

Version 25



Trapeze

Enterprise Asset Management

Setting Up Preventive Maintenance Programs

Reference Guide

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Customer Care is available Monday through Friday, 8:00 a.m. to 8:00 p.m., Eastern Standard Time.

Toll-Free Telephone: 1-877-411-8727

E-mail: cc@trapezegroup.com

FTP Site: <https://ftps.trapezegroup.com/>

Web Site: <https://collaborate.trapezegroup.com>

The website provides access to Trapeze Collaborate which offers resources to implement and operate the software, search knowledge, participate in communities, log/track service requests, sign-up for release alerts, view product health recommendations, and download updates or documentation. For secure access to Collaborate, contact Customer Care through the website or by calling the number above.

Product Compatibility

Refer to the latest [Product Compatibility](#) information on Trapeze Collaborate for requirements including operating system information, databases, Crystal reports, network protocol, HTTP servers and browsers that are supported.

Setting Up Preventive Maintenance Programs – Process Guide

Version 25.x

February 2025

Contents

1. Overview.....	1
Requirements and Prerequisites.....	1
Enterprise Portal Screen Access.....	1
2. Understanding Preventative Maintenance Programs	3
Class PM Programs	3
Individual PM programs.....	3
PM Programs vs. Inspections	3
3. Setting Up Preventive Maintenance Programs	5
Setting up a PM Service	5
Basic Info Tab.....	5
Functions Tab.....	5
Meter Info Tab	5
Class PM Service Pattern Tab	6
PM/Inspection Detail Tab	7
Individual PM Service Schedule Tab	10
Configuring the PM Program Type.....	11
Creating PMs	12
Create a new task.....	12
Create the PM Checklist Items	12
Associate PM Service and PM Task.....	12

1. Overview

This guide provides information about setting up Preventive Maintenance (PM) Programs. It includes a general description of both Class and Individual PMs and outlines the Enterprise Portal screens involved in the process.

Requirements and Prerequisites

Trapeze EAM Application 16.0 or higher

Trapeze EAM Web Modules 16.0 or higher

Enterprise Portal Screen Access

Edit access will be needed for the following screens:

Setup > Equipment Class – Primary Information

Equipment class ID: NF-D35-04-2300

Class PM Service Pattern

PM services in one cycle: 8

PM service interval every: 3 MONTHS

Row #	Slot no	Blank slot	PM service	Description
1	1	☐	A	PM SERVICE A
2	2	☐	B	B SERVICE
3	3	☐	C	C SERVICE
4	4	☐	D	PM SERVICE D
5	5	☐	E	PM SERVICE E

Equipment Units > Asset Primary Information

Equipment ID: 2303

2004 NEW FLYER D35LF BUS NF-D35-04-2300 35'

Asset type: ASSET

Basic Info

Model year: 2004

Manufacturer ID: NEW FLYER

Model ID: D35LF

Equipment type: NF-D35-04

PM program type: INDIVIDUAL

Description: BUS NF-D35-04-2300 35' PASSENGER TRANSIT

Color:

Serial number: 5FYD2GV194U027198

Asset number: H

Associated file:

Path and file name:

Description:

Setup > Shop Activity > Tasks > Task Primary Information

Task ID

Basic Info

Description

Task type

REPAIR GROUP
REPAIR TASK
PM SERVICE
PM TASK
INSPECTION

 Repair task ID associated with PM task
Default priority ID
Benchmarking task ID

☐ Inventory rebuild
☒ Ignore comebacks
☐ Always on repair work orders
☐ Always on PM work orders
☒ Active

Associated file
Path and file name
Description
Override time code for indirect time
Default account ID for indirect time

