## Array Variable Override Controller

This controller does not generate any value , but it modifies the output of the child controller by overriding some critical information which are passing through . Using Array Variable Override (AVO) you can override the indexes and counts of container nodes in the all subcontrollers.
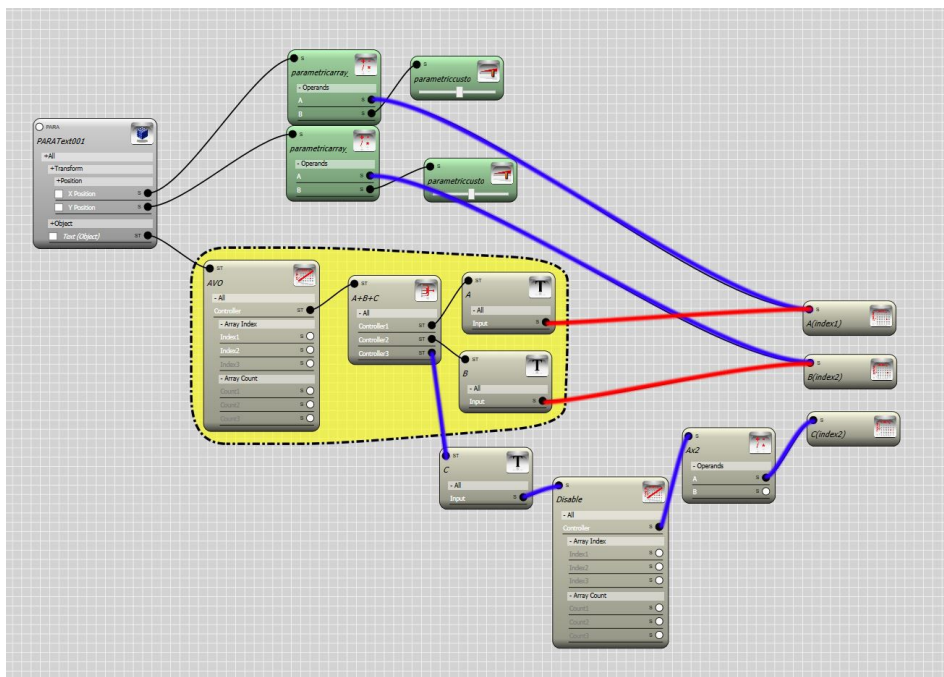
Enable/Disable

When the enable option is selected the controller allows user to override the array variables such as index and count parameters. When disable option is chosen the controller defines the limit which the variable override must be implemented.

In below example the AVO controller can override the array variables in all sub controllers that are highlighted in yellow. Note the Array variable controllers in the right side , the index1 and index2 passed by array variable controller in the red path will be replaced by the value defined in AVO controller while the blue path still contains the default value.
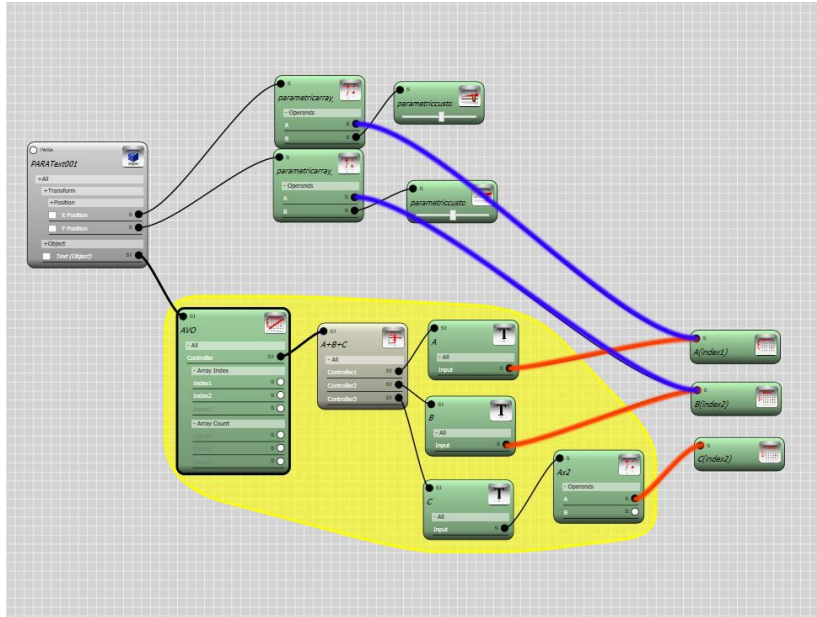
In below example and in the second AVO controller the disabled options is chosen to limit the scope of the first controller. The subcontrollers on the right side of the second AVO will not inherit the values from the first AVO.

