

Description of Phase 2 gbXML Effort

I. Improved Validator Tests

- A. All Validator Test Cases have been reviewed for errors and corrected.
- B. New Validator Tests have been completed.
 - 1. All documentation complete
 - 2. All XML files have been reviewed for completeness and accuracy.
- C. All test cases from RP-1468 that are relevant have been included in the suite of validator tests. Below is an exhaustive list of RP-1468 tests that have been included or excluded:
 - 1. RP-1468 Test # 10 - not included, as it is irrelevant for these validator tests.
 - 2. RP-1468 Test # 35 - included, several variants of this test are included.
 - 3. RP-1468 Test # 36 - not included, this cannot be tested without major advances in API programming of various CAD/BIM tools, hence beyond scope.
 - 4. RP-1468 Test # 05 - not included, though it is implicit for the validator tests.
 - 5. RP-1468 Test # 07 - included, 2 variants of this test are included.
 - 6. RP-1468 Test # 08 - included, 2 variants of this test are included.
 - 7. RP-1468 Test # 09 - not included, as it is irrelevant for these validator tests
 - 8. RP-1468 Test # 12 - not included, as it is irrelevant for these validator tests
 - 9. RP-1468 Test # 14 - not included, as it is irrelevant for these validator tests
 - 10. RP-1468 Test # 15 - not included, as it is irrelevant for these validator tests
 - 11. RP-1468 Test # 16 - not included, as it is irrelevant for these validator tests
 - 12. RP-1468 Test # 18 - included, with two variants. We ensure that walls that are drawn both below and above grade are properly broken down into separate walls.
 - 13. RP-1468 Test # 19 - included, where the interior surface is defined to be type air or opening is of type air
 - 14. RP-1468 Test # 20 - included, several variants of this test are included.
 - 15. RP-1468 Test # 21 - not included, gbXML does not have a SETBACK element, attribute, or enumeration.
 - 16. RP-1468 Test # 22 - not included, beyond scope of only modeling geometry.
 - 17. RP-1468 Test # 23 - not included, beyond scope of only modeling geometry.
 - 18. RP-1468 Test # 26 - not included, this cannot be tested without major advances in API programming of various CAD/BIM tools, hence beyond scope.
 - 19. RP-1468 Test # 27 - not included, this cannot be tested without major advances in API programming of various CAD/BIM tools, hence beyond scope.
 - 20. RP-1468 Test # 28 - included, several variants of this test are included.
 - 21. RP-1468 Test # 29 - included, several variants of this test are included.
 - 22. RP-1468 Test # 30 through 34 - not included, as this is regarding modeling take-offs. Beyond scope and cannot be tested without major advances in API programming of various CAD/BIM tools.

- II. Improved validator
 - A. Phase 2 validator active on gbXML.org website. User testing has commenced.
 - B. Phase 1 validator can still be accessed for certain tests.
 - C. Source code is available on Github
- III. gbXML API with example implementation
 - A. ability to read and write geometry to gbXML, via the Grasshopper and Rhino interface. Project is live and undergoing beta testing. Open Source Code is available on Github