How to use XML Schema Directive (XSD) against a mission file
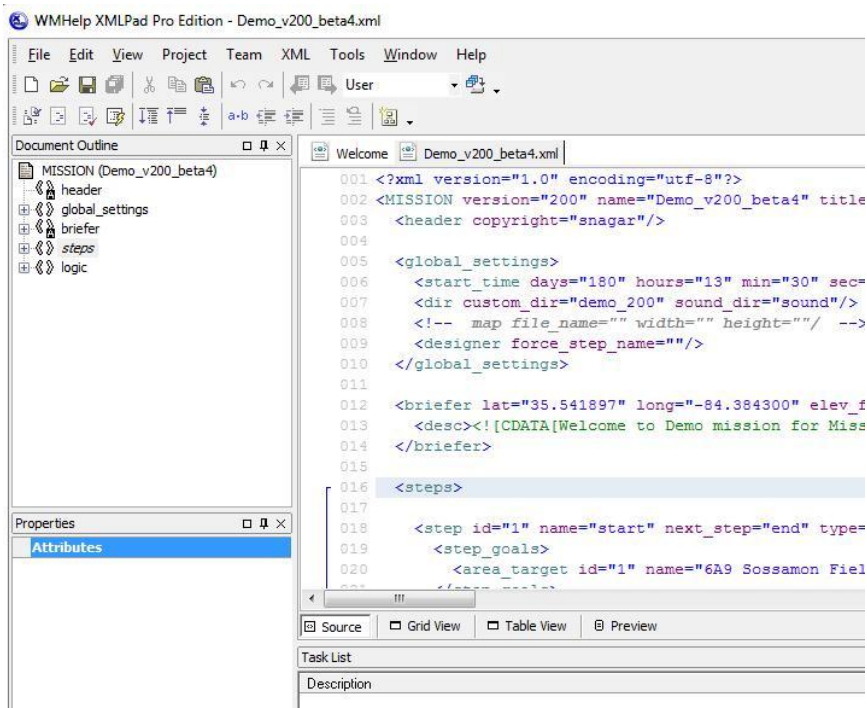*Written by Snagar for Mission-X v2.01 mission files*

First I want to explain that XSD files has their limitations, they can point to an issue in your XML format, but it does not mean that it will not work with the plugin. To better understand this, lets assume you construct a "STEP" that has: <step_goals>, <step_feedbacks> and <step_settings> defined in this order.

The XSD validation might flag you "STEP" element as not structured correctly, because the order of elements in it are not "<step_goals>,<pick>, <step_settings>,<step_feedbacks>….", this means that for every main container, we need to create all possible combination in order to validate the mission file correctly, and this is where you as a designer need to decide if the "validation" message is important or not.

In the following short document, I'll demonstrate how to validate your mission file using an XSD file.
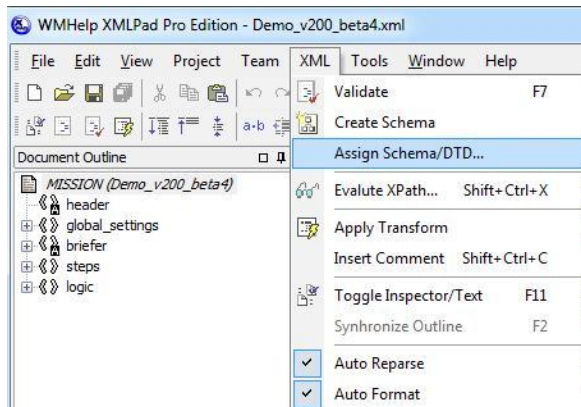
Windows:

1. Download and install XMLPad application.
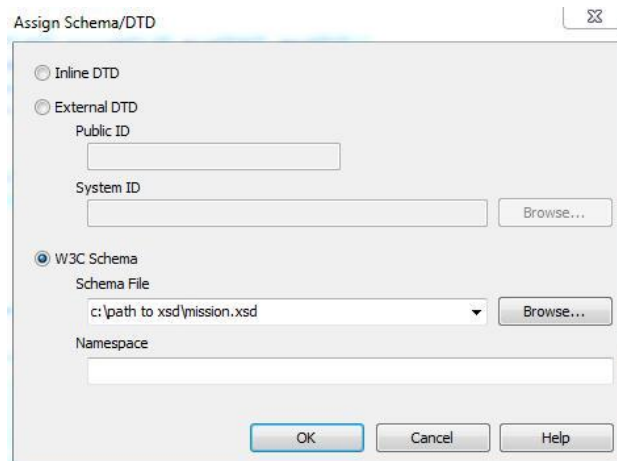2. Load your mission.xml file in it.

3. From the Menu, click the "XML -> Assign Schema/DTD" option, and pick "W3C Schema" option.

If you do not see the "assign schema/DTD" menu, you should remove the following attributes from you "root" element (should be MISSION): "*xsi:noNamespaceSchemaLocation*" and "*xmlns:xsi*", and <u>reload</u> the mission file.

