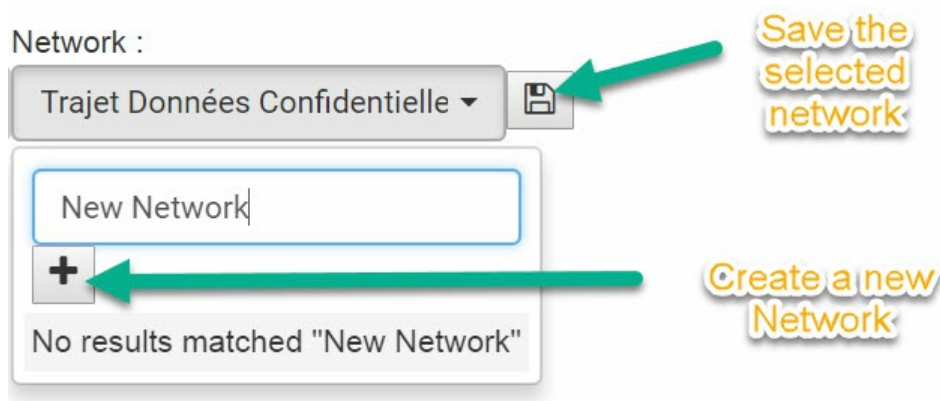
Zip the edge on start

Remove Lonely Objects

Activate the option to remove lonely object. When you click on the button, it will delete from the network the node that have no connection.

Enable Edit

You can load network disposition (node position, link selected, cluster, external filter ...)
Contributor only can save or create a network disposition.



When you create a new network, it will create a new object and associate it with all the node present on the network layout.

To use this option you need to have your metamodel ready :

Create a new objectType : CW API NETWORK with 2 properties : Configuration (memoText), and Create On View (string)

Create also an association between CW API NETWORK and Any Objects

Inside

C:\Casewise\Evolve\Site\bin\webDesigner\custom\Marketplace\libs\Network\src\cwLayoutNetwork.js

Fill these variable with the scriptname of your model

```

cwLayoutNetwork.prototype.construct = function(options) {
  this.definition = {};
  (this.definition.capinetworkScriptname = "capinetwork";
  this.definition.capinetworkDisplayname = "Network";
  this.definition.capinetworkToAnyAssociationScriptname = "CAPINETWORKTOASSONNETWORKANYOBJECTTOANYOBJECT";
  this.definition.capinetworkToAnyAssociationDisplayname = "Present On Network";
  this.definition.capinetworkCreateOnViewScriptname = "createoncwview";
  this.definition.capinetworkConfigurationScriptname = "configuration";

  this.definition.capinetworkCreateOnViewDisplayname = cwAPI.mm.getProperty(this.definition.capinetworkScriptname, this.definition.capinetworkCreateOnViewScriptname).name;
  this.definition.capinetworkConfigurationDisplayname = cwAPI.mm.getProperty(this.definition.capinetworkScriptname, this.definition.capinetworkConfigurationScriptname).name;

  this.hiddenNodes = [];
  this.complementaryMode = [];
  this.externalFilters = [];

  this.behaviour = {};
  this.behaviour.add = false;
  this.behaviour.absolute = false;
  this.behaviour.or = false;
  this.behaviour.highlight = true;

```

Inside your evolve configuration

You need to add to each object this node.

Nom du noeud	Tous les objets - CW API NETWORK (appear on)						
L'association type	Tous les objets - CW API NETWORK (appear on)						
Objet Type cible	CW API NETWORK						
Mandatory Association	<input type="checkbox"/>						
Identifiant du noeud	cw_api_network_20215_2047437899						
Trier sur	Nom						
Inverser le tri	<input type="checkbox"/>						
Include Objects Only If Have Associations	<input type="checkbox"/>						
Propriétés sélectionnés	<input type="checkbox"/> Average Rating <input type="checkbox"/> Catégorie <input checked="" type="checkbox"/> Configuration <input checked="" type="checkbox"/> Create on cwView <input type="checkbox"/> Créé par <input type="checkbox"/> Date de création <input type="checkbox"/> Date de mise à jour <input type="checkbox"/> Date de validation <input type="checkbox"/> Description <input type="checkbox"/> Id <input type="checkbox"/> Identificateur unique <input type="checkbox"/> Mis à jour par <input type="checkbox"/> Modèle <input type="checkbox"/> Niveau de protection <input checked="" type="checkbox"/> Nom <input type="checkbox"/> Niveau d'urgence <input type="checkbox"/> Total Commentaires <input type="checkbox"/> Valable						
Filter sur les propriétés (ET)	<table border="1"> <thead> <tr> <th>Propriété</th> <th>Opérateur</th> <th>Valeur</th> </tr> </thead> <tbody> <tr> <td>Create on cwView</td> <td>=</td> <td>index_applications_network_bt</td> </tr> </tbody> </table>	Propriété	Opérateur	Valeur	Create on cwView	=	index_applications_network_bt
Propriété	Opérateur	Valeur					
Create on cwView	=	index_applications_network_bt					

