



VEBKO ONLINE HELP

XRIO Converter File

Category	tester
Section	Modules Toolbar and Statusbar
Language	English
Generated	2026-10-18

To further study the "XRio Converter" file, by clicking on "Import from list" icon on the "Load XRio Converter and Rio file from list" page, an "XRio Converter" file related to the "AREVA MiCOM P441" is loaded. After the "XRio Converter" file is loaded, it is possible to export this file from the software separately. To do this, by clicking on "File" menu, you can export the "XRio Converter" file in forms of with or without formula. In this part, for a better understanding, first, export the "XRio Converter" file without formula by using the "Export without formula...." option.

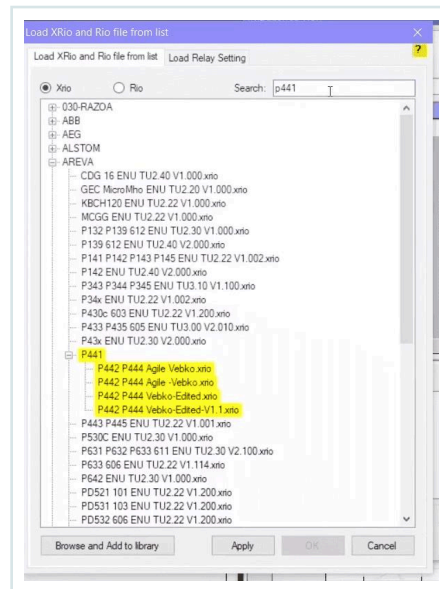


Figure 1

Then, the same "XRio Converter" file is loaded in the software without formula. By opening the "XRio Converter" file in notepad++, you can see that this file is written in "xml" format. In the subset of "XRio", the version and language of the file are defined. It is then observed that the "XRio Converter" file without formula consists of two main parts of "Rio Converter" and "Rio Type".

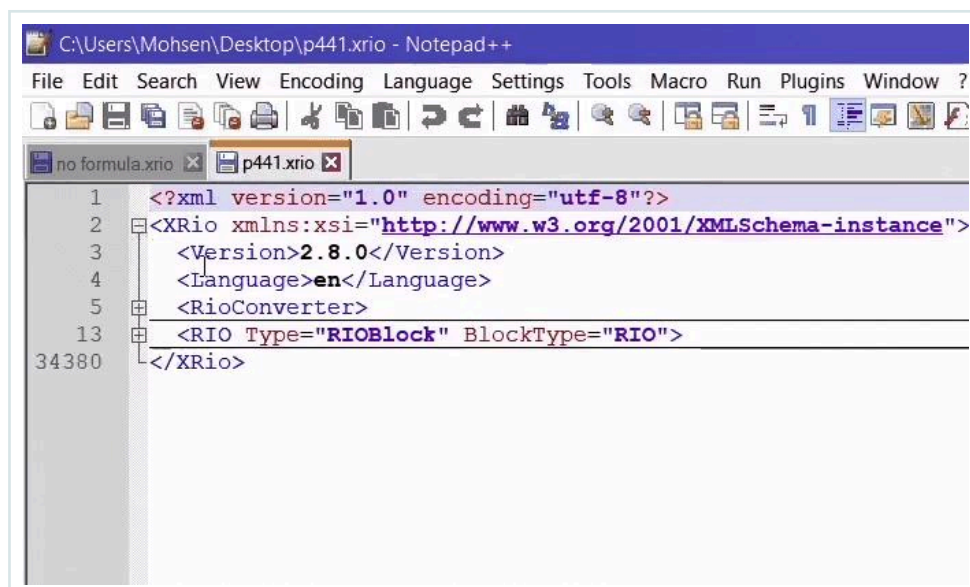


Figure 2

By opening the “Rio Converter” section, you can see that this section consists of another section named “Properties” where information about date and time are mentioned. In fact, the style of this type of coding is “xml” where each section opens and closes with a tag. For example, “XRio” tag is opened here and again closed in the end and the “</” sign indicates its closure. also, it is possible to open or close the “Rio Converter” tag by clicking on the square next to it. The “ScriptReference” tag is opened and closed in the same line because there is a “/” sign in the end. The second part which is the “Rio Type” tag, contains fixed information of the relay and is the same “Rio” file as described before.

