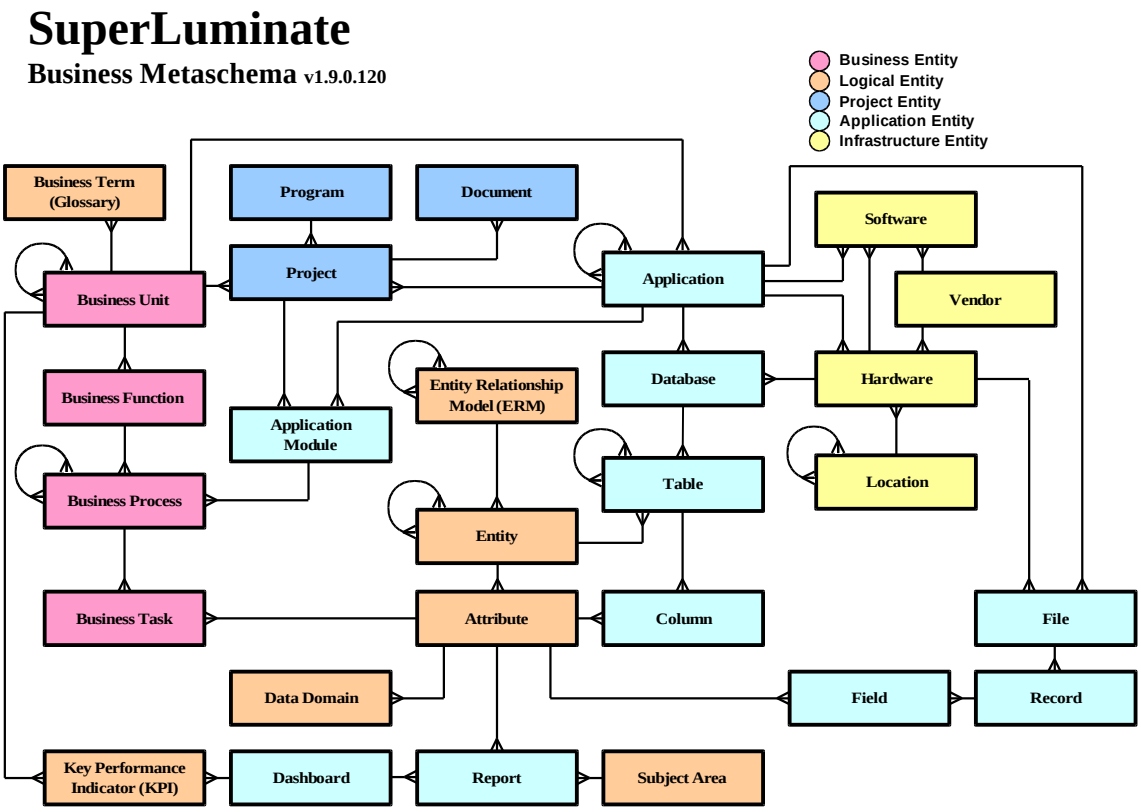
SuperLuminate Business Metaschema (Metadata Structure)
Updated 17-Feb-2012

This metaschema defines the underlying business metadata objects and their relationships that can be captured and maintained in the SuperLuminate data dictionary. This is a fully functional business metaschema but can easily be changed to meet the specific requirement of your enterprise.



Relationship Scenarios:

A relationship is a link between two entities, e.g. the entity “Table” is linked to the entity “Column” – “Table” is parent and “Column” is child.

An entity can also be related to itself, e.g. a “Table” entity can be a parent to many other “Table” entities and at the same time a “Table” entity can also be a child to many other “Table” entities.

In both cases the relationship is only a physical link maintained in the SuperLuminate database.

In some modeling methodologies a relationship is maintained in its own entity type (a relationship entity type) – the two entities (parent and child) must link separately to the relationship entity. The advantage to this is the relationship can

have its own attribution (definition) including rules and options. The disadvantage is most relationships do not require attribution – they are only links. Creating a relationship entity type is cumbersome requiring a lot more maintenance. IRDS (ISO) metadata standards are averse to modeling relationships as entities.

Appropriate Taxonomy:

- Category: Enterprise
- Subject: Business
- Class: Entity…
- Type: Opus

Data Object (Entity) Definitions:

- Application
  - Application software is computer software designed to help the user perform a particular task. Such programs are also called software applications, applications or apps.

- Application Module
  - An application can contain or consist of one or more application modules. An application can have no modules.

- Attribute
  - In computing, an attribute is a specification that defines a property of an object, element, or file. An attribute usually consists of a name, a data type, a size, and a default value.

- Business Function
  - A business function is a group of logically connected tasks performed together, in some logical sequence, to accomplish an objective or deliver a business product. An upper level business activity that is achieved via the performance of component activities. Examples: Manufacturing, Shipping.

- Business Process
  - A business process is a set of associated procedures or activities with defined roles and relationships carried out to realize a business function in pursuit of business objectives. A business process is the action taken to respond to particular events, convert inputs into outputs, and produce particular results. Business processes are what the enterprise must do to conduct its business successfully. A series of related business activities aimed at achieving one or more business objectives in a measurable manner.

