

Data to Excel

The main dimensions and a table of deck data will be written to an Excel file. In here, the total deck area will be calculated and the result will be sent back to Quaestor in the parameter `Total_deck_area`.

- First, store the Excel file **Example.xls** in the current applications directory (either of the knowledge base, located in `Kbs_<KnowledgeBaseName>\Applic`, or the general `Applic` directory in My Knowledge).
- Create the following parameters in the **Knowledge Browser**:

| Parameter name | Dimension | Determined by | Reference | In Class |
|--------------------------------|-------------------|------------------------------|-------------------------------------|----------|
| <code>Data_to_excel\$</code> | [$\$$] | USL: User of System/function | Data written to Excel sheet | Excel |
| <code>File_name_Excel\$</code> | [$\$$] | USL: User of System/function | Excel file name | Excel |
| <code>Total_deck_area</code> | [m ²] | USL: User of System/function | Total deck area calculated by Excel | Excel |

- Include the following parameters in entity `Data to Excel`: `Loa`, `Lpp`, `Boa`, `Dm`, `Data_to_excel$`, `Deck_data#`, `File_name_Excel$` and `Total_deck_area`.
- Create the following relations in Entity **"Data to Excel"**:

`Loa = ENTITY#(xx).Loa` where **"xx"** is the QEntityID value of entity `Main Dimensions`.

`Lpp = ENTITY#(xx).Lpp` where **"xx"** is the QEntityID value of entity `Main Dimensions`.

`Boa = ENTITY#(xx).Boa` where **"xx"** is the QEntityID value of entity `Main Dimensions`.

`Dm = ENTITY#(xx).Dm` where **"xx"** is the QEntityID value of entity `Main Dimensions`.

`Deck_data# = ENTITY#ENTITY#(xx).Deck_data#` where **"xx"** is the QEntityID value of entity `Decks`.

`File_name_Excel$ = "Deck_data_" + STR$(TIME(0)) + ".xls"`

`Total_deck_area = Data_to_excel$.Total_deck_area`

- To show computed values set attribute **@SHOW** on QEntityData.

Parameter `Data_to_Excel$` contains the **EXCEL#()** function. The **EXCEL#()** function returns the result of an EXCEL spreadsheet calculation in **TeLiTab** format. See the wiki for a detailed description of **EXCEL#()** function.

- Create the relation as shown below.

`Data_to_excel$ = EXCEL#(1,"NullString",File_name_Excel$,"NullString",TEXTITEM$(1),TEXTITEM$(2),Deck_data#,Loa, Lpp, Boa, Dm)`

Expression Data:

| | |
|-------------------|-----------------------------------|
| @NOCALC | |
| TEXTITEM1= | |
| 5 | |
| "Loa" | "Deck data.Loa" |
| "Lpp" | "Deck data.Lpp" |
| "Boa" | "Deck data.Boa" |
| "Dm" | "Deck data.Dm" |
| "Deck_data#" | |
| { | |
| 6 | |
| "Name\$" | "Deck data.Name of deck(2)" |
| "Deck_function\$" | "Deck data.Function(3)" |
| "Z" | "Deck data.Height [m](4)" |
| "X_aft" | "Deck data.Aft position [m](5)" |
| "X_front" | "Deck data.Front position [m](6)" |
| "Area" | "Deck data.Area [m^2](7)" |
| } | |
| | |
| TEXTITEM2= | |
| 1 | |
| "Total_deck_area" | "Deck data.Totaldeckarea" |

Modify existing Taxonomy Relation

Expression Text

Data_to_excel\$ = EXCEL\$(1,"NullString",File_name_Excel\$,"NullString",TEXTITEM\$(1),TEXTITEM\$(2),Deck_data#, Loa, Lpp, Boa,

Expression Data

```

@NOCALC

TEXTITEM1=
| 5
"Loa"                "Deck data.Loa"
"Lpp"                "Deck data.Lpp"
"Boa"                "Deck data.Boa"
"Dm"                 "Deck data.Dm"
"Deck_data#"
{
6
"Name$"              "Deck data.Name of deck(2)"
"Deck_function$"     "Deck data.Function(3)"
"Z"                  "Deck data.Height [m] (4)"
"X_aft"              "Deck data.Aft position [m] (5)"
"X_front"            "Deck data.Front position [m] (6)"
"Area"               "Deck data.Area [m^2] (7)"
}
|

TEXTITEM2=
| 1
"Total_deck_area"     "Deck data.Totaldeckarea"

|@QUAESTORVERSION:2.42.0.6/25/2014 10:48:13 AM
@LASTCHANGED:07-14-2014 at 09:56:31
          
```

Expression Reference

Save

As Instance

Can