

GEM Data Integration Suite

The financial reporting was solved in a form of data consolidation into one single Microsoft Excel file which lacked various features:

Let us deal
with the data!

- The file was way too big – the extent of the data analysis is overwhelming for the Microsoft Excel tools.
- It was slow – just the very opening of the MS Excel file took several minutes, not to mention the work itself with the files. Each operation takes too long to work efficiently.
- It was not stable – MS Excel simply stopped working from time to time. In some cases, the program was simply ended with a significant loss of data.
- It was not documented – the MS Excel working process lacked columns regarding the final reports and reports about working with them. This data was known only to a handful of selected employees while the documentation was not accessible at all.
- It was not sustainable – in order to keep all the information, it was extremely difficult to maintain and update this type of solution.



The client used to extract data manually from several internal systems, primarily from the general company ERP solution. The resulting transfer into MS Excel and following data cumulation from different files into one single file, as well as its macro processing proved to be untenable.

The new solution is managed on a virtual machine with the Microsoft Windows Server system. This system version supports the use of Microsoft SQL Server. It serves both as a testing and as a production environment. The environment allocation runs on a database and application level.

Thanks to the Microsoft SQL Server solution and its relational database and analytical system for business, as well as the Microsoft data stores, an efficient solution was achieved:

- It has a convenient and user-friendly web interface.
- It contains standardized reports.
- One can easily modify the reports form based on user's requirements and on the user's level – all depending on the given rights and roles.
- The user can work with a convenient Microsoft environment (Power BI, Reporting Services, MS Excel).
- Reports are easily accessible. Their analysis and creation is a matter of seconds instead of the original dozens of minutes.
- Following the data preparation, the data may be exported into MS Excel for further changes with one click.





THE SOLUTION USES FOLLOWING COMPONENTS:

- **Microsoft SQL Server – database**
- **Microsoft SQL Server – Reporting Services**
- **GEM Data Integration Suite**



GEM DATA INTEGRATION SUITE

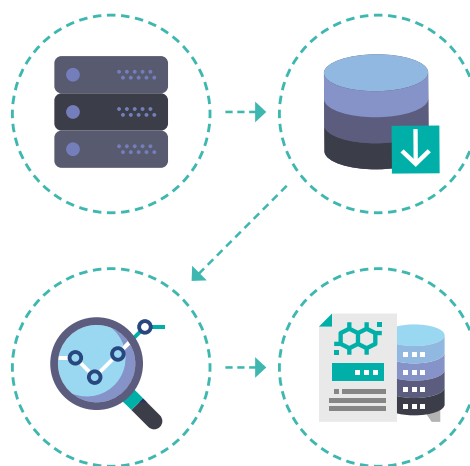
The GEM Data Integration Suite was selected as an ETL tool (Extract, Transform and Load) which specializes in various data source connection, the source extraction, transformation and saving in the selected folder.

GEM Data integration Suite is a set of open source tools which are mutually integrated into one unit. Its robust form is comparable with various expensive commercial enterprise tools.



GEM DATA INTEGRATION SUITE CONTAINS FOLLOWING COMPONENTS:

- **DISL – Data Integration Specific Language**
- **Pentaho Data Integration (Pentaho DI) Community Edition**
- **Jenkins Continuous Integration (Jenkins CI)**



All the named tools are Open Source which means that one can use them commercially and free of charge. GEM System offers everything from implementation and preparation to the whole solution support. This solution has been implemented with several of our important clients.

