Oracle Designer

Report : TABLE DEFINITION
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Parameter Values
Workarea : GLOBAL SHARED WORKAREA
Container : GNIS
Container Version :
Recurse Sub-Containers : N
Tab/View/Snap Name : FEATURE_RELATIONSHIPS
Diagram :
Includes Column Details : Yes

Tables Created
On/After :
On/Before : 12 May 2003
and

Tables Changed
On/After :
On/Before : 12 May 2003

Table Definition

Container : GNIS Version :

Table Name : FEATURE_RELATIONSHIPS Alias : FERL
Display Title : Feature Relationships

Description : A relationship between two features. New relationships may be defined and added as needed. The relationship can be locational, jurisdictional, administrative, or other as defined.

Volumes

Start Rows : 0 End Rows : 0

Storage

Index-organized ? No

Column Summary

Col.Seq.	Column	Nulls ?	Type
10	FEATURE_ID1	NOT NULL	NUMBER (10, 0)
20	FEATURE_ID2	NOT NULL	NUMBER (10, 0)
30	RELATIONSHIP	NOT NULL	VARCHAR2 (50)
40	SEQUENCE	NOT NULL	NUMBER (3, 0)

Primary Key

Name	Column
FERL_PK	FEATURE_ID1 FEATURE_ID2 RELATIONSHIP

Foreign Keys

FEATURE_ID1_FK

FEATURE_ID1 references FEATURES.FEATURE_ID
Transferable ? No Update Rule : Restricted
Mandatory ? Yes Delete Rule : Restricted

FEATURE_ID2_FK

FEATURE_ID2 references FEATURES.FEATURE_ID
Transferable ? No Update Rule : Restricted
Mandatory ? Yes Delete Rule : Restricted

Column Detail

10 FEATURE_ID1

Optional ? :No ; Number (10, 0) ;() ; ; Uppercase ? :No ;

This is a foreign key column on FEATURES. FEATURE_ID for the first feature in the relationship, and is also part of the primary key for the table.

Table Definition

Container : GNIS Version :

Index Summary

Name	Seq.	Column	Index Type
FEATURE_ID1_FK_I	1	FEATURE_ID1	NOT UNIQUE
FEATURE_ID2_FK_I	1	FEATURE_ID2	NOT UNIQUE
RELATIONSHIP_I	1	RELATIONSHIP	BITMAP

Column Detail

Notes

Current GNIS Table/Column:
FEATURE COUNTY.FEATURE_ID_NMBR
MILITARY COUNTY.FEATURE_ID_NMBR
FEATURE_STATE.FEATURE_ID_NMBR

Data loading instructions for:

In County: Load from above columns keyed on FEATURE COUNTY.CNTY_ID_NMBR. The FEATURE.FEATURE_ID_NMBR corresponding to the county with the FEATURE COUNTY.CNTY_ID_NMBR will be loaded into FEATURE_ID2. Assign a FEATURE_RELATIONSHIP_TYPE of IN COUNTY to each record.

In State: Same as above for records with CNTY_NMBR_CODE = 0 and FEATURE COUNTY.STATE_NMBR_CODE not null. Also records in the FEATURE_STATE table that are not duplicated in the FEATURE_COUNTY table are to be loaded with In State relationships. The FEATURE.FEATURE_ID_NMBR corresponding to the state with the FEATURE COUNTY.STATE_NMBR_CODE will be loaded into FEATURE_ID2. Assign a FEATURE_RELATIONSHIP_TYPE of IN STATE to each record.

Current GNIS Table/Column:
FEATURE.FEATURE_NAME
FEATURE.SPECIAL_DESIG

Data Loading Instructions for Subdivision: For each feature with FEATURE.DESIGNATION = SUBDIVISION, enter the corresponding FEATURE_ID_NMBER in FEATURE_ID1, and the FEATURE_ID_NMBR for the incorporated place of which it is a subdivision in FEATURE_ID2. If a feature has "Subdivision" as a parenthetical expression in the FEATURE.FEATURE_NAME field, then it also has an entry in the FEATURE.SPECIAL_DESIG field stating that it is the subdivision of "feature name" incorporated place. Assign a FEATURE_RELATIONSHIP_TYPE of SUBDIVISION to each record.

