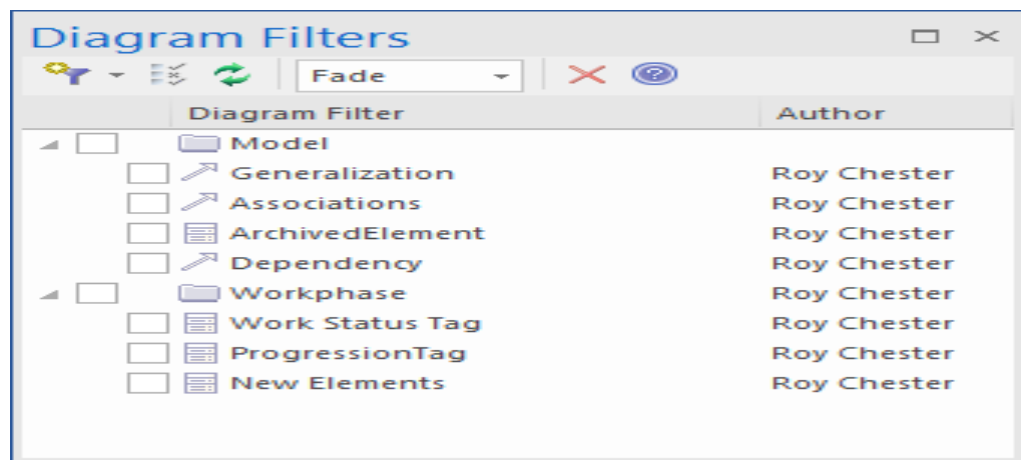# Diagram Filters

Using Diagram Filters (Dynamic Visual filters), you can modify the display of diagram components so that the required items are immediately identified, without damaging the structure and integrity of the model.

The filters operate on elements, connectors or **Tagged Values** according to properties such as Author, Status, Date Created or Stereotype Value and, for connectors, whether the connector is hidden or visible.

Access

Ribbon	Layout > Tools > Diagram Filters or Show > Portals > Window > Diagram > Diagram Filters

Applying Diagram Filters

You can use Diagram Filters singly, in sequence, or in combination to tailor the display of diagrams to show:

- Information for different users, so that - for example - technical staff and stakeholders each can apply filters that highlight the information pertinent to them
- What elements have been recently developed or changed
- Which part of a model was developed by a particular person
- Which parts of a diagram are at a particular phase, status or version

Examples of ways in which you might apply filtering include:

- Setting up a filter for immediate use on a diagram, and modifying that filter as you review the diagram so that you highlight elements with different values for the same properties - perhaps, by filtering on Phase, to compare 'As-Is' and 'To-Be' elements
- Setting up a filter and leaving it active so that all diagrams you display are automatically filtered the same way
- Setting up a series of filters to use

- Grouping filters so that their combined results identify objects that meet the characteristics of each filter and indicate an 'overview' status as well; for example, 'Work In Progress' plus 'Work Not Started' show objects in each category at the same time, under the group filter 'Work Not Completed'

Filters for elements can also be applied to the **Package Browser** and **Diagram List**.

The 'Diagram Filters' context menu (right-click on the body of the window) provides an option for toggling between the filters and simple context filtering of diagrams; if you select the 'Context Filtering' option, the Diagram Filters are disabled and the contents of the diagram are grayed-out, except for a selected element and those elements directly related to it.

Facilities

Facility	Detail
Developing Filters	You create and define as many filters as you require, setting up each filter by defining which element, connector or **Tagged Value** properties to specifically check for and (depending on how you set up the filter parameters) whether to include or exclude elements or connectors having particular property values. You cannot combine element, connector and/or Tagged Value *properties* in one filter, but you can apply any combination of element filter, connector filter and/or Tagged Value filter to a diagram at the same time, individually or as a grouped filter.
Filter	If you select 'Gray Scale', 'Fade' or 'Hide', the action of the filters is

Effect - Gray Scale, Fade or Hide	to exclude items that do not match the parameters rather than include items that do. If, for example, you selected to filter on element name, looking for elements with the word 'Class' in the name, the filter would apply this logic: Does 'Name' contain string 'Class'? If 'No', apply effect; if 'Yes', take no action. The elements you want are therefore what is left on the diagram, rather than what was operated on. The filter effect remains in force while you do other work on the diagram, until such time as you disable the filter.
Filter Effect - Highlight	If you click on 'Select', the logic is reversed: Does 'Name' contain string 'Class'? If 'No', take no action. If 'Yes', apply effect. In this case, the filter effect is not permanent, and clicking off the items deselects them. This effect is excellent for selecting items having the same characteristics across a large diagram, to be processed in a single task; instead of having to locate the items and select them with **Shift**+**click** individually, you can apply the filter. If you inadvertently lose the selection by clicking off the items, you can get it back again almost immediately by re-applying the filter.

