



Introduction

Business rules are defined in the present document to enable to run “**inference mechanisms**” that are necessary for the system to be run.. The general principle of business rules is to describe rules and a very refined level in order to be able to deduce rules at consolidated levels.

Secondary concepts are not set in the business model, and therefore not mentioned in the business rules, as each acteur may want to created different secondary concepts that are meaningful for them. For instance the concept of “products catalog” can be defined by an enterprise who needs it, and can be described through a business rule like “if enterprise offers products, then product catalog of the enterprise is the list of all products offered”. Other concepts like “basket”, “invoice”, “delivery note”, etc. could be defined the same way using the existing concepts.

There are different ways to implement business rules. Some are implemented in the owl/pprj files through Protégé, like simple cardinalities rules. We didn't mention those here. Others, more complex business rules, need to be programmed with sparql ou swrl for instance. In Data Food Consortium, we are listing the rules here but they are not yet programmed.

Business rules

#	If	Then	Concepts impacted
	Latitude AND longitude not empty	Deduce address (street, city, postcode, country)	address
	Address not empty (street, city, postcode, country)	Deduce latitude and longitude	address
	In an Order, there is an Order Line for a Defined Product with a certain Quantity	The Quantity for the same Defined Product in the Order's Sale Session equals the sum of the Quantities for that Product in each Order associated to that Sale Session.	sale session
	A Defined product has a quantity defined (total theoretical stock)	The sum of the corresponding catalog items' stock limitation can't be greater than the quantity of the Defined product	Defined product, catalog item, offer
	If Theoretical stock or Real stock is empty	Quantity associated is unlimited	Theoretical stock, Real stock