

REV.	DESCRIPTION	DATE	BY
8.000	Redesign of Security	03/08/2011	DJ
8.006	Update foreign key delete actions	11/07/2014	DJ
8.007	Added X,Y, pppX, pppY to Multimedia. New Table Video_File	14/07/2014	DJ
8.008	Add 3 Markup editor types	16/07/2014	DJ
8.009	Update FK relationship for Function_Part_Input.LinkFP_ID and Function_Test.FD_ID	21/07/2014	DJ
8.011	Updates for Traffic Lighting, new talbe Foreign_Key_Filter.	25/08/2014	DJ
8.014	New fields in Client.	16/09/2014	DJ
8.015	Sessions	16/09/2014	DJ
8.016	Statistics for Charts	17/09/2014	DJ
8.020	Element_Type to Risk_Element	30/09/2014	DJ
8.023	Updates Client table with Drawings options	09/10//2014	FA
8.030	Removal of View_Node.Location, replaced with Link_ID	11/11//2014	DJ
8.033	Updates to Report Parameters	07/01//2015	DJ
8.034	Rename field Report Parameters.Field_Name to Parameter_Name.	15/01//2015	DJ
8.035	Added 'Name' to View_Node.	27/01//2015	DJ
8.036	Added 'Comments' to Function_Definition and increase 'Name' to 100 characters.	27/03//2015	DJ
8.042	Added Boolean_Exception and BE_ID to Bound.	09/07//2015	DJ
8.050	Updates to Planning Template and Schedule structure	28/08//2015	DJ
8.051	Added Component_ID to Workpack	14/09//2015	DJ
8.052	Added Task_Count, Task_Breakdown to Workpack Changed Workpack.Actual_Start/Actual_End to FT_DATE	18/09//2015	DJ
8.053	Added Instructions to Info_Def	24/09//2015	DJ
8.056	Changed 'text' to 'varchar(max)'. Added various Indexes.	15/10//2015	DJ
8.064	Added Last_Generation_Time to Report_Template, Level to Risk/Status, Asset_Type expression to Anomaly	09/12/2015	DJ
8.066	Security_User changes, removed RBI_Transaction, updates to Foreign Key actions	05/01/2016	DJ
8.073	Workflow Tables, removal of Stored Procedures, UDF's and Views.	22/02/2016	DJ
8.074	Changed Comments fields to varchar(max) and a handful of others..	22/02/2016	DJ
8.076	Added Operation, changed Sync_Change	25/02/2016	DJ
8.077	Removed Workflow_Item_Field, Add Field to Workflow_Filter	1/03/2016	DJ
8.079	Calculated fields in Risk_Model_Component	1/04/2016	DJ
8.081	Added 'Email' table	6/04/2016	CT
8.085	Fixed Lookup_Item.Icon to be varbinary(max), Added Severity.Description	13/05/2016	DJ
8.089	Added Task.Name, Added Event.HasFinding	08/06/2016	DJ
8.092	Removed Library.Refers_To	15/06/2016	DJ
8.094	Added Workflow_Item.Is_Not_Before_Nest	06/07/2016	DJ
8.096	Added Workflow.Description/Action_Image, Workflow_Item.Interaction_Type	18/07/2016	DJ
8.097	Added Security_User.Reset_Password	25/07/2016	DJ
8.100	Added Unit_ID to Axis	21/09/2016	DJ
8.101	Added some constants to Series_Type and Axis_Kind	04/10/2016	DJ
8.102	Added Unit_Group, Unit_Item and Field_Unit	11/10/2016	DJ
8.104	Add support to Bound for Field inputs	21/10/2016	DJ
8.105	Update Video_File table. Change duration to End_Clock and add Date_Modified	27/10/2016	CT
8.107	Added View_Node.Level	16/11/2016	DJ
8.108	Changes to Video_File and Temp path in Client	21/11/2016	DJ
8.109	Changes to LTIP_Task_Row, Row Security, updated Video_File, new Datum	30/11/2016	DJ
8.110	Removed Schedule / LTIP_Schedule, other minor planning changes	13/12/2016	DJ
8.127	Moved Repository.File_Data into new table Repository_Data.File_Data	22/03/2017	DJ
8.138	Added Ignore_When_Repeat_Null to LTIP_Task	20/07/2017	DJ
8.140	Added Risk_Score to Anomaly and RC_ID to Client	25/08/2017	DJ
8.141	Added Stacking to Charts	29/08/2017	DJ
8.143	Added License to Client	06/09/2017	DJ
8.144	Added External_Provider_Type table and External_Provider.Settings	18/09/2017	DJ
8.146	Added Is_Tasked to Action	29/09/2017	DJ
8.147	Changed Header.Has_Video to a calculation, instead of an Expression	18/10/2017	DJ
8.148	Changed Workflow_Item.Name to be 255 characters in length.	14/11/2017	DJ
8.150	Added 'Sender' to Email table.	20/11/2017	CT
8.151	Added 'Active Inspection' database table.	20/11/2017	CT
8.152	Update referential integrity	07/12/2017	DJ
8.153	Added Session_ID to 'Active Inspection' table.	10/1/2018	CT
8.155	Updates for Synchronisation	28/02/2018	DJ

