

Communicate SymWriter: R5. Trays and buttons

R5.1 What is a tray – overview

In SymWriter it is not necessary to use grids. Grids are really quick and useful for arranging cells in a regular (or semi-regular) form. Sometimes it is better, or more attractive, to have an alternative way of arranging objects where they can be positioned and sized independently. In SymWriter a tray is a holder for such a group of objects. A tray can have a graphic as a background.

On a tray you can place:

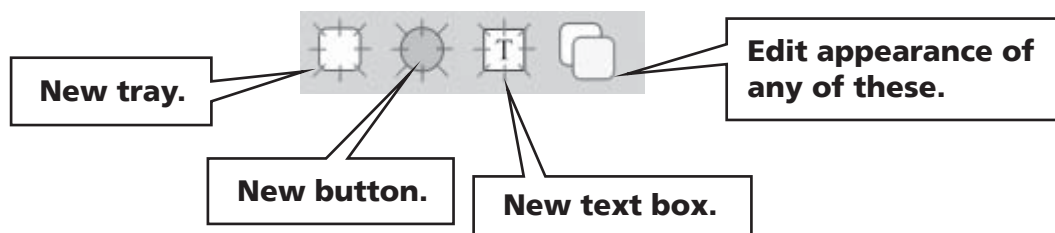
- Graphics
- Buttons
- Text boxes

Each of these objects has access to the Edit cell actions dialog and so they can behave much the same way as cells in a grid.

Also you can link to a tray in the same way as you can link to a grid. Trays can be stacked like grids. In fact you can mix trays and grids in a stack.

R5.2 Making a single tray

The icons relating to this section are in the default toolbar for designing environments.

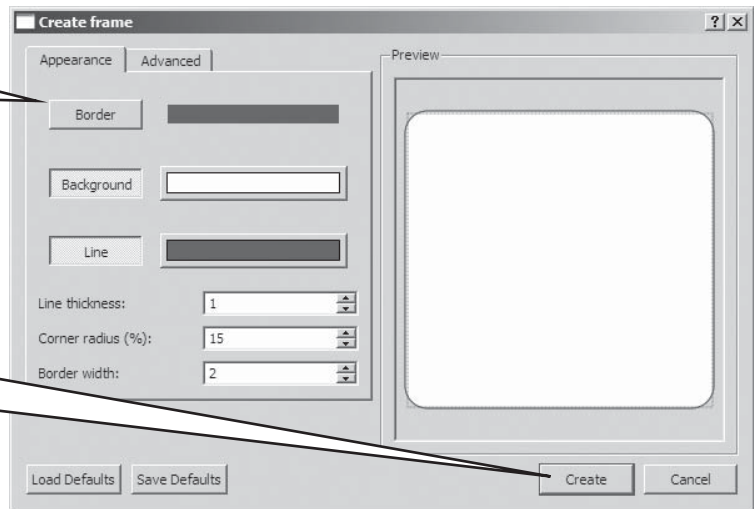


From the launcher select the **Design environment** button. Then create the **environment** with a single **stage** at the bottom of the screen (See User Guide start of section B2.1 Making a single grid for writing).

Select the **New tray** icon.



This works just like making a grid, except there is just the single whole tray.



When you have set the colours etc as you wish, click **Create**, then drop the tray centrally onto the lower stage.



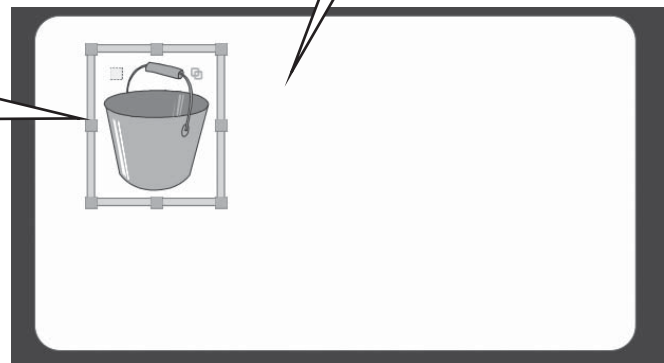
Now click on the **Graphic** tab to show the graphic browser. Click on a graphic, we chose a bucket, and then click in the tray.