Edge Color

You can assign a color to an Edge Type following this structure

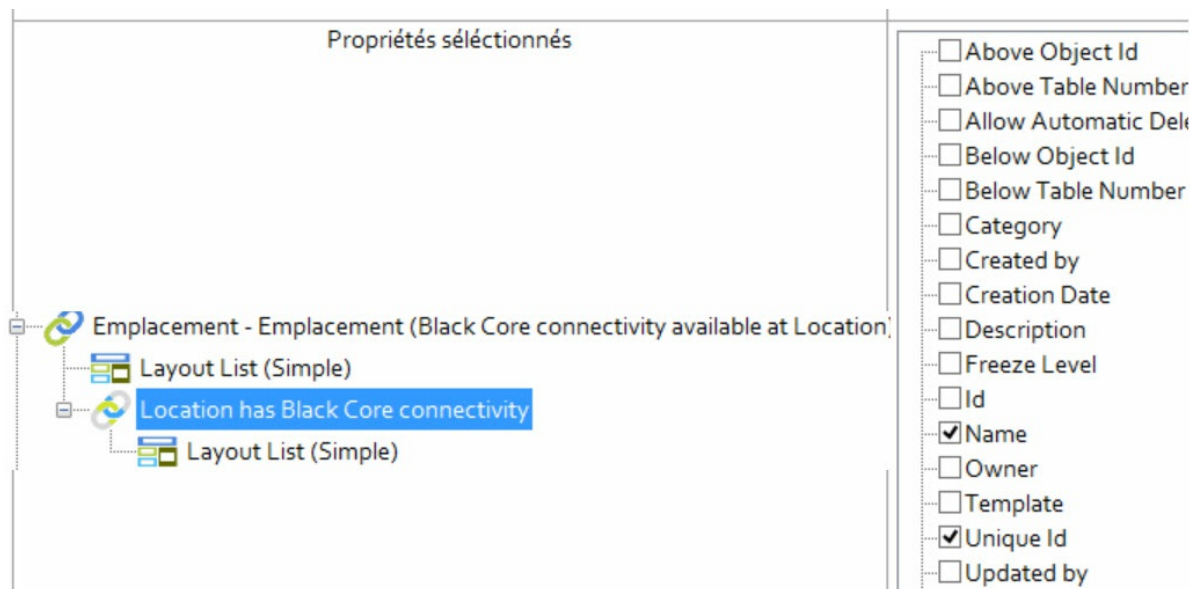
```

{
  "flux": {
    "label": "Flux Applicatif",
    "color": "#CCCC00"
  },
  "locationhasblackcoreconnectivity": {
    "color": "#000000",
    "label": "Black Connectivity"
  }
}

```

Edge Type is by default the associationTypeScriptname or the objectTypeScriptName(in case of hiddenNode)

To use association in the EdgeType, you need to add the intersection node, and select the uuid.



Edge Type To Select on Start

List the link Type you want to select On Start. Splitter is a comma

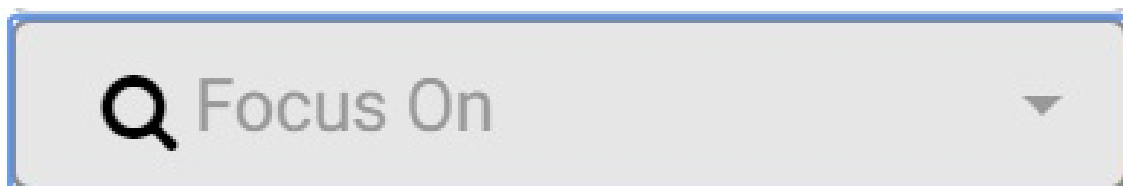
Assign associationNodeId to EdgeType

In the same way, you assign group with Node, you can do that with the EdgeType

For example :

emplacement_20196_1480647536,toto#emplacement_20196_148043224,tata

Focus On



This menu allow you to zoom on a object present on the network, it will go to his position, zoom on it, and select it.

