

## Oracle Designer

Report : TABLE DEFINITION  
Filename : s:\documents\pdfs\fept.pdf  
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### Parameter Values

Workarea : GLOBAL SHARED WORKAREA  
Container : GNIS  
Container Version :  
Recurse Sub-Containers : N  
Tab/View/Snap Name : FEATURE\_POINTS  
Diagram :  
Includes  
Yes column Details :  
Tables Created  
On/After :  
and On/Before : 12 May 2003  
Tables Changed  
On/After :  
On/Before : 12 May 2003

**Table Definition**

Container : GNIS Version :

Table Name : FEATURE\_POINTS Alias : FEPT  
 Display Title :

Description : Coordinates defining the location of the feature on the surface of the earth. The "primary point" or the "application" is the single set of coordinates defining the official location of the feature as approved by the U.S. Board on Geographic Names. The primary point may be, but is not necessarily, near the geographic center of the feature. Policies of the Board on Geographic Names define the locations of the primary point. For example, the primary point for rivers, streams and other waterways is the mouth. For features such as summits, the primary point is the highest point. For populated areas, the primary point is the center of the original feature regardless of how it has changed over time. The primary point has a sequence number of 1.

Long and large features may have additional sets of coordinates called "secondary points." Secondary points locate these features on standard USGS 7.5x7.5 degree quadrangle maps other than the map containing the primary point, generally one point per map. They are sequenced according to policies of the Geographic Names Office. For example, points for rivers are sequenced from mouth to source.

These points do not represent boundaries or geometries and should not be confused with them.

Volumes

Start Rows : End Rows :

Storage

Index-organized ? No

Column Summary

<u>Col.Seq.</u>	<u>Column</u>	<u>Nulls ?</u>	<u>Type</u>
10	FEATURE_ID	NOT NULL	NUMBER (10, 0)
20	SEQUENCE	NOT NULL	NUMBER (3, 0)
30	POINT	NOT NULL	VARCHAR2 (240)
40	LATITUDE	NOT NULL	NUMBER (8, 5)
50	LONGITUDE	NOT NULL	NUMBER (9, 5)
60	CELL_ID	NOT NULL	NUMBER (10, 0)

Primary Key

<u>Name</u>	<u>Column</u>
FEPT_PK	FEATURE_ID SEQUENCE

Column Detail

10 FEATURE\_ID

**Table Definition**

Container : GNIS Version :

Foreign Keys

## FEPT\_FEAT\_FK

FEATURE_ID	references	FEATURES.FEATURE_ID
Transferable ?	Yes	Update Rule : Restricted
Mandatory ?	Yes	Delete Rule : Restricted

Index Summary

<u>Name</u>	<u>Seq.</u>	<u>Column</u>	<u>Index Type</u>
CELL_ID_I	1	CELL_ID	NOT UNIQUE

Column Detail

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

The ID of the feature containing the point. This is a foreign key column on FEATURES.FEATURE\_ID and part of the primary key for this table.

Notes Current GNIS Table/Column:  
FEATURE\_CELL\_EXTENT.FEATURE\_ID\_NMBR

Data Loading Instructions: Load from above column.

## 20 SEQUENCE

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

The sequence number of a point defining a feature.

Notes Current GNIS Table/Column:  
FEATURE\_CELL\_EXTENT.CELL\_SEQ\_NMBR

Data Loading Instructions: Load from above column.

## 30 POINT

Optional ? :No ; Varchar2 (240) ;() ; ; Domain :GEOMETRY ; Uppercase ? :No ;  
Place holder for spatial column when spatially enabled.

Coordinates defining the location of the feature on the surface of the earth. The "primary point" or the "application" is the single set of coordinates defining the official location of the feature as approved by the U.S. Board on Geographic Names. The primary point may be, but is not necessarily, near the geographic center of the feature. Policies of the Geographic Name Office and the Board on Geographic Names define the locations of the primary point. For example, the primary point for rivers, streams and other waterways is the mouth. For features such as summits, the primary point is the highest point. For populated areas, the primary point is the center of the original feature regardless of how it has changed over time. The primary point has a sequence number of 1.

Long and large features may have additional sets of coordinates called "secondary points." Secondary points locate these features on standard USGS 7.5x7.5 degree quadrangle maps other than the map containing the primary point, generally one point per map. They are sequenced according to policies of the Geographic Names Office. For example, points for rivers are sequenced from mouth to source.

Table Definition

Container : GNISVersion :

Column Detail

These points do not represent boundaries or geometries and should not be confused with them.

Notes

Current GNIS Table/Column:  
The spatial data in this column will be loaded from the  
FEATURE\_POINTS.LATITUDE and FEATURE\_POINTS.LONGITUDE.

Data Loading Instructions: Convert the above lat/longs and load  
using the spatial utility.

A database trigger will maintain the two sets of data in  
synchronization.