REV.	DESCRIPTION	DATE	BY
8.156	Updates for Synchronisation	12/03/2018	DJ



Field_Type		
Key	Type	Delphi Constant
1	Alphanumeric	FT_STRING
3	Whole Number	FT_NUMBER
5	Boolean	FT_BOOLEAN
6	Numeric	FT_NUMERIC
7	Currency	FT_CURRENCY
9	Date	FT_DATE
10	Time	FT_TIME
11	Date and Time	FT_DATETIME
15	Image	FT_IMAGE
16	Memo	FT_MEMO
18	Passthru	FT_PASSTHRU
17	Guid	FT_GUID
37	Lookup List	FT_LOOKUP
38	Sub AIG / Event	FT_TABLE
39	Position Link	FT_POSITION
40	Calculation	FT_CALC
42	Global Lookup	FT_GLOBALTABLE

Foreign_Flag		
Key	Type	Delphi Constant
1	Don't display	FF_DONT_DISPLAY
2	Display	FF_DISPLAY
3	Follow the table's foreign keys	FF_FOLLOW
4	Special case fields/tables	FF_SPECIAL

Sync_Change_Operation		
Key	Type	Delphi Constant
1	Insert	SC_INSERT
2	Update	SC_UPDATE
3	Delete	SC_DELETE

Database_Type		
Key	Type	Delphi Constant
0	Normal Database	ST_NORMAL
1	Publisher (Master)	ST_PUBLISHER
2	Subscriber (Child)	ST_SUBSCRIBER

Field_Map_Usage		
Key	Type	Delphi Constant
1	Pipeline As Built Northing	FM_ASBUILT_NORTHING
2	Pipeline As Built Easting	FM_ASBUILT_EASTING
3	Pipeline As Built Order	FM_ASBUILT_ORDER
4	DVR Recording Folder	FM_DVR_FOLDER
5	Position KP	FM_POSITION_KP*
6	Position Northing	FM_POSITION_NORTHING*
7	Position Easting	FM_POSITION_EASTING*
8	Position Depth	FM_POSITION_DEPTH*
9	Position Heading	FM_POSITION_HEADING*
10	Pipeline Feature Start	FM_PIPELINE_FEATURE_START
11	Pipeline Feature End	FM_PIPELINE_FEATURE_END
12	Pipeline Feature Name	FM_PIPELINE_FEATURE_NAME
13	Pipeline Feature Category	FM_PIPELINE_FEATURE_CATEGORY

\* These usages aren't widely used in version 6, as they are already populated as pass thru fields to Header, so for most instances the field maps aren't required because these fields are displayed with an Event by default.

Function_Part_Type		Delphi Class
Type		
Compare Two Inputs		TMetaFunctionComparison
Constant		TMetaFunctionConstant
Notes		TMetaFunctionNote
Operation (Add, Subtract etc)		TMetaFunctionOperation
Bitwise / Logical Operation		TMetaFunctionExtendedOperation
Function		TMetaFunctionLink
Matrix		TMetaFunctionMatrix
Parameter		TMetaFunctionParameter
Range		TMetaFunctionRange
Result		TMetaFunctionResult
Risk Rollup		TMetaFunctionRollup
Global Lookup		TMetaFunctionLookup

Trigger_Type		
Key	Type	Delphi Constant
1	Field Visible	TT_VISIBILITY
2	Field Read Only	TT_READONLY
3	Field Required	TT_REQUIRED
4	Field Clear	TT_CLEAR

Bound Type		
Key	Type	Delphi Constant
1	Fail if outside Bound	BT_FAIL_OUTSIDE_RANGE
2	Fail if inside Bounds	BT_FAIL_INSIDE_RANGE
3	Function, fail if Result is true.	BT_CUSTOM

Element_Type		
Key	Type	Delphi Constant
1	Field/Value	ET_VALUE
2	Factory/Category	ET_FACTOR

Layer_Type		
Key	Type	Delphi Constant
1	Button	LT_BUTTON
2	Button with Region	LT_BUTTON_REGION
3	Region	LT_REGION
4	Markup	LT_MARKUP*
5	Caption	LT_CAPTION
6	Button with Point	LT_BUTTON_POINT
7	Coordinates	LT_COORDINATES

\* Markup is currently not used or implemented.

