

# M5 Batch Processes User Guide

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# **M5 Batch Processes - User Guide**

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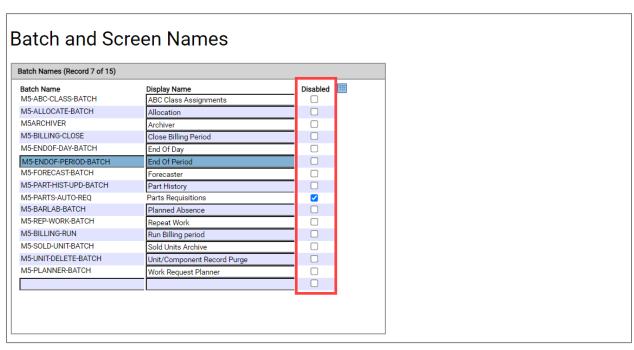
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#### **Batch Process Overview**

The M5 System has several internal batch processes that are critical to the overall integrity and functionality of the system. The configuring, scheduling and execution of these batch processes is controlled through the Batch Process Manager.

Different Batch Processes have different parameters to configure but maintaining and executing them is done through the same general steps.

#### **Batch and Screen Names**

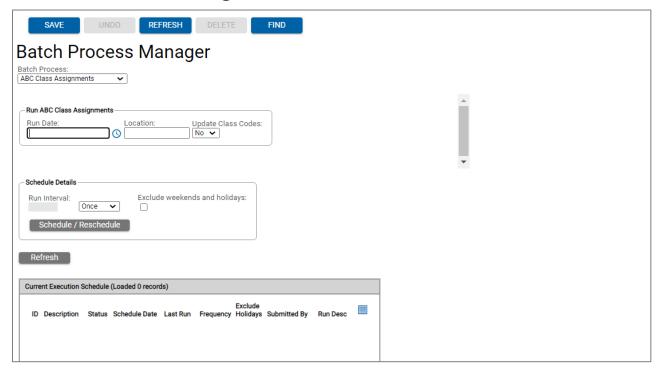


Before navigating to the Batch Process Manager frame, you will want open the Batch and Screen Names frame to make sure the batch processes you want to run are not disabled.

- 1. To enable a specific batch process, clear the **Disabled** checkbox in the row of that process.
- 2. To disable a specific batch process, select the **Disabled** checkbox in the row of that process.
- 3. When you are finished enabling or disabling batch processes, select the **SAVE** button.

Now you are ready to move to the **Batch Process Manager** frame.

## **Batch Process Manager**

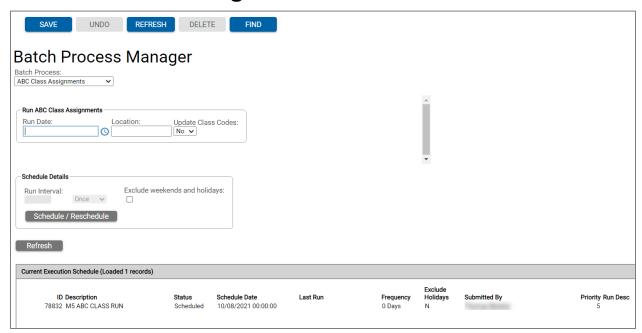


Open the Batch Process Manager frame and select the Batch Process field to select a process. If there is a current schedule for that batch process, you will see a notice. It can be deleted or rescheduled as needed.

Each specific batch process will be covered more in depth on the following pages, the following general set of steps apply to the scheduling of each process:

- 1. To create a new schedule, delete any current schedule then set up the new one.
- 2. Each process will have different parameters to be entered.
- 3. Select the run interval.
- 4. Select the Exclude weekends and holidays checkbox, if required.
- 5. Select Schedule/Reschedule.

# 1. ABC Class Assignment

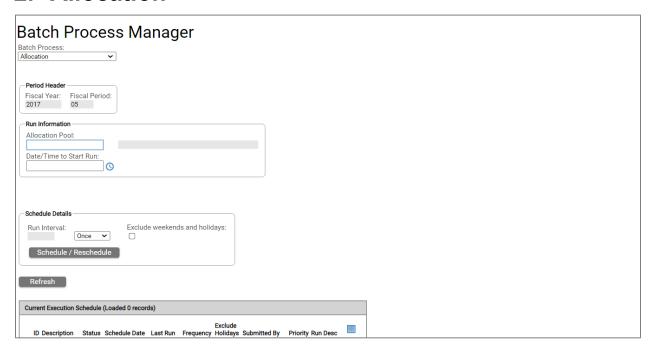


The ABC Class Assignment batch process produces a report that allows the user to preview how the ABC class codes will be assigned to stock parts.