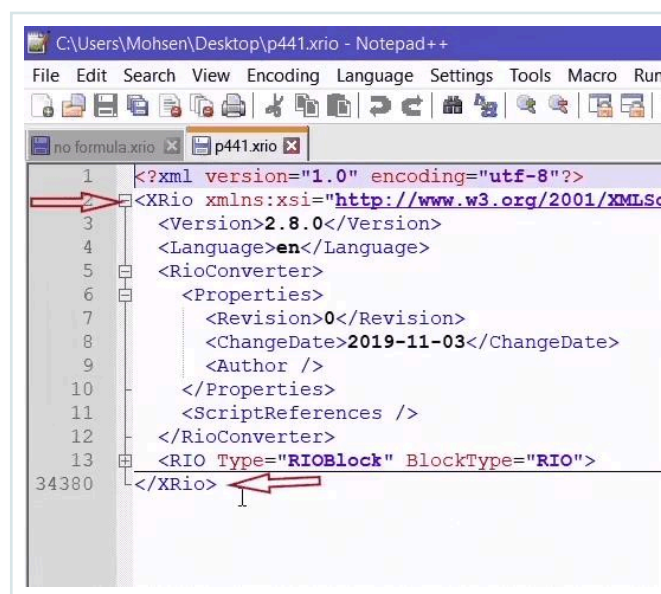


Figure 3

By opening this tab, it is observed that the “Rio” tag consists of “DEVICE”, “DISTANCE”, “OVERCURRENT”, “CBCONFIGURATION” blocks which are originated from the relay specifications. These blocks are the “xml” model of the “Rio” file which is included in the “XRio Converter” file. As it is written, the “Rio” tag is of the “Block” kind. By opening this block it is observed that the “Rio” block consists of other blocks. By opening this block it is observed that inside this block there is a “DEVICEMODEL” which is of the “Parameter” kind. This means that this block has a “value” of “P441 P442 P444”. Likewise, there are other parameters including “MANUFACTURER”, “DEVICETYPE”, etc. in the “NAMEPLATE” block.

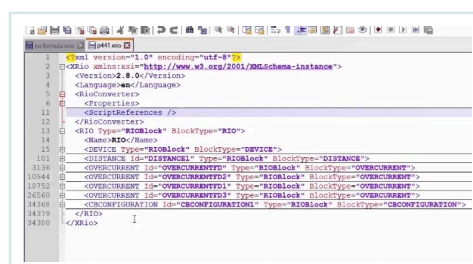


Figure 4

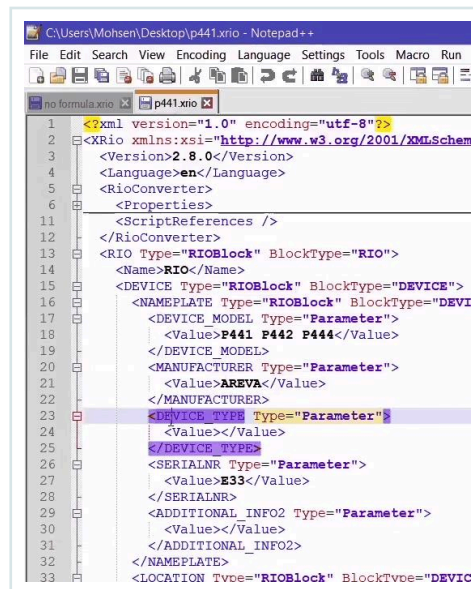


Figure 5

This information can be observed in the “Vebko AMPro Test” software after entering the “XRio Converter” file. The information related to “XRio Converter” file is available in the “Test Object” window. In the tree diagram of this section is the “XRio Converter” block and its subsets -similar to the “Rio” Block-. Likewise, the “Device” block and its subsets are -similar to the “Name Plate” block-. In the “Name Plate” block the parameters mentioned in “XRio” are entered in the table. For example, the “DEVICE MODEL” parameter which has the value of “P441 P442 P444”, is displayed in the “Value” column of this table. As another example, in the “Rio” block in the “XRio Converter” file and in the path of “DISTANCE” and “PROTECTEDOBJECT” blocks, it is observed that the value of “LINE” is entered for “PT connection” with “ID” : “PTCONN”.

