

Determining Next Predictive Service Plan Date

Asset Predictive Servicing allows Ostendo to determine the next service plan date based on both usage (readings) as well as time.

This document runs through an example of how Ostendo will generate the next required service date based upon Readings and the Predictive Maintenance settings for an Asset.

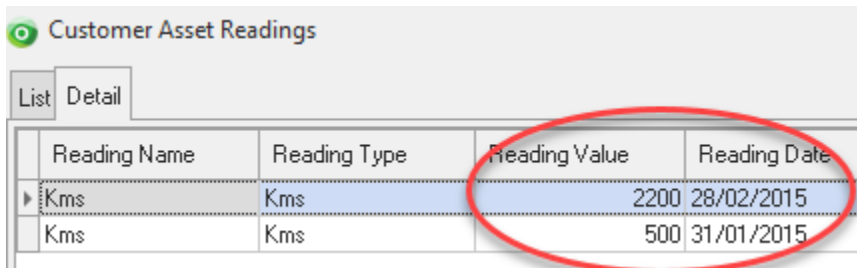
Click [here](#) to download a spreadsheet which may assist in explaining some of the calculations involved in this process.

Scenario: This Asset will require a 5000 km service or 6 months service, **whichever comes first**

To determine the predicted usage of an Asset Ostendo will determine the average usage from the last two readings, therefore you must have either 2 or more Actual Readings, or one Initial and One Actual Reading. Failing this Ostendo will simply use the Recurring Frequency and Frequency Period to determine the next service plan date from the Last Event Date set on the Recurring & Predictive Servicing tab on the Customer Asset.

In this example we have setup a vehicle to be serviced every 6 months or 5000kms whichever comes first.

We have also previously logged two Readings to record the Kms at specific points in time.



Reading Name	Reading Type	Reading Value	Reading Date
Kms	Kms	2200	28/02/2015
Kms	Kms	500	31/01/2015

Now let's create the Predictive Servicing Event against the Asset:

From the Recurring & Predictive Servicing Tab on the Customer Asset Master, press the Add button and ensure the following entries are completed.

Recurring Style:	Frequency (only allowed for Predictive)
Day of Month:	None (only allowed for Predictive)
Fixed Day Number:	Not used for Predictive
Frequency Period:	Days / Weeks / Months between servicing irrespective of readings
Recurring Frequency:	This defines the time between servicing irrespective of readings
Predictive Style:	Set this to ' Include Predictive Event '

Nearest Working Day: When the Service Date is predicted Ostendo will use a Working Day rather than that specific date determined

Reading Name: This is the Reading Name for Usage to be determined

Reading Cycle: In our example we will use 5000 kms. In other words a service event should be created every 5000 kms (dependent upon usage)

Job Type: This must be unique to this asset to allow for adhoc jobs to be created for this asset. Eg: Instead of Ostendo predicting the next event, you may choose to manually create an adhoc job for this asset. By allowing this and using the same Job Type, Ostendo can then automatically update the next Planned Service date taking into account the adhoc job. (Same approach is used for Recurring type maintenance)

Template: This Job Template will be used when the Job is created from the Service Orders Required Screen

Last Event Date: This will default to todays date, however you should ensure this initial date is set to the last Reading Date or Initial Reading Date if there was no actual Reading Date. This is used to determine the anticipated Planned Service Date.

Planning											
Batch Entry		Service Plans									
Planned Servicing	Recurring and Predictive Servicing		Recurring Invoices	Linked Warranties	Equipment	Maintenance History					
Recurring Style	Day of Month	Fixed Day Number	Frequency Period	Recurring Frequency	Predictive Style	Nearest Working Day	Reading Name	Reading Cycle	Job Type	Template	Last Event Date
Frequency	None		Months	6	Include Predictive Event	<input type="checkbox"/>	Kms	5000	Recurring	TB Template	28/02/2015

Once the Predictive Servicing parameters have been set, go to the Planned Servicing Tab and Ostendo would have now automatically created a Service record based on usage and time, whichever is first.

Planning								
Batch Entry		Service Plans						
Planned Servicing	Recurring and Predictive Servicing		Recurring Invoices	Linked Warranties	Equipment	Maintenance History		
Planned Date	Job Type	Template	Confirmation Status	Reminder Sent	Reminder Date	Reminder Contac	Confirmed Date	
21/05/2015	Recurring	TB Template	NotConfirmed	<input type="checkbox"/>			21/05/2015	

You will notice that the Planned Date is displayed as 21/5/2015. This is the next expected service date based on the predictive servicing settings.

Let's see how Ostendo determines this date.

Our last two readings were 28 days apart and accounted for 1700 kms usage.

Ie: average usage is $1700 / 28 \text{ days} = 60.714 \text{ kms per day}$

Our cycle is set to trigger every 5000 kms

Ie: $5000 / 60.714 \text{ kms} = 82 \text{ days}$.

This part of the calculation is saying that the next service event based on a predicted usage of 60.714 kms per day would be...

Last Event Date of 28/2/2015 + 82 days = 21/5/2015

The other side of this is the time element which would be...

Last Event Date of 28/2/2015 + 6 Months = 30/6/2015

A comparison of these two dates is made to determine the earliest. The earliest then becomes the Planned Date. (This date will be advance to the next working date if the Nearest Working Day was ticked on the Recurring & Predictive Servicing screen)