#### To run the batch process:

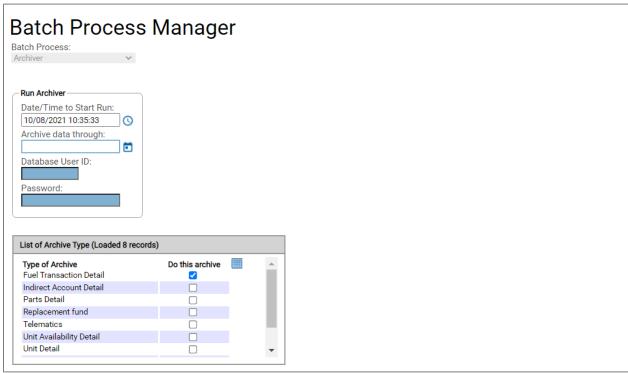
- 1. In the Batch Process Manager select ABC Class Assignment.
- 2. Enter a run date and a location. You can also leave the location blank to run the process for all locations.
- 3. The default value for the Update Class Codes field is No. Typically, you would run this process twice, once with the value set to No, then again with the value set to Yes after you verified the code assignments and made any necessary corrections. You can also set the interval and frequencies to run the batch, Exclude holidays and weekends and Schedule it. When you are satisfied with code assignments you can set the update value to Yes and run the batch to update the codes.
  - The value in the Update Class Code field ignores the setting in System Flag 5038 (Update ABC Class Codes to the Part Inventory Location Frame?). System Flag 5038 controls whether the update is performed during the End of Period batch process.
- 4. Select Schedule/Reschedule to schedule the batch process to run.

## 2. Allocation



The Allocation batch process is a customer-specific process used for distributing costs to allocation pools or groups. The Allocation Pools are created by AssetWorks when requested by the customer and can be configured and executed through the Batch Process Manager.

# 3. Archiver



The Archiver batch process moves and stores older data that no longer needs to be readily available in active M5 tables. The program moves the data from various tables based on the type of transaction. M5 provides the ability to archive data transaction types.

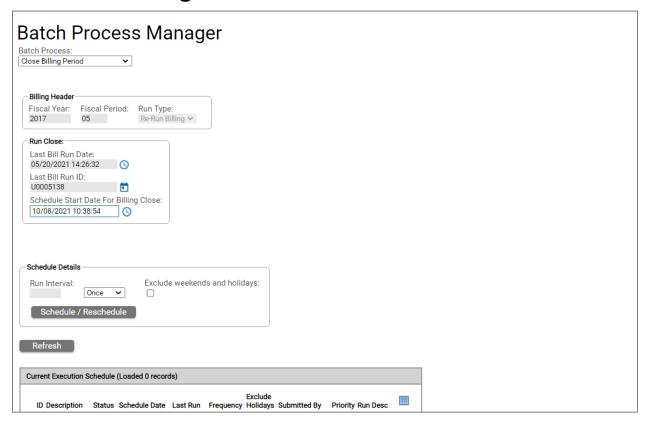
- 1. Fuel Transaction Detail
- 1. Indirect Account Detail
- 2. Parts Detail
- 3. Replacement Fund
- 4. Telematics
- 5. Unit Availability Detail
- 6. Unit Detail
- 7. Work Order Detail

To run the batch process:

- 8. Enter the Date/Time to start the batch process.
- 9. Enter the through date for which the program will archive data.

- 10. Enter the database user.
  - For Oracle clients the database user archives all companies within the database. For example, if your organization has two companies, both are archived.
  - For SQL Server clients, it is recommended to run this batch process through mfiveapp database user.
- 11. Enter the database user password.
- 12. The Look Back Value, Look Back Term, and Unit Type are locked fields used in a separate batch process called Sold Units Archive. They are not editable.
- 13. Select the checkbox in the Do this archive column to select the type or types of data to archive during the batch process execution. You can select multiple options.
- 14. Select the Run Interval. Options are once, minutes, hours, days, months. You can select the checkbox to exclude weekends and holidays.
- 15. Select Schedule/Reschedule to schedule the batch process.
- 16. You can view the current execution schedule on the i-frame below.

