Engineering Data Compiler User Guide

OLE Data extraction and creation of EviFile CSV imports

Revision 7 Date: 02/02/2022

Contents

EDC Configuration

Worksheet Description

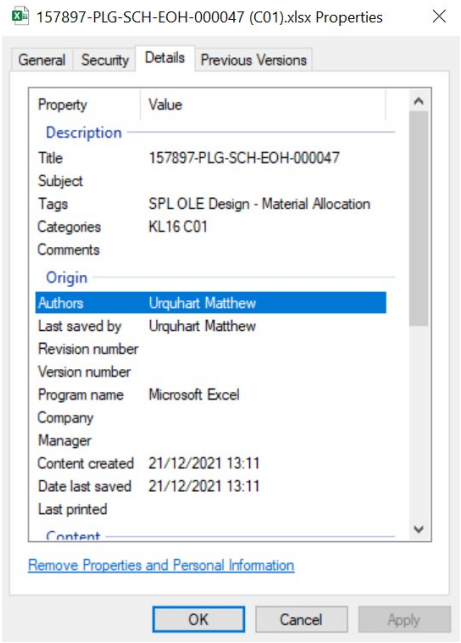
Primary

Details the version of the EDC Configuration File. This is for local version control only

Input File Type Keywords

EDC needs to understand the type of engineering data contents within the Excel file. This is achieved by using the 'Tags' parameter within the engineering data file.

The type of document is identified in the 'Document Type' and 'Keyword' parameter. Only the keyword need to exist within the file properties tag.



Assembly Components Items

A number of QCS outputs require component information, which is not allocated in the allocation sheets. To support this, a list of assemblies and components are listed here. This is called by the MLOOKUP parameter in the QCS form parameter.

Foundation Schedule Config

This worksheet defines the relationships between the EDC parameters and columns in the Foundation Schedule. Multiple suppliers or version of the Foundation Schedule can be accommodated with adding multiple rows.

OLE Steelwork Config

A number of QCS outputs require steelwork information which is not defined within the engineering documents. Supplier values are based on UKMS basic design materials.

OLE Allocation Sheet Config

This worksheet defines the relationships between the EDC parameters and columns in the Allocation Sheet. Multiple suppliers or versions of the Allocation Sheet can be accommodated with adding multiple rows.

OLE QCS Trigger

For each QCS, all permissible allocation is to be added. Allocation references can be limited to Primary and Secondary values, eg ABS/123.

QCS Configuration

A QCS configuration worksheet is identified with the first character in the worksheet name being non numeric, with the second character being numeric. Eg A1, A2, G1.

To exclude a QCS configuration from being processed, add a numeric prefix to the worksheet name. Eg 0_A1, 0_A2, 0_G1

QCS Description: Taken from row 1 of the QCS template

QCS Title: Taken from row 2 of the QCS template

QCS Ref: QCS unique identifier

Config Column Mapping: Defines the source of data or functions for EDC to undertake. See 'QCS Functions' for available functions

Item Description: This is the EDC Function description to populate the applicable QCS reference.

Column Title: This is the QCS template column name for EDC to write the output.

QCS Functions

Constant Output Value – [value]

A constant output value is identified with square bracket around the text string. Example [n/A]

Materials Look Up – MLOOKUP([Assembly], (Component), (Quantity)]

Returns the quantity of a component from the 'Assembly Components Items' config worksheet. The component is populated with '?'. Example MLOOKUP([B83],[C50],[?])

Material Description Look Up – MSLOOKUP([Assembly])

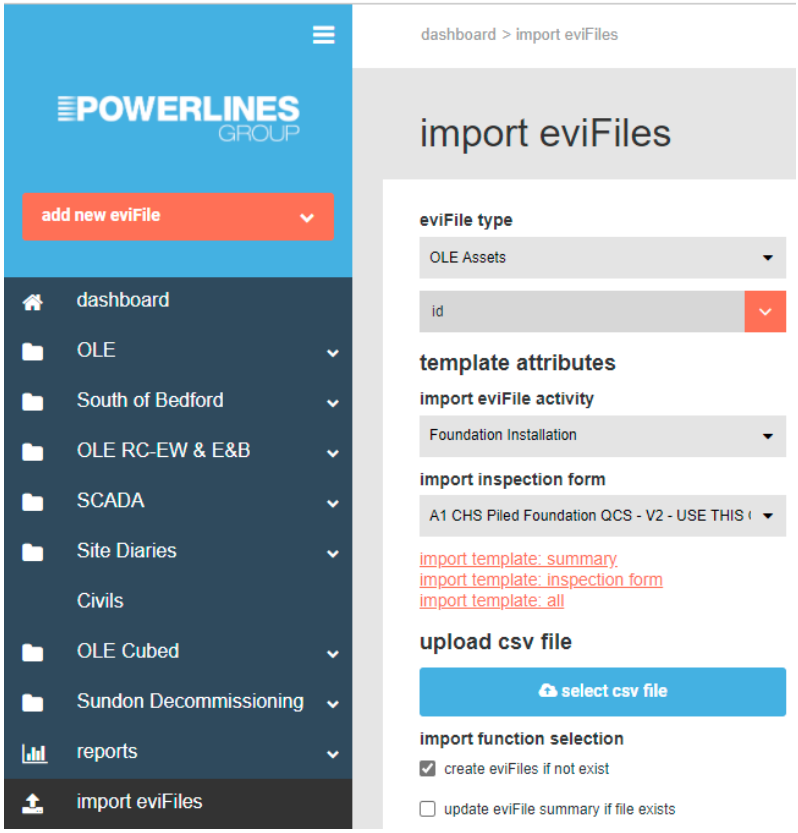
Returns the description from the 'Assembly Components Items' config worksheet. Note this is used to return the registration arm length based on the assembly reference.