Setup > Equipment Units > Equipment Class – Class/Task Information

Equipment class ID

Task or standard ID

PM Tasks

☐ Checklist performance is tracked by exception only

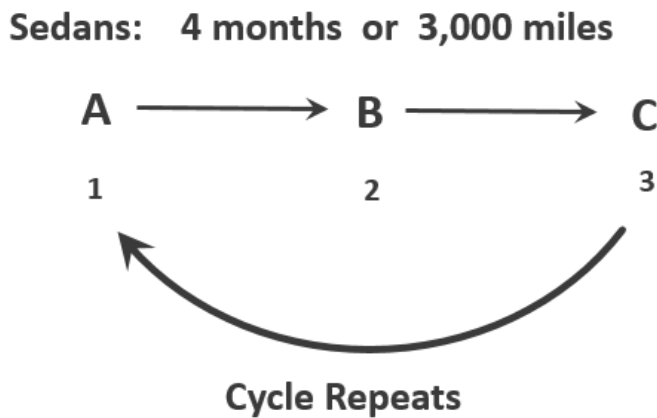
Row #	Delete	PM task ID	Sequence	Test type ID	Test group ID	Standard job ID	Description
1	☐	999-002	20				CHECK COVER
2	☐	999-007	70				CHECK FOR DEBRIS
3	☐	999-008	80				CHECK HORN(S) BUTTON OPERATION(S).
4	☐	999-009	90				CHECK THE OPERATION OF DIRECTIONAL AND HEADLIGHT FT SWITCH
5	☐	999-010	100				CHECK THE CONDITION AND OPERATION OF SUN VISORS.
6	☐	999-011	110				CHECK AMEREX FIRE AND/OR GAS DETECTION
7	☐	999-012	120				CHECK THE OPERATION OF THE RADIO; PA SYSTEM; AND SPEAKERS
8	☐	999-013	130				CHECK FRONT DOOR AIR RELEASE WITH POWER OFF.

2. Understanding Preventative Maintenance Programs

In a PM program, the parameters at which a specific PM service should be performed on equipment are defined. The PM parameters can include a period of elapsed time, the equipment meter usage and/or the amount of fuel consumed by the equipment. The PM program can be defined for an individual equipment unit or for a class of similar equipment. The two types of PM programs are Class PM programs and Individual PM programs. Both Class PM programs and Individual PM programs can be used simultaneously.

Class PM Programs

Class PM programs are a repeating cycle of services. The number of different services in the pattern depend on the number of unique services that are required to maintain the equipment assigned to the PM class.



Individual PM programs

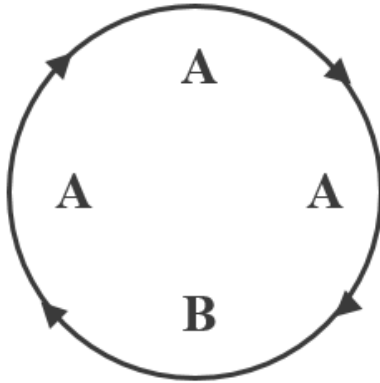
Individual PM programs can be used for “one-off” pieces of equipment that do not fit into the class-based cycle. Individual PM programs are also useful if you do not want the PM services to be linked in a cycle to other services.

PM Programs vs. Inspections

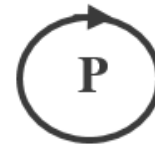
Inspections are recurring equipment services that are not part of the normal preventative maintenance service cycle.

Unlike PMs, Inspection due dates do not affect the Next PM Due Date. In addition, Inspections are strictly date-based as opposed to PMs which can be date-based, meter-based or fuel-based.

PM Cycle



Inspection Services (separate from PM cycle)



3. Setting Up Preventive Maintenance Programs

Setting up a PM Service

On the Equipment Class – Primary Information screen, load the equipment class for the Class PM you are creating. Ensure that all necessary equipment has this class in the PM Program field of the Asset Primary > Classes screen.

The remainder of this section will walk through each tab required for Class PMs to be created. It will not walk through every function of each tab.

Basic Info Tab

Defined group of class identifiers. The **Require class type for equipment classes** field on the **General Info** tab of the **Data -> Equipment Units -> Setup -> Options** screen specifies whether information in this field is required.