Diagram Filter is filtering elements or connectors in diagrams.

١.   You can select its effect from 'Fade', 'Gray Scale', and 'Select'
٢.   The filters are stored in a project (.eapx,etc.), so users can share defined filters.
٣.   You can also apply the filter feature from the layout Ribbon, Filter Panel.

Layer is a similar feature , but you can 'group' elements as you like.

Tips for Filters

١.   When enable two or more filters, the 'OR' condition is applied
●   If you want the 'And' condition, you need to create filter groups.
٢.   You can keep filtering during :
●   Switching diagrams.
●   Generating documents.
●   Print a diagram.
٣.   If you use hide condition you cannot select hidden elements
●   You can use this filter not to move unwanted elements.

٤. 'Relationships' and 'Hierarchy' filters are useful , but only in the filter panel of the Ribbon.

Legend Element

Legends are elements to apply color to elements or connectors according to condition.

- Specify element or tagged value , and then add value and color pair.
- Legend can be reused by Copy and Paste (Ctrl+C & Ctrl+v) to other diagrams
- Legend is not a tool to apply color to elements /connectors directly, do not apply but consider using a legend
  - Why you want to apply color?
  - Define the reason as a Tagged value or any property
  - Add a legend and set the rule
- By defining data and presentation you can
  - Use multiple legend and select applying color
  - You can change color in one step whenever you want.
  - You can use the 'Data' in other feature:
    - List view
    - Filter
    - Search

Layout Diagrams

As you develop a model diagram and add more elements and connectors to it, you can apply one of a number of formats to automatically lay out specific areas or sets of elements in the diagram in a structured arrangement. If the diagram is very simple, you could even use this facility to lay out the entire diagram.

Additionally, you can provide filters and parameters for two or three types of layout and then 'chain' the layouts so that they are executed in sequence to result in a more refined layout. You can select a system-defined chain, or one that you have created yourself.

Access

Ribbon	Layout > Tools > Diagram Layout > Open Diagram Layout Tools
Context Menu	Right-click a selected element on a diagram | Layout Selected Elements (available only when multiple elements are selected)

Other	Right-click on any toolbar	Diagram Layout Tool : Select a Layout	➡Apply Layout

Lay out elements on a diagram

Step	Action	See also
1	Select the elements to lay out on the currently-active diagram - hold **Shift** or **Ctrl** while you click on each required element, or hold the mouse button down while you sweep over the area containing the required elements. If no elements are selected on the active diagram, then all elements on the diagram are laid out (except where otherwise documented).	
2	Click on the drop-down arrow on the top left field of the **Layout Tools window**, and select the required layout type: ● Circle/Ellipse ● Box ● Per Page ● Digraph ● Spring ● Neaten ● Converge/Diverge ● Fan Relations ● Auto Route The layout type determines the fields presented in the window, therefore the appropriate fields are described separately for each layout type. If you want to apply a sequence or chain of diagram layouts to a diagram, select either: ● The appropriate system-defined chain name, or ● The name of a chain you have created yourself You can create and modify a 'Layout Chain' by clicking on the ⊞ button in the dialog toolbar.	[Circle/Ellips](#) [Per Boxe](#) [Page](#) [Digraph](#) [Spring](#) [Neaten](#) [Converge/D](#) [Fan iverge](#) [Relations](#) [Auto](#) [Chain Route](#) [diagram](#) [layouts](#)
3	When you have completed the fields, click on the ➡ button. The selected elements are reorganized into the pattern format you have selected and according to the options you have chosen.	
4	If you do not want to work with the new layout, click on the **Undo**	

	button in the toolbar ().