IMPORTING ACTIVITIES FROM MSPROJECT TO PROJEQTOR

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CONTENT

INTRODUCTION

The objective of this document is to describe how to use the “MSProject to Projeqtor - Activity Import.xlsm” spreadsheet, which generates the file containing all the data needed to import activities from MSProject schedule to Projeqtor.

GUIDELINES

The steps needed to use “MSProject to Projeqtor - Activity Import.xlsm” spreadsheet are given below:

1. Configure all parameters presented in “Import_Configuration” workbook.

   Please see section “Import_Configuration” for more information about the parameters and what they are used for

2. Paste in “Projeqtor_Activity_List_Export” workbook the list of activities that are already recorded in Projeqtor, considering the desired project. Follow the steps below to get these list:
   a. Go to “Activities” screen
   b. Apply a filter to list only activities of the desired Project
   c. Use the functionality “Export to CSV format”, so a list of all activities recorded in Projeqtor for the desired project is generated
   d. Copy the data regarding the activities exported from Projeqtor and paste it in “Projeqtor_Activity_List_Export” workbook, considering the defined format. The activity list must be ordered by ID column in ascending order (from lower to higher numbers ;-))

   Please see section “Projeqtor_Activity_List_Export” for more information about which data must be copied to this workbook

3. Paste in “MSProject_Schedule” workbook the list of activities defined in MSProject schedule. Follow the steps below to get this list:
   a. Open MSProject file containing the schedule of the desired project
   b. Copy the data of all activities existing in MSProject schedule and paste them in “MSProject_Schedule” workbook, according to existing columns and sequence.

   Please see section “MSProject_Schedule” for more information about which data must be copied to this workbook

4. Review the information presented in “Projeqtor_Import” workbook. Please take close attention to the following:
   a. Check if the information automatically generated are correct. The user may need to go back to Step 1 and review the parameters.
   b. Complete any missing information needed or change the data automatically generated, to make sure the information to be imported as correct as desired.

   Please see section “Projeqtor_Import” for more information about the data automatically generated by this spreadsheet, as for understanding the rules and parameters used, facilitating the correction of incorrect data.

5. Go back to “Import_Configuration” workbook and check if any validation presents any error. If there is any error, please analyze the problem and correct it before generating the file.
6. Press “Generate” button and wait until the end of the generation process, which will result in the generation of the import file
7. Go back to Projeqtor and import the generated file using the functionality “Tools >> Import Data”.

IMPORT_CONFIGURATION

This workbook contains the parameters that need to be set before the generation of the data to be imported in Projeqtor. The workbook performs some basic validations, so the user may check for basic errors before the generating the data to be import.

ATENTION: The validations performed in the spreadsheet are not taken into account during the generation of the import file. They are put in place only as a visual indicator to help the user to prevent and correct errors before generating the import file.

The parameters needed and the validations performed are presented below.

PARAMETERS

Parameter	Description	Allowed Values
Not Started Activity Status	Status to be assigned to an activity with progress = 0%	*
Handled Activity Status	Status to be assigned to an activity with progress > 0% and < 100%	*
Finished Activity Status	Status to be assigned to an activity with progress = 100%	*
Default Priority	Priority to be assigned to activities	*
Default Planning Mode	Planning mode to be assigned to activities	*
MSProject Unit Measure for Duration (plural)	Word used by MSProject after Duration Value in plural (2 "days"; "hours")	**
MSProject Unit Measure for Duration (singular)	Word used by MSProject after Duration Value in singular (1 "day"; "hour")	**
Creation Date	Creation date of the activity in Projeqtor	***
Creation User	User to be assigned as creation user of the activity in Projeqtor	*
Project ID	ID of the project which the activity will be linked to	*
Set first resource name in MSProject Schedule as Activity Responsible?	If "YES", the first resource name defined in MSProject schedule will be defined as the activity responsible in Projeqtor. ATENTION: if the resource name in MSProject does not exist in Projeqtor, the import will fail If "NO", no resource name will be assigned to activity. ATENTION: if no resource is defined as responsible and activity status is changed do a "handled" or "finished" status, the import will fail	YES/NO
MSProject Resource	Character used by MSProject to separate resource names	**