- Business Task

    - A business task is a specific is a discrete event within a business processes. A business task will have only one input and one output.

- Business Term (Glossary)
    - A business term is the definition for common terminology and acronyms used in business plans, accounting, finance, and other aspects of the business.

- Business Unit
    - When companies become really large, they are best thought of as being composed of a number of businesses, i.e. business units. These organizational entities are large enough and homogeneous enough to exercise control over most strategic factors affecting their performance. They are managed as self contained planning units for which discrete business strategies can be developed.

- Column
    - In computing, a column is a specification that defines a property in a database table. A column usually consists of a name, a data type, a size, and a default value.

- Dashboard
    - Dashboard is a term now being used generally to refer to a web-based technology page on which real time information is collated from various sources in the business. The metaphor of dashboard is adopted here to emphasize the nature of the data being displayed on the page; it is a real-time analysis as to how a business is operating, just like on an automobile dashboard real time information is displayed about the performance of that vehicle.

- Data Domain
    - In data management and database analysis, a data domain refers to all the unique values which a data element may contain. The rule for determining the domain boundary may be as simple as a data type with enumerated list of values. For example, a database table that has information about people, with one record per person, might have a "gender" column. This gender column might be declared as a string data type, and allowed to have one of two known code values: "M" for male, "F" for female, or "U" for unknown. The data domain for the gender column is: "M", "F", and “U".

- Database
    - A Database is an integrated collection of logically related records consolidated into a common pool. A database stores detailed data needed to support the operations of an entire organization. Relational databases are the most commonly used database today. Relational databases use

tables to structure information so that it can be readily and easily accessed and maintained.

- Document
  - A document is any file containing text, media or hyperlinks. A document (noun) is a bounded physical representation of a body of information designed with the capacity (and usually intent) to communicate.

- Entity
  - Entities can be thought of as nouns. An entity may be defined as a thing which is recognized as being capable of an independent existence and which can be uniquely identified. An entity may be a physical object such as a house or a car, an event such as a house sale or a car service, or a concept such as a customer transaction or order.

- Entity Relationship Model (ERM)
  - In software engineering, an entity-relationship model (ERM) is an abstract and conceptual representation of data. Entity-relationship modeling is a database modeling method, used to produce a type of conceptual schema or semantic data model of a system, often a relational database, and its requirements in a top-down fashion. Diagrams created by this process are called entity-relationship diagrams, ER diagrams, or ERDs.

- Field
  - In computing, a field is a specification that defines a property in a record. A field usually consists of a name, a data type, a size, and an integer number identifying the position of the field in the record.

- File
  - A file is a system of organizing data so that it can be understood by a particular application. A standardized file format makes it possible for different programs to share the same information. A file can contain one or more types of records as defined in the entity named “Record.”

- Hardware
  - Hardware is a general term that refers to the physical artifacts of a technology. Hardware are the physical components of a computer system. The physical or mechanical devices that comprise a computer system, such as the central processing unit, monitor, keyboard, mouse, other peripheral devices including telecommunications, and other information technology devices.

- Key Performance Indicator (KPI)
  - A key performance indicator is a high-level measurement of how well an organization is doing in achieving critical success factors. Distinguished

from other metrics, key performance indicators (KPIs) are those metrics most critical to gauging progress toward objectives.

- Location
  - A location is a physical place identified by a postal address but the location specification can be much more specific, e.g. Building, Floor, Room, Cube, Chassis, Frame, Shelf, Rack.

- Program
  - A program or program management is the process of managing multiple interdependent projects that lead towards an improvement in an organization's performance.

- Project
  - A project in business is a collaborative enterprise, frequently involving research and design that is carefully planned to achieve a particular aim.

- Record
  - A record is a particular row in a file containing many fields. If there is only one type of record in a specific file then only one “Record” entity will exist for that file – one “Record” entity for each record type (format).

- Report
  - A report is a document characterized by information or other content reflective of inquiry or investigation, which is tailored to the context of a given situation and audience. The purpose of reports is usually to inform.

- Software
  - Computer software or just software is a general term used to describe a collection of computer programs (sets of instructions for a computer), procedures and documentation. There are two kinds of software: system software and application software. System software is usually stored on a computer's hard drive until needed by the computer. Application software ('apps' for short) are more commonly known as programs.

- Subject Area
  - An area of major interest or importance to the enterprise. It is centered on a major resource, product, or activity. The subject areas provide reference information when conducting detailed requirements gathering.

- Vendor
  - A vendor is a seller – someone who promotes or exchanges goods or services for money. A vendor, or a supplier, is a supply chain management term meaning anyone who provides goods or services to a company.

- Table
  - A table is a tabular view of data, in a relational database management system, defined by one or more columns of data and a primary key. A table is populated by rows of data.

- Table Association
  - A table association records the relationships (connections) between one or more tables.

Extended Attribution:

Once the Metaschema is developed showing the relationships between all of the entities (and agreement is reached to the structure) the entities must be attributed. The required attributes must be added to each entity to record the required and optional information for each object.