

### Preliminary Notice

This paper is freely downloadable (PDF) from [www.conceptualheaven.com](http://www.conceptualheaven.com).

This paper provides an explanation of messages provided by the "SBVR Validate" XSLT utility that is downloadable from the Member Area page of [www.conceptualheaven.com](http://www.conceptualheaven.com).

#### **VAL-001: Namespace URI '<http://www.conceptualheaven.com/undefined>' declared for the subject vocabulary is a reserved namespace URI.**

Explanation: The document declares '<http://www.conceptualheaven.com/undefined>' as the namespace URI of its subject vocabulary. This is not allowed because this namespace URI is reserved by Conceptual Heaven.

Solution: Change this namespace URI to a different value.

Note: The reserved word '<http://www.conceptualheaven.com/undefined>' is produced by the "Extract" utility if there is no properly declared subject vocabulary, or if there is no properly declared namespace URI for the subject vocabulary.

Note: For more information on the subject vocabulary, read the section below on message VAL-002.

#### **VAL-002: Subject vocabulary not declared, or subject vocabulary has no declared namespace URI.**

Explanation: The document must declare a subject vocabulary and this vocabulary must have a declared namespace URI.

The *first glossary entry in document order* is assumed to be for the document's subject vocabulary, on the conditions that the concept name for this entry is for an individual concept, and that the entry has an explanation with label "Namespace URI:". The explanation text (= the value in the right-hand column) of this explanation is assumed to be the subject vocabulary's namespace URI.

Solution: Make sure that the first glossary entry in document order is for an individual concept and designates your subject vocabulary, i.e. the vocabulary that the document describes.

Make sure also that this glossary contains an explanation with label "Namespace URI:" that specifies a namespace URI suitable as a global identifier for your vocabulary when data is moved to other XML files, merged with other XML data, or exchanged with other software.

Note: To indicate to the reader what is the subject vocabulary, you can use any headers for sections, other text elements, numbering, etc. that you see fit. The formal requirement is only that the first glossary entry in document order is for an individual concept and contains an explanation with label "Namespace URI:".

Note: In addition to the namespace URI, it is advisable to include in the glossary entry an abbreviation or synonym that gives a short name to the vocabulary. Conceptual Heaven will preserve the following information during all processing and will (re)present it in end results:

- The subject vocabulary's namespace URI.
- The subject vocabulary's name.
- The subject vocabulary's abbreviation or synonym (if any).

Example:

## 1. Key concepts

### 1.1. Subject vocabulary

#### EU-Rent English Vocabulary 1.0

Definition: A fictitious version 1.0 of a fictitious example [SBVR 1.0:] vocabulary published by Conceptual Heaven that EU-Rent supposedly uses to conduct its business in situations where it is acceptable or desirable to use the English language.

Note: The vocabulary presented in this document.

Synonym: EU-Rent 1.0

Namespace URI: <http://www.conceptualheaven.com/spec/eu-rent10>

#### VAL-003: Glossary entry for '...' has multiple explanations labeled "Namespace URI".

Explanation: The glossary entry has two or more explanations labeled "Namespace URI". This does not make sense because a Namespace URI is understood to identify a concept uniquely.

Solution: Drop one Namespace URI (or more, as needed) so that only a single Namespace URI remains in the glossary item.

**VAL-004: Glossary entry for '...' with explanation labeled "Namespace URI" is not for an individual concept.**

Explanation: The glossary entry has an explanation labeled "Namespace URI", but it is not for an individual concept. This does not make sense, because the purpose of a Namespace URI is to identify a vocabulary uniquely. A vocabulary is always an individual concept, not an ordinary noun concept or a verb concept.

Solution: Drop the Namespace URI or move it to the correct place. If it is already in the correct place, change the color-coding of the concept being declared, so that this declaration is an individual concept.

**VAL-005: More than one glossary entry for concept '...' .**

Explanation: The document contains more than one glossary entry for the concept. This is not desirable because contradictory or redundant information about a concept is difficult to detect when the concept is declared in multiple places.

Solution: Decide what is the best place in the document to declare the concept. Drop the other declaration(s) of the concept. If the entry that you decide to drop has explanations, move these lines to the remaining declaration.

