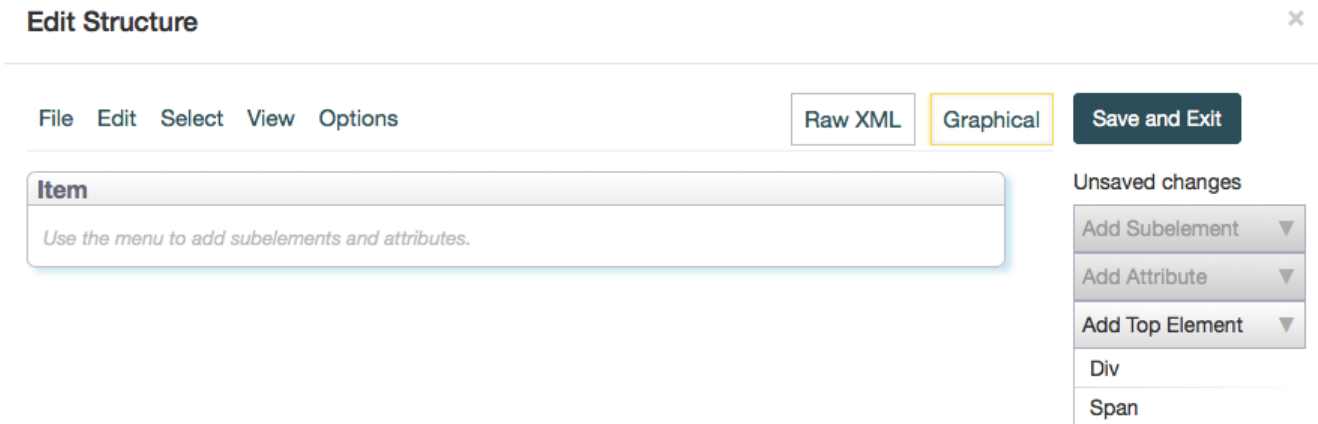


# Adding Structure to Files Using the Graphical XML Editor

In Avalon 4.0 and later, you have the ability to add navigational structure to any file. This can be done by writing raw XML or by using the graphical XML editor. Examples are provided below and you can also refer to [avalon\\_structure.xsd](#) schema for detailed specifications.

To add structure using the graphical editor:

1. Navigate to the "Structure" tab of any item and click the + sign to the right of the section.
2. Click edit and then select "Graphical" tab in the editor.
3. You will be presented with a blank item in which you can use the menu to the right to add Divs and Spans.



An *Item* is the main container for the XML document. A *Div* is used to create contained hierarchical structure that contains one or more *Spans*. You can not add time codes to *Divs*. A *Span* is used to add beginning and end times to specific parts of the file. A *label* attribute is required on both *Divs* and *Spans*.

Avalon items can contain many files, or sections as we call them. Each file can have only one XML document or "XML *Item*". Each "XML item" for which structure should be added should contain at least 1 *Span* with time codes in place.

A simple example would be tracks on a CD.

## Example audio work:

Sallie Bakes a Pie with a length of 10 mins

1. The Crust 3 mins 30 sec
2. The Filling 5 mins 30 sec
3. Baking 58 sec

To create this:

1. In the Item box, enter the label "Sallie Bakes a Pie". The total duration of the file/section will happen automatically.
2. Click on the "Item" box. It will become outlined in orange and the top bar will become blue as in the image above.
3. Now you will see options on the right to add Span and Divs. In Sub Elements and Top Elements.
4. Add 3 Spans as Top Elements to "Sallie Bakes a Pie" by clicking the Span label in the Top Element section 3 times.
5. Click on each Span box and add 3 attributes to each by clicking the labels "label, begin, end".
6. Enter labels and times for each span
7. Times should be entered in this format hh:mm:ss.msec

It would look like this in the editor:

## Edit Structure



File Edit Select View Options

Raw XML

Graphical

Save and Exit

### Item

(x) label

#### Span

(x) label  (x) begin

(x) end

#### Span

(x) label  (x) begin

(x) end

#### Span

(x) label  (x) begin

(x) end

Unsaved changes

Add Subelement

Div

Span

Add Attribute

label

Add Top Element

Div

Span

Switching over to the Raw XML view of this structure looks like this:

## Edit Structure



File Edit Select View Options

Raw XML

Graphical

Save and Exit

```
1 <Item label="Sallie Bakes a Pie">
2   <Span label="The Crust" begin="00:00:00.00" end="00:03:30.00"/>
3   <Span label="The Filling" begin="00:03:30.00" end="00:09:00.00"/>
4   <Span label="Baking" begin="00:09:00.00" end="00:10:00.00"/>
5 </Item>
```

Unsaved changes

Add Subelement

Add Attribute

Add Top Element

Div

Span

A more complex structure is shown in Raw XML below reflecting the following:

1. Sallie Bakes a Pie
  - a. Part 1: Make and Back
    - i. The Crust 3 mins 30 sec
    - ii. The Filling 5 mins 30 sec
    - iii. Baking 58 sec
  - b. Part 2: Cool and Serve
    - i. Cooling
      1. Remove from Oven 30 sec
      2. Cooled Enough Yet? 1 min
      3. What About Now? 1 min

- 4. Yay, We Can Eat Pie! 1 min
  - ii. Eating All the Pie 1 min 30 sec
- c. That Ended Too Soon 10 sec
- d. Sad Trombone 4 min 50 sec

## Edit Structure

✕

File Edit Select View Options Raw XML Graphical Save and Exit

```

1 <Item label="Sallie Bakes a Pie">
2   <Div label="Part 1: Make and Bake">
3     <Span label="The Crust" begin="00:00:00.00" end="00:03:30.00"/>
4     <Span label="The Filling" begin="00:03:30.00" end="00:09:00.00"/>
5     <Span label="Baking" begin="00:09:00.00" end="00:10:00.00"/>
6   </Div>
7   <Div label="Part 2: Cool and Serve">
8     <Div label="Cooling">
9       <Span label="Remove from Oven" begin="00:10:00.00" end="00:10:30.00"/>
10      <Span label="Cooled Enough Yet?" begin="00:10:30.00" end="00:11:30.00"/>
11      <Span label="What About Now?" begin="00:11:30.00" end="00:12:30.00"/>
12      <Span label="Yay, We Can Eat Pie!" begin="00:12:30.00" end="00:13:30.00"/>
13    </Div>
14    <Span label="Eating All the Pie" begin="00:13:30.00" end="00:15:00.00"/>
15    <Span label="That Ended Too Soon" begin="00:15:00.00" end="00:15:10.00"/>
16  </Div>
17  <Span label="Sad Trombone" begin="00:15:10.00" end="00:20:00.00"/>
18 </Item>
  
```

All changes saved

- Add Subelement ▾
- Add Attribute ▾
- label
- begin
- end
- Add Top Element ▾
- Div
- Span

In the Graphical editor, Part 2 is a *Div* with another *Div* and *Span* inside. The inside *Div* also contains *Spans*.

## Edit Structure

✕

File Edit Select View Options Raw XML Graphical Save and Exit

**Item**

(x) label: Sallie Bakes a Pie

**Div**

(x) label: Part 1: Make and Bake

**Span**

(x) label: The Crust

(x) begin: 00:00:00.00

(x) end: 00:03:30.00

**Span**

(x) label: The Filling

(x) begin: 00:03:30.00

(x) end: 00:09:00.00

All changes saved

- Add Subelement ▾
- Add Attribute ▾
- Add Top Element ▾
- Div
- Span