Separator		
Set activities with NO resource in MSProject as "Activity Group"?	"If ""YES"", activities with no resource names in MSProject will have their activity type defined as a ""activity group"" (according to type defined in parameter). If ""NO"", nothing happens.	YES/NO
Default Activity Type for "Activity Group"	Activity type to be assigned to "activity groups". NOTE: It is recommended that the activity type configured to represent “activity groups” (or phases, control activities, etc.) do NOT require the fields “Responsible” and “Result” as mandatory fields.	*
Use Default Activity Type?	If "YES", activity will be created with a default activity type (defined below). If "NO", no activity type will be assigned.	YES/NO
Default Activity Type	Activity type to be assigned to activities	*
Handled date equal to validated start date?	If "YES", when an activity has a "handled" status (progress >0% and <100%), handled date will be set as validated start date. If "NO", "Creation Date" will be used.	YES/NO
Done date equal to validated end date?	If "YES", when an activity has a "done" status (progress =100%), done date will be set as validated end date. If "NO", "Creation Date" will be used.	YES/NO

* Any valid value accepted / used by Projeqtor

** Any valid value used by MSProject

*** Any date. Standard is generation date

VALIDATIONS

Validation	**Description**	**Results**
Activity names in MSProject Schedule without names longer than 100 chars?	Checks if there is any activity name in “MSProject_Schedule” workbook, which the content in longer than 100 characters, since that is the max length of Projeqtor’s activity name field. NOTE: Importing a activity with name longer than 100 chars will make Projeqtor truncate the activity name, to make it 100-char-long. Later, when comparing Projeqtor activity name with MSProject activity name, “MSProject_Schedule” workbook will not find a match and the activity will be duplicated in Projeqtor, instead of updated.	**OK –** no activity name longer than 100 chars in “MSProject_Schedule” workbook **NOK –** there are activity names longer than 100 chars in “MSProject_Schedule” workbook
Activity names in MSProject Schedule WITH NO duplicated	Checks if there is any duplicated activity name in “MSProject_Schedule” workbook. Duplicated names must not occur, otherwise, while crossing data from “MSProject Activities X Projeqtor Activities”, incorrect association	**OK –** no duplicated activity names found in “MSProject_Schedule” workbook

values?	between ID and activity name may occurs. This may happen because Excel function PROCV gets the ID of the first activity with the given name found.	**NOK –** there are duplicated activity names in "MSProject_Schedule" workbook
Activity names in Projeqtor Activity List WITH NO duplicated values?	Checks if there is any duplicated activity name in "Projeqtor_Activity_List_Export" workbook. Duplicated names must not occur, otherwise, while crossing data from "MSProject Activities X Projeqtor Activities", incorrect association between ID and activity name may occurs. This may happen because Excel function PROCV gets the ID of the first activity with the given name found.	**OK –** no duplicated activity names found in "Projeqtor_Activity_List_Export" workbook **NOK –** there are duplicated activity names in "Projeqtor_Activity_List_Export" workbook
Parameters defined?	Checks if all parameters were defined. ATENTION: this validation does not check the defined values for each parameter, but only if there is something define or not.	**OK –** all parameters were defined **NOK –** there are parameters where no value was defined

GENERATION OF IMPORT FILE ("GENERATE" BUTTON)

The generation of the import file is performed when the user hits the "Generation" button.

As mentioned above, the user must check if the validations performed have returned some error, to prevent the generation of incorrect data.

The generation process (Excel Macro) performs the following steps:

- Clear possible existing data in "Data_Import" workbook generated in previous processes
- Select all data existing in "Projeqtor_Import" workbook containing formatted data
- Paste data into "Data_Import" workbook, which will be used to generate import file
- In "Data_Import" workbook, clears the content of all cells with blank values ("")
- In "Data_Import" workbook, orders all activities by column ID, in decreasing order. The reason behind this ordering process is that, generally, "group activities" (activities representing phases, control activities, etc.) or "parent activities", have an ID number smaller than their child activities. So, during the import process if we try to close a parent activity without having the child activities closed before, an error occurs during the import process. By having the activities in a decreasing order, child activities will be closed first, and then, when the parent activity will be closed no error will occur.
- Copy data (from "Data_Import" workbook) to be imported to a new file / spreadsheet with ".xlsx" extension (compatibility with Projeqtor, which does not read Excel files with macro – ".xlsm files")
- Saves the import file in the same directory of the generation spreadsheet
- Closes the import file and reactive the generation spreadsheet, in "Import_Configuration" workbook