Size the graphic as you like (we call this a Command Graphic).

Then click on the **Action** icon to add actions to the graphic.

We chose:

- **Send a graphic**
- **Send pre-defined text** ("The bucket is under the sink").
- **Send a return**

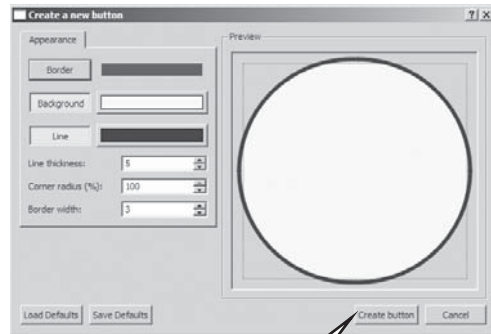


Adding a button

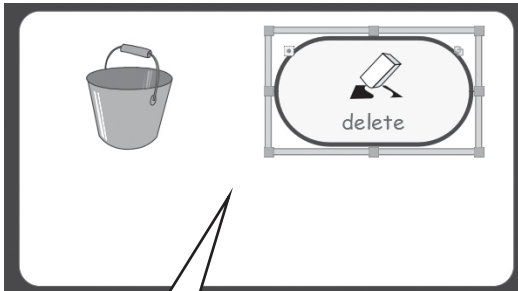
Now select the **New button** icon.



This works just like making a **grid** except there is just the single **whole button**, and the defaults are likely to be near those that you may want for a button.



When you have set the colours etc. As you wish, click **Create button**, then drop the button onto the tray.



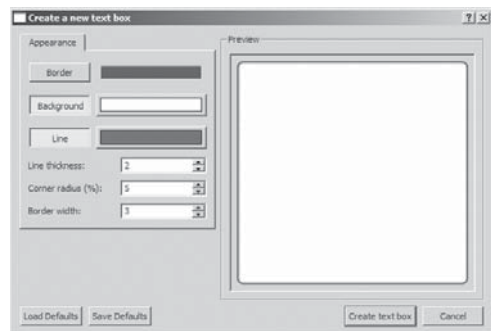
You can drag the **button** to what shape and size you like. **Buttons** behave like a **cell** so you can use **F2** to go to **text-mode**, and type into the button. Here we then clicked on the **action** icon in the **button** and set the single action **Delete word**.

Adding a new text box

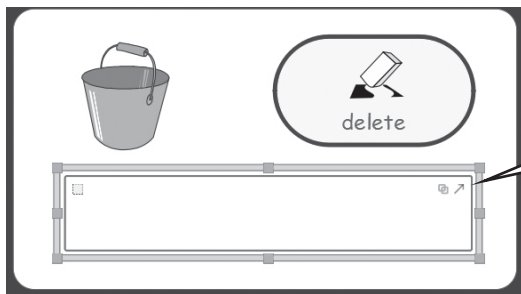
Now select the **New text box** icon.



This works just like making a **grid**, except there is just a single box, and the defaults are likely to be near those that you may want for a **text box**. Also **text boxes** have the command to **Send cell contents** set by default. Otherwise a **text box** and a **button** are identical in what they can do.

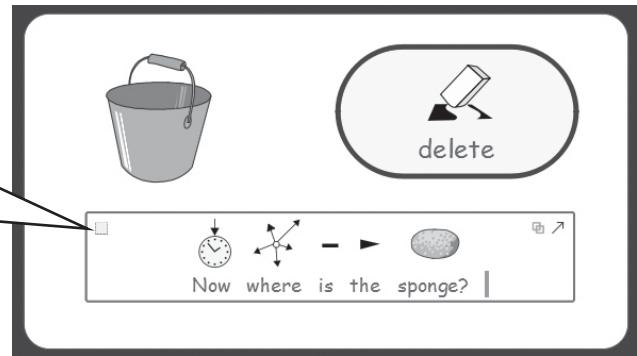


When you have set the colours etc as you wish, click **Create text box**, then drop the text box onto the tray. Drag the text box to the size you want.

