

Fact Cube Using Currency Conversion (Financial Consolidation)

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The actual currency conversion applies to amounts entered into a source currency and computes the amount in a target currency. This calculation may apply to multiple cubes having some common features required for the support of currency conversion. These common features include the following dimensions:

- **Version**: This dimension is shared between the fact cube and the **Exchange Rates_YTD** cube.
- **Month_YTD**: This dimension is shared between the fact cube and the **Exchange Rates_YTD** cube.
- **Legal Entity**: If amounts are entered in the currency **LC** (Local Currency), the **Currency** attributes in this dimension will be used to identify the actual currency code of the local currency of this entity.
- **Currency**: This dimension separates input and output elements of the currency conversion. The table below defines the various elements of this dimension:

Element	Definition
ALL_Currencies	Root element grouping all input elements. The sum of amounts in multiple currencies is most likely not useful.
Uncurrency	Aggregated element grouping all currently unused currency codes.
LC	Captures amounts in the local currency.
XXX	Stored non-currency figures.
Other currency codes, e.g. EUR	Captures amounts in an explicit source currency. Valid elements must include a code of three capital letters, as defined by ISO 4217.
LC > - e.g. EC > USD	Calculated base element showing the result of the currency conversion from the implicit local currency. The submitted separate financial statements and the subsequent adjustments, transitions and conversions must use this currency conversion.
Transaction_Currency e.g. USD_TG	The transaction currency is the agreed upon currency for a transaction between two entities, e.g. USD_TG . The values stored in the transaction currency are meant for information purpose only. They are not converted further.

Element	Definition
← → e.g. EUR > USD	<p>Calculated base element showing the result of the currency conversion from the group currency into another reporting currency. The combined financial statement and all consolidations operate on the values stored explicitly on the group currency.</p> $AMNDT_{Target\ Currency} = \frac{AMNDT_{Group\ Currency}}{EXCHNGR_{AMT_{Conversion\ Type}_{Group\ Currency}}}$
← → e.g. USD	<p>Aggregated element showing the total result of the currency conversion into a target currency. This is the sum of</p> <ul style="list-style-type: none"> - the result of implicit currency conversions, e.g. EUR > USD - all results of explicit currency conversions, e.g. EUR > USD - the input element matching the target currency, e.g. USD - the input element EUR for non-currency figures. $Total\ AMNDT_{Target\ Currency} = AMNDT_{Target\ Currency} + AMNDT_{Group\ Currency} + AMNDT_{Currency\ X}$ $+ \sum_{i=1}^n AMNDT_{Conversion\ Type\ i}$

- Account or measure dimension: this dimension defines which [Conversion Type](#) is used to select the exchange rate. The dimension must have an attribute [Conversion Type](#) holding one base element of the [Conversion Type](#) dimension. The conversion type [~](#) always contains a rate of 1 and can be used to prevent unwanted currency conversion, e.g. for the number of heads. The name of this dimension can be configured with the currency conversion rules of each cube using currency conversion.
- Other dimensions: the fact cube may have additional dimensions. The currency conversion is computed on base-level cells, which implies that the calculation is also computed on the base elements of these other dimensions. Values on aggregated elements are defined by the aggregation of those base cells.