The NavEdit Software Database

The NavEdit software saves all changes or notifications that have been made to depth or heave values to a Microsoft Access database called a DELTA (*.dlt) database. This database is used with the Navigation Project database to make sure that no element within the Navigation Project database is altered in anyway.

The DELTA database contains several tables for the storing of modifications (deltas) to the Navigation database. As such, the two databases are co-dependent.

This document describes:

Tables

This section contains a brief description of each table in the DELTA database format.

Version

The version table contains the version of the DELTA database that is used by the application to determine the database format.

Field	Description
Version	Version number.

MRUData

This table contains the Most Recently Used (MRU) survey, vessel, Depth service, Heave service, Tide file, guidance object, and user-selected time region.

Field	Description
SurveyName	Name of the last survey selected in the NavEdit software.
SteerbySession Number	Instance of the steer-by last selected in the NavEdit software.
SurveyStart	Start time of the last selected survey.
SurveyStop	Stop time of the last selected survey.
VesselName	Name of the last selected vessel.
VesselID	ID of the last vessel used.
VesselHasShape	Does the vessel have a shape? 0 = No, 1 = Yes.
VesselIsCurrent	Is this vessel current? 0 = No, 1 = Yes.
DepthCSID	CSID of the last Depth service used.
DepthVesselID	ID of the vessel that the Depth service is configured on.
DepthEquipConfigID	Equipment configuration ID of the selected Depth service.
DepthServiceID	Internal ID number of that service type.
DepthServiceString	String associated with the Depth service ID.
DepthLabelText	Equipment name for the selected depth configuration.

Field	Description
DepthDataSource	Data source number for Depth service (if any).
HeaveCSID	CSID of the last Heave service used.
HeaveVesselID	ID of the vessel that the Heave service is configured on.
HeaveEquipConfigID	Equipment configuration ID of the selected Heave service.
HeaveServiceID	Internal ID number of that service type.
HeaveServiceString	String associated with the Heave service ID.
HeaveLabelText	Equipment name for the selected heave configuration.
HeaveDataSource	Data source number for Heave service (if any).
TidePath1	Path of the last Tide file 1 used.
TidePath2	Path of the last Tide file 2 used.
SteerbyName	Name of the last GO used.
SteerbyGOID	Guidance object ID of the last GO used.
SteerbySessionNumber	Instance of the steer-by last selected in the NavEdit software.
SteerbyStart	Starting time of the last GO used.
SteerbyStop	Stopping time of the last GO used.
OffsetName	User-defined offset name.
OffsetID	Internally assigned vessel offset ID number.
OffsetX	Offset's X coordinate, on vessel design grid (metres).
OffsetY	Offset's Y coordinate, on vessel design grid (metres).
OffsetZ	Offset's Z coordinate, on vessel design grid (metres).
UserSelectStart	Start time of the last user-selected time region.
UserSelectStop	Stop time of the last user-selected time region.

TimeAdjustments

This table stores the user-specified time latency that is applied to the depth data.

Field	Description
DepthLatency	Time added to depth data (in seconds).

EditRegions

This table stores the edited regions of a guidance object (GO).

Field	Description
StartTime	The start time of the edited region (in seconds).
StopTime	The stop time of the edited region (in seconds).
DepthRegion	True/False flag indicating that this region refers to a depth region as opposed to a position region. 1 = True, 0 = False.
SteerbyID	Internal reference ID number assigned to the steer-by.

EventAdjustment

This table stores the display state of an event.

Field	Description
TimeIndex	The time of the flagged event (seconds).
EventConfigId	Relates this event data record to an event configuration.
EventCode	Event code of the flagged event.
VesselId	Vessel identifier of the offset position.
OffsetId	Vessel offset identifier of the offset position.
StateFlag	Flag specifying the state (see State Flag Description, page 6).

HeaveAdjustments

This table contains the heave modifications.

Field	Description
TimeIndex	The time of the Heave data that was modified (in seconds).
CSId	The ID of the Heave service modified.
Heave	The modified Heave value (meter).
Quality	Quality value associated with the heave (if any).

Field	Description
StateFlag	The state flag of the Heave value (see State Flag Description, page 6).
Inserted	Indicates if the point has been added in the NavEdit software. That is, the point is not in the original Navigation database.

DepthAdjustments

This table contains the depth modifications.

Field	Description
TimeIndex	The time of the depth data that was modified (seconds).
CSId	The ID of the Depth service this record refers to.
Channel1	The modified channel 1 value (metres).
Channel2	The modified channel 2 value (metres).
Quality	Quality value associated with the depth data (if any).
Ch1StateFlag	The state flag of the channel 1 value (see State Flag Description, page 6).
Ch2StateFlag	The state flag of the channel 2 value (see State Flag Description, page 6).
Inserted	Indicates if the point has been added in the NavEdit software, i.e., the point is not in the original Navigation database.

Displays

This table stores details about each display open in the NavEdit software.

Field	Description
Type	Display type. 1 = Grid, 2 = Graph, 3 = Map, 4 = Thumbnail.
Placement	Position and size details of the display (binary number).
Settings	Properties of the display (binary number).

State Flag Description

State flags appear in the EventState, Heave Adjustments, and DepthAdjustments tables.

State Flag Value	Description
0	This flag indicates that the data is valid and not rejected in any way.
1	The value associated with this flag was rejected because it was less than the minimum depth value in the Batch Processor.
2	The value associated with this flag was rejected because it exceeded the maximum depth value in the Batch Processor.
3	The value associated with this flag was rejected because it was less than the minimum depth quality in the Batch Processor.
4	The value associated with this flag was rejected because it exceeded the Spike filter parameters in the Batch Processor.
5	The value associated with this flag was rejected because it exceeded the Heave filter parameters in the Batch Processor. (If in heave table then the value exceeded the maximum, if in the depth table then the value exceeded the heave age value).
6	The value associated with this flag was rejected because it failed the Tide filter in the Batch Processor.
7	The value was manually rejected by the user.