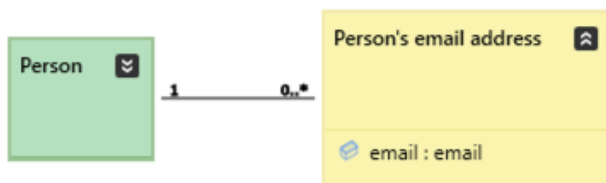


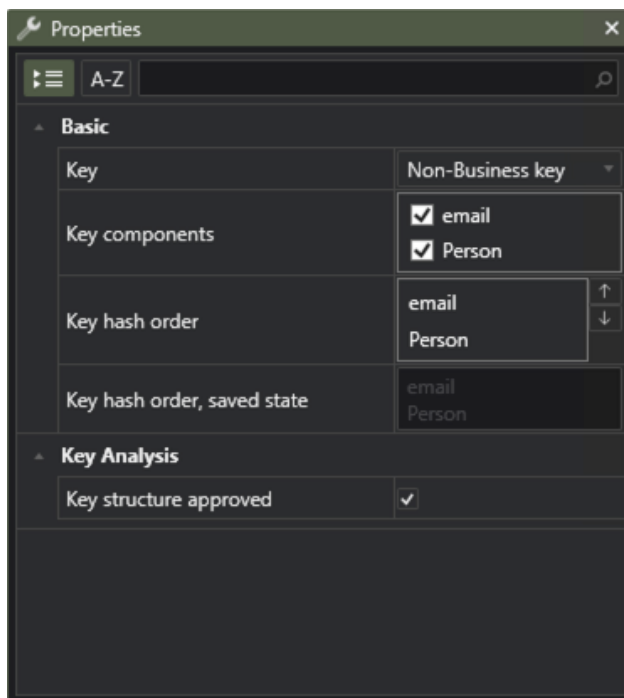


Multi-Active Satellites

An attribute with an array of values is modeled as a class of its own (for example, *Person's email address* class related to the *Person* class and containing the attribute *Phone number*). The key is defined as a non-business key containing both the owner reference (the associated *Person* class) and the value itself (*email*).



Attribute with array of values modeled as class



Key definition of *Person's email address*

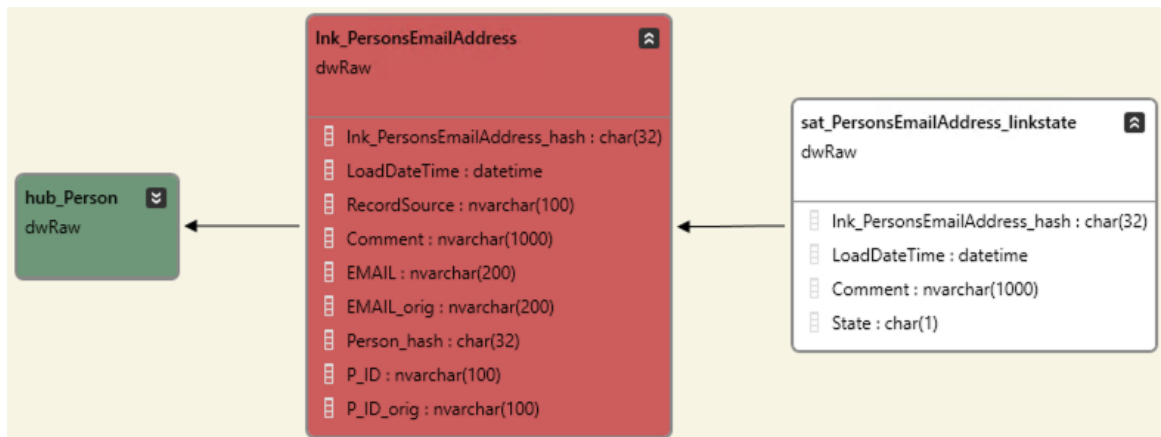
State tracking can optionally be turned on. With state tracking off, all loaded values remain active, and with state tracking turned on, the last loaded batch will remain active as values not present in the batch will be marked as deleted.

Other structures can also be modeled, if more appropriate for the case.

This approach results in a structure that is a consistent implementation of the model and that can hold many values that can be simultaneously valid. Instead of multi-active satellites, this modeling



approach generates a link table with an optional state tracking satellite. As the value is part of the key, the link table will contain the value itself.



Generated structure

We are also considering an alternative way of modeling, where a multi-value attribute is simply assigned a multiple cardinality (0..* or 1..*), after which it will automatically be implemented as above. This keeps the model tidier.