## 4. Close Billing Period



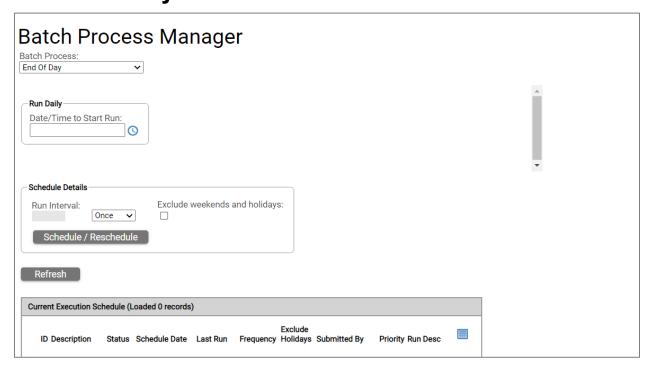
The Close Billing Period batch process should be run after all billing transactions for the current period have been verified as accurate.

When this batch is selected, the user will be prompted to make sure they understand that when this process runs no further changes will be allowed in this period.

After this batch process is executed the billing transactions are posted to the accounting ledgers and cannot be changed. Any adjustments will have to be made in the next billing period and both entries will appear in the audit trail.

- 1. When you select the close button the billing header displays the fiscal year and period for which billing will be closed.
- The Last Billing Run Date will also be displayed.
- 3. Enter the Schedule Start Date For Billing Close. Selecting the field will default to the current date and time.
- 4. Select the run interval.
- 5. Select the Exclude weekends and holidays checkbox, if required.
- 6. Select Schedule/Reschedule, and then select SAVE.

## 5. End of Day



The End of Day batch process updates specific data into certain tables daily. By default, this process automatically run every day at the time specified unless it is changed. It generates an email when completed. The email is sent to the user specified in the Application User Maintenance frame.

The End of Day process performs the following tasks:

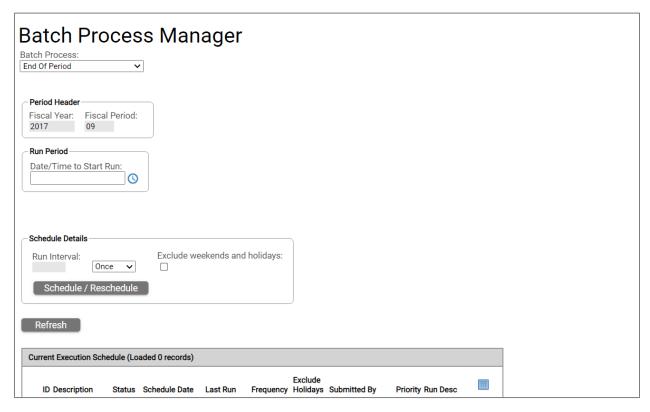
- Calculates unit downtime accumulated since the last End of Day was run.
- Updates part statistics with the last physical inventory date if no last physical inventory date is present.
- Updates Parts Usage Occ table to identify failures of major parts.
- Update Unit\_Dept\_Comp\_Main with current values of Department numbers from Unit\_Assign\_Hist.

When you select the End of Day batch process you will see a notice if there is already a schedule active for it. Select OK to delete and reschedule to process.

- 1. Delete the existing schedule before creating a new one.
- 2. Enter the date and time to reschedule the end of day process.
- 3. Select the run interval.
- 4. Select the Exclude weekends and holidays checkbox, if required.

- 5. Select Schedule/Reschedule.
- 6. When the End of Day process has finished running, the user who ran it will receive an email indicating that the process completed successfully or there were errors.
- 7. If there are any errors reported, they can be corrected, and the process can be run again.
- The End of Day batch process will not run during a system backup. Be sure to schedule it before or after your system backup runs. It is also recommended to run the End of Day process at a time when the system is in limited use.

## 6. End of Period



The End of Period batch process must be run no earlier than the first day of a new fiscal period. End of Period automatically closes the oldest currently open period. The End of Period tasks include:

- Verifying there is a unit history record for each unit for the current period.
- Propagating shift table information forward for the module flag designated amount of time.

Running Eop Inv Proc, a process that performs inventory processing and cleanup by:

- Rolling usage quantities by period and setting current period usage to zero.
- Deleting transfers which have been rejected or completed over the number of days indicated by the Inventory Management module flag, Del. expired POS/Trans after (duration).
- Rolling period start quantities/inventory dollar value by period.

