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TM1 DATES v/s EXCEL DATES

Both TM1 and Excel use a "date serial" system in which any date that you use in calculations is represented as a positive integer value.

That integer value is calculated from an arbitrary starting date. Adding whole numbers to a specific serial date moves you forward through the calendar a day at a time.
Time is represented as fractions of a day; 0.25 for 6am, 0.5 for noon, 0.75 for 6pm and so on.

In the case of Excel, the starting date is 31st December 1899. That is, if you enter the value 1 into a cell in Excel and format it as a date, you'll see the value as 31st December 1899. 2 will be the 1st of January 1900, 3 the 2nd of January, and so on.In other words, every full day that passes adds 1 to the serial date.

Jumping forward many decades, Friday 1 January 1960 is day number 21,916 and also the starting date in TM1. To allow for this serial date difference, you had to do all sorts of adjustments in rules or TI processes to adjust dates collected using Excel to get them into a form usable by TM1.

This was ok when you were using a cube viewer, but was difficult to manage when you had a TM1 view presented through Excel. There were various ways of treating it, but now with the release of Planning Analytics IBM has introduced a parameter that can be used in the tm1s.cfg file for a model that can tell TM1 to use Excel dates. Therefore you can now use the same serial number when presenting a date through Excel and in all other forms of viewing TM1 data.

Parameter that let TM1 Dates behave like Excel Dates :
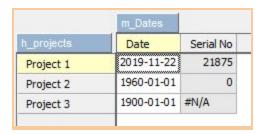
UseExcelSerialDate=T

Add the above parameter in tm1s.cfg file, restart the server and you are good to go.

Note: Be careful! You don't want to change it for an existing model as it will change all the calculations already built using TM1 dates.
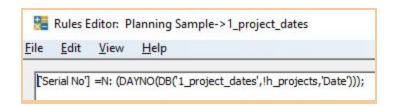
Example:

As shown in below screenshot, date of Project 1 is serial no 21875 according to TM1. Project 2 is serial no. 0 because it is the 1st day in TM1 (1st Jan 1960). Serial No for project 3 is #N/A because TM1 does not recognise any dates before 1st Jan 1960.
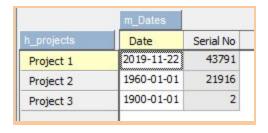
h_projects	m_Dates	
	Date	Serial No
Project 1	2019-11-22	21875
Project 2	1960-01-01	0
Project 3	1900-01-01	#N/A

Following is the rule written to arrive at above serial no.

```
Rules Editor:  Planning Sample->1_project_dates
File   Edit   View   Help

['Serial No']  =N: (DAYNO(DB('1_project_dates',!h_projects,'Date')));
```

Now to make TM1 behave like Excel, add the parameter UseExcelSerialDate=T and restart the server. Login and open the view to find that serial no. is changed.

Project 2 displays serial no. 21916, which is the breaking point because you had to consider it everytime you write date calculations, which you no longer have to.

h_projects	m_Dates	
	Date	Serial No
Project 1	2019-11-22	43791
Project 2	1960-01-01	21916
Project 3	1900-01-01	2

Thank You !!!