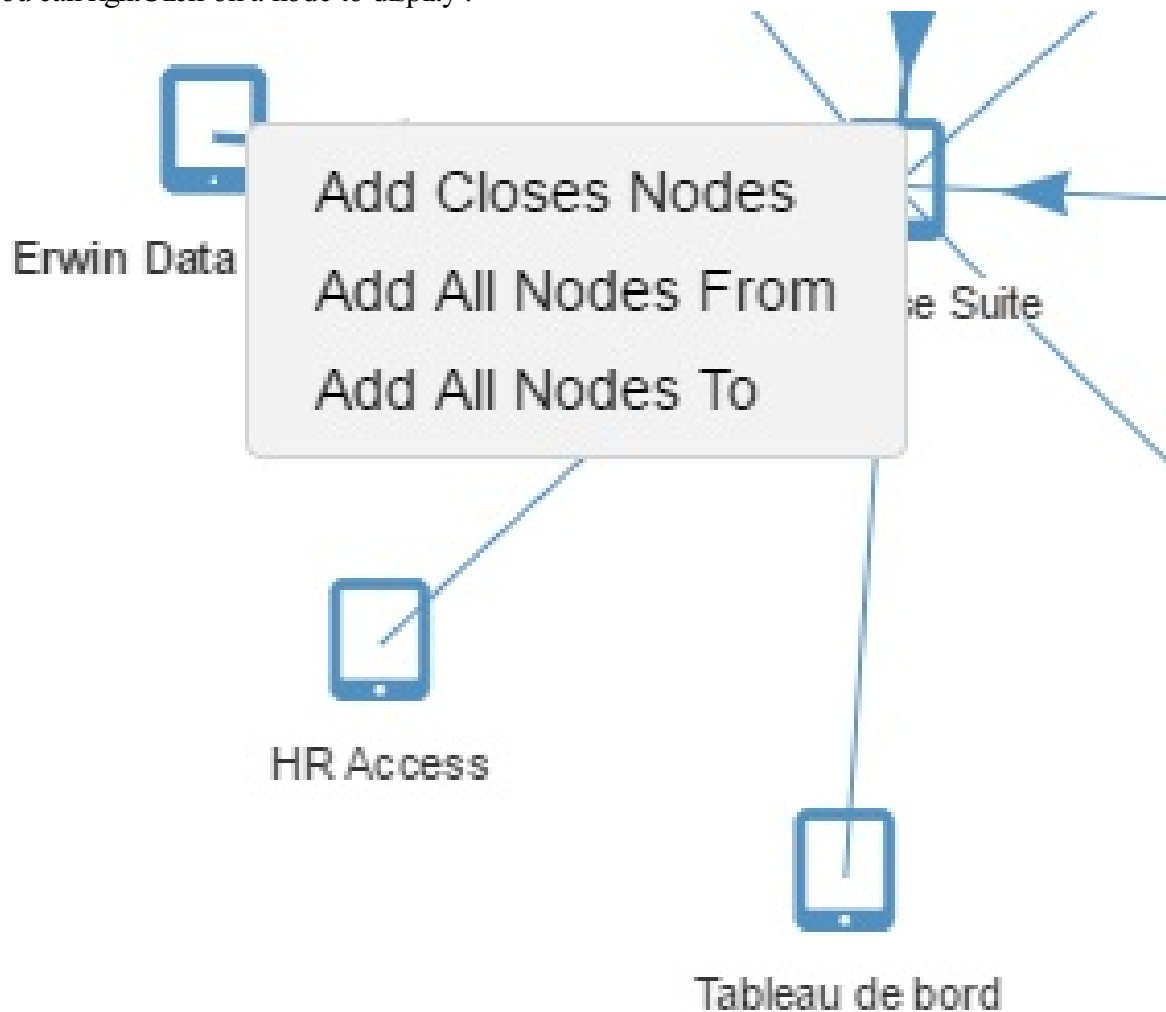
Button Action

Disable / Enable Physics : Allow to disable the physics and freely move the node

Zip/ UnZip Edges: Allow to unmerge the edges, in case of hidden nodes, this will disable the name of the hidden object on the edge.

RightClick Action

You can rightClick on a node to display :



Add Closes Nodes

This will add on the network, the node that are connected to the selected node

Add All Nodes From

This will add on the network, the node that have a path (even indirect) that leave from the selected Node

Add All Nodes To

This will add on the network, the node that have a path (even indirect) that go in the selected Node

Remove Node

This will remove the node

Remove Close Nodes

This will remove all the node that are directly connected to the object

Add All Connected Nodes

this will add all node that are connected directly and indirectly to the selected node

Behaviour Button

By clicking, on the button you can change the behaviour of the external association filter :

- Absolute : disable all node, then add the node of the external filter
- Addition : Add the node of the external filter
- Highlight : Highlight the node of the external filter