Getting current on-hand quantity and unit price to calculate the current period start quantity/inventory dollar value. The going price and Rav are calculated in the Part\_Get\_Price process according to the pricing method set for the Inventory Management module flag-Type of pricing to use for inventory valuation.

#### These valid pricing methods include:

- Location Standard: Locstd Unit\$ = Location Unit \$.
- Location Average: Locavg Unit \$ = Location Calculated Unit \$.
- System Standard: Sysstd Unit \$ = Part Unit \$.
- System Average: Sysavg Unit \$ = Part Calc Unit \$.
- Incrementing the period roll counter (Pd Roll Ct) to annualize usage.
- Calculates depreciation for all units that have a depreciation type of S (Straight-line), and that do not have a SOLD status.
- System Flag 5290 "Calculate depreciation based on capital journal?" determines how the depreciation of capitalized value is calculated. If set to N for purposes of depreciation, the capitalized value of the unit is the purchase cost plus capital adjustments at the time the end-of-period is run. This preserves existing functionality. If set to Y, the capitalized value of the unit only includes the changes made prior to the end of the period being closed, excluding those after the period was closed and before EOP was run. The Y setting also enables EOP to "catch up" and process depreciation for periods prior to the period being closed, including those values as a depreciation adjustment for the period being closed.
- This flag cannot be changed by users because of the potential duplication of values if the flag is changed from N to Y. Only new customers or customers that have not otherwise implemented depreciation calculations in M5 should consider changing the flag.
- Updates the line items in the Budget frame (some applications do not have this frame) if the appropriate budget flags are set in System Management Flags.
- Updates Maintenance Class Code history.
- Sums past five years of unit history for reporting purposes (rolling five year window).
- Closes the period (nothing else can be charged to a closed period).
- Renames the user log file that keeps track of users.
- Updates the Last End of Period run.
- A batch process called Part\_Hist can be run separately by setting System Flag 5032.

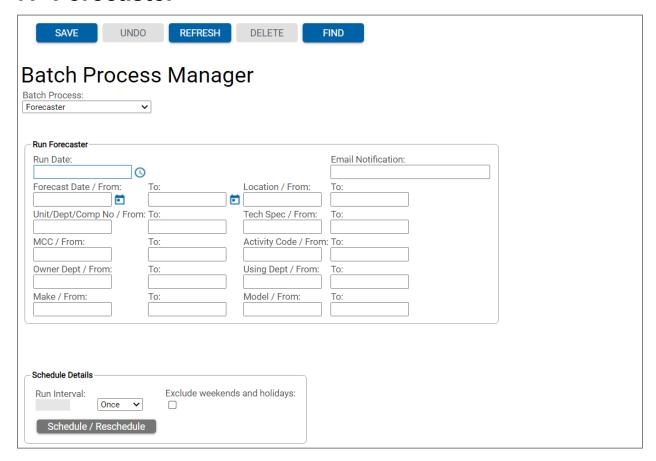
#### To run the process:

- 1. Select End of Period in the Batch Process Manager.
- 2. The fiscal year and period will display.

- 3. Enter the date/time to start running the process. The current date and time will default. Make adjustments if necessary.
- 4. Select the run interval.
- 5. Select the Exclude weekends and holidays checkbox, if required.
- 6. Select Schedule/Reschedule.

M5 sends an automatic email when the process has completed to the person who started the process. The email address comes from the Application User Maintenance frame. The email indicates if the process completed successfully or had errors.

#### 7. Forecaster



The Forecaster batch process is used to predict when a standard job is due for a unit, department, or component. The Forecaster uses the Standard Job MCC and the Standard Job Tech Spec to create work requests with a future due date. This date is calculated based on a time interval, the primary or secondary meter usage or fuel consumption.

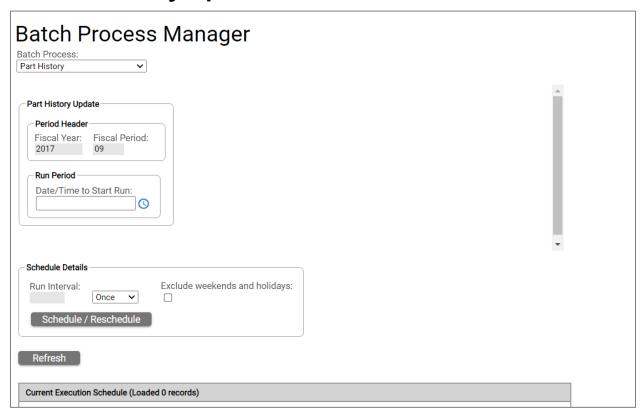
The setup of the Standard Job MCC and interval must be completed prior to running the forecaster to have work requests generated. If the MCC setting is left at the default of zero the Forecaster will not calculate usage at all. The job may be set as recurring or one time only.

