Regulation of wage calculation

Diagram

Description automatically generated with medium confidence

*Standardize wage calculation with regulations*

A central aspect in the complexity of wage calculation is the fact that the wage information comes from different sources. Due to the lack of a standard in wage calculation, it is up to the wage software to standardize and integrate the wage data. Even more difficult for the software house is to maintain a wide range of expert knowledge. Extraordinary and short-term regulatory changes bring payroll software manufacturers to their implementation limits.

To reduce this complexity, the *Payroll Engine* has formalized the wage definition into regulations, which are separated from the software core and divided among the involved parties/sources. The layering of regulations results in the client-specific wage calculation. The payment contains the basic elements of data processing ([IPO model](https://en.wikipedia.org/wiki/IPO_model): input-process-output) of wage-related information.

Data input is performed by the case payment object, which contains the case data in fields. For example, the employee case Change of Address contains the fields Street, Postal Code and City. By means of dependency between cases, complex cases such as employee entry can be divided and mapped.

The wage data is processed in the wage run using the wage type and collector regulation objects. Wage types are calculated in numerical order. The wage type result is transferred to specific collectors which determine the aggregated wage data (e.g. wage bases).

For data evaluation the regulation object Report is used which converts the wage run results into documents or interface data. In addition to wage data, case data evaluations are also possible.

The additional information required for input and processing, such as pay scale and tax tables, are managed in the regulation object Lookup. The script includes calculation functions such as determining the tax class based on various criteria.

A decisive advantage of the regulation layer model is the scalable adaptation and extension of the wage definition. Each regulation object can be changed in a client regulation or extended with new regulation objects. For example, the case of employee entry can be supplemented with the selection of company-specific insurance. Multilingual designations allow to use the settlement in different languages.

With the availability date of the settlement, software updates (e.g. tariff changes) can be easily planned. For retroactive calculations and forecast analyses, the payment relevant at the time is used.

By standardizing the wage calculation in regulations, the payroll know-how is manifested and a system is created to exchange and recycle regulations between different countries, industries and customers.