

SML Dialog with Tabbed Pages using XML

Shown below are two views of a sample SML dialog window with two tabbed pages (panels) and the XML text used to create it. Tabbed pages are represented in the XML text by *page* elements that nest inside a *book* element. In this example the controls on each tabbed page are placed within one of several layout

pane elements. Nested panes are used to organize dialog controls into vertical columns or horizontal rows. Control elements can also be added directly into a page (or into the dialog element for a non-tabbed dialog) to create a single vertical column or horizontal row of elements.




```

<?xml version="1.0"?>
<root> start-tag of the required root element of the XML document name of the SML function or procedure to call when the Apply button is pressed
  <dialog id="dlgform" title="Flow Path and Buffer Zone" OnApply="OnApply()"> start-tag for the dialog element with attributes
    <book> start-tag of the book element consisting of tabbed pages
      <page Name="Controls"> start-tag for the first tabbed page; the Name attribute sets the page name
        <pane Orientation="horizontal"> start tag for a layout pane to contain pushbuttons; Orientation attribute set to create a horizontal row
          <pushbutton Name="Save" Icon="FILE_SAVE" ToolTip="Save Output Layers..." OnPressed="DoSave()"/>
          <pushbutton Name="Remove" Icon="CONTROL_SUBTRACT_CYAN" ToolTip="Remove Output Layers" OnPressed="cbDoRemove()"/>
          <pushbutton Name="Number of Seedpoints..." OnPressed="DoSet()"/>
        </pane> end-tag for the first layout pane
        <pane Orientation="vertical"> start-tag for a vertically-oriented layout pane to contain a column with toggle buttons
          <togglebutton id="btnSnap" Name="Move Seed Point to Flow Path" Selected="false"/>
          <togglebutton id="btnFlow" Name="Compute Flow Path" Selected="true"/>
          <togglebutton id="btnBasin" Name="Compute Upstream Basin" Selected="true"/>
          <togglebutton id="btnBuffer" Name="Compute Buffer Zone" Selected="false"/>
        </pane> end-tag for the second layout pane
        <pane Orientation="horizontal"> start-tag for a horizontally-oriented layout pane to contain text label and editable numeric field
          <label>Buffer Distance: </label>
          <editnumber id="PromptDistance" Width="5" Default="100" Precision="0" MinVal="0"/>
        </pane> end-tag for third layout pane
      </page> end-tag for the first tabbed page
      <page Name="Colors"> start-tag for the second tabbed page with default vertical orientation
        <pane Orientation="horizontal"> start-tag for a horizontally-oriented layout pane to contain the first color-button and label
          <colorbutton id="fcolor" OnChangeColor="OnChangefcolor()"/>
          <label> Flow path color</label>
        </pane> end-tag for the layout pane
        <pane Orientation="horizontal">
          <colorbutton id="bacolor" OnChangeColor="OnChangebacolor()"/>
          <label> Basin color</label>
        </pane>
        <pane Orientation="horizontal">
          <colorbutton id="buicolor" OnChangeColor="OnChangebuicolor()"/>
          <label> Buffer zone color</label>
        </pane>
        <pane Orientation="horizontal">
          <colorbutton id="bocolor" OnChangeColor="OnChangebocolor()"/>
          <label> Extents box color</label>
        </pane>
      </page> end-tag for the second tabbed page
    </book> end-tag for the book element
  </dialog>
</root>

```

pushbutton elements: empty tags with attributes. Use the Icon attribute to create an icon button with the named icon

toggle button elements: empty tags with attributes

editable numeric field with attributes defining the default value, number of decimal places, and minimum allowed value

name of the SML function or procedure to call when the color is changed

page with default vertical orientation; its children are arranged in a vertical column

The Orientation attribute for a pane, page, or dialog lets you set whether its contained elements are arranged in a vertical column or horizontal row. The default orientation for a pane is the opposite of its parent. All children of a pane are laid out from left to right or top to bottom.

red boxes outline panes with horizontal orientation nested in the page; each pane includes a colorbutton and label element in a horizontal row