In the Batch Process Manager select Forecaster from the list of Batch Processes and you will be in the Run Date field. Press Tab to select the current date and move to the email notification field. The email notification will let the user know if the process ran successfully or failed. The default schedule interval is once. Select Schedule to execute.

The Forecaster is a powerful tool for ensuring that your units remain in compliance with warranties and in optimal working condition.

Please see the *Forecaster Application User Guide* for more information.

## 8. Part History Update



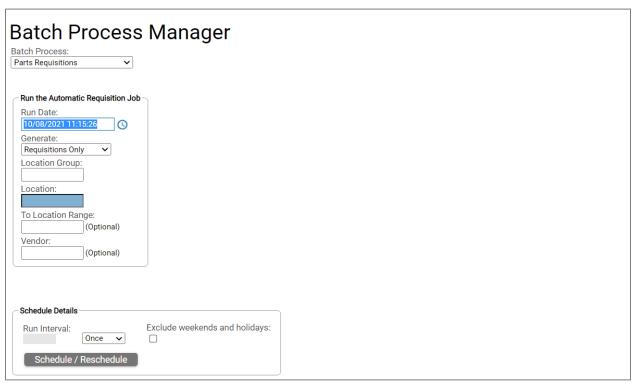
The Part History Update batch process allows the user to close the Part History on exactly the last day of the month separate from the End of Period Process. System Flag 5032 must be set for this to occur.

See the section on the End of Period process for more details.

To run it, select Part History in the Batch Process Manager. The Fiscal Year and Period display.

- 1. Enter the Date/Time to Start Run.
- 2. Select the run interval.
- 3. Select the Exclude weekends and holidays checkbox, if required.
- 4. Select Schedule/Reschedule.

## 9. Parts Requisitions

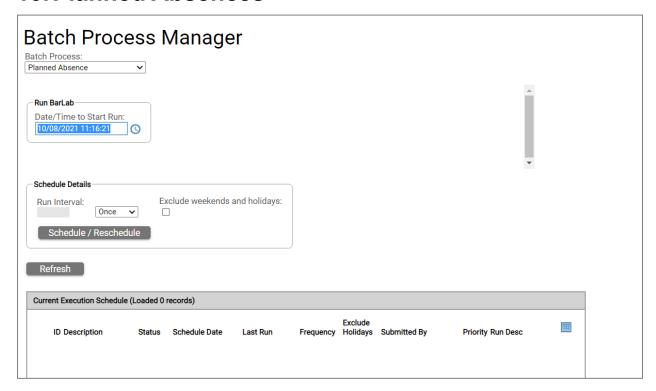


The Parts Requisition batch process automatically creates requisitions, requisitions and purchase orders or part transfers within the parts inventory module. When reordering is done manually the quantities are based on the Standard Order Quantities from the Part Inventory Location Manager frame.

When reordering is scheduled automatically the quantities are based on the Economic Order Quantities established by the ABC classification and historical transactions. When you select Parts Requisitions in the Batch Process Manager you will be in the Run Date field with the current date selected. Modify the date if desired or press Tab to select what you want to generate with this run.

- 1. Select requisitions only, requisitions and purchase orders or transfers only from the Generate dropdown menu.
- 2. Enter the Location in the Location field or a range of locations in the To Location Range field. A Vendor can be specified in the Vendor field.
- 3. Select the run interval and exclude weekends and holidays checkbox, if required.
- Select Schedule/Reschedule.

### 10. Planned Absences



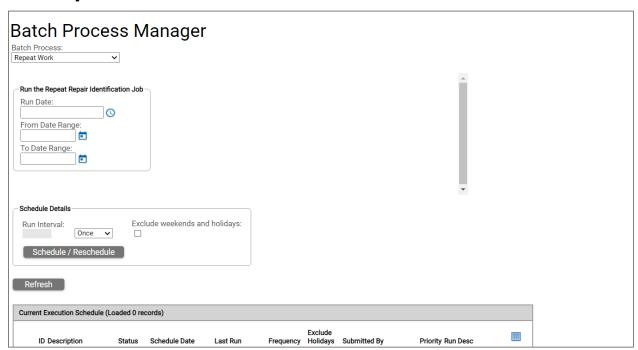
The Planned Absences batch process updates employee holidays and vacation schedules. These appear on the Labor Timecard frame. It must be run daily.

