Labor Charge from OEE (ARC 6407)

Preface

Customer has a system called SimTech OEE that captures labor hours performed on Work Orders on some of machines on the production floor. SimTech OEE will contains information such as Work Order, Start Time, End Time, Employee, Completed Quantity, Scrap Quantity, etc.

Project 6407 will integrate the SimTech OEE data into OEE without requiring user to manually input the data again in GSS through Shop Floor Control > Transactions > Manual Time Card Input.

Technical Specification

GSS needs this information to process the labor data:

- Work Order Number
- Work Order Sequence
- Transaction Date
- Workcenter/Workgroup
- Employee No
- Start Time
- End Time
- Hours Worked (optional can be calculated from Start Time and End Time)
- Flag to close the Work Order
- Good Quantity
- Bad Quantity
- Scrap Codes (optional)

SimTech OEE uses Microsoft SQL Server database and the data needs to be accessible through a SQL View containing the information mentioned above.

Since GSS is using Pervasive/Zen database, the data needs to be pulled directly from Microsoft SQL Server database and processed into Pervasive/Zen database.

Design Specification

A GAB script will be attached to the Online Update hook to connect to the SimTech OEE database and pulled the newest data that has not been processed. The script will run according to the Online Update interval time.

The script will perform the following validation:

- Work Order Number is valid and is not closed
- Work Order Sequence is valid, is a Labor sequence, and is not closed
- Transaction Date is a valid date
- Workcenter/Workgroup is valid
- Employee is valid
- Start Time is a valid datetime
- End Time is a valid datetime

- The duration between Start Time & End Time cannot surpass 24 hours
- Flag Closed is either 'Y', 'N', or blank
- Direct or Setup indicator will be based on the Setup Flag in Job Operations table
- Always use Rate Type of Regular (R)
- Scrap Code is ignored

Transaction records that pass validation will be compiled into a text file. Callwrapper JB0455 will process the data into GSS using the text file. The data will be written into JOBS_IN_PROCESS table. Those records are processed into JOB_DETAIL when the Online Update runs.

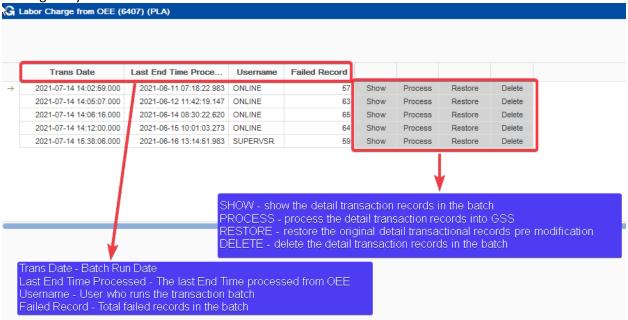
Transaction records that fail validation will be inserted into GAB_6407_FAILED_TRAN table.

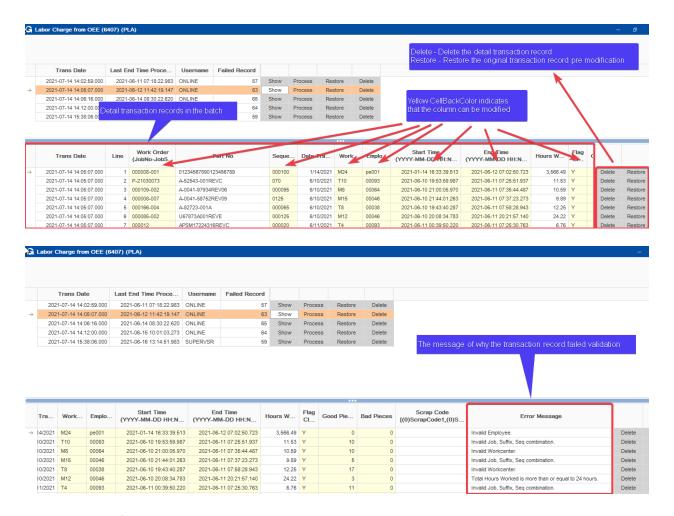
The last End Time processed will be stored in GAB_6407_LAST_TRAN table so that the script knows where to start pulling the next transaction records.

For those failed transaction records, user needs to investigate why they failed. User remedies the data then processes the data into GSS again. To accommodate this, another GAB script is created. User can see all the transaction run batches ran from the Online Update and modify the failed transaction records from this script.

User Manual

- 1. Run Shop Floor Control > Transactions > Labor Charge from OEE (6407)
- 2. The top part will show all the transaction run batches.
- 3. The bottom part will show the detail of the transaction records inside each batch and the message why the record failed.





4. Once user modifies the transaction records, process the transaction batch again by clicking on the Process button.

When the automatic data extraction from OEE runs through the Online Update, the screen below will appear showing the progress of the data extraction and analysis.