**VAL-006: Verb concept '...' involves undeclared noun concept '...' .**

Explanation: There is a verb concept V involving a noun concept N, but N is not declared as a concept.

Example: There is a concept 'customer rents car' but the concept 'customer' is not declared.

Solution: Add a glossary entry for the missing noun concept.

**VAL-007: Glossary entry for concept '...' has explanation labeled "Role in:" with value '...', but that verb concept is not declared.**

Explanation: There is a glossary entry for concept N with an explanation labeled "Role in:" but the value in this explanation does not refer to an existing verb concept.

Example: An explanation for noun concept 'employee' has a "Role in:" explanation with value 'person works for company', but there is no glossary entry for concept 'person works for company'.

Solution: Check that the value in this "Role in:" line is correct. If it is, then add a glossary entry for the verb concept it means to refer to.

**VAL-008: Glossary entry for concept '...' has explanation labeled "(More) general concept:" with value '...', but that general concept is not declared.**

Explanation: There is a glossary entry for concept C with an explanation labeled "More general concept:" or "General concept:", but the value in this explanation does not refer to an existing concept.

Example: An explanation for noun concept 'car' has a "General concept:" explanation with value 'vehicle', but there is no glossary entry for concept 'vehicle'.

Solution: Add a glossary entry for the missing general concept.

**VAL-009: Glossary entry for concept '...' has explanation labeled "Synonym:" with value '...', but there is no declared noun concept by that name.**

Explanation: There is a glossary entry with an explanation labeled "Synonym:" but the value in this explanation does not refer to an existing noun concept.

Example: An explanation for noun concept 'car' has a "Synonym:" explanation with value 'automobile', but there is no glossary entry for concept 'automobile'.

Solution: Add a glossary entry for the missing synonym.

Note: "Synonym:" must refer to a declared *noun* concept, not to a declared *verb* concept. To express that a verb concept has the same meaning as a another verb concept, use label "Synonymous Form" and not "Synonym".

**VAL-010: Glossary entry for concept '...' has explanation labeled "Synonymous Form:" with value '...', but there is no declared verb concept by that name.**

Explanation: There is a glossary entry for verb concept V with an explanation labeled "Synonymous Form:" or "Syn. Form" but the value in this explanation does not refer to an existing verb concept.

Example: An explanation for noun concept 'EU-Rent owns car' has a "Synonymous Form:" explanation with value 'EU-Rent has car', but there is no glossary entry for verb concept 'EU-Rent has car'.

Solution: Add a glossary entry for the missing synonymous form.

Note: "Synonymous Form:" must refer to a declared *verb* concept, not to a declared *noun* concept. To express that a noun concept has the same meaning as a another noun concept, use label "Synonym" and not "Synonymous Form".

**VAL-011: Glossary entry for general concept (individual concept, verb concept) '...' has explanation labeled "See:" with value '...', but that general concept (individual concept, verb concept) is not declared.**

Explanation: There is a glossary entry for general concept G, individual concept I, or verb concept V with an explanation labeled "See:" but the value in this explanation does not refer to an existing concept of the same type (i.e., general concept, individual concept, or verb concept respectively).

Example: An explanation for noun concept 'automobile' has a "See:" explanation with value 'car', but there is no glossary entry for concept 'car'.

Solution: Add a glossary entry for the missing synonym.

**VAL-012: Glossary entry header for concept '...' has unmarked or wrongly marked text.**

Explanation: There is a glossary entry header that contains either unmarked ("black") text or wrongly marked text. Glossary entry headers may only contain:

- Text with noun-concept ("green") marking.
- Text with individual-concept ("green double-underlined") marking.
- Text with verb-concept ("blue") marking.
- Keywords that are role differentiators.

Solution: Make sure to correctly mark the part of the glossary entry header that is unmarked or wrongly marked.

Example 1: Your glossary header was marked:

branch is *located* in area

Mark it instead as follows:

branch *is located in* area

Example 2: Your glossary header was marked:

branch *is located in* area

Mark it instead as follows:

branch *is located in* area