



# Bowne Global Solutions and OLIF

## Industry Implementation

## Why is Bowne Interested in Standardized Data Exchange?



- ◆ Localization provider for over 300 clients  
=> over 300 data models!
- Optimize and simplify the process of  
interchanging terminological data
- ◆ MT lexicons for 22 language directions
- Optimize and simplify the process of  
interchanging lexical data



- ◆ **Single data repository** for all terminological, lexical and TM data
- ◆ Each entry may be used for HT/MT/NLP
- ◆ Incorporates project and general term/lex data
- ◆ Web-based access for managing and consulting data



- ◆ **Terminological Data Categories**  
=> “checked by” (ISO 12620)/ “QA Person” (BGS);
- ◆ **MT-Related Data Categories**  
=> “InflectionClass” (OLIF)/ “Inflection Class” (BGS);
- ◆ **Localization-related Data Categories**

# The Bowne Linguistic Repository



TermGLOBAL - Microsoft Internet Explorer

Address: http://tgstage.bowneglobal.com/termglobal.asp?IE=0

**BOWNE** Home / Search | Queries/Proposals | Links | Style Guides | Feedback | Tools | Help

**TermGLOBAL™**

Customer: Commerce One Domain: [All] Source Language: English

Project: Auction Services v5.0, Subject: [All] Target Language: Italian, Japanese, PortugueseBraz, Spanish

Approval Status: [All] Creation Date: yyyy-mm-dd

Entry Type: ☒ SW String ☒ Word/Phrase ☒ Segment

Search Mode: ☒ Exact Match ☐ Beginning With ☐ Contains ☐ Ending With ☐ Case Sensitive

Search Text: file Expand Search search

Number of Entries: 1 1-1 of 1

File

File	Creation Date	Translation ID
Spanish	2001-11-16	7863529

Customer: Commerce One Project: Auction Services v5.0, Version: Number: Entry Type: Word/Phr

1-1 of 1

Welcome to TermGLOBAL! Daniela Dettmann

Start | Inbox ... | DD\_B... | Re: Q... | C:\ | Untitled... | 01121... | Term... | Micros... | Volume IE | 4:26 PM

3 basic entry types

# The Bowne Linguistic Repository



TermGLOBAL - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites History

Address http://tgststage.bowneglobal.com/termglobal.asp?IE=0

TermGLOBAL™

BOWNE

Home / Search / Queries/Proposals / Links / Style Guides / Feedback / Tools / Help

(Export Queries/Proposals)

Customer: Commerce One Source Language: English

Project: Auction Services v5.0, Target Language: German

Creation Date: After 2001-11-12 Approval Status: [All]

Type: ☒ Query ☒ Proposal

Entry Type: ☒ SW String ☒ Word/Phrase ☒ Segment

Export Format: TAB Separated

Column text file, separated by TABs

Available Fields:

- Proposal #
- Type
- Created By
- Creation Date
- Query/Proposal Status
- Project Name
- Customer Name
- Comment
- Type
- Entry Type
- Context
- Created By
- Closed By
- Closure Date

Selected Fields:

- Source Entry
- Target Entry
- Source Language
- Target Language

Welcome to TermGLOBAL! Daniela Dettmann

Start | Internet

Inbox - ... DD\_BGS... Re: Que... C:\ Untitled ... 011210... TermGL... 4:36 PM



- ◆ **Specify data categories** used in the BGS database, adding exact definitions for mapping.
- ◆ **Map data categories** to existing standards or interchange formats (ISO 12620, OLIF); define supplemental data categories; propose new data categories for standardization (TC37/SC4).
- ◆ **Define export format** using tools and formats developed by the SALT group to create an XML environment for BGS' terminological entries designated for interchange with TBX.
- ◆ **Create or identify converters** to export BGS data to TBX, and to import BGS data into other databases (e.g., customer dbs) and data from other dbs into the BGS Linguistic Repository.



