# XML format

There are dozens of books on XML only - it is a widely used language for many purposes. As always, wikipedia is a good read. however, based on an example, the (for this purpose) essential items will be explained.

An example macro file might look like this:

```
<?xml version="1.0" encoding="utf-8"?>
<avolites.macros xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="Avolites.Menus.xsd">
    <!-- Macro to set PlaybackPaging to never. Sebastian Beutel with help by
Gregory Haynes 05/09/2016 -->
    <macro id="Avolites.Macros.PagingNeverHold" name="Set PbPaging to
NeverHold">
        <description>Sets PlaybackPaging to NeverHold.</description>
        <sequence>
        <step>ActionScript.SetProperty.Enum("Handles.HandlesHeldover",
"NeverHold")</step>
        </sequence>
        </sequence>
        </sequence>
        </sequence>
        </macro>
</avolites.macros>
```

## The 1st line

```
<?xml version="1.0" encoding="utf-8"?>
```

is the opening XML declaration. It is not required but good practice.

## The 2nd line

```
<avolites.macros xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="Avolites.Menus.xsd">
```

has some required and some non-required parts:

- < the angled brackets > are essential for every xml tag
- avolites.macros is the essential macro tag which makes Titan interpret this file correctly
- the xmlns... part is the namespace of the file. It is not required and can be omitted.
- this line corresponds with the last line

</avolites.macros>

. Note the slash at the beginning which makes this a closing tag - **every tag needs to be closed!** 

#### The 3rd line

<!-- Macro to set PlaybackPaging to never. ... -->

is a comment, and will not be interpreted by Titan. It is good practice to comment at least what the macro does and who wrote it - and in more advanced macros, comments on the real logic will be of great help.

### The 4th line

```
<macro id="Avolites.Macros.PagingNeverHold" name="Set PbPaging to NeverHold">
```

corresponds with line 9

#### </macro>

. These two lines hold the macro itself - each file can hold multiple macros where each macro starts with <macro  $\dots$  > and ends with the corresponding </macro>.

The parts id=... and name=... are properties of this macro:

- id is required and a unique identifier
- name is semi-required and is the name which is shown in Titan if you omit it, then you'll only see something like 'Macro1'.

#### Lines 5 through 8

```
<description>Sets PlaybackPaging to NeverHold.</description>
    <sequence>
        <step>ActionScript.SetProperty.Enum("Handles.HandlesHeldover",
"NeverHold")</step>
```

```
</sequence>
```

are the contents of our macro:

- <description> corresponds with the closing </description>, is optional, and may hold a longer description of the macro
- <sequence> corresponds with the closing </sequence> and holds the actions which the macro is to perform (one or more steps)
  - it is also possible to use <start> ... </start> and <end> ... </end> in order to have separate actions when the button is pressed and when it is released, see Stopwatch/Flash Playback
- <step>...</step> is the function which this step is to perform. In this case it calls the function ActionScript.SetProperty.Enum() with the arguments "Handles.HandlesHeldover" and "NeverHold".

A brief introduction about possible functions is available here. But essentially, this whole wiki is

dedicated to possible macros

It is possible to bundle some steps together into one block with {curly braces} like this:

```
<sequence>
<step>Playbacks.SetRecordType("RecordCueModeProgrammer")</step>
<step>
{
Playbacks.StoreCue("PlaybackWindow", 1000, false);
Handles.SetSourceHandle("PlaybackWindow", 1000);
ActionScript.SetProperty("Handles.CurrentUserNumber",
userNumber:10000);
Handles.SetUserNumber();
Handles.ClearSelection();
}
</step>
</sequence>
```

See http://forum.avolites.com/viewtopic.php?f=20&t=5783.

#### further readings

- Introduction to macros
- Console and simulator how actions on the consoles are described
- Recorded vs. coded macros both kinds: Country, AND Western
- Macro file format what to observe when creating macro files
- Macro Folders where exactly are the macro files stored
- Deploying macros how to import a macro file into Titan
- XML format a veeeery basic introduction into the format macro files are written in
- The Syntax of Functions understanding how functions are described in general
- Control Structures conditions and other means to control the flow
- Action and Menus when a menu needs to be toggled in addition to the action
- Step Pause a little delay might sometimes be helpful
- Active Binding highlighting a macro handle as active
- Namespaces a way to keep order of the functions, properties and other stuff
- Datatypes numbers, words, yes & no: the various types of values
- Properties list the affected system variables of Titan
- Function list the functions mentioned in this wiki
- Examples list all the contributed macros. And where is yours?

2017/10/13 15:12 · icke\_siegen

From: https://avosupport.de/wiki/ - **AVOSUPPORT** 

Permanent link: https://avosupport.de/wiki/macros/xml\_file\_format?rev=1586689508

Last update: 2020/04/12 11:05