Another scenario may occur when an Array variable controller is used under two AVO controller one with enable override and other with disable. In this case the enable variable override takes over. In below example the index2 which is passed by controller B it will be overridden by the first AVO controller although it's used under an AVO controller with active disabled option.
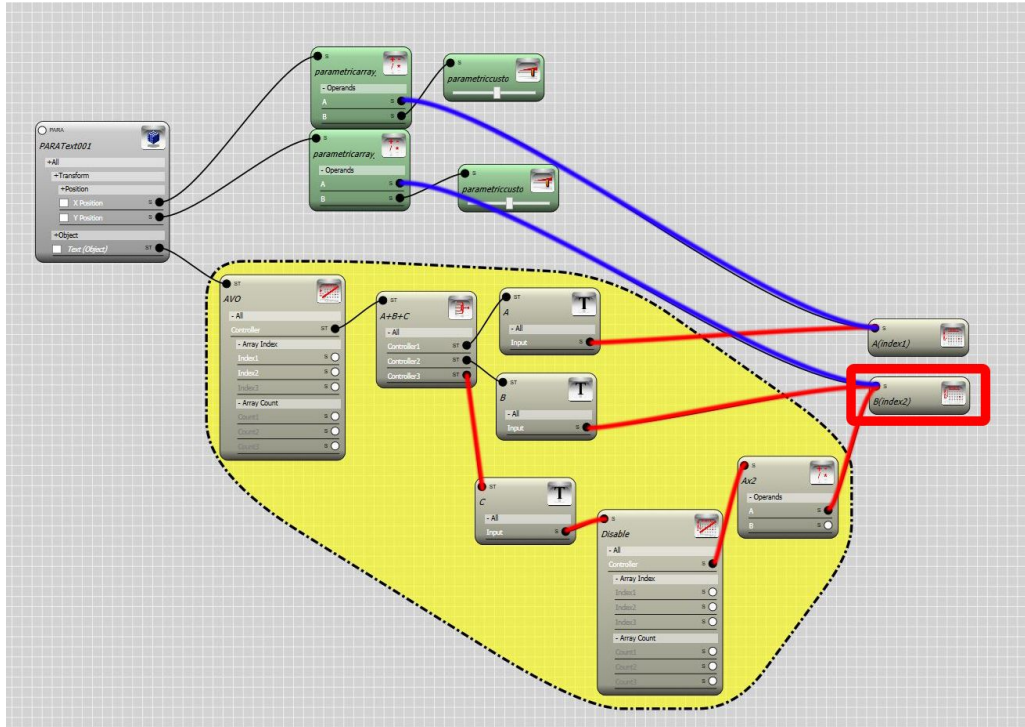
Note:

If you wish to access the original values of index or count parameters under an AVO controller which overrides those parameter make sure you use a fresh copy of the controller under the AVO controller and choose disable option.

Override Values

In this section you can choose the array variable which you would like to override. There 6 variables listed. To override an array variable check the box for the variable and then enter the value in control panel or add a controller to the relevant channel.

Note:

You can only enter integer number in spinners.