# Mapping Bowne Data to ISO/OLIF in RDF



```

</dcsd:DataCategory>
- <dcsd:DataCategory dcsd:DCName="synonym" dcsd:DCIdentifier="ISO12620A-020102" dcsd:DCType="C"
  dcsd:DCCOccurrence="0..1">
  <dcsd:DCDefinition>Any term that represents the same or a very similar concept as the main entry term in a term
  entry.</dcsd:DCDefinition>
- <dcsd:DCCComment>
  <dcsd:conceptComment>Synonymy is generally relative, i.e., synonyms rarely cover all aspects of the same concept
  in all instances. The resulting degree of synonymy (A.2.10) is treated using the conventions defined for degree of
  equivalence (see A.3.1). BGSExp: A term that has the same meaning as the entry. The synonyms_ID is the key
  for the relation entry_in_this_table to synonyms; it addresses the Synonym table that contains all information
  specific to the synonym.</dcsd:conceptComment>
  <dcsd:Example>"dynamicizer" in annex C, figure C.2</dcsd:Example>
</dcsd:DCCComment>
<dcsd:DCContent dcsd:DataType="basicText" />
- <dcsd:DCAdmin dcsd:EditionDate="2001-11-05" dcsd:Status="Accepted" dcsd:StatusDate="2001-11-05">
  <dcsd:StatusNote>Added 2001-11-05 DD; BGS: Edited 2001-11-05</dcsd:StatusNote>
</dcsd:DCAdmin>
- <dcsd:DCParent>
  - <rdf:Alt>
    <rdf:li>term</rdf:li>
  </rdf:Alt>
</dcsd:DCParent>
</dcsd:DataCategory>
- <dcsd:DataCategory dcsd:DCName="syntactic frame" dcsd:DCIdentifier="OLIF-synFrame" dcsd:DCType="C"
  dcsd:DCCOccurrence="0..1">
  <dcsd:DCDefinition>Data category that describes the syntactic frame data categories for the entry string
  (subcategorization).</dcsd:DCDefinition>
- <dcsd:DCCComment>
  <dcsd:conceptComment>OLIF datcat name: synFrame BGSName: syntactic frame; BGSExp: Sequence of POS in a
  phrase.</dcsd:conceptComment>
  <dcsd:sourceComment>...</dcsd:sourceComment>
  <dcsd:Example>...</dcsd:Example>
  <dcsd:DictionaryID>???</dcsd:DictionaryID>
</dcsd:DCCComment>

```

OLIF and ISO Categories



# Exchanging Lexical Data: LIF Data Categories



- ◆ Lemma
- ◆ Translation
- ◆ Part of Speech
- ◆ Attribute(s)
- ◆ Comment
- ◆ Headword
- ◆ Morphology
- ◆ Initials
- ◆ Date
- ◆ Sanitized Headword

# LIF Data Categories and Attributes



Lemma	Translation	PoS	Attributes	Comment	Headword	Morph.
a.m.	por la mañana	5	+Time		a.m.	1
aardvark	cerdo* hormiguero*	1	+Animate		aardvark	1
abandonment	entrega* de sí mismo	1	+Abstract		abandonment	1
abandonment	desamparo	1	+Abstract		abandonment	1
abase	humillar	3	+TakesDO		abase	10
abasement	humillación	1	+Abstract		abasement	1
abash	desconcertar	3	+TakesDO		abash	8
abbess	abadesa	1	+Animate+Human+Occupation		abbess	2
abbey	abadía	1	+Place		abbey	1
abductor	raptor	1	+Animate+Human		abductor	1
arma* blanco*	cold steel*	1	+Feminine+StressedA		arma	0
casilla* de verificación	checkbox	1	+Feminine		casilla	0
edición* electrónico*	desktop publishing	1	+Feminine		edición	3

# Mapping Data Categories: Localization



- ◆ Category
- ◆ Platform
- ◆ Module

## Mapping Data Categories: Comments



◆ OLIF <note>

◆ OLIF <usage>

◆ Bowne Comment Fields

## Mapping Data Categories: More Examples



- ◆ Domain Hierarchy Levels
- ◆ “Component” Information
- ◆ Inflection Class, Domain and Semantic Type Information

# Mapping Data Categories: Semantic Type

SALT Suite 3.04

DCS File Editor Converter Publisher Admin Readme About

Selection Data Categories Visualization Query Help About

Data Category: semantic type Identifier: OLIF-semType Administrative Annotations Parents Style

Occurrence: 0..1

Definition: Data category that represents the status of the entry string with respect to a semantic type classification system.

Source note

Comment: OLIF datacat name: semType  
BGSName: semantic type;  
BGSExpl: "Applicable for nouns. Also used to indicate the type of

Example

Target type: not present Content type: picklist Dictionary ID: Other...

Level	Possible
TDC	<input type="checkbox"/>
GIS	<input type="checkbox"/>
CI	<input type="checkbox"/>
TE	<input type="checkbox"/>
LS	<input type="checkbox"/>
TC	<input type="checkbox"/>

Reference picklist values

Selected values: anim-hum (noun), anim-hum-func (noun), anim-hum-pn (noun)

OLIF2 Values





- ◆ Promote OLIF guidelines for formulating canonical forms
- ◆ Tool for mapping OLIF data categories
- ◆ Expandable OLIF category value lists for domain and semantic type

## Contact Information



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