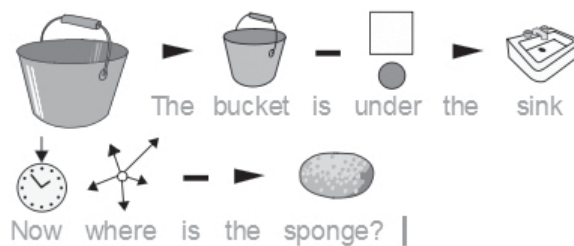


(There is an example of this kind of activity in the Example Environments folder called **what can I find.swe**).

Press **F10** to put the text box into symbol mode. Type a sentence into the text box. Press **F2** to go to **arrow-mode** and click on the action icon in the text box and add the action to **Send a return** after the **Send cell contents**.



You can now save the environment and go to try your work. This is what was obtained after selecting the bucket and then the text box.



You can see that this tray could be one of a set in an activity about finding where things are. Trays can be stacked and linked in a very similar way to grids.

R5.3 Altering the appearance of a tray

The appearance of a tray can be edited in the same way as a grid. Right button click in the tray and select **Edit tray appearance**. You can also use the **edit appearance** icon from the toolbar to modify the properties of a **tray, a button or a text box**.



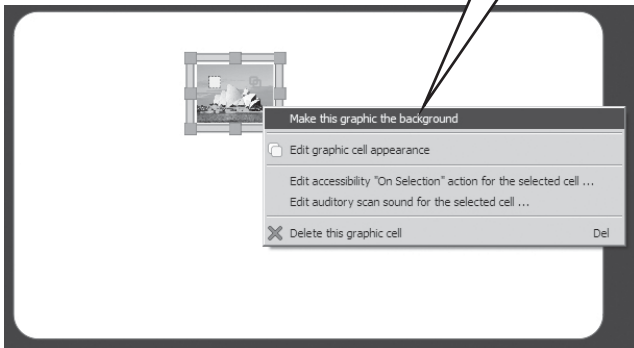
You select the object then click on the **edit appearance** icon from the toolbar.

The dialog box that appears is the same as that used to create the tray, see section R5.2 Making a single tray p1.

Adding a background graphic

You can also use a graphic as the background for a tray. From the graphic browser drop a graphic onto a tray. Right button click on the graphic:

Select **Make this graphic the background**.



Removing a background image

Right click on the graphic.

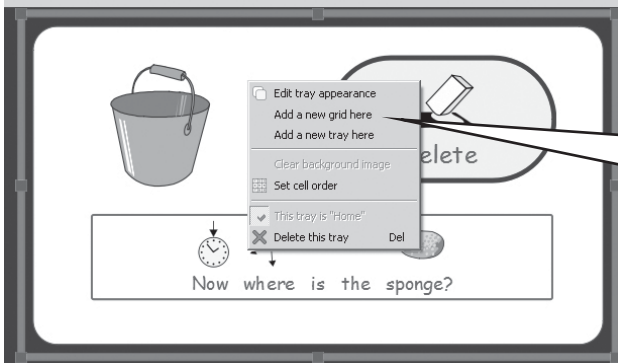


Select **Clear background image**.

You can delete a tray by selecting **Delete this tray**. Or you can press the **Delete** key when the tray is selected.

R5.4 Linking trays

You can create a stack of trays, or trays and grids, in the same way that you created a stack of grids in Reference Sheet R3.2 Making a sequence of linked grids. Right button click on the tray to bring up the context menu.



You can select **Add a new grid here** or **Add a new tray here**, according to whether you want to add a grid or a tray to the stack.