PROJEQTOR_ACTIVITY_LIST_EXPORT

In this workbook, the user have to copy the activity list previously exported by Projeqtor, considering the project that must be updated. If the project has no activities recorded in Projeqtor (first import), this workbook must be empty, with no values besides the existing header. The following information from Projeqtor are required: id and activity name, which must be copied in the columns “ID” and “Name”, respectively.

IMPORTANT: The activity list must be ordered by ID column in ascending order (from lower to higher numbers ;-)).

Below are shown the columns present in the workbook and their description:

Column name	**Description**
Correct Activity Name	This column represents the “correct” name of the activity recorded in Projeqtor. A formula in the cells of this column that removes all blank spaces existing in the values of column “Name”, and the result of this formula is applied to this column. By doing this, we can avoid problems due to existing blank spaces in the beginning, middle or end of the activity name. **ATTENTION:** this column is READ-ONLY. No information should be copied in the cells of this column. **VALIDATIONS:** - If the activity name is duplicated (there is another activity with the same name in Projeqtor’s activity list), the cell will be highlighted with a red background color. - If Projeqtor’s activity does NOT have a corresponding activity (same name) in MSProject schedule, the cell will be highlighted with a yellow background color.
Id	ID of the activity recorded in Projeqtor
Name	Name of the activity recorded in Projeqtor

MSPROJECT_SCHEDULE

In this workbook, the user have to copy the activity list defined in MSProject schedule, regarding the project that will be imported to Projeqtor.

In case of having activities listed in “Projeqtor_Activity_List_Export” workbook, it will be performed an information crossing (comparing activity name in Projeqtor vs. activity name in MSProject) to try to identify the activity ID used in Projeqtor.

The following information from MSProject schedule are required: “% Complete”, “Activity name”, “Duration”, “Start date”, “End date”, “Predecessors”, “Resource names”.

Below are shown the columns present in the workbook and their description:

Column name	Description
Projeqtor_ID	Id of the activity recorded in Projeqtor. This information is found by comparing MSProject activity name and Projeqtor activity name, listed in “MSProject_Schedule” and “Projeqtor_Activity_List_Export”, respectively. If the same name cannot be found on both workbook, a blank value will be used. **ATTENTION:** this column is READ-ONLY. No information should be copied in the cells of this column.
Correct activity name	This column represents the “correct” name of the activity recorded in MSProject schedule. A formula in the cells of this column that removes all blank spaces existing in the values of column “Name”, and the result of this formula is applied to this column. By doing this, we can avoid problems due to existing blank spaces in the beginning, middle or end of the activity name. **ATTENTION:** this column is READ-ONLY. No information should be copied in the cells of this column. **VALIDATIONS:** - If the activity name is duplicated (there is another activity with the same name in Projeqtor’s activity list), the cell will be highlighted with a red background color.
% Complete	% of completion of the activity in MSProject schedule
Activity name	Name of the activity in MSProject schedule
Duration	Duration of the activity in MSProject schedule
Start	Start date of the activity in MSProject schedule
End	End date of the activity in MSProject schedule
Predecessors	Predecessors of the activity in MSProject schedule
Resource names	Resource names of the activity in MSProject schedule

PROJEQTOR_IMPORT

This workbook presents all information regarding to “activities” that can be imported to Projeqtor. Some data are automatically generated considering the parameters configured in “Import_Configuration” workbook and the data listed in “MSProject_Schedule” e “Projeqtor_Activity_List_Export” workbooks. The user may correct auto-generated data or complete missing data. The columns which content are automatically generated are presented with gray as background color.

Below are presented the columns that have auto-generated content, in addition with the logic used to generate the content.

