Experiment SBR Vernieuwing:
Reporting on repetitive data with xBRL-CSV

Motivation

The SBR Vernieuwing process focuses on the Dutch SBR agreement system as a whole and how to fulfill the "promise of SBR" by making it simpler and more profitable for the market and government to work with SBR. In order to reach this goal, for example, alternative technologies are being looked at. With the introduction of the Open Information Model (OIM) by XBRL International it is now possible to compose XBRL messages in other formats, including the CSV format (xBRL-CSV). This offers new possibilities.

Is it possible to use xBRL-CSV to report on high volumes of repetitive data within SBR?

Within SBR, the data format xBRL-XML is currently being used. Reporting over high volumes of repetitive data is challenging because the xBRL-XML file quickly becomes too large, especially for validation purposes. Using the OIM specification, a xBRL-CSV file can be created, that makes it theoretically possible to create reports consisting of high volumes of repetitive data. Based on the client case specified below and the opportunity offered by technology a need arose for an experiment in which the possibilities of xBRL-CSV within SBR are investigated.

Client case

A case of SBR-wonen ("SBR for housing corporations"), a relatively recent participant, was used for the experiment. The covenant that led to the foundation of SBR-wonen aims to improve the information provision in the Dutch public housing corporation sector. The covenant was signed by four parties that supervise the housing corporations. This supervision is done through two reports: a forecast report (dPi) and an accountability report (dVi).

This experiment looked at the integration of the real estate table ("WOZ" table) in the accountability information (dVI) reporting. The WOZ table states all rentable units that are or have been in the possession of the corporation in the past year. This table is suited for the experiment since this is a file with large amounts of repetitive data. Within the current set-up of SBR it is not possible to include this table in a XBRL report. This forces SBR-wonen to use an alternative solution where the table is being sent in a normal CSV file as an attachment.

Decreasing the volume of the WOZ table in xBRL-CSV

The experiment was carried out in collaboration with the tax authorities, a long-time user of XBRL in the Netherlands. They too see the potential of xBRL-CSV. By using the existing XBRL knowledge within the tax authorities, it was possible to determine which size reduction is feasible and whether the largest WOZ table of a corporation would remain under 20 MB. This is necessary because the SBR reporting gateway (Digipoort) currently doesn't permit files over 15 MB in size. The WOZ table consists of 27 columns of data a corporation has to report per rentable unit. Within the largest housing corporation, the report consists of 80,000 lines.

In addition to this experiment, it was tested whether a software supplier active in the housing corporation sector and with no experience with XBRL, was able to convert a WOZ table into the xBRL-CSV format, using the specifications. SBR Vernieuwing expects to present the result of this additional test in the fourth quarter of 2020.

Experiment setup

The team has delivered specifications and several sample files. The samples varied in level of normalization of the xBRL-CSV file. Normalization in this respect means that the data is handled more efficiently, for example with an enumeration of a number of fixed values. Any enumeration or combination of enumerations then get their own table and the combinations are recorded once in a JSON file. The more normalization is applied, the smaller the file size. The downside is that more XBRL knowledge is needed when drawing up and processing the WOZ table when more normalization is applied. The tax authority has, on the basis of the specification and knowledge of the WOZ table created a fully normalized file. Any variation that can be created from a drop-down list is given its own table. The result for the WOZ table with 80,000 lines are 27 tables with a total volume of 6.5 MB. Finally, the file was validated within the test setup.
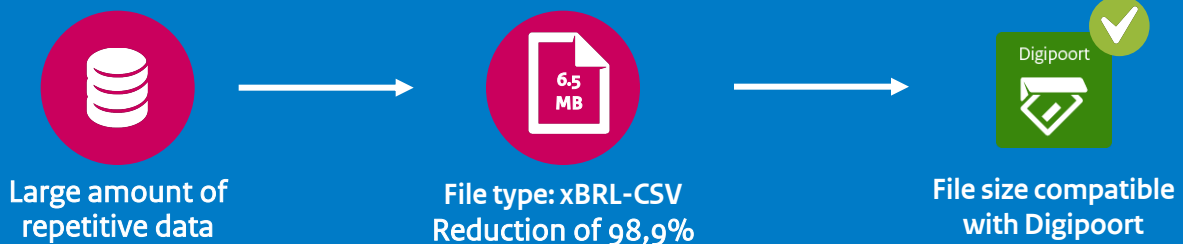
Conclusions

The volume of an xBRL-CSV file was reduced by 98.2% compared to an xBRL-XML file.

The file volume of the largest WOZ table is 6.5 MB. Such a small volume opens the possibility to use both the xBRL-XML (dVi) report and the xBRL-CSV (WOZ table) in one instance.

An algorithm has been developed by the tax authorities to create a xBRL-CSV file based on a WOZ table. When this specification is to be used, this algorithm can be used by software vendors and the IT department of a corporation to convert the old format WOZ table to the xBRL-CSV format. The tool can also help to create a new WOZ table in the xBRL-CSV format.

Large amount of repetitive data → **File type: xBRL-CSV Reduction of 98,9%** → **File size compatible with Digipoort**

Next steps

In order to successfully implement the use of xBRL-CSV for SBR-wonen and the Tax Authorities it should be possible to perform validations on the xBRL-CSV file in the used gateway. It is also necessary to validate values in the xBRL-CSV file against values in an xBRL-XML file from the same client, so called cross instance validation. These two topics will be tested in a follow-up experiment.

At the same time the ability to process the generated xBRL-CSV files by the supervisory parties is subject of another follow-up experiment with those parties.

Additional information

Do you have any further questions about this experiment? Please contact Jon Butter at jon.butter@logius.nl

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