Units conversion – M_TO_MM

Converts extracted design value from metres to millimetres. Used with a source column value. Example 21 M_TO_MM.

EviFile QCS Templates

To ensure the outputs are configured to the QCS schema requirements, a copy of the EviFile QCS templates must be downloaded prior to launching EDC. To minimise processing time only download the QCS templates required for processing.



Download ‘import template inspection form’ only

The file structure for the template MUST align to either of the following

2021-10-26_OLE Assets_Steel Installation_C11 UKMS DC Portal QCS.csv
2021-12-20_OLE Assets_Foundation Installation_V2 - A2 Concrete Foundation QCS_import template.csv

EDC Lat Long data file & Data Extraction and CSV Creation

EviFile Templates

EDC requires the QCS import templates to downloaded and stored in an accessible common area. Refer to EviFile guidance on how to download.

Note that the import template shall be 'inspection form' type.

Load EDC

EDC is run from Excel Office 365 and has been developed on Version 2112. To run EDC, Open 'EDC Vn.xlsm' and click 'Launch Engineering Data Compiler'

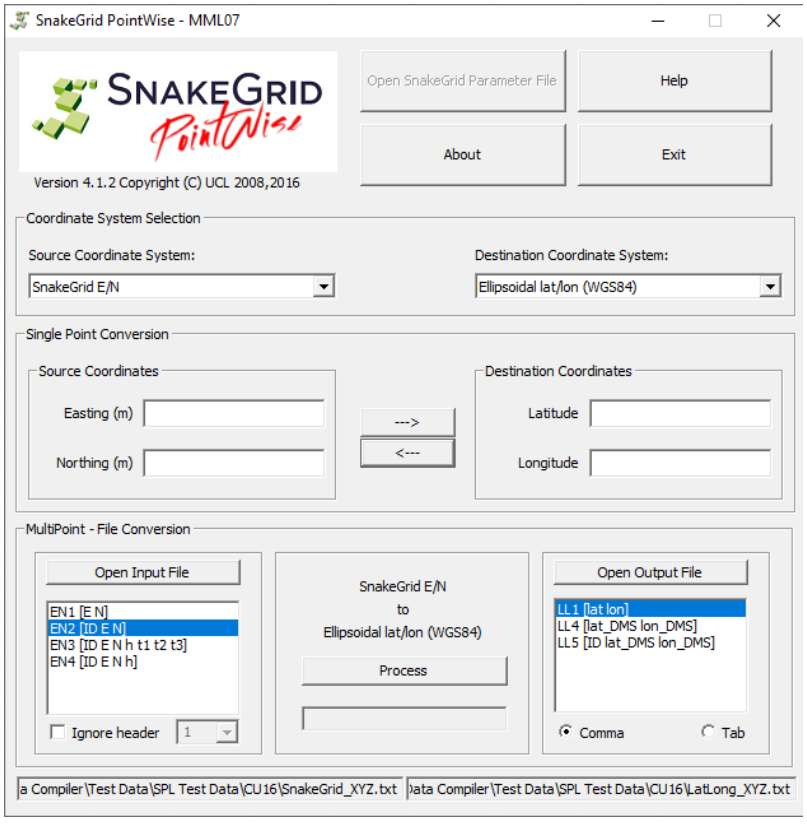
Creation of Lat Long Data File

EviFile mapping outputs require assets to be in Latitude and Longitude. With Network Rail adopting custom project Snake Grids these coordinates require converting. To undertake the conversion SnakeGrid Pointwise is to be used. Download for free here

SnakeGrid Pointwise requires an input text file and output text file.

To create these files:

1. Set the path of input files. The Foundation Schedule must be provided
2. Set the path of the EDC configuration Excel file
3. Set the path to the EviFile Templates
4. Click 'Create Txt File for Lat Long'
5. Set the output location
6. Set Pointwise to the following:



This process will populate the LatLong_XYZ.txt with converted SnakeGrid coordinates.
Note: SnakeGrid data file is required. For testing Snakeparams_ASA_MML07.dat has been used.

Creation of QCS CSV Import Files

1. Set the path of input files. The Foundation Schedule must be provided
2. Set the path of the EDC configuration Excel file
3. Set the path to the EviFile Templates
4. Set the path of the Lat/Long Text File
5. Set the path of the SnakeGrid Text File
6. Click 'Create CSV Upload Files'
7. Set the output location

Click here for annotated video of creation of Lat/Long text file and Import CSV file