40 LATITUDE

Optional ? :No ; Number (8, 5) ;( ) ; ; Domain :LATITUDE ; Uppercase ? :No ;

The latitude of the point defining the location of the feature on the surface of the earth. The "primary point" or the "application" is the single set of coordinates defining the official location of the feature as approved by the U.S. Board on Geographic Names. The primary point may be, but is not necessarily, near the geographic center of the feature. Policies of the Geographic Name Office and the Board on Geographic Names define the locations of the primary point. For example, the primary point for rivers, streams and other waterways is the mouth. For features such as summits, the primary point is the highest point. For populated areas, the primary point is the center of the original feature regardless of how it has changed over time. The primary point has a sequence number of 1.

Long and large features may have additional sets of coordinates called "secondary points." Secondary points locate these features on standard USGS 7.5x7.5 degree quadrangle maps other than the map containing the primary point, generally one point per map. They are sequenced according to policies of the Geographic Names Office. For example, points for rivers are sequenced from mouth to source.

These points do not represent boundaries or geometries and should not be confused with them.

Notes

Current GNIS Table/Column:  
The spatial data in this column will be loaded from the  
FEATURE\_POINTS.LATITUDE and FEATURE\_POINTS.LONGITUDE.

Data Loading Instructions: Convert the above lat/longs and load  
using the spatial utility.

A database trigger will maintain the two sets of data in  
synchronization.

Current GNIS Table/Column:  
FEATURE\_CELL\_EXTENT.FEAT\_LATITUDE\_CHAR  
FEATURE.SOURCE\_LATITUDE\_CHAR  
MILITARY\_CELL\_EXTENT.FEAT\_LATITUDE\_CHAR  
ANTARCTIC.LATITUDE

Data Loading Instructions: Convert the degrees/minutes/seconds  
to decimal degrees to five places and load into the new column.  
Load LATITUDE from the FEATURE\_CELL\_EXTENT, MILITARY\_CELL  
EXTENT, and ANTARCTIC tables, keyed to FEATURE\_ID\_NMBR. The  
ANTARCTIC table has no sequence number, so POINT SEQUENCE  
defaults to 1.

Table Definition

Container : GNISVersion :

Column Detail

Disregard records with FEAT\_LATITUDE\_CHAR = UNKNOWN

For records in the FEATURE table with values for SOURCE\_LATITUDE\_CHAR, compare these values with the latitude having the highest sequence number of FEATURE\_CELL\_EXTENT (degrees/minutes only, not seconds). If the points are the same, ignore SOURCE LATITUDE. Else, load the SOURCE LATITUDE with sequence number maximum + one.

Definitions:

1. A point feature is associated with only one point, and the sequence number defaults to 1. A point feature is one defined by a single set of coordinates on the USGS National Base Map series at a scale of 1:24000 or 1:25000.
2. For a linear feature, the points are sequenced from mouth toward the source. The point with sequence number 1 is the mouth and the primary point. For features with class = valley, stream, or arroyo, the highest sequence number is the source. Other points are called secondary points. The following are exceptions to these rules. The primary point of a canal, channel, or trail is the center. The primary point of a ridge is the highest point. (See FEATURE CLASS.LOCATION)
3. For an arial feature, points are sequenced according to guidelines of the Geographic Names Office. The point with sequence number of 1 is the primary point. Other points are secondary points. The primary point of an areal feature is the approximate geographic center, with the following exceptions. The primary point of a populated place is the center of original place usually the city or town hall, main post office, etc. The primary point of a reservoir is the dam. The primary point of a summit, range, ridge, or pillor is the highest point. (See FEATURE CLASS.LOCATION)

50 LONGITUDE

Optional ? :No ; Number (9, 5) ; ( ) ; ; Domain :LONGITUDE ; Uppercase ? :No ;

The longitude of the point defining the location of the feature on the surface of the earth. The "primary point" or the "application" is the single set of coordinates defining the official location of the feature as approved by the U.S. Board on Geographic Names. The primary point may be, but is not necessarily, near the geographic center of the feature. Policies of the Geographic Name Office and the Board on Geographic Names define the locations of the primary point. For example, the primary point for rivers, streams and other waterways is the mouth. For features such as summits, the primary point is the highest point. For populated areas, the primary point is the center of the original feature regardless of how it has changed over time. The primary point has a sequence number of 1.

Long and large features may have additional sets of coordinates called "secondary points." Secondary points locate these features on standard USGS 7.5x7.5 degree quadrangle maps other than the map containing the primary point, generally one point per map. They are sequenced according to policies of the Geographic Names Office. For example, points for rivers are sequenced from mouth to source.

Container : GNISVersion :

Column Detail

These points do not represent boundaries or geometries and should not be confused with them.

Notes

Current GNIS Table/Column:  
FEATURE\_CELL\_EXTENT.FEAT\_LATITUDE\_CHAR  
FEATURE.SOURCE\_LATITUDE\_CHAR  
MILITARY\_CELL\_EXTENT.FEAT\_LATITUDE\_CHAR  
ANTARCTIC.LATITUDE

Data Loading Instructions: Convert the degrees/minutes/seconds to decimal degrees to five places and load into the new column. Load LATITUDE from the FEATURE\_CELL\_EXTENT, MILITARY\_CELL\_EXTENT, and ANTARCTIC tables, keyed to FEATURE\_ID\_NMBR. The ANTARCTIC table has no sequence number, so POINT\_SEQUENCE defaults to 1.