The PM Program type will be defined on this tab.

Functions Tab

The **Functions** tab enables you to display and specify the types of activities performed on equipment units assigned to the equipment class. You can assign equipment units to equipment class IDs on the **Classes** tab of the **Equipment Units -> Asset Primary Information** screen.

Check all boxes that apply. At a minimum, PM Program must be selected.

Meter Info Tab

Ensure a Meter type is selected that is in line with the equipment. For example, MILES for a bus.

Row #	Delete	Meter type	PM meter override	PM soon due range	Comeback range	Maximum usage gap	Deny fuel if PM late by x me
1	☐	MILES	6000	0	0	0	0

PM fuel quantity override

Amount of fuel consumption since last PM at which equipment units (or linear assets) in the class become due for PM even if the PM due date or meter readings do not yet indicate a PM is due. It can be any value greater than zero. This field is optional.

Deny fuel if PM late by x days

Number of days that an equipment unit may be late for preventive maintenance service before it will be denied fuel. Maximum field length is five characters. Must be a positive number if entered. (If this field is zero or left blank, the check for days late never occurs and fueling is never denied.) Optional.

PM meter override

Number of meter units accumulated since the last PM at which the next PM will be due, even if the next PM due date has not yet been reached. This field is optional.

Deny fuel if PM late by x meter units

Number of meter units by which an equipment unit may be late for preventive maintenance service before it will be denied fuel. Maximum field length is six characters. Must be a positive number if entered. If this field is zero or left blank, the check for days late never occurs and fueling is never denied. This field is optional.

Class PM Service Pattern Tab

A PM-service pattern (for example, an A service every 6 months, a B service every 12 months, and a C service every 24 months) can include up to 26 different services (A to Z).

Equipment class ID: NF-D35-04-2300

Class PM Service Pattern

PM services in one cycle: 8 PM service interval every: 3 MONTHS (dropdown: MONTHS, WEEKS, DAYS)

Row #	Slot no	Blank slot	PM service	Description
1	1	☐	A	PM SERVICE A
2	2	☐	B	B SERVICE
3	3	☐	C	C SERVICE
4	4	☐	D	PM SERVICE D
5	5	☐	E	PM SERVICE E

PM services in one cycle

If there is no PM program for this equipment class, this field should contain a zero (0). Otherwise, it is the number of PM service intervals to elapse before the pattern repeats from the beginning.

PM service interval every ____

This field consists of two parts. The first part is the number of days, weeks, or months that one-time interval (filled or empty) represents. The second part has a list box:

- **MONTHS:** Service intervals are measured in months.
- **WEEKS:** Service intervals are measured in weeks.
- **DAYS:** Service intervals are measured in days.

To set up irregular intervals between the services, select a time interval that represents the smallest interval between any two services and that is also small enough so that all time intervals are integral multiples of it.

The following fields specify the time intervals between each PM service that the **PM/Inspection Detail** tab assigns to the class. These time intervals create the class's *service pattern*. The system examines these fields to determine the next PM due date for equipment units in the class. (If the **Meter Info** tab or the **Class PM** tab on the **Equipment Units -> Asset Primary Information** screen defines meter or fuel PM overrides, the equipment unit may become due for a PM because of accumulated meter usage or fuel consumption, rather than the time period specified here by the class's PM service pattern.)

Slot no

Each slot number is a time interval for PM, controlled by the **PM service interval every ____** field. The time intervals between slots determine the service pattern. This field is display only.

Blank slot

If this field has a check, the row has been left blank intentionally. You can use blank rows to increase the PM service interval.

PM service

Task identifier of the preventive maintenance service. Task IDs are defined as PM services on the **Basic Info** tab of the **Shop Activity -> Setup -> Tasks -> Primary Information** screen.

PM/Inspection Detail Tab

The **PM/Inspection Detail** tab enables you to define and display details about the preventive maintenance (PM) services and inspections performed on equipment units assigned to each equipment class for PM.

