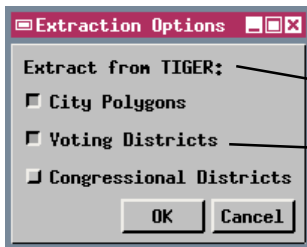


Sample Dialog Descriptions in XML

Shown below are several sample SML dialog windows with the XML text used to create each one. In a dialog specification in XML, text elements (delimited by start- and end-tags) represent components of the dialog and are identified by a set of predefined XML tags. Various properties of each component (name, default settings, and so on) are included as

attributes of the component's start-tag. In some cases all of the information for a dialog control is represented by a combined start-end tag (called an empty tag) and its attributes. The XML format facilitates dialog setup because elements within the XML document are grouped and nested in a clear logical structure that determines the layout of the dialog.

Label and Toggle Buttons

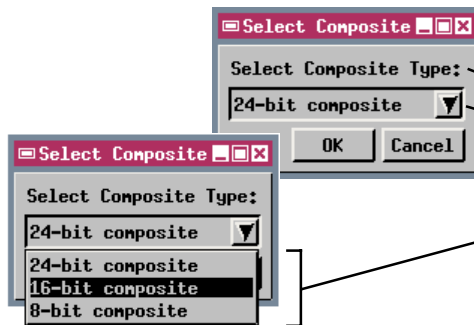


```
<?xml version="1.0"?>
<root>
  <dialog id="tigerops" title="Extraction Options" OnOK="CheckTogs()">
    <label>Extract from TIGER:</label>
    <togglebutton id="citybtn" Name="City Polygons" Selected="true"/>
    <togglebutton id="votebtn" Name="Voting Districts" Selected="false"/>
    <togglebutton id="congbtn" Name="Congressional Districts" Selected="false"/>
  </dialog>
</root>
```

Annotations for the XML code above:

- `<?xml version="1.0"?>`: start-tag for the required root element of the XML document
- `<root>`: start-tag for the dialog element with attributes
- `<label>Extract from TIGER:</label>`: text label element
- `<togglebutton id="citybtn" Name="City Polygons" Selected="true"/>`: toggle button elements: empty tags with attributes
- `</dialog>`: end-tag of the dialog element
- `</root>`: end-tag of the root element

Label and Combobox Menu

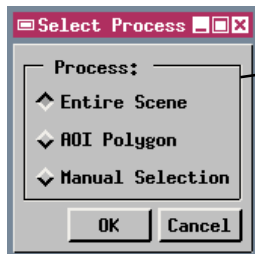


```
<?xml version="1.0"?>
<root>
  <dialog id="selcomp" title="Select Composite" OnOK="OnOK()">
    <label>Select Composite Type:</label>
    <combobox id="comptype" Default="24">
      <item Value="24">24-bit composite</item>
      <item Value="16">16-bit composite</item>
      <item Value="8">8-bit composite</item>
    </combobox>
  </dialog>
</root>
```

Annotations for the XML code above:

- `<dialog id="selcomp" title="Select Composite" OnOK="OnOK()">`: dialog title
- `<label>Select Composite Type:</label>`: name of SML function or procedure to execute when OK button is pressed
- `<combobox id="comptype" Default="24">`: combobox element
- `<item Value="24">24-bit composite</item>`: item list for the combobox menu; empty tags with attributes

Radio Buttons (Only One Selected at a Time) in a Box

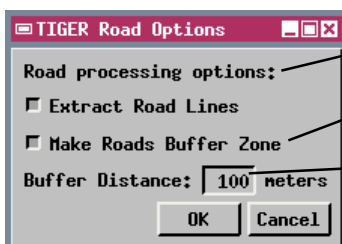


```
<?xml version="1.0"?>
<root>
  <dialog id="select" title="Select Process" OnOK="OnOK()">
    <groupbox Name="Process: " ExtraBorder="4">
      <radiogroup id="processgp" Default="entire">
        <item Value="entire" Name="Entire Scene"/>
        <item Value="polygon" Name="AOI Polygon"/>
        <item Value="manual" Name="Manual Selection"/>
      </radiogroup>
    </groupbox>
  </dialog>
</root>
```

Annotations for the XML code above:

- `<?xml version="1.0"?>`: required XML version declaration
- `<groupbox Name="Process: " ExtraBorder="4">`: box element with Name (label)
- `<radiogroup id="processgp" Default="entire">`: group of radio buttons
- `<item Value="entire" Name="Entire Scene"/>`: item list for the radiogroup
- `</radiogroup>`: end-tag for the radiogroup
- `</groupbox>`: end-tag for the groupbox element

Togglebuttons, Labels, and Editable Numeric Field



```
<?xml version="1.0"?>
<root>
  <dialog id="tigrdrs" title="TIGER Road Options" OnOK="OnOK()">
    <label>Road processing options:</label>
    <togglebutton id="getrdrs" Name="Extract Road Lines"/>
    <togglebutton id="mkbuf" Name="Make Roads Buffer Zone"/>
    <pane Orientation="horizontal">
      <label>Buffer Distance:</label>
      <editnumber id="buffdist" Width="4" Precision="0" Default="100" MinVal="0"/>
      <label>meters</label>
    </pane>
  </dialog>
</root>
```

Annotations for the XML code above:

- `<dialog id="tigrdrs" title="TIGER Road Options" OnOK="OnOK()">`: id attribute lets SML script easily access the control setting or value
- `<pane Orientation="horizontal">`: layout pane with child elements in horizontal row
- `<editnumber id="buffdist" Width="4" Precision="0" Default="100" MinVal="0"/>`: editable numeric field with number of decimal places and default and minimum value attributes
- `</pane>`: end tag for the layout pane