

*Quipu Data Warehouse and Analytics integrates, cleans and standardises data from different sources and makes them available for analysis and reporting.*

- **Multi-level data warehousing for international groups**

Quipu Data Warehouse and Analytics offers two levels of data warehousing for institutions with complex organisational structures, such as global institutions working in different countries with disparate connectivity capabilities, time zones and IT architectures.

The local level serves each institution's local needs, while the group level concentrates data from all of the group institutions into a central headquarters repository.

- **Enforcement of group-wide reporting policies and standards**

Rapidly changing external and internal reporting requirements that apply to all members of a group of institutions can be deployed to all group locations in a matter of days, thanks to the system's straightforward, compatible versioning, and modular architecture. Local- and group-level mappings in all key areas allow country-specific reporting requirements to be aligned with global requirements.

- **Flexibility of data modelling**

Institution-specific data requirements can be modelled in a flexible way based on local decisions on data needs, without interfering with group-wide requirements and standards.

- **Compatibility with multiple data sources**

Quipu Data Warehouse and Analytics can connect to any ODBC accessible database as well as to other sources, such as HTTP services over various protocols, Excel documents and flat text files. Currently we work with data from over 30 different types of source with disparate implementation technologies, including all of the main Quipu applications: Quipu Accounting, Quipu Treasury, Quipu CRM and Quipu Core Banking.

- **OLAP<sup>1</sup> cubes**

Besides the direct access to the data warehouse SQL database, data can be published via Microsoft Analysis Services OLAP databases (“cubes”) for seamless integration with any business intelligence tools, including Microsoft Excel, Reporting Services and the latest generation of Microsoft Power Tools.

- **Easy administration**

Administration of the data warehouse is carried out using a web-based application which runs on any standard web browser. This allows authorised users (who do not require any programming skills) to load data manually from the source systems, to configure scheduled automatic data loads and to access highly detailed log files providing details of each load. Enforced dual control ensures that the administration processes are secure.

- **Financial institution data modelling**

Out of the box, Quipu Data Warehouse and Analytics offers modelling of the following data areas from a financial institution’s point of view: financial data, clients and contracts, and transactions. These data areas are populated with the most widely used attributes and measures used in banking reporting, both for external and for management requirements. However, they can easily be customised according to each financial institution’s specific requirements.

- **Reporting frequency**

End-of-day and end-of-month data are stored in the warehouse. This means that some reports and analyses can be generated for specific days or a specific series of days, while the full range of reporting and analytical features is available for monthly reporting.

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<sup>1</sup> On-Line Analytic Processing

- **Central bank reporting**

Quipu Data Warehouse and Analytics is ideally suited to the task of collecting and consolidating data from the members of a group of institutions and reporting them centrally to the relevant supervisory authority. For example, Quipu Data Warehouse and Analytics provides the foundation for the ProCredit group's reporting to the EBA via the German Bundesbank, merging data from all of the group's institutions in compliance with frequently changing reporting requirements.

- **User training**

Quipu offers on-site user training at the financial institution, or at Quipu's Regional Offices or its Head Office. Training is provided in different phases, following the project implementation status, and the specific requirements of different users. In addition, Quipu provides user manuals and other documentation in electronic or printed format, which are also available online.

- **Supported operating systems**

Quipu Core Banking is fully compatible with Microsoft SQL 2005/ 2008 SQL Server 2008R2/ 2012, Windows 2003/ Windows 2008/ Windows XP/Windows Vista and Windows7.