4. You need to enter the full path or the name of the XSD file into the "Schema File" text field, Example:
c:\dir\missionx.xsd

This adds two attributes to "<MISSION>" element (root element) by the name: "*xsi:noNamespaceSchemaLocation*" and "*xmlns:xsi*".
You can always remove them and assign new xsd file.
It is important to understand that on XMLPad v3.0, when I altered the <u>XSD</u> file, XMLPad was aware of the change only after I re-open the XML file I tested.
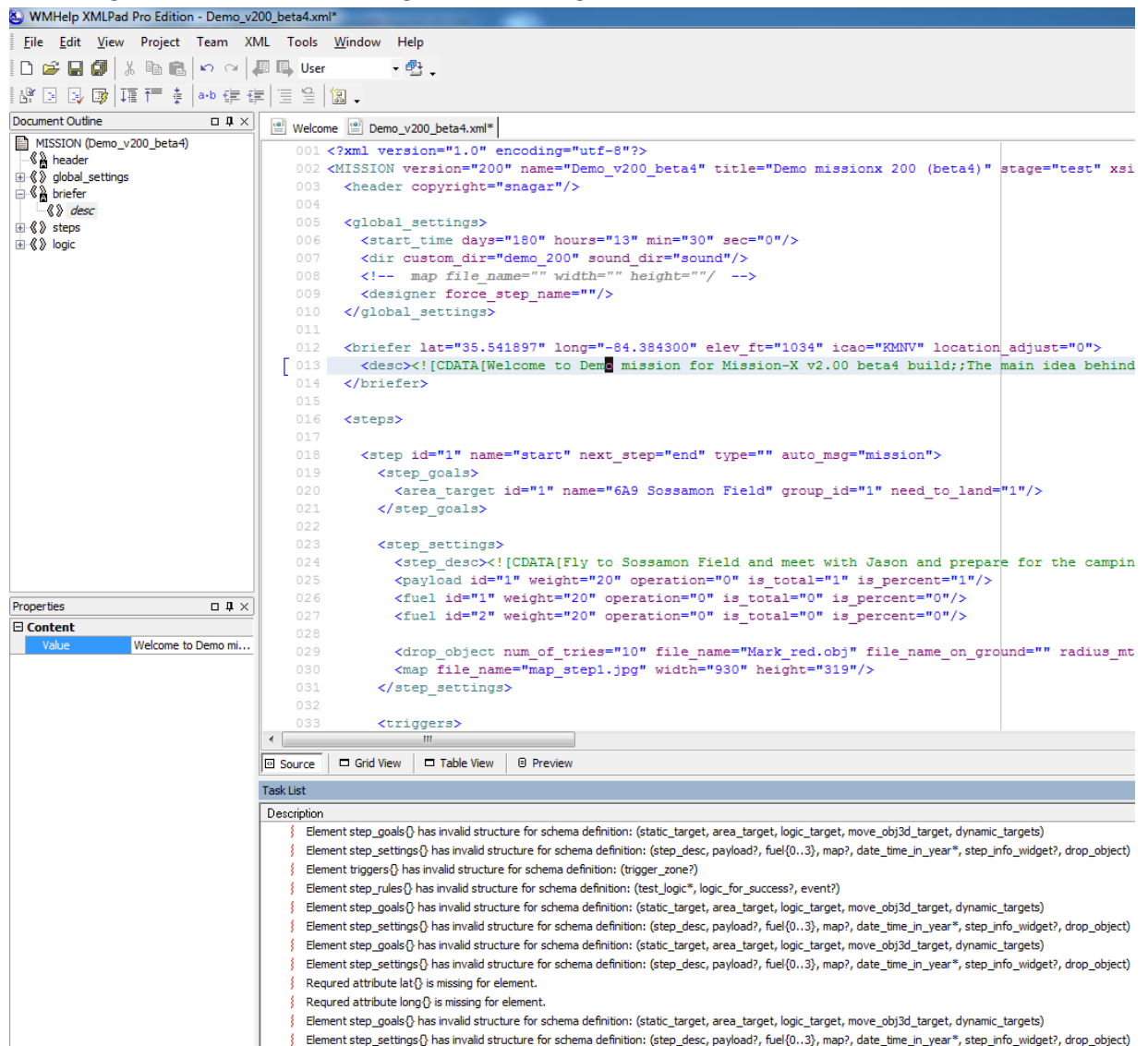
5. Press the "**F7**" to check validity of XML.

You can ignore most of the following errors/warning:

a. Element XXX{} has invalid structure for schema definitions.
b. For last step, naming "end", you can ignore missing "lat/long" attributes.

On Linux

I did not found a GUI interface but with xmllint you do XML validation.

The problem is that xmllint is stricter then XML Pad, therefor it fails to parse correctly mission.xsd file. You are more than welcome to fix my xsd or sending me an e-mail to point the issue and how to resolve it.