Column Name	Logic explanation
id	Uses the ID recorded in Projeqtor for the activity. If an ID was not found, uses blank value.
idProject	If an activity does not exist in the current line, uses blank value. Otherwise, uses the “Project ID” defined in parameters.
idActivityType	If an activity does not exist in the current line, uses blank value. Otherwise, checks if there is (are) resource names for the corresponding activity in MSProject schedule. Is there is no resource name in MSProject schedule, checks if the parameter “Set activities with NO resource in MSProject as ''Activity Group''” is active or not. If Yes, uses the “Default Activity Type for ''Activity Group''” defined in parameters. Otherwise, uses blank value. Is there is a resource name in MSProject schedule, checks if the parameter “Use Default Activity Type” is active or not. If Yes, uses the “Default Activity Type” defined in parameters. If No, uses blank value.
name	If an activity does not exist in the respective line in MSProject schedule, uses blank value. Otherwise, uses the activity name recorded in MSProject schedule.
creationDate	If an activity does not exist in the current line, uses blank value. If an ID was not found for the current activity, uses the “Creation date” defined in parameters, because it assumes that the activity will be inserted in Projeqtor and a creation date is needed. If an ID was found, uses blank value, because it assumes the activity already exists in Projeqtor and the creation date is already set.
idUser	If an activity does not exist in the current line, uses blank value. If an ID was not found for the current activity, uses the “Creation user” defined in parameters, because it assumes that the activity will be inserted in Projeqtor and a creation user is needed. If an ID was found, uses blank value, because it assumes the activity already exists in Projeqtor and the creation user is already set.
idStatus	If an activity does not exist in the current line, uses blank value. Otherwise, the “% complete” of the activity defined in MSProject schedule will be used to choose which status should be used, according to the values defined in parameters. The rules used to choose the status

	are presented below: • 0% - Uses the value defined in “Not Started Activity Status” • 100% - Uses the value defined in “Handled Activity Status” • 1% a 99% - Uses the value defined in “Finished Activity Status”
idResource	First, checks if the parameter “Set first resource name in MSProject Schedule as Activity Responsible” is active or not. If No, uses blank value. If Yes, but an activity does not exist in the current line, uses blank value. If Yes and there is an activity in the current line, checks if there are resource names informed in MSProject schedule. In case of no names informed, uses blank value. If resource names are informed in MSProject schedule, uses the name of the first resource associated to the activity. For getting the first resource name from MSProject schedule, it checks if there is only one resource name or more. This validation assumes that MSProject separates resource names using a “separator character”. This separator character must be set in parameters (“MSProject Resource Separator”). Therefore, if a separator character is found, it means that there are two or more resource names, and then, it uses the first resource name as activity responsible. If the separator character was not found, it means that there is only on resource name, and then uses this name.
handledDate	If an activity does not exist in the current line, uses blank value. If “% complete” in MSProject schedule is equal to 0% (zero), it assumes the activity was not started, and then uses blank value. If “% complete” > 0% (zero), it assumes the activity is handled or finished, requiring a handled date to be set. In this case, it checks if the parameter “Handled date equal to validated start date” is active or not. If Yes, uses “validated start date”. If No, uses the value of parameter “Creation date”.
doneDate	If an activity does not exist in the current line, uses blank value. If “% complete” in MSProject schedule is lower than 100% (one hundred), it assumes the activity is not finished, and then uses blank value. If “% complete” is equal to 100% (one hundred), checks if parameter “Done date equal to validated end date” is active. If Yes, uses “validated end date”. If No, uses the value of parameter “Creation date”.
initialStartDate	If a start date does not exist in the respective line in MSProject schedule, uses blank value. Otherwise, checks if an ID was found for the current activity. If an ID was found, uses blank value, because it assumes the activity already exists in Projeqtor and the start date is already set. If an ID was NOT found, uses the “start date” defined in MSProject schedule, because it assumes that the activity will be inserted in Projeqtor and a start date is needed.
validatedStartDate	If a start date does not exist in the respective line in MSProject schedule,

