



## XCarrier Added-Value Data Storage



### DataLake

The XCarrier data lake stores original source system data in raw data format from the integrated source and file systems.

The data lake configuration secures and controls the merging of data streams from data sources or source systems. The process includes the complete collection, cleansing and secure uploading and storage of the data in the data lake.

Data traceability is the system's primary focus. Data completeness and uploading to the data lake is important to avoid post-processing problems such as suspensions or ambiguities. This reduces the need for any human intervention in the operational process.

Data integrity is enforced using restrictions on the third normal forms. The third normal form is the goal of successful normalization in the relational XCarrier database model.

Naming conventions and fields are automatically preconfigured and suggested by XCarrier including registrations.

In telecommunications applications, the data lake exists as the initial and central memory for all master data (e.g. customer data) and transaction data (e.g. call data records).



### Integrated Data Lake

All data is copied from the XCarrier data lake, harmonized, categorized, given the correct time stamp, enriched by AI if required and stored in a structured manner. Basic data can be enriched, completed and refined with additional information to enable the greatest possible added value for the company.

The integrated data lake contains all transformed and perfected data necessary for all subsequent process steps, e.g. as a data entry point for reporting, visualizations, advanced analyses and machine learning.

Downstream process steps and added value are achieved through skilful use and analysis of the data. This may include, for example, an intercompany clearing process, live interactive information for trading operations or proactive backup actions (external system activation) of the system environment due to criminal activity.

