

## BR\_Translation – Translation Services

### Revision history

2017-04-20	Robin Lamacraft	Original draft
2018-04-03	John Lucas	Added BR_Notification entries
2018-05-31	Don Ferguson	Removed graphics and DB tables, (out of date) added Forms of Translation section

**NB: the content below needs a review to ensure alignment with current HRE Name Style and translation design.**

### SCOPE

This module must be used anywhere text strings may have a Translation that needs to be stored or retrieved. These text strings may be stored in database tables according to their length. Text strings may be plain or encoded. Some collections of values have extra relationships that need to be managed as part of the translated string storage.

Translated strings are classified as follows:

1. The expected maximum length of a particular entry type
2. The place of generation or use of translated values
3. The special interactions between values within the same type of data entry.

### Subdivision by expected Maximum Length

2 Strings lengths are used:

- Normal max. 8000 characters but only uses actual string length as VARCHAR() with MAX\_VALUE set to 8000)
- Huge max. 2Gb characters as a CLOB (character BLOB).

### Subdivision by place of generation or use

- Associated with the GUI
  - GUI Labels and options
  - Reminders and Help
  - Error and Warning Messages.
- Associated with user data and auxiliary definitions
  - Auxiliary Definitions (Tags, etc)
  - Name Element entry
  - Output Templates and Sentences
  - Memos with embedded Citations.

NOTE: The text below is divided into 2 parts: GUI related and Data-related.

### Forms of Translation

There are 2 forms of translation services that exist within the HRE environment.

1. NLS: (Natural Language Support) provided by Java for all fixed plain strings. The translations for these are stored in Eclipse resource files and are managed by Eclipse libraries. NOTE: Any error message, etc. that is a template into which there are substitution values are to be inserted falls in the next form of translation service. Any non-fixed, non-plain string output within the Java code will need to use a BR\_Translation API to compose the string that is to be output
2. HRE-controlled translation: Database Table #204 provides the storage of translated abbreviations, labels and descriptions directly as a service for many tables. Any string output which has markers for retrieval and output of values from within the Client and Server XML

status files or from any accessible file in the H2 database is managed through BR\_Substitution.

### **GUI-RELATED ACTIONS**

1. To define or modify a GUI Translation Dictionary entry: Create, Edit, Save and Retrieve
2. To define or modify a language-specific value: Create, Edit, Save and Retrieve.

### **GUI-USED BY**

Any GUI module.

### **USER DATA RELATED ACTIONS**

1. To define or modify a User Data Translation Dictionary entry: Create, Edit, Save and Retrieve
2. To define or modify a language-specific value: Create, Edit, Save and Retrieve.

### **USER DATA-USED BY**

Any GUI module or Substitution operation.

### **GENERIC NAME STYLE RELATED TRANSLATIONS**

Name style related translations have additional properties as values may be ordered in a hierarchical sequence. There may be differences according to the type of object that is being named. The same text value used for different name element fields cannot be considered equivalent. For example the word "Washington" as an element of a Location name can be used with different consequences for several levels of Name Element use. This is also important when providing data entry completion hints.

Reference should be made to Database tables #162-166.

### **REQUIRED SERVICES**

1. BR\_EntityLink
2. BR\_Field
3. BR GuiElement
4. BR\_Notification

### **WARNING CONDITIONS**

1. Need details of the condition that raised the warning, example message and possible next steps. (Use BR\_Notification to alert the user.)

### **ERROR CONDITIONS**

1. Need to record the condition that raised the error, example message and possible next steps. (Use BR\_Notification to alert the user.)