Download Button

You can click on the download button , to download a png of the network
(on huge network, it work only with edge)

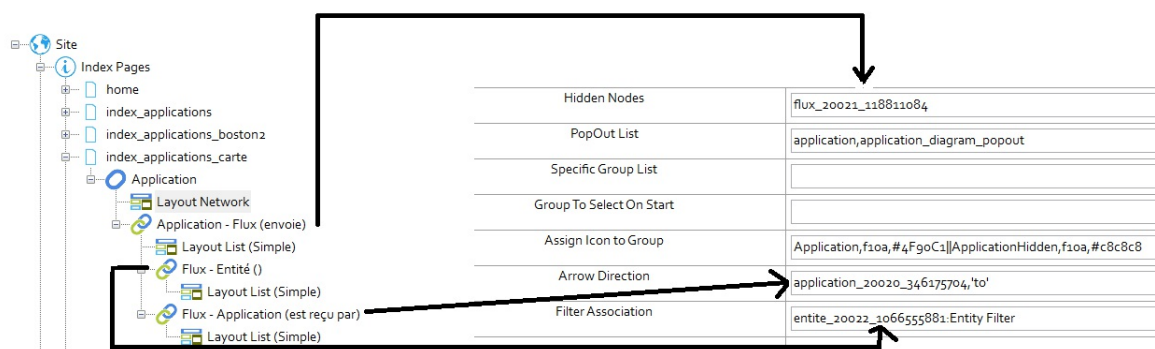
Exemple : Application Map

Here we have the following metamodel :

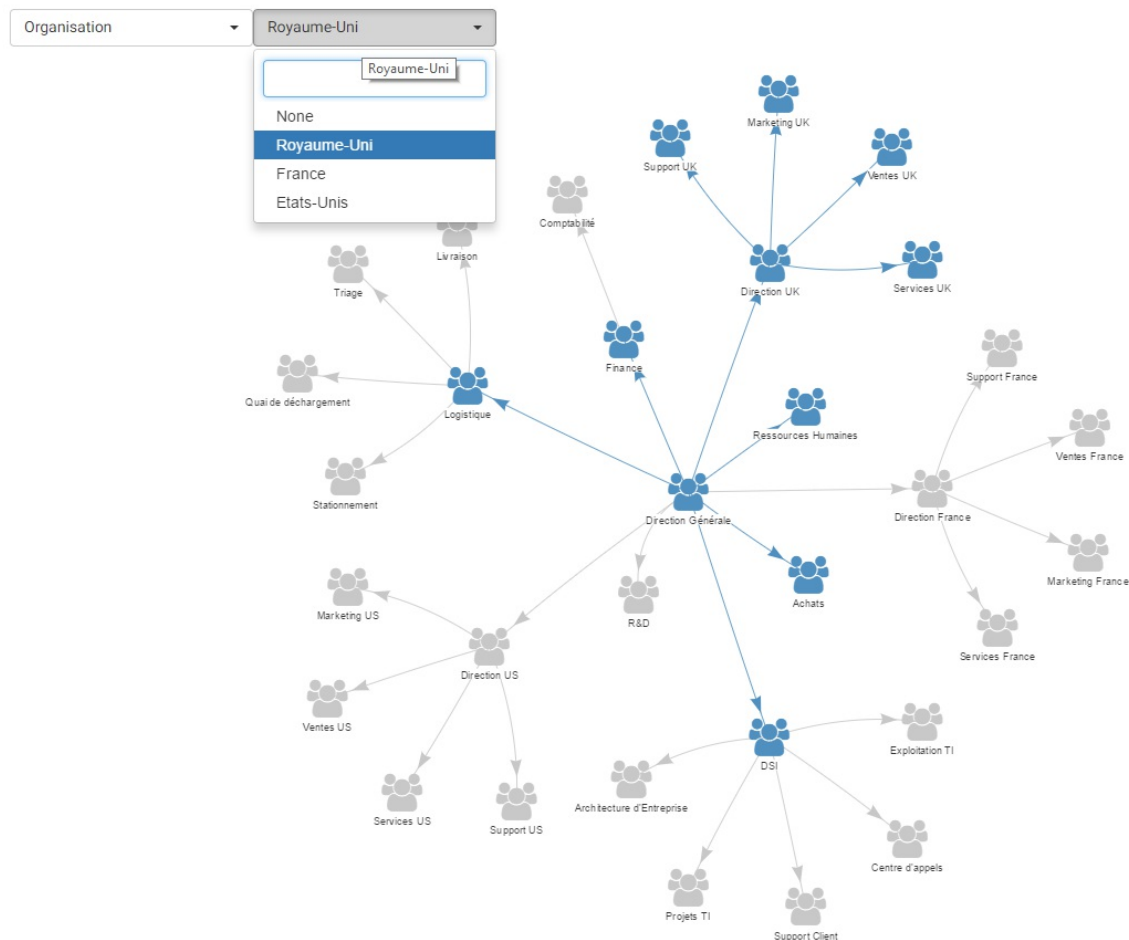
Application connected to flux connected to Application
and flux connected to Entity