Current GNIS Table/Column:
ANTARCTIC.ANT_SEQ_NMBR

Data Loading Instructions for IN ANTARCTIC: For each record from the ANTARCTIC table, assign the feature ID for Antarctica to FEATURE_ID2 and a FEATURE_RELATIONSHIP.TYPE = IN ANTARCTIC.

Business Rule:
If RELATIONSHIP = IN COUNTY

Table Definition

Container : GNIS Version :

Column Detail

Then RELATIONSHIP may not = IN STATE, IN ANTARCTICA

If RELATIONSHIP = IN STATE
Then RELATIONSHIP may not = IN COUNTY, IN ANTARCTICA, SUBDIVISION

If RELATIONSHIP = IN ANTARCTICA
Then RELATIONSHIP may not = IN COUNTY, IN STATE, SUBDIVISION

If RELATIONSHIP = SUBDIVISION
Then FEATURE_ID1 is a feature with DESIGNATION = SUBDIVISION
And FEATURE_ID2 is a feature with DESIGNATION = INCORPORATED PLACE

20 FEATURE_ID2

Optional ? :No ; Number (10, 0) ;() ; ; Uppercase ? :No ;

This is a foreign key column on FEATURES. FEATURE_ID for the second feature in the relationship, and is also part of the primary key for the table.

Notes Data loading instructions: See Feature ID1.

30 RELATIONSHIP

Optional ? :No ; Varchar2 (50) ;() ; ; Uppercase ? :Yes ;

The type of relationship between two features.

Notes GNIS Table/Column:
None

Data loading instructions: See Feature ID1.

40 SEQUENCE

Optional ? :No ; Number (3, 0) ;() ; ; Uppercase ? :No ; Default Value :1 ;

The sequence number of one of multiple features related to another feature. Sequencing rules are defined for different types of relationships. Additional rules may be defined in the future.

Notes Current GNIS Table/Column:
FEATURE COUNTY.CNTY_SEQ_NMBR
MILITARY COUNTY.CNTY_SEQ_NMBR
CAVE COUNTY.CNTY_SEQ_NMBR

1. For features crossing multiple counties: The sequence number of the counties crossed by or entered by a feature. For linear features crossing multiple counties, the counties are sequenced from the mouth toward the source. If a linear feature enters, then exits and reenters a county, only the first entry is counted for sequencing. For areal features located in multiple counties, the counties are sequenced according to guidelines of the Geographic Names Office. The county with the sequence number of 1 is the primary county.

Sequence numbers are manually maintained. No derivation rules or algorithms. If a feature is associated with only one county, the county sequence number defaults to 1. No zeros.

Table Definition

Container : GNIS Version :

Column Detail

Data Loading Instructions: Load from above columns keyed on the two FEATURE_ID_NMBR and COUNTY_ID_NMBR.

2. For features crossing multiple states:
The state sequence numbers are derived from the county sequence numbers as follows: The primary state is the state with the primary county and is assigned sequence number = 1. The remaining states are sequenced in the same order as the counties they contain. Therefore the state sequence is derivable. These feature state relationships need not be stored as records in this entity.

Therefore, GNIS Table/Column:
FEATURE STATE.STATE_SEQ_NMBR
MILITARY STATE.STATE_SEQ_NMBR
CAVE STATE.STATE_SEQ_NMBR
Will not be used.

Sequence numbers with no other rules default to 1. No zeros.

Note: Check FEATURE.STATE_ALPHA_CODE and FEATURE.COUNTRY_ALPHA_CODE for features not in the FEATURE COUNTY or FEATURE STATE tables.

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TABLE DEFINITION

End of Report