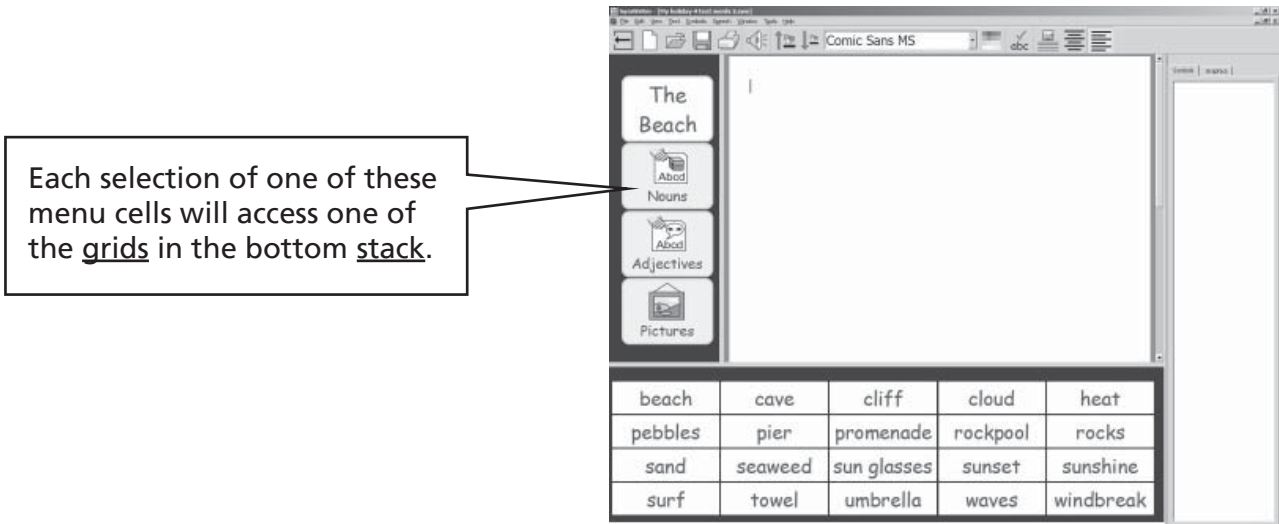
When a stack has been created each tray and grid will appear in the grid viewer. Linking from graphics, buttons and text boxes on a tray works exactly like linking from cells in a grid. The link anchor will show in each of these objects, and links can be made as described in sheets R3.2 Making a sequence of linked grids and R3.3 Using two separate grids. There is nothing new to learn.

R5.5 Using buttons direct on a stage

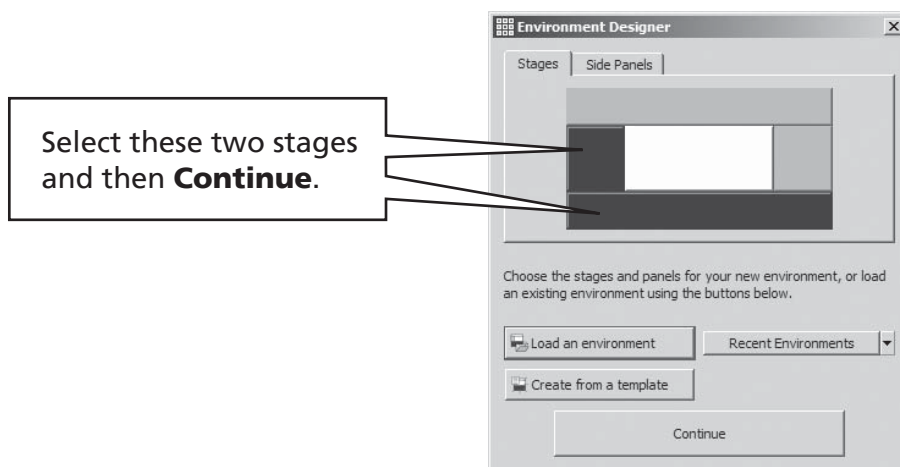
You can drop buttons and text boxes directly onto a stage. They behave the same way as when dropped onto a tray but will remain permanently visible. This is useful so that certain common commands, such as delete word, can always be available to a mouse user. It is less useful for switch access – see User Guide section B3. Switch scanning p72 – as it is better to keep these functions within the scanning grid.

R5.6 Using multiple stages

You may want to use more than one stage, for example a menu grid down the left and a stack of other grids at the bottom. This shows the sort of layout:



To achieve this two stages are needed. These may be produced by selecting them at the outset using the dialog that appears from the launcher, i.e.



Stages can, however, be added or removed at any time using items on the toolbar:



To make a new stage, select the **New stage** icon and move the mouse to the side of the screen where you want the stage – a “ghost” image of the stage will appear. Click when the ghost image is correct.

To delete a stage, click on the **Delete stage** icon and then on the stage you wish to delete.

You may find that the default “front to back” order of the stages is not what you need, for example you may want the left stage to be at the front.

Right button click on the left stage and select **Bring this stage forward**.



Don't forget that you can change the size of a stage by dragging the grey bar at its edge.