

Knowledge Base Article

Product Category: Software
Product: CMSW7400 – SKF @ptitude Analyst
Version: 8.0 MR2 and MR3

Abstract

This article describes how to correct historical erroneous 100% ROUTE Complete calculations to a more accurate approximation of ROUTE % Complete.

Overview

There is a defect in SKF @ptitude Analyst version 8.0 MR2 where SKF Microlog Inspector and SKF Microlog Analyzer data, when processed, produces a ROUTE % Complete of 100% - regardless of the state of data. This defect had been addressed in version 8.0 MR3, but the fix does not address any historical data. SKF Machine Health has produced a script to try and address historical ROUTE history records to get a more accurate ROUTE % Complete figure.

Constraints and assumptions

ROUTE % Complete calculation is performed based on the current status of the ROUTE and the state of data collection at the time of processing. The accuracy of calculating this value after the fact is decreased by a number of factors. Some of these factors are:

- POINTs added to/deleted from a ROUTE after collection
- POINTs enabled/disabled after collection
- If data archiving is turned on, measurements removed by the archiving process
- Trying to calculate % complete on ROUTEs collected with SKF MARLIN/Microlog Inspector devices with older firmware that does not create 'non-collection' measurements when POINTs are skipped because of 'Machine Not Running' or 'Condition not met'

- If a POINT exists on two different ROUTEs and data was collected on a second ROUTE (on a different device) at the same time a ROUTE was being collected

What the script does

This script does the following:

- Takes a given start date/time
- Takes a given end date/time
- Retrieves all ROUTEHISTORY records that were started after the given start date/time and finished before the given end date/time
- For each ROUTEHISTORY record:

The enabled POINTs belonging to that ROUTE are retrieved

The count of those POINTs is calculated to TotalRoutePoints

- o For each enabled POINT in the ROUTE, a count of the number of distinct POINTIDs for measurements with data timestamps greater than or equal to the ROUTEHISTORY start time and less than or equal to the ROUTEHISTORY end time is calculated to CollectedPoints
- o The ROUTEHISTORY record % Complete field is updated with CollectedPoints/TotalRoutePoints
- o ROUTEHISTORY.PCTCOMPLETE will be updated if the current PCTComplete value is 100

How to run the script

1. Create a backup of the database and exit from all SKF software.
2. Open file "Recalculate Route Completion Percent.sql" in Microsoft SQL Server Management Studio.
3. Modify the script to change the values of parameter @InputStartDate and @InputEndDate with format 'YYYYMMDD' , where:

@InputStartDate = Start Of Route Upload

@InputEndDate = End Of Route Upload

For example, to modify ROUTE histories collected between January 29, 2014 and October 29, 2016, edit the script as follows:

Declare @InputStartDate **Varchar**(8) = '20140129'

Declare @InputEndDate **Varchar**(8) = '20161029'

4. Execute the script.
5. Exit Microsoft SQL Server Management Studio and launch SKF @ptitude Analyst again as usual.

To request further support on an SKF Machine Health product, please contact the Technical Support Group (TSG). TSG can be reached by phone, e-mail, or live chat:

Customers in Europe, Middle East and Africa:

- Phone: +46 31 337 6500
- E-Mail: TSG-EMEA@skf.com
- Chat: www.skf.com/cm/tsg

Customers in all other locations:

- Phone: 1-858-496-3627 or toll-free (USA) 1-800-523-7514
- E-Mail: TSG-Americas@skf.com
- Chat: www.skf.com/cm/tsg