Library_Connection_Type		
Key	Type	Delphi Constant
1	Asset Type	LCT_ASSET_TYPE
2	Workpack	LCT_WORKPACK
3	Asset	LCT_ASSET
4	Event Type	LCT_EVENT_TYPE
5	Event	LCT_EVENT
6	Anomaly	LCT_ANOMALY
7	RBI Model	LCT_RISK_MODEL
8	Function	LCT_FUNCTION

Axis_Type		
Key	Type	Delphi Constant
1	Field	AT_FIELD
2	Calculation	AT_CALCULATION
3	Auto	AT_AUTO
4	Count	AT_COUNT
5	Sum	AT_SUM
6	Average	AT_AVERAGE

Axis_Kind		
Key	Type	Delphi Constant
1	X Axis	AK_X_AXIS
2	Y Axis	AK_Y_AXIS
3	Colour Axis	AK_COLOUR_AXIS
4	X2 Axis	AK_X2_AXIS
5	Split Series	AK_SERIES *
6	Split Chart	AK_CHART *
7	Z Axis	AK_Z_AXIS
8	Z2 Axis	AK_Z2_AXIS

\* Allows you to split the series into multiple series based on an axis, or split the series into multiple charts (and duplicate series without this axis on all charts)

Series_Type		
Key	Type	Delphi Constant
1	Point	ST_POINT*, **
2	Line	ST_LINE*, **, ***
3	Bezier Line	ST_BEZIERLINE*, **, ***
4	Vertical Lines	ST_VERTICAL_LINE
5	Bars	ST_BARS
6	Gantt	ST_GANTT
7	Pie	ST_PIE
8	Anomaly	ST_ANOMALY
9	Histogram	ST_HISTOGRAM
10	Polygon	ST_POLYGON *, **
11	Polyline	ST_POLYLINE *
12	Contour	ST_CONTOUR
13	Heat Map	ST_HEAT_MAP
14	Horizontal Line	ST_HORIZONTAL_LINE
15	3D Mesh	ST_3DMESH
16	3D Pipeline	ST_3DPIPELINE
17	3D Events	ST_3DEVENTS

\* Allows Point Style to be selected. \*\* Allows Shading to be chosen  
\*\*\* Allows Statistics to be selected.

Point_Style		
Key	Type	Delphi Constant
1	Circle	PS_CIRCLE
2	Square	PS_SQUARE
3	Diamond	PS_DIAMOND
4	Cross	PS_CROSS
5	None	PS_NONE

Def_Type		
Key	Type	Delphi Constant
1	AIG	DT_ASSET
2	Risk Table	DT_RISK
3	Sub AIG	DT_SUBASSET
4	Point Event	DT_POINTEVENT
5	Range Event	DT_RANGEEVENT
6	Sub Event	DT_SUBEVENT
7	Global Table	DT_GLOBALTABLE
8	Monitored Data	DT_MONITOREDDATA
9	Survey Data	DT_SURVEY
10	Continuous Event	DT_CONTINUOUS
11	System Table	DT_SYSTEM
12	Dynamic Property Table	DT_PROPERTY

Editor_Type		
Key	Type	Delphi Constant
1	Combo Box	ET_COMBOBOX
2	Radio Group	ET_RADIOGROUP
3	Edit Box	ET_EDIT
4	Number Edit	ET_NUMBEREDIT
5	Checkbox	ET_CHECKBOX
6	Form	ET_FORM
7	Grid	ET_GRID
8	Date	ET_DATE
9	Time	ET_TIME
10	Date and Time	ET_DATETIME
11	Calculation	ET_CALCULATED
12	Memo	ET_MEMO
13	Record Lookup	ET_RECORDLOOKUP
14	Graphic	ET_GRAPHIC
15	Repository	ET_REPOSITORY
16	Colour Combo	ET_COLOR
17	Shortcut	ET_SHORTCUT
18	Markup Point	ET_MARKUP_POINT
19	Markup Line	ET_MARKUP_LINE
20	Markup Region	ET_MARKUP_REGION

LTIP_Frequency		
Key	Type	Delphi Constant
1	Monthly	LF_MONTHLY
2	Quarterly	LF_QUARTERLY
3	Half Yearly	LF_HALF_YEARLY
4	Yearly	LF_YEARLY

MT_Action		
Key	Type	Delphi Constant
1	Launch Event Template	MA_LAUNCH
2	Launch Event with Image	MA_LAUNCHIMAGE
3	Record Event Template	MA_ONECLICK

Delete Action (Field_Def / Default_Column)		
Key	Type	Delphi Constant
0	No Action	FK_NOACTION
1	Cascade Delete	FK_CASCADE
2	Set Null	FK_SETNULL