

XML Standardization Implementation Lessons Learned

This document is to provide information for the lessons learned during our work in implementing the XML standardization.

Scripts were written to help perform the initial schema updates. Utilizing the XML Workbooks, the scripts did the following:

1. From the summary tab, used the first column "Form/Schedule/Dependency" (column A) to find the schemas file (append ".xsd") and then the second column "Tab" (column B) to map to the appropriate spreadsheet tab in the workbook.
2. Then, using the appropriate Form/Schedule/Dependency tab, search for element(s) matching the name in the first column "Current Element Name" (column A) within the actual schema and, if found, update the element(s) with the name in the column "Notes - UDP Name ..." (column E).
3. Then, if there are attributes listed under "Current Attribute Name" (column G), perform the same type of search/update as item 2.
4. At this point, the automated updates were complete and the file was saved.
5. In addition to the automation, we also performed manual updates, i.e. data type name changes, duplicate elements with different "new" names, etc.

Lessons Learned:

- There are cases where there were multiple occurrences of the "current" element/attribute name but the "new" names were different. Our script updated all to match the last (chronologically) "new" name. In these cases, we had to identify these occurrences and then manually update the elements/attributes appropriately. In these situations, to assist the developers and testers with their updates/verification, I documented differentiating details such as type definition, line number, and or parent element in the "Notes" column (K) so they could determine which elements the new unique names mapped to.
- There are cases where the DataType name was changed. Our script did not handle this so these were places we also had to make manual updates.
- Our script could not handle blank lines in the spreadsheets. Once it hits a blank line, it stops and thinks it is done. We had to look at every

spreadsheet and clean out any extraneous blank lines. This included moving the Attributes up to the top row under the headings, rather than being located next to the element they are attached to.

- Once the update script was run, all element/attribute changes had to be applied manually.