PM/Inspection Detail						
Row #	Delete	PM service	Description	Oil change	Update PM schedule based on date	Extend date due if __ days out of ser
1	☐	A	PM SERVICE A	☒	WORK FINISHED	0
2	☐	B	B SERVICE	☒	WORK FINISHED	0
3	☐	C	C SERVICE	☒	WORK FINISHED	0
4	☐	D	PM SERVICE D	☒	WORK FINISHED	0
5	☐	E	PM SERVICE E	☒	WORK FINISHED	0
6	☐	F	PM SERVICE F	☒	WORK FINISHED	0
7	☐	G	PM SERVICE G	☒	WORK FINISHED	0
8	☐	H	PM SERVICE H	☒	WORK FINISHED	0

Update PM schedule based on date

Specifies how the system computes the due date for the next PM service for an equipment unit in this class. The PM schedule is updated each time you finish or close a work order. To preserve the specified interval between services to provide the flexibility to allow for events that may delay the performance of PM services, specify either **UNIT IN**, **WORK FINISHED**, or **IN SERVICE**.

- **UNIT IN:** From the **Date and time in** field on work order screens. The next due date is computed based on the date the last PM work order was actually opened or closed (the PM schedule is updated when the work order is finished).
- **FIRST LABOR:** From the **Date and time first labor** field on work order screens. The next due date is computed based on the first labor date recorded for the last PM work order. Select this option if the equipment unit often arrives at the shop long before a mechanic starts to perform the work.
- **WORK FINISHED:** From the **Job status** field on work order screens. The next due date is computed based on the date and time work was completed on the last PM work order. A date in the **Work order date and time finished** field on work order screens signifies that the work is complete.
- **IN SERVICE:** From the **Equipment status** field on the **Status** tab of **Equipment Units - > Asset Primary Information** screen. The next due date is computed based on the date and time the equipment unit was placed back in service after the last PM work order was closed. A date in the **Work order date and time in service** field on work order screens signifies that the equipment is now in service.
- **SCHEDULED:** From the **PM scheduled** field on work order screens. The next due date is computed based on the date the last PM was scheduled regardless of when it was opened or closed. Select this option if you perform PM services promptly and want to be strict about having equipment units brought in for PM service at a scheduled time, regardless of when the service was last performed.
- **TASK COMPLETION:** From the **Date and time completed** field on the **Tasks** tab of work order screens. The next due date is computed based on the date the task was completed.

Allow update PM schedule prior due: Days

Upon a work order's close or finish, the number of days prior to the due date that the PM/Inspection schedule may be updated. Must be a positive number. Defaults to zero (0). If the specified parameters are not met, NO displays in the **Update PM schedule** field on the **Call Center (Basic Info tab)**, **Work Order Center (Tasks tab)**, and **Work Order Completion (Basic Info tab)** screens.

Allow update PM schedule prior due: Meter 1/2

Upon a work order's close or finish, the meter 1/2 reading prior to the due meter reading that the PM/inspection schedule may be updated. Must be a positive number. If the specified parameters are not met, NO displays in the **Update PM schedule** field on the **Call Center (Basic Info tab)**, **Work Order Center (Tasks tab)**, and **Work Order Completion (Basic Info tab)** screens.

Update meter due from scheduled if late

If this field has a check and a PM service is performed early or on time, the next due meter 1/2 is set to the actual performed meter 1/2 value plus override. If this field has a check and a PM service is performed late, the next due meter 1/2 is set to the scheduled meter 1/2 value plus override. If this field is blank (default), the next scheduled PM service is set to the actual meter value from the work order.

Update schedule by calendar

If this field has a check, the system uses the value specified in the **Calendar ID** field to determine when to update the PM schedule. If a calendar ID is not specified, the system uses the calendar assigned to the equipment unit's PM location.