Note:

When overriding Index value make sure the new value is greater than 0 and less than count value in the same direction.
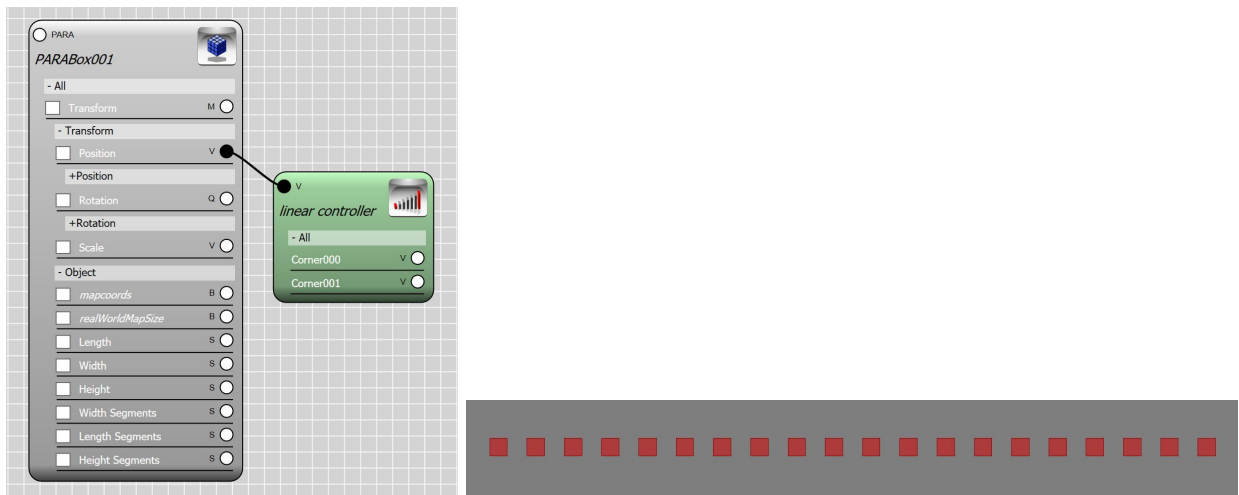
Note :

When overriding the count value make sure the new value is greater than 1 .

Example1 :

Below image shows the result of overriding the index1 value by a graph controller. Before the override a linear controller has been assigned to the position channel of a parametric array node:

After the override the linear controller shows an easing effect towards the end and beginning of the array. This is because the index1 value which is used to compute the position of the items in D1 does not increment in a linear manner but follows the curve in graph controller and varies between 1 to count1 as per range controller.
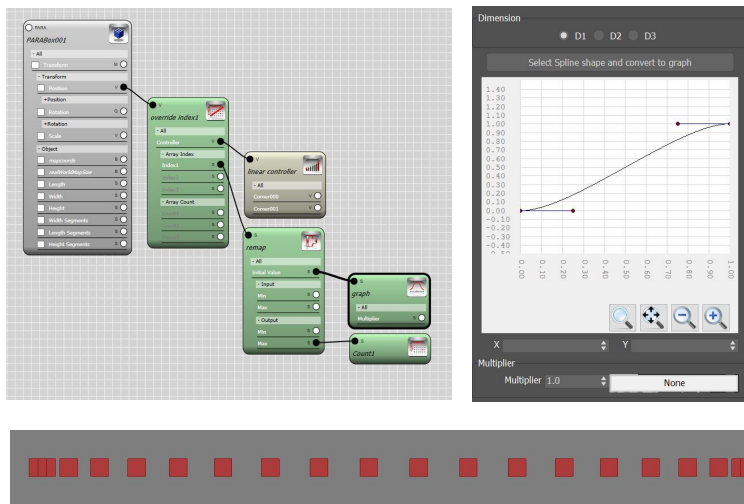

Invert Array

Choose this option to reverse the index value. For example in a 1D array with the 10 members the index of the members from the first member to the last are :

1,2,3,4,5,6,7,8,9,10 . Choosing invert array option on index1 will change the index1 for the members to 10,9,8,7,6,5,4,3,2,1

Example 2:

In below example the result of bitmap controller is up-side down because the bitmap controller reads the pixels from the top-left corner to bottom-right corner.
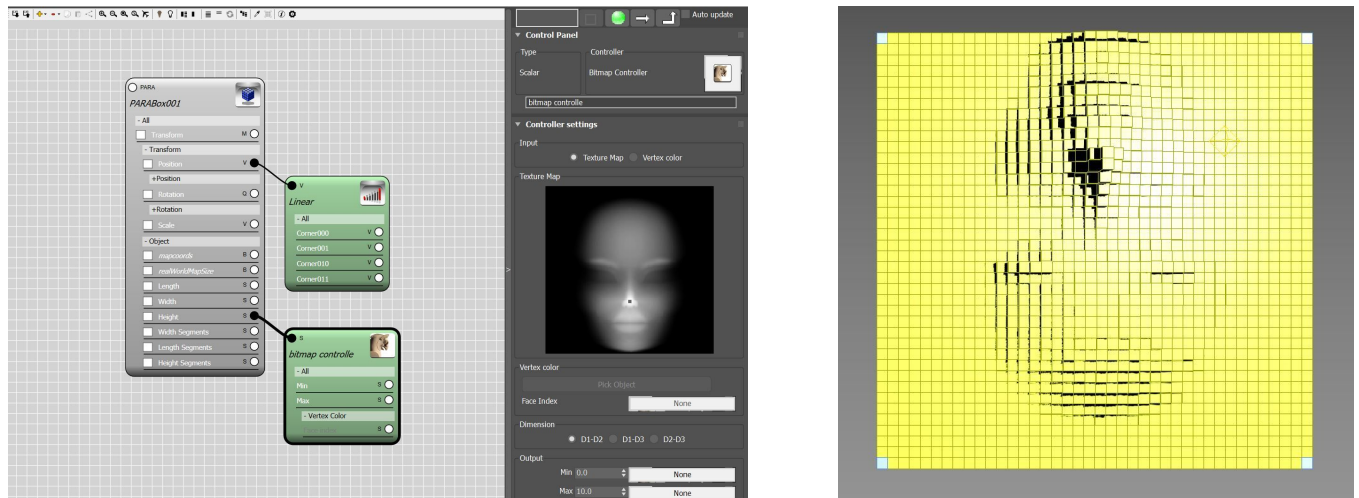
In below an AVO controller used to reverse the array in D2 direction. The result matches the bitmap image:
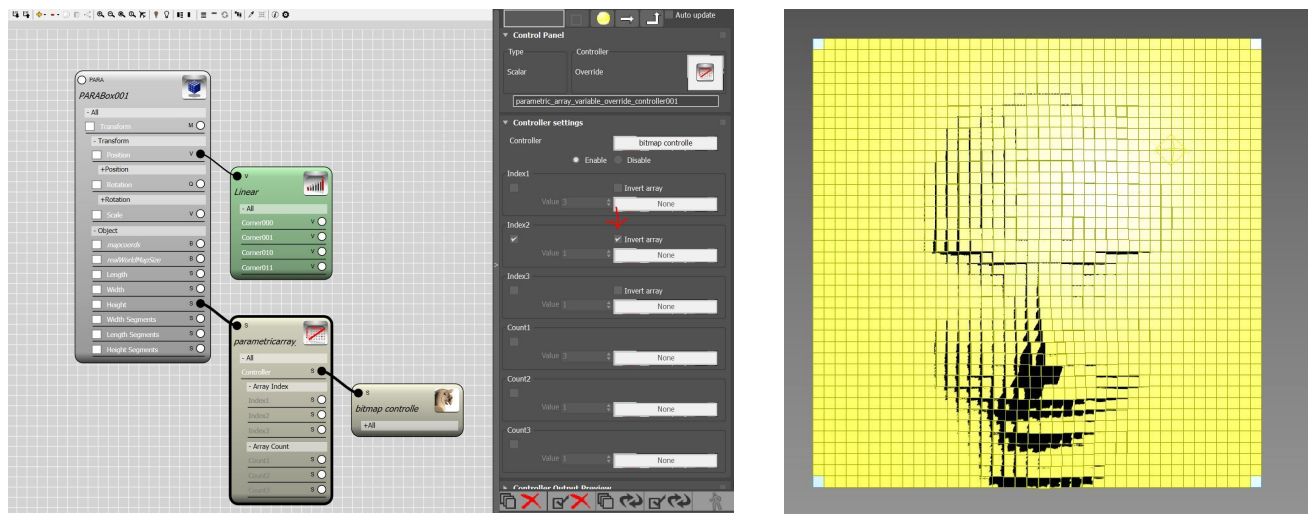
Outputs
The AVO controller supports all types of outputs.