

Public Support - Support Request #11042

Availability of Script/Tool to Convert between Old and New Mapping Formats in DeviceToolbox

2020-04-16 14:02 - hidden

Status: Closed	
Priority: Normal	
Category:	
Customer: AUDI	Product Issue Numbers:
Department: EF	Affected Products: ADF Device Toolbox 3.1.0
Requester's Priority: Normal	Platform: Windows 10 64bit
Support Level: 2nd Level	Topic: DeviceTB::Common
Resolution:	FAQ Links:
Description	
Supportanfrage	
<p>I wanted to ask if there is any script or tool available, with which I can convert an old "buffer configuration file" to a new one which is compatible with ADF_DeviceToolbox version 3.x. The documentation of ADF-DeviceToolbox mentions that the syntax has been changed, but does not mention any tool to support the migration. (see <ADTF_DeviceToolbox_ROOT>/doc/devicetoolbox_html/page_whats_new.html#subsection_mapping_vergleich)</p>	
Lösung	
<p>good timing, today we have pushed a stylesheet for this conversion to the community:</p> <ul style="list-style-type: none">• https://git.digitalwerk.net/adtf3_open_source/adtf2_buffer_config_xml_to_adtf3_codec_map_converter <p>Feel free to use and collaborate in case you are missing features.</p> <p>Maybe it will grow with an own convenience tooling but now it is possible with an easy xslt.</p> <p>For an example have a look here:</p> <ul style="list-style-type: none">• #11042#note-5	

History

#1 - 2020-04-16 15:19 - hidden

- Status changed from New to In Progress
- Private changed from Yes to No
- Topic set to DeviceTB::Common
- Affected Products ADF Device Toolbox 3.1.0 added
- Affected Products deleted (ADF Device Toolbox 3.2.0)

#2 - 2020-04-17 15:20 - hidden

- Status changed from In Progress to Customer Feedback Required

Hi Samer,

good timing, today we have pushed a stylesheet for this conversion to the community:

- https://git.digitalwerk.net/adtf3_open_source/adtf2_buffer_config_xml_to_adtf3_codec_map_converter

Feel free to use and collaborate in case you are missing features.

Maybe it will grow with an own convenience tooling but now it is possible with an easy xslt.

#3 - 2020-04-23 09:28 - hidden

Hi Florian,

I associated the stylesheet to an existing CCC xml file. But I don't see anything in the browser.
I also don't find any html tag in the stylesheet templates. What should I expected to get as an output (html page or something else)?

#4 - 2020-04-23 11:13 - hidden

- Status changed from Customer Feedback Required to In Progress

#5 - 2020-04-23 12:30 - hidden

- Status changed from In Progress to Customer Feedback Required

Hi Samer,

we do not want to generate a html or using an XLS stylesheet as "pretty-print".
We want to generate a .map file from .xml file to re-use in ADTF 3.x.

So you need a XSLT Processor (e.g. Saxon, Qt XmlPatterns) to process.
After choosing, please read its documnetation or ask google, this exceeds our supported range.

But let's give an example based on XML Patterns within Qt 5.12.4:

In this showcase we will transform the example buffer configuration xml file from Device TB 2.x:

- <DEVICE_TB_DIR>/bin/templates/CanConfigCodecExt/CanConfigCodecExt.xml

```
<?xml version="1.0" encoding="iso-8859-1" standalone="no"?>
<settings>
  <input channel="0" channelmask="0x3">
    <buffer name="RESULT_STRUCT" pack="1" timestamp="$FIRST$" delay="0">
      <trigger start_msg="ESP" stop_msg="Kombi" />
      <struct pack="1">
        <element name="s_FahrGeschw" signal="ESP.ESP_v_Signal" type="tFloat64" />
        <element name="s_AngezGeschw" signal="Kombi.KBI_angez_Geschw" type="tFloat64" />
      </struct>
    </buffer>
  </input>
</settings>
```

Then we need the XSLT Tool from Qt:

- <QT5_DIR>/bin/xmlpatterns

If you don't have a complete Qt developer package, have a look here:

- https://support.digitalwerk.net/adtf/v3/adtf_html/page_qt.html
- https://support.digitalwerk.net/adtf/v3/adtf_html/page_external_dependencies.html

It is very simple to use:

```
xmlpatterns <stylesheet> <file_to_transform>
```

This will dump the generated structure in console:

```
<mapping codec="CCC" version="2.00">
  <outputs channel="0">
    <output name="RESULT_STRUCT" delay="0" timestamp="$FIRST$">
      <struct name="" pack="1">
        <assignment>
          <to>s_FahrGeschw</to>
          <from>ESP.ESP_v_Signal</from>
          <type>tFloat64</type>
        </assignment>
        <assignment>
          <to>s_AngezGeschw</to>
          <from>Kombi.KBI_angez_Geschw</from>
          <type>tFloat64</type>
        </assignment>
      </struct>
    </output>
  </outputs>
</mapping>
```

To generate a file from the output we simple pipe it into a map file and extend the call:

```
xmlpatterns <stylesheet> <file_to_transform> > <file_to_be_generated>
```

In our use case (without paths to the files):

```
xmlpatterns buffer_xml_to_codec_map_conversion_stylesheet.xml CanConfigCodecExt.xml > CanConfigCodecExt.map
```

And we are getting a map file which contains the generated structure and can be used within CAN Decoder in ADTF 3.x.

Hope this brings you into business, I will extend the documentation in gitlab about that.

#6 - 2020-04-24 18:01 - hidden

Hi Florian,

Thanks for the information! I could generate the new file :)

However in runtime, I get an error due to identical names of `<assignment><to></to></assignment>` in the same `<output>`.

Theses names were in different `<struct>` nodes in the old file. However the new mapping file does not contain an `<struct>` node, and flatten all `<assignment>` directly under `<output>`.

This is different from your example. I see in your generated file that the node `<struct>` is available!

#7 - 2020-04-27 17:49 - hidden

Hm... can you provide the xml file from ADTF 2.x to reproduce ?

Otherwise, as mention... it is an open source project... feel free to join working on it :-)

#8 - 2020-04-30 17:51 - hidden

Hi Florian,

when I tried it again, I got a valid .map file with `<struct>` nodes in it.

At the first time **somehow** I didn't get any `<struct>` node in the generated file. I cannot reproduce it again!

But now I have what I need :)

Thanks a lot!

#9 - 2020-05-04 10:34 - hidden

- *Description updated*

- *Status changed from Customer Feedback Required to To Be Closed*

Good, don't worry.

Main target is to have a solution.

Thanks also to have a first review and feedback on this new project !

#12 - 2020-07-07 12:49 - hidden

- *Status changed from To Be Closed to Closed*