On the network, we want to display the Application and display the flux as arrow (depending if the flux is emit or receive)

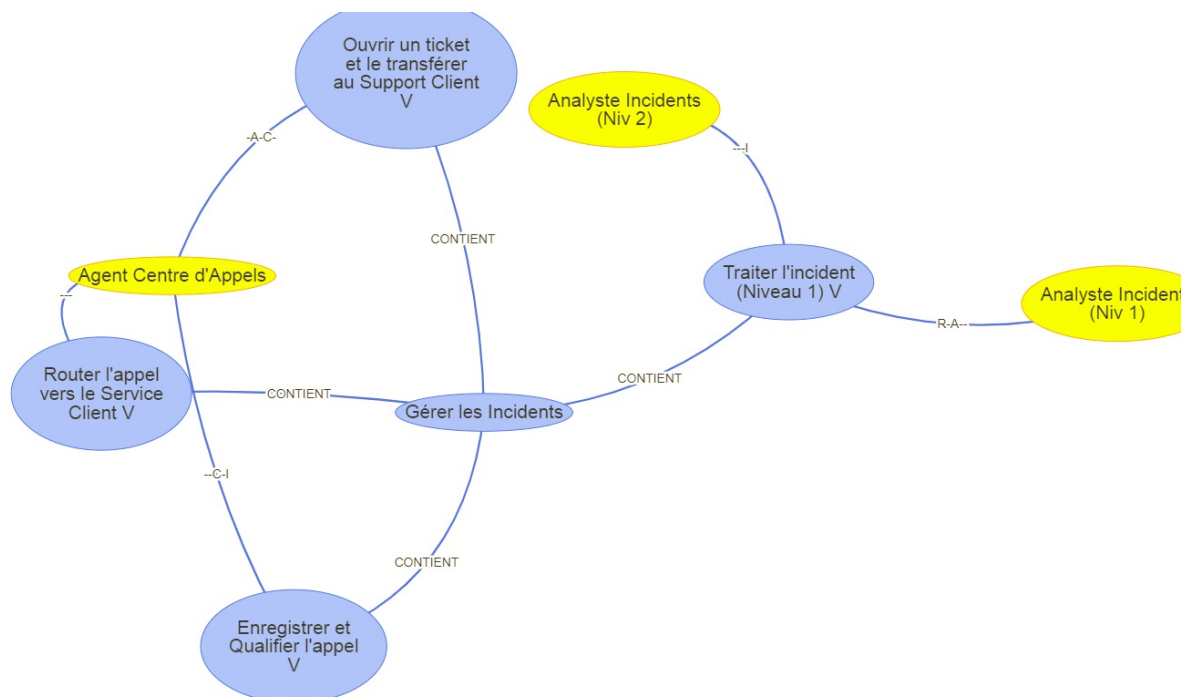
For that, we use the following configuration :

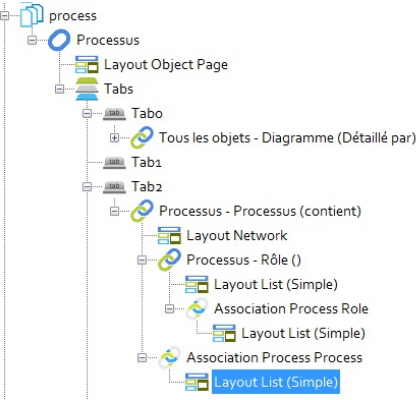


ApplicationHidden correspond to the icon and the colour that the unhighlighted node will take.

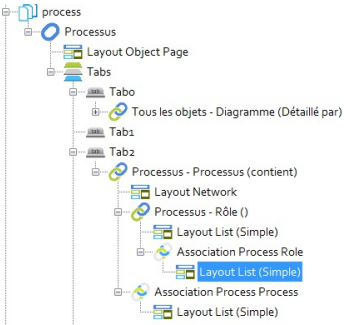


Exemple : Using Custom Display String to display RACI on the network





Custom Display String	CONTIENT
Display a Title	<input type="checkbox"/>



Custom Display String	{RESPONSIBLE.R}-{ACCOUNTABLE.A}-{CONSULTED.C}-{INFORMED.I}
Display a Title	<input type="checkbox"/>