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# AP-Note
# Automatic FIBEX Migration with FIBEX-Convert

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## Introduction

The FIBEX (Field Bus Exchange Format) standard, proposed and defined by the ASAM e.V., is a standard XML-Format, which describes complex message based communication systems, e.g. vehicle communication databases. Based on this XML data format the description of FlexRay, CAN, LIN and MOST networks and the talking nodes as well as the data exchange of the design, configuration, simulation and monitoring tools can be defined in a straight forward manner.

During the past years the FIBEX document versions 1.1.5, 1.2.0, 2.0.1 and 3.0.0 have been released. This FIBEX document versions differ in several specific XML elements and schemas each from another.

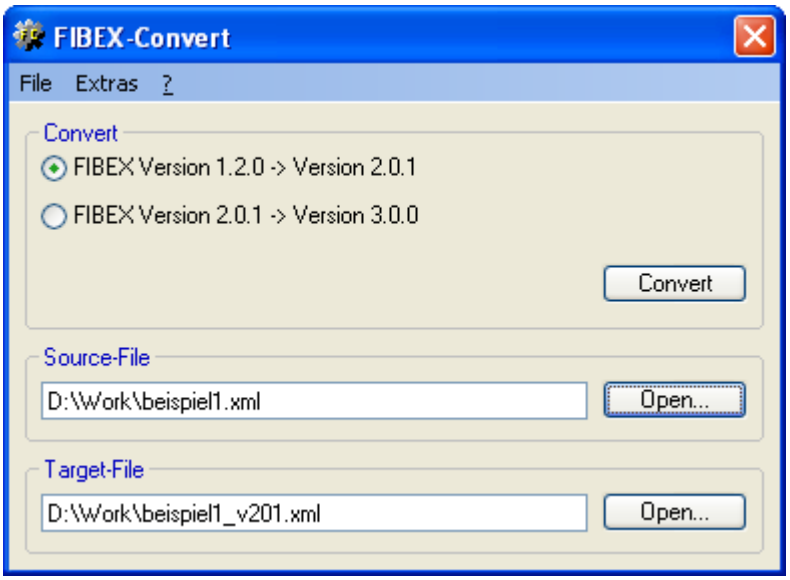
This AP-Note describes how the FIBEX-Editor® 4.0 with its built in tool FIBEX-Convert can be used to automatically migrate FIBEX XML documents from a lower FIBEX version to a higher FIBEX version.

The tool FIBEX-Convert can automatically migrate FIBEX files:

1. From FIBEX 1.2.0 to FIBEX 2.0.1
2. From FIBEX 2.0.1 to FIBEX 3.0.0

During the conversion, all elements, which are different between source and destination version, are converted into FIBEX format of the destination file. The result of the conversion may be verified with the FIBEX-Editor 4.0, which automatically validates all FIBEX documents during the read/open process.

**Conversion from FIBEX 1.2.0 to FIBEX 2.0.1**



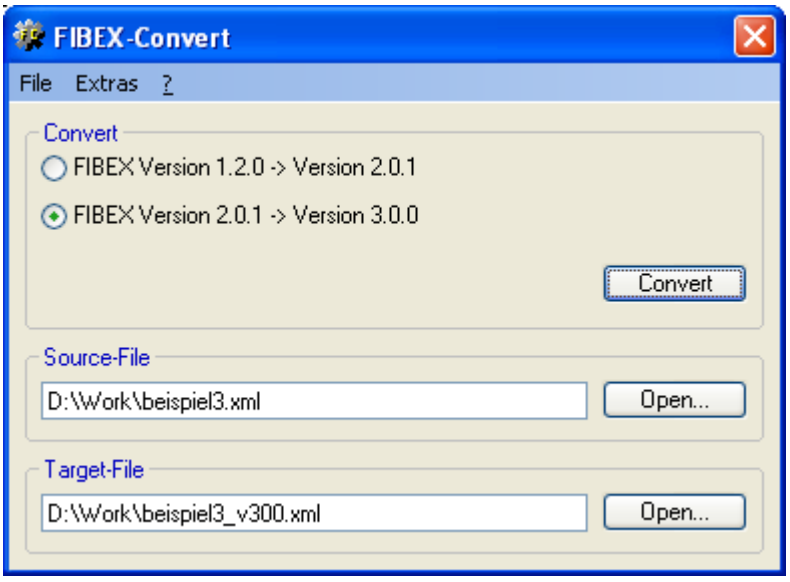

Step 1: Select a source file

Step 2: Select a destination file

Start the conversion with the “Convert” Button

All elements, which are different between FIBEX 1.2.0 and FIBEX 2.0.1, are converted into the FIBEX 2.0.1 format destination file.

**Conversion from FIBEX 2.0.1 to FIBEX 3.0.0**




Step 1: Select a source file

Step 2: Select a destination file

Start the conversion with the “Convert” Button

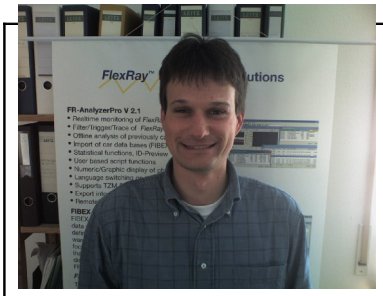
All elements, which are different between FIBEX 2.0.1 and FIBEX 3.0.0, are converted into the FIBEX 3.0.0 format destination file.

## Conclusion

The FIBEX-Convert tool is included in the FIBEX-Editor® 4.0, which is a versatile software package, not only to edit, change or view FIBEX files in graphic form, but also to create a completely validated FIBEX XML description for automotive networks, containing FlexRay, CAN and LIN ECUs.

A set of user selectable validation rules allows to check the FIBEX design for data integrity.

The FIBEX XML description file created can be used e.g. as data base for a lot of software tools, which need a car data base to map the FlexRay, CAN or LIN raw data stream into easy readable and interpretable physical values.

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