After the process is scheduled it will automatically run every day. Use the Holiday Calendar frame to set up the Company holidays to automatically appear as part of the Employee Absence. This frame example has a schedule set up to run daily.

- 1. To create a new one, enter the Date/Time to Start Run.
- 2. Select the run interval.
- 3. Select the Exclude weekends and holidays checkbox, if required.
- 4. Select Schedule/Reschedule.

As part of your regular maintenance you can delete one time jobs that are not set to recur. See the System Run List of Jobs frame to complete this maintenance.

## 11. Repeat Work



Used in conjunction with enhanced repeat repairs functionality and System Flag 5212 – Use Enhanced Repeat Repairs System? This flag must be set to Y.

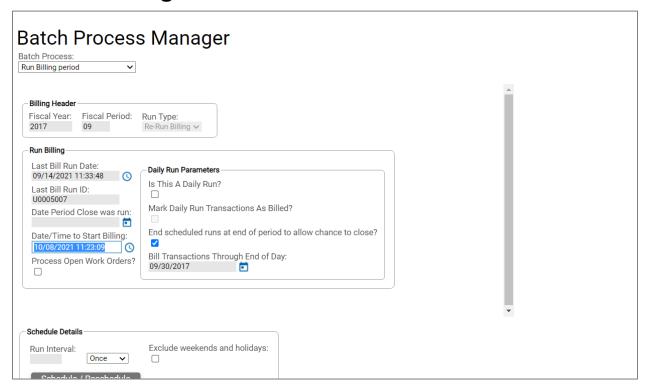
See also System Flag 5359 – Use "Ignored" WACs when evaluating job history for Repeat Repair - When a job is entered, default behavior is to check previous job occurrences whether or not the previous jobs have a WAC with the Ignore Repeat Repairs flag set to Y.

Also, when selecting a previously flagged job to see its history, jobs will appear in the history whether or not the WAC is set to Ignore.

The only function of the Ignore flag is that a job with an Ignored WAC will not itself be flagged as a Repeat Repair. However, if you set this flag to N, jobs with WACs that have the Ignore flag set will not be considered at all and will not appear in the Repeat Repair job history.

- 1 This flag is only used when System Flag 5212 is set to Y.
- This batch process should be run when:
  - Adding jobs to be tracked for the first time.
  - o Changing any job parameters in Repeat Repairs.
  - To clear the repeat flags in o job.

## 12. Run Billing Period



The Run Billing Period batch process produces a detailed report showing all the items in the current billing period. It is not directly connected to the End of Period process. It can be run anytime you would like to examine the details of the items in the current Billing Period.

The Current Billing Period is based on the last time you closed a Billing Period by running the Close Billing Period batch process. The report produced by Run Billing Period gives you the opportunity to find any mistakes in billing transactions before posting them to the current billing period ledgers.

The Run Billing Period process populates data into specific tables based on the configuration of the billing structure in the M5 System.

After the Run Billing Period process is finished the reports should be carefully reviewed to make sure the data is correct. If not, corrections can be made and the Run Billing Period batch can be executed again as often as needed.

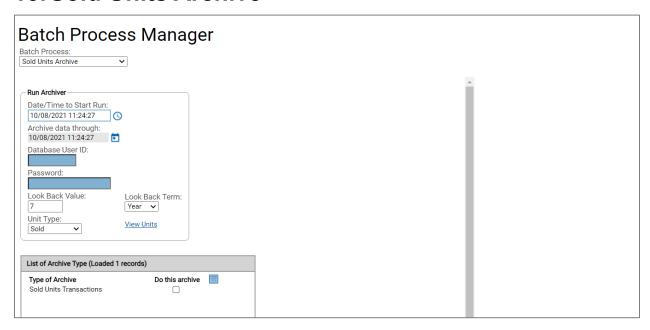
After the data is verified the billing can be finalized by running the Close Billing Period process. After the Close Billing Period process is complete no additional changes can be made to the current period.

Any changes discovered after this have to be corrected as adjustments in the new period and both items, the incorrect original charge and the corrected charge will appear in the audit trail.