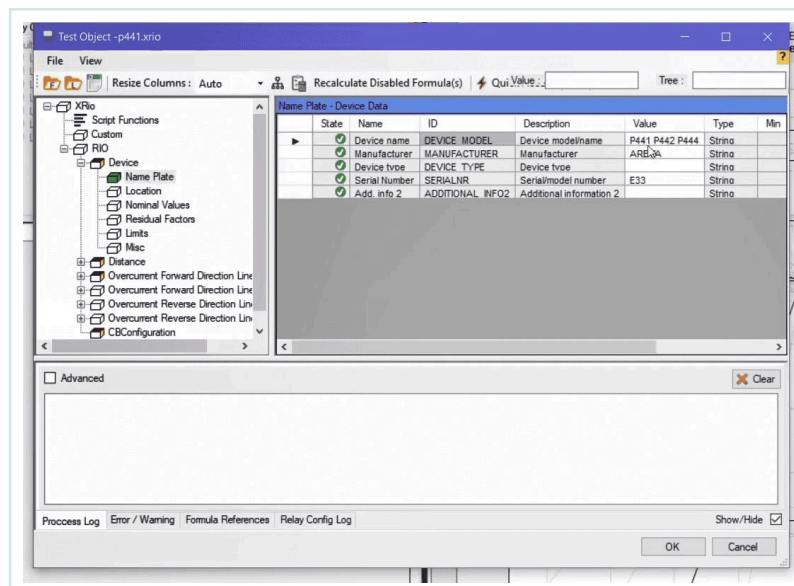


Figure 6

If you follow the same path in the "Test Object" window in the "Vebko AMPro Test" software, namely the "Distance" directory in the "Rio" block, you can see in the "Protected Object" table that for a parameter with "ID" : "PTCONN" in the "Value" column, "at line" is entered while in the "XRio Converter" file, "Line" was entered as the value. The reason for the difference in values of the "Vebko AMPro Test" software and the "XRio Converter" file is that the codes written in the "Rio" section, receive the values from "XRio" and then enter the corresponding values for different parameters in accordance with design of the codes, which is here "Line" for a parameter with "ID": "PTCONN" in the "XRio" corresponds to "at line" in "Rio".

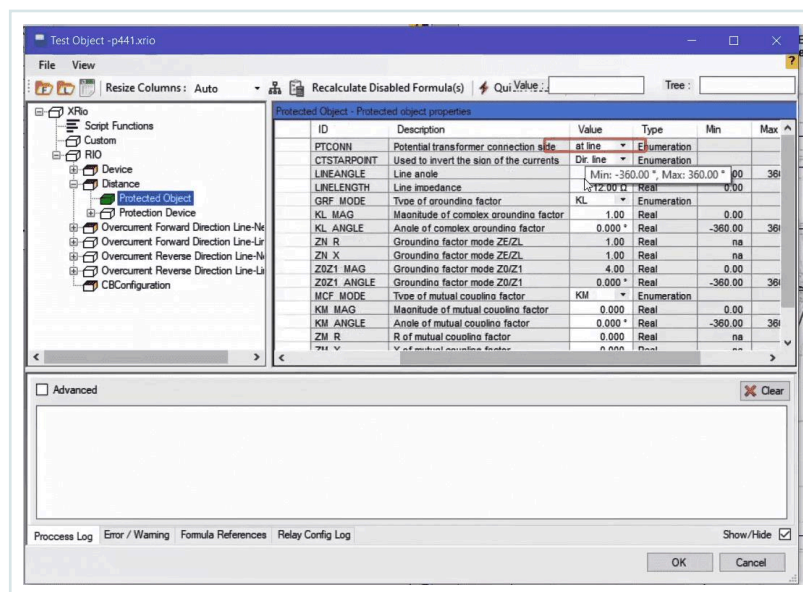


Figure 7

In "Vebko AMPro Test" software, there are columns like "Name", "Description", etc. for each parameter which provides the user with information about the intended parameter and there may be no code for these sections in the "XRio Converter" file. Initialization of these columns in the "Rio" is in the way that according to the code written by the programmer, wherever in the "ID" column the phrase "PTCONN" is written, its name is "PT Connection" and "Potential transformer connection side" is entered as described in the "Description" column for it. Also, the programmer coded other columns like "Type" has mentioned it in the code to be displayed in the "Rio" section. For the mentioned parameter it is "Enumeration" which means that it is selective and the user can select a value from the drop-down field in the "Value" column.

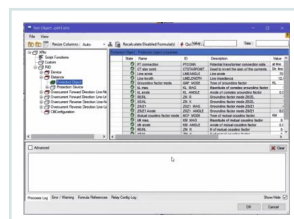


Figure 8

It should be noted that for every piece of information in the “Custom” part which is not fixed, its code must be written in “XRio”. This will be more explained in future videos. Another point is that the “User Interface” mode is included in “Rio” section. This means that by double-clicking on any block of the subsets of “Rio”, for example, “Device” block, the “Device Setting” page opens where all parameters of the subset of this block can be observed and changed. These changes are, simultaneously, recorded in parameters table as well. But, if you double-click on any block other than “Rio”, a series of information about “ID” of the block as well as its name are displayed.

[jg1]XRio_Converter_File