

BR_Pattern – Pattern Services

Robin Lamacraft 2017-03-19

SCOPE

This module must be used to operate with Patterns. It provides services to create, edit, retrieve and delete Node Entity Patterns and Node Entity Pattern Definitions. Node Pattern Definitions are collections of data that provide the values and templates for creating Pattern Instances for user data in HRE. NOTE: All actions below must be aware of the GUI-Language, the User Data Entry Language and the Report Language.

All Pattern Definitions have the following common property fields:

- Pattern Type HRE-ID
- Entity Type A HRE-ID
- Entity Type B HRE-ID
- Pattern Label IID (language dependent)
- Pattern Label Abbreviation IID (language dependent)
- Pattern Subject Global Sentence IID (only includes Parent Entity)
- Pattern Same as Subject Global Sentence HRE-ID (includes Parent Entity and all others of same Entity type)
- Pattern Summary Global Sentence HRE_ID (includes all Entities)
- List of Pattern Named Sentences (HRE-ID for each)
- List of Permitted Sentence Substitution Variables (HRE-ID for each)
- List of Named Memos (HRE-ID for each).

There are 7 Pattern Definition Types defined in HRE:

- Associate Patterns that describe how an Entity has a role with an Event or Task. Associate Patterns have the following additional Property Values:
 - Details needed
- Heading Patterns that describe the type of Event or Task (they can also exist for other Entities.) Heading Patterns have the following additional Property Values:
 - Details needed
- Member Patterns that describe the group membership of a group to an entity of not the same group type. Member Patterns have the following additional Property Values:
 - Details needed
- Name Patterns that describe how a Name is connected to an Entity. Name Patterns have the following additional Property Values:
 - Details needed
- Relationship Ranked Patterns that describe the relationship between 2 entities of the same type where the relationship is asymmetric. NOTE: Events and Tasks can be related. Relationship Patterns have the following additional Property Values:
 - Details needed
- Relationship Equally Patterns that describe the relationship between 2 entities of the same type where the relationship is symmetric. NOTE: Events and Tasks can be related. Relationship Patterns have the following additional Property Values:
 - Details needed
- Citation Patterns that describe the relationship between a Link or a Node Entity with a Source. Citation Patterns have the following additional Property Values:
 - Details needed

A user can select a Pattern Definition as the template for a new Pattern instance which contains the appropriate user data. This module provides both the creation and maintenance of the Pattern Definition database tables, but also creates, edits, etc the Pattern user data database tables.

ACTIONS

For Pattern Definitions of a particular type and Entity focus:

1. Create a new Pattern Definition
2. View or Edit the Pattern Definition
3. Check the syntax of a Pattern Definition after editing including sentence templates for symbols and appropriate variable references
4. Check that data entry field values match required field formats
5. Check before deleting a Pattern Definition that no Pattern data uses that Pattern Definition
6. Retrieve the sentence with or without variable substitution and grammar adjustments.

For Pattern Instances of a particular type and Entity focus:

1. Create a new Pattern instance
2. View or Edit the Pattern instance
3. Check that data entry field values match required field formats
4. Check the syntax of a Pattern instance after editing including sentence templates for symbols and appropriate variable references
5. Retrieve the sentence with or without variable substitution and grammar adjustments.

USED BY

1. Any GUI screen that operates on Pattern Definitions or Pattern Instances.

AUXILIARY DATA USED

1. PatternDefn DBT
2. PatternDefnProperty DBT
3. PatternDefnValidate DBT
4. PatternAssociate DBT
5. PatternSentence DBT
6. PatternHeading DBT
7. PatternRelationRanked DBT
8. PatternRelationEqually DBT
9. PatternMemeberDBT
10. PatternCitation DBT.

REQUIRED SERVICES

1. BR_EncodedString
2. BR_Grammar
3. BR_EntityLink
4. BR_FieldTranslation.

WARNING CONDITIONS

1. Need details of the condition that raised the warning, example message and possible next steps.

ERROR CONDITIONS

1. Need to record the condition that raised the error, example message and possible next steps.