

DISCON Specialists

EA Enabling Techniques

Sub-schema Interdependency Diagram

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Reason for Existence

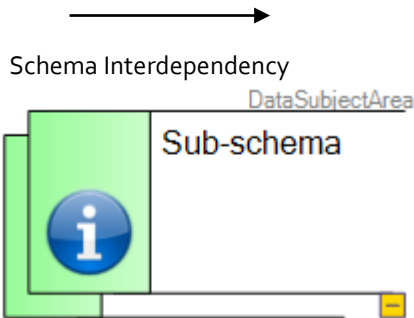
The dependencies between schemas in the data model along with the sub-schemas can be depicted on a Sub-schema Interdependency Diagram.

- Sub-schema Interdependency represents a mathematically preferred development order (Architectural Priority).
- A Mathematically Determined Architectural Priority means that we are aware of the order in which components should be implemented or which part of other components should be in place before we can implement a new component. The architectural priority is represented in the form of a SID or a System Ring Diagram (SRD).
- The Sub-schema Interdependency is much more accurate than the ring diagram and clearly represents the integration boundaries of systems.

2. Input Required

1. Applying the Functional Effect Back-tracking (FEBT) Algorithm to the Attribute Dependency Diagram (ADD) will result in a Component Based Composition with Plug-in Plug-out Capability.
2. The FEBT determines the scope and allows you to develop sub-schemas based on the dependencies between events and objects.
3. From these Sub-schemas a SID can be developed.
4. The SID can be modelled in MetaBuilder. See steps below.

1. Notation



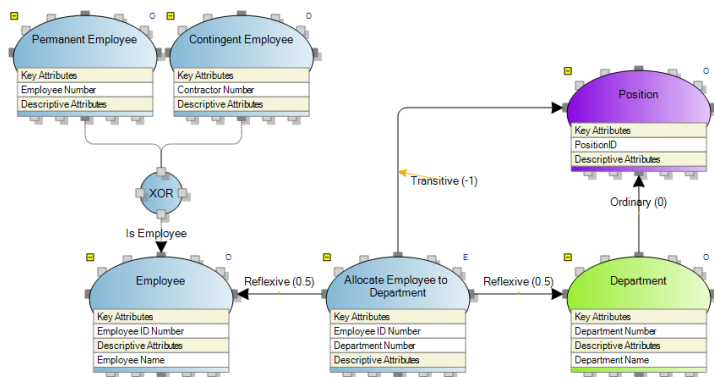
A group of entities that can naturally be associated with each other and that are grouped together because of a specific cohesion are called a Sub-schema.

Compile a SID in MetaBuilder

1. Select a New Diagram.
2. Open the Data Stencil.
3. Compile an ADD.
4. Validate the ADD (Tools -> Validate -> ADD).
5. Apply FEBT Algorithm (Possible Actions -> FEBT - SID -> Go).
6. Rename SID Clusters.

3. MetaBuilder Example

ADD



SID

For Business or System development the SID depicts the following development sequence:

1. Position Cluster
2. Department Cluster
3. Employee Allocation Cluster