Disregard records with FEAT\_LATITUDE\_CHAR = UNKNOWN

For records in the FEATURE table with values for SOURCE\_LATITUDE\_CHAR, compare these values with the latitude having the highest sequence number of FEATURE\_CELL\_EXTENT (degrees/minutes only, not seconds). If the points are the same, ignore SOURCE\_LATITUDE. Else, load the SOURCE\_LATITUDE with sequence number maximum + one.

Definitions:

1. A point feature is associated with only one point, and the sequence number defaults to 1. A point feature is one defined by a single set of coordinates on the USGS National Base Map series at a scale of 1:24000 or 1:25000.

2. For a linear feature, the points are sequenced from mouth toward the source. The point with sequence number 1 is the mouth and the primary point. For features with class = valley, stream, or arroyo, the highest sequence number is the source. Other points are called secondary points. The following are exceptions to these rules. The primary point of a canal, channel, or trail is the center. The primary point of a ridge is the highest point. (See FEATURE\_CLASS.LOCATION)

3. For an arial feature, points are sequenced according to guidelines of the Geographic Names Office. The point with sequence number of 1 is the primary point. Other points are secondary points. The primary point of an areal feature is the approximate geographic center, with the following exceptions. The primary point of a populated place is the center of original place usually the city or town hall, main post office, etc. The primary point of a reservoir is the dam. The primary point of a summit, range, ridge, or pillor is the highest point. (See FEATURE\_CLASS.LOCATION)

Current GNIS Table/Column:  
FEATURE\_CELL\_EXTENT.FEAT\_LONGITUDE\_CHAR  
FEATURE.SOURCE\_LONGITUDE\_CHAR  
MILITARY\_CELL\_EXTENT.FEAT\_LONGITUDE\_CHAR  
ANTARCTIC.LONGITUDE

Data Loading Instructions: Convert the degrees/minutes/seconds to decimal degrees to five places and load into the new column.

**Table Definition**

Container : GNIS Version :

Column Detail

Load LONGITUDE from the FEATURE CELL EXTENT, MILITARY CELL EXTENT, and ANTARCTIC tables, keyed to FEATURE\_ID\_NMBR. The ANTARCTIC table has no sequence number, so POINT SEQUENCE defaults to 1.

Disregard records with FEAT\_LONGITUDE\_CHAR = UNKNOWN

For records in the FEATURE table with values for SOURCE\_LONGITUDE\_CHAR, compare these values with the longitude having the highest sequence number of FEATURE\_CELL\_EXTENT (degrees/minutes only, not seconds). If the points are the same, ignore SOURCE LONGITUDE. Else, load the SOURCE LONGITUDE with sequence number maximum + one.

## Definitions:

1. A point feature is associated with only one point, and the sequence number defaults to 1. A point feature is one defined by a single set of coordinates on the USGS National Base Map series at a scale of 1:24000 or 1:25000.

2. For a linear feature, the points are sequenced from mouth toward the source. The point with sequence number 1 is the mouth and the primary point. For features with class = valley, stream, or arroyo, the highest sequence number is the source. Other points are called secondary points. The following are exceptions to these rules. The primary point of a canal, channel, or trail is the center. The primary point of a ridge is the highest point. (See FEATURE CLASS.LOCATION)

3. For an arial feature, points are sequenced according to guidelines of the Geographic Names Office. The point with sequence number of 1 is the primary point. Other points are secondary points. The primary point of an areal feature is the approximate geographic center, with the following exceptions. The primary point of a populated place is the center of original place usually the city or town hall, main post office, etc. The primary point of a reservoir is the dam. The primary point of a summit, range, ridge, or pillor is the highest point. (See FEATURE CLASS.LOCATION)

## 60 CELL\_ID

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

The identification number for the standard cell containing the point. The standard cell is 7.5 X 7.5 degrees, except in Alaska where it is 15 X 15 degrees.

Notes

Current GNIS Table/Column:  
None

Data Loading Instructions: Load using a spatial join on FEATURE.POINT and CELLS.GEOMETRY where (CELL\_SIZE = 7.5 X 7.5 and CELL.GEOMETRY does not interact with (GOVERNMENT\_UNITS.GEOMETRY where (GOVERNMENT\_UNITS.STATE\_ALPHA = AK and GOVERNMENT\_UNITS.UNIT\_TYPE = STATE)) or CELL\_SIZE = 15 X 15 and CELL.GEOMETRY does interact with (GOVERNMENT\_UNITS.GEOMETRY where (GOVERNMENT\_UNITS.STATE\_ALPHA = AK and GOVERNMENT\_UNITS.UNIT\_TYPE = STATE)))

**Table Definition**

Container : GNIS Version :

Column Detail

A trigger will maintain this column using the same rules.



Oracle Designer  
TABLE DEFINITION  
End of Report