	uses blank value. Otherwise, uses start date defined in MSProject schedule.
priority	If an activity does not exist in the current line, uses blank value. Otherwise, checks if there is an ID for the activity. If the ID does not exist, uses the value of parameter “Default Priority” (it assumes the activity will be created in Projeqtor). Otherwise, uses blank value, because it assumes the activity already exists in Projeqtor and the priority is already set.
initialEndDate	If an end date does not exist in the respective line in MSProject schedule, uses blank value. Otherwise, checks if an ID was found for the current activity. If an ID was found, uses blank value, because it assumes the activity already exists in Projeqtor and the end date is already set. If an ID was NOT found, uses the “end date” defined in MSProject schedule, because it assumes that the activity will be inserted in Projeqtor and an end date is needed.
validatedEndDate	If an end date does not exist in the respective line in MSProject schedule, uses blank value. Otherwise, uses end date defined in MSProject schedule.
idActivityPlanningMode	If an activity does not exist in the current line, uses blank value. Otherwise, checks if there is an ID for the activity. If the ID does not exist, uses the value of parameter “Default Planning Mode” (it assumes the activity will be created in Projeqtor). Otherwise, uses blank value, because it assumes the activity already exists in Projeqtor and the Default Planning Mode is already set.
initialDuration	If a duration does not exist in the respective line in MSProject schedule, uses blank value. Otherwise, checks if an ID was found for the current activity. If an ID was found, uses blank value, because it assumes the activity already exists in Projeqtor and the duration is already set. If an ID was NOT found, uses the “duration” defined in MSProject schedule, because it assumes that the activity will be inserted in Projeqtor and a duration is needed. PS: MSProject duration value is “processed” so the unit measure used by MSProject in duration column is removed, resulting in a number (instead of a text). This process considers the values defined in “MSProject Unit Measure for Duration (plural)” and “MSProject Unit Measure for Duration (singular)” parameters, as well their variations using the “?” symbol, that is allowed by MSProject for estimated durations. These texts (representing the unit measure) are removed from the duration value defined in MSProject schedule, resulting in the number to be used.
validatedDuration	If a duration does not exist in the respective line in MSProject schedule,

	uses blank value. Otherwise, uses duration defined in MSProject schedule. PS: MSProject duration value is “processed” so the unit measure used by MSProject in duration column is removed, resulting in a number (instead of a text). This process considers the values defined in “MSProject Unit Measure for Duration (plural)” and “MSProject Unit Measure for Duration (singular)” parameters, as well their variations using the “?” symbol, that is allowed by MSProject for estimated durations. These texts (representing the unit measure) are removed from the duration value defined in MSProject schedule, resulting in the number to be used.

DATA_IMPORT

This workbook is used by Excel Macro to process information from “Projeqtor_Import” and generate the final data to be imported to Projeqtor.

The reason for using this spreadsheet (“Data_Import”) instead of “Projeqtor_Import” is that when setting blank values (“”) in Excel and importing this data to Projeqtor, both Excel and Projeqtor understand that blank values (“”) are actually real values that need to be processed, instead of inexistent content that should be ignored.

Thus, the Excel macro copies all contents from “Projeqtor_Import” to “Data_Import”, and seeks for blank values in “Data_Import” workbook. Once a blank value (“”) is found, it clears the content of the cell, so neither Excel nor Projeqtor will not recognize it as a real value. If this process was performed in “Projeqtor_Import” workbook, all formulas defined in the cells would be clean up, and consequently, the same spreadsheet could not be used more than once without having to manually replicate the formulas to the cells that were clean up.

ADDITIONAL INFO

KNOWN LIMITATIONS

The following limitations are known regarding the use of “MSProject to Projeqtor - Activity Import.xlsm” spreadsheet:

- **“Parent-Child” Activities:** It does not automatically identify the relationship of parent-child activities from MSProject. If the parent activity already exists in Projeqtor, it is still possible to make this association manually in the spreadsheet, using the workbook “Projeqtor_Import”, column “idActivity”. However, Projeqtor “Planning” functionality provides the user a much better and user-friendly interface.

TIPS

The following tips may be helpful during the of “MSProject to Projeqtor - Activity Import.xlsm” spreadsheet:

- When defining the parameter “Default Activity Type for "Activity Group"”, check how the corresponding activity type is recorded in Projeqtor. Make sure the following fields are unset in Projeqtor record for the choosen activity type: “Description mandatory”, “Responsible mandatory on handled status” and “Result mandatory on done status”. By doing this, it will avoid import errors, since having a parent activity with no responsible defined (since each child activity has its own responsible) is common practice when creating a project schedule.

ATTACHMENTS

Not applicable

CONTRIBUTIONS

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