

Example Data Specifications & Information Requirements Framework

TRANSFORMATION LOGIC TEMPLATE (Source to Target Mapping)

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1 Purpose

This document template defines an outline structure for the clear and unambiguous definition of transmission of data between one data storage location to another.

This template forms part of example data specification & information requirements framework. The framework offers a set of outline principles, standards and guidelines to describe and clarify the semantic meaning of data terms in support of an Information Requirements Management process.

(See the *Framework Overview* for further details.)

2 Transformation Logic (Source to Target Mapping)

- It anticipates that at times, data will be transmitted from one data storage location (the “source”) to another (the “target”).
- Similar specification is required for the mapping of such data transfer, regardless of the mechanism used to execute the transmission (e.g. ETL, ELT and ESB transport mechanisms.)

Specification Item	Purpose
Source Table Name(s)	The database table name(s) of the data source (or file name in file-based data stores) (NB: Should also capture details of the access path.)
Source Column Name(s)	The database column(s) of the source (or field name/positions in file-based data stores)
Target Table Name(s)	The database table name(s) of the target data structure. Should also capture details of the access path.
Target Column Name(s)	The database column(s) of the target data structure
Transformation Logic	The logical expression of how the data will be transmitted from the source to the target, including any transformation rules to be applied. Recognise that multiple sources could be merged into one target, or vice versa.
Source Output Timing	Cover Timing of extraction / Extraction Method Details (may in part be covered at Data Store level)

- Good data management and data governance practices require that the Source to Target mapping of any data solution align with the Enterprise Logical (Canonical) Model.
- Data designers must therefore clearly demonstrate that the data transformation logic within any data system of business application map to and align with the Logical Model.
- Beyond this requirement, Data Governance is not concerned with the technical details of data management implementation, and therefore takes no specific interest in the physical design or technical structure of any data processing layers.
- Where a system exposes data structures that are not explicitly relational, documentation should be structured as if the data was stored in a relational manner.
- Notwithstanding, the expectations of auditability, traceability and persistence must be demonstrated.

Appendix A: Column Domains – Candidate list

Name	Definition
Amount	A Monetary Amount. i.e. a Quantity of a CURRENCY
Code	A character string or number which is used for identification purposes. * has no explicit natural language meaning - i.e. not an English word
Cost/Revenue Amount	An Amount of a Currency where: * positive = Revenue * negative = Cost
Count	
Date	
Date/Time	specification of seconds ?
Day of Month	
Day of Week	
Days	A number of days.
Description	A brief text description.
Details	Data with embedded meaning and of a complex format but for which the meaning cannot be consistently interpreted by a computer system.
Direction	Direction of an accounted balance.
DR/CR Amount	An Amount of a Currency where: * positive = DR * negative = CR
Email Address	
External Reference	A code or reference for which the format is specified by an external party.
Factor	A rate/proportion/ratio in the range 0 to a maximum value.
Frequency	EXAMPLES Annual, Half Year, Quarterly, Monthly, Weekly, Daily, Ad Hoc
Indicator	Binary Indicator - Yes or No.
Name	A meaningful word or phrase used for identification purposes.
Notes	Textual Notes.
Ordinal	A number indicating a position within a sequence of numbers.
Phone	International
Quantity	A number of units.
Rate	A rate/proportion/percentage.
Status	A number or character string used to indicate a state which is likely to change over time.
Time	
Type	A number or character string used for classification with a discrete set of values per column. * could be an English word or phrase
Year	A calendar year. E.g. 2002
Year/Month	A month in a specific year. E.g. November 2002

About the author



Alan D. Duncan is an evangelist for information and analytics as enablers of better business outcomes, and a member of the Advisory Board for QFire Software.

An executive-level leader in the field of Information and Data Management Strategy, Governance and Business Analytics, he has over 20 years of international business experience, working with blue-chip companies in a range of industry sectors. Alan was named by Information-Management.com in their 2012 list of "Top 12 Data Governance gurus you should be following on Twitter".

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