#### To run the batch process:

- 1. Select Run Billing Period from the list of batch processes.
- The Billing Header will show the current fiscal year and the fiscal period for the billing transactions that will be shown on the reports.
- 3. The Run Type setting is determined by the previous history of this batch. This example shows Re-Run Billing as the type because it was already executed in the current Billing Period. The last Billing Run information is shown here.
- 4. If the billing period has not already been closed you will be able to set up the details discussed in the next steps. Most importantly, the Run Type will include Run Billing in addition to Re-Run Billing.
- 5. Enter the Date/Time to Start Billing. Selecting the field defaults to the current date and time.
- 6. Select the Process Open Work Orders checkbox if you want the billing to include charges on open work orders.
- 7. The Daily Run Parameters area allows billing to be configured to run on a daily basis. You can choose to mark the transactions as billed and control the end date of run.
- 8. Select the run interval.
- 9. Select the Exclude weekends and holidays checkbox, if required.
- 10. Select Schedule/Reschedule.

#### 13. Sold Units Archive



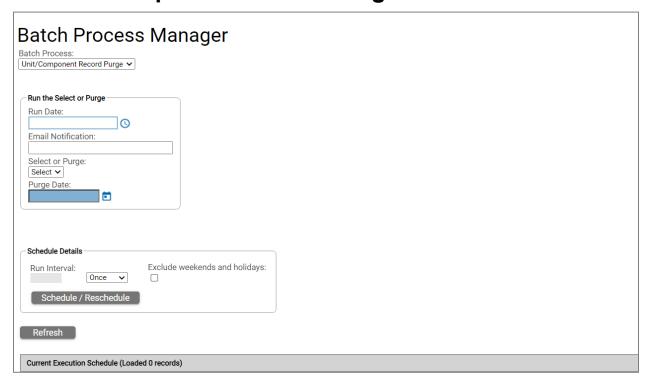
The Sold Units Archive batch process is a customer-specific batch process that provides the ability to archive units from M5. This process will remove all the historical data behind the units to limit the amount of data being searched when retrieving data from the M5 application.

The Look Back Value, Term, and Type defines which units and the cutoff for which of those units are eligible to be archived.

For example, if the term is set to years, the value is 7, and the unit type is Sold, then units sold more than seven years ago would be eligible to be archived by the batch process.

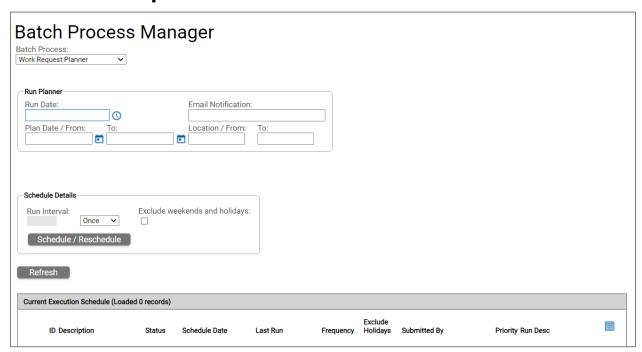
- The View Units hyperlink allows you to view a list of units that match your parameters before running the batch process.
- This is an important step. It is vital to verify the units being archived to ensure there are no mistakes or necessary changes.
- After archived, the data cannot be recovered.
- This process is intended to be run on a yearly basis (during off hours) by only authorized users.

# 14. Unit/Component Record Purge



This batch process allows for the purging of disposed of (sold) assets after a determined amount of time has passed since the date of sale. The process selects and then permanently deletes asset records based on the defined batch process parameters when the user schedules the program.

## 15. Work Request Planner



The Work Request Planner is a batch process to be used in conjunction with the Shop Planning module.



Recommended to be run at the end of each Forecaster run but can be run as a standalone process.



The maintenance location parameter will select work requests be due date for the location scheduled shift.

- Planner will replace the lesser of the hours for that schedule shift and the estimated hours for the WR.
- Remaining house will be placed in the next schedule shift or day, depending on the maintenance location parameters.
- This process repeats until the work request's hours are exhausted.



The planner will not attempt to place time on a schedule shift at a location where no employees are scheduled to work, or where the schedulable percentage time for that location and shift are zero.

# **Updates**

Release	Section	Description
23.2	All sections	Applied miscellaneous writing style updates throughout the document.
24.0	7. Forecaster	Updated the reference to the Forecaster Application User Guide.