Update to working day _____ next scheduled date

If the next scheduled PM or inspection service falls on a non-working day, this field specifies which working day should be used. Useful for shops that are not open 24 hours a day, seven days a week. Optional unless there is a check in the **Update schedule by calendar** field. This field has a choice list:

- **BEFORE:** Set date to the last working day before the non-working day (or days). The PM schedule is updated based on the working day BEFORE the next scheduled date
- **AFTER:** Set date to the first working day after the non-working day (or days); the PM schedule is updated based on the working day AFTER the next scheduled date

Apply days-based update by calendar

If this field has a check, the next PM scheduled date is based on the actual number of working days in the calendar ID. Applicable only if the **Time unit** field on the **Individual PM Service**

Schedule tab specifies DAYS. If a time unit other than DAYS is specified, the date is calculated normally.

Calendar ID

Identifier of the calendar to use to calculate the PM schedule for the next available day. This field has a list box. Required if there is a check in the **Apply days-based update by calendar** field. Otherwise, optional. Must be a valid calendar ID if entered. If this field is blank, the calendar for the equipment unit's location determines the calendar date.

Calendar IDs are defined on the **Data -> Setup -> Organization Structure -> Calendars** screen.

Minimum days buffer

Minimum number of days that must elapse between inspections or testing, as mandated by the Federal Railway Administration (FRA). Must be greater than or equal to zero.

Individual PM Service Schedule Tab

The **Individual PM Service Schedule** tab enables you to display and define, for equipment classes, a repeating sequence of PM services to perform on equipment units assigned to a PM program type of INDIVIDUAL on the **Basic Info** tab of the **Equipment Units -> Asset Primary Information** screen. To do this, you specify both a time interval between performances of the services and the consecutive order of services.

Equipment class ID

NF-D35-04-2300

NF-D35-04-2300

Individual PM Service Schedule

Row #	Delete	PM service	Meter 1 override	Meter 2 override	Fuel override	Number of time units	Time unit
10	☐	BUS - MAJOR	7000	0	0	1	MONTHS
11	☐	BUS - 3YP	150000	0	0	36	MONTHS
12	☐	BUS - 6MFIRE	25000	0	0	6	MONTHS
13	☐	BUS - AIRTNK	150000	0	0	36	MONTHS
14	☐	BUS - DYNO	150000	0	0	39	MONTHS
15	☐	BUS - FRBRNG	60000	0	0	14	MONTHS
16	☐	BUS - DPHGM	100000	0	0	24	MONTHS
17	☐	BUS - SLACKS	100000	0	0	24	MONTHS

Meter 1 and 2 override

Number of meter units after the last performance of this PM service at which to perform the same service again, irrespective of elapsed time or fuel consumption. This field is optional.

Fuel override

Quantity of fuel used since the last PM service at which the equipment unit becomes due for PM if the quantity is used before the next PM due date or meter readings that would make the unit due. This field is optional.

Number of time units

Number of time units to elapse between consecutive performances of this service on the equipment unit. Each PM service has its own interval between performances.

Time unit

Measurement of time to use for the number of time units. This field has a list box:

- DAYS
- WEEKS
- MONTHS
- END OF MONTH
- FIRST OF MONTH
- PER WEEK
- PER MONTH
- PER YEAR

Configuring the PM Program Type

On the **Asset Primary** screen, select whether the equipment supports Class PMs, Individual PMs, Both, or None.

Equipment ID: 2303 2004 NEW FLYER D35LF BUS NF-D35-04-2300 35' Asset type: ASSET

Basic Info

Model year: 2004 PM program type: CLASS, **INDIVIDUAL**, BOTH, NONE

Manufacturer ID: NEW FLYER NEW FLYER

Model ID: D35LF D35LF

Equipment type: NF-D35-04 NF-D35-04-2300

Description: BUS NF-D35-04-2300 35' PASSENGER TRANSIT

Color:

Serial number: 5FYD2GV194U027198

Asset number: H

Associated file: Path and file name: , Description:

Creating PMs

Create a new task

