

BR_Location – Location Services

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SCOPE

This module must be used anywhere information about a Location is created, updated or needs to be retrieved. A Location in HRE is an object that represents a coordinate or region where Events have occurred, Tasks are planned to occur and the address of a Repository or a Place which is a subject to research. [Place as a Research Type will be one of the first to be added to HRE once the initial version is distributed.] The same coordinates may have different names which may be date-dependent. There may be different methods of expressing those coordinates, such as the UK Ordnance Survey Grid, etc. If those same coordinates have alternative names they are stored as name variants for the one Location. The most common form of naming a Location is to structure the name as a series of Name Elements which are then listed in a hierarchical order where each Name Element represents a region that contains the previous one. Unfortunately there is not a single classification of the hierarchical levels. It is therefore necessary that HRE can use a number of hierarchical Name Element classifications. In HRE, Location Names are entered using Name Styles to provide flexible input field sequences and output templates.

Apart from potentially having alternative names, Locations can have other data or properties that the researcher wishes to record and use in analysis. These are properties that are constant over time. HRE Locations may include the Latitude and Longitude and Altitude of a Location. There may be other derived data that the user would like to attach to the Location object as Flags or Notepads. Other values may change over time, like the postal-code or zip-code, so these belong to a name variant. The user may want to add a Flag to a Location to signify that this location was on the coast, on a river, in a desert, etc. The name of the River might be stored as a Notepad of the same Location.

Locations may have relationships to other Locations. Locations can be clustered or the distance between them can be calculated. The ability to record routes of migration and the ability present data on maps is a very important aspect of many kinds of research.

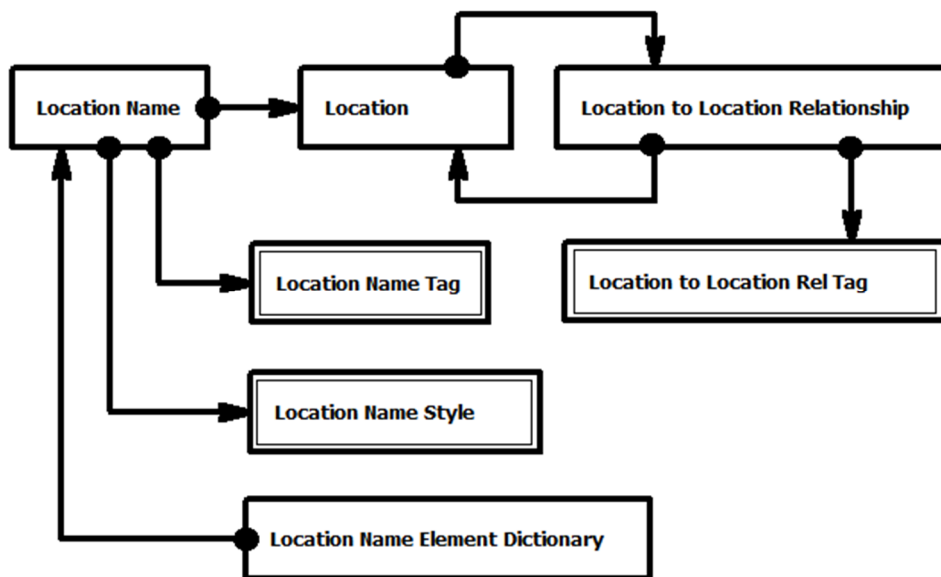
ACTIONS

1. To define or modify the properties of a Location: Create, Edit, Save, Select and Store
2. To define or modify Name Styles for Location Names
3. To add, edit, delete Location Name variants using Names Styles and associated Tags
4. To add, edit, delete Location to Location Relationships with Relationship Tags
5. To retrieve and search Location Name Element values
6. To evaluate Location Name Output Templates
7. To enable Flags and Notepads (Inbuilt and Custom) to belong to Locations, Location Name Variants and Location to Location Relationships.

USED BY

1. BR_Occasion
2. BR_Repository.

DATA CONTROLLED BY THIS MODULE



1. Location Table: One record per Location

SQL FIELD NAME	SQL FIELD TYPE	NOTES
HRE COMMON FIELDS FIRST		HRE_ID is Location_ID
PRY_NAME_ID	INT8 NOT NULL	The HRE Location Primary translated Name ID
IS_GAZETEER	INT	0= NO, 1= YES (if YES, cannot be deleted)
LATITUDE	DOUBLE	Latitude (Signed Decimal Degrees)
LONGITUDE	DOUBLE	Longitude (Signed Decimal Degrees)
ALTITUDE	DOUBLE	Altitude above sea level (Metres)
ISO_COUNTRY	VARCHAR(3)	ISO 3166 Alpha-3 Country code

The PRIMARY INDEX of this table is the HRE_ID. (Location)

NOTE: Other fields will be added here as Internal Flags and Notepads to reduce the frequency of common text processing.

2. Location Name Table: One record for each Location Name Variant

SQL_FIELD NAME	SQL_FIELD TYPE	NOTES
HRE COMMON FIELDS FIRST		HRE_ID is Location Name_ID
LOCATION_ID	INT8 NOT NULL	Parent HRE Location ID
LOCN_NSTYLE_ID	INT8 NOT NULL	HRE Location Name Style ID
LOCN_NTAG_ID	INT8 NOT NULL	HRE Location Name Variant Tag ID
START_DATE	INT8 NOT NULL	HRE Historical Date ID for start of use of this name
END_DATE	INT8 NOT NULL	HRE Historical Date ID for end of use of this name
SENTENCE_ID	INT8 NOT NULL	HRE Sentence ID
MEMO_SET_ID	INT8 NOT NULL	Named Meno Set ID (used collect named memos for sentence)

The PRIMARY INDEX of this table is the HRE_ID. (Location Name)

3. Location to Location Relationship Table: One record for each Location to Location Relationship

SQL_FIELD NAME	SQL_FIELD TYPE	NOTES
HRE COMMON FIELDS FIRST		HRE_ID is Location Name_ID
LOCATION1_ID	INT8 NOT NULL	Parent HRE Location1 ID
LOCATION2_ID	INT8 NOT NULL	Parent HRE Location2 ID

LOCN_RTAG_ID	INT8 NOT NULL	HRE Location to Location Relationship Tag ID
RELTN_TYPE_ID	INT	0 = Same Relationship either way (e.g. L1 adjacent to L2), 1 = Location 1 Larger (e.g. L1 contains L2), 2 = Location2 Larger (e.g. L1 is within L2)
START_DATE	INT8 NOT NULL	HRE Historical Date ID for start of use of this relationship
END_DATE	INT8 NOT NULL	HRE Historical Date ID for end of use of this relationship
SENTENCE1S_ID	INT8 NOT NULL	HRE Sentence ID for Location1 as Subject
SENTENCE2S_ID	INT8 NOT NULL	HRE Sentence ID for Location2 as Subject
SENTENCE1A_ID	INT8 NOT NULL	HRE Sentence ID for Location1 as Auxiliary
SENTENCE2A_ID	INT8 NOT NULL	HRE Sentence ID for Location2 as Auxiliary
MEMO_SET_ID	INT8 NOT NULL	Named Memo Set ID (used collect named memos for sentence)

4. The PRIMARY INDEX of this table is the HRE_ID. (Location Name)

REQUIRED SERVICES

1. BR_GuiElement
2. BR_EntityLink
3. BR_HistoricalDate
4. BR_NameStyle
5. BR_Tag
6. BR_Translation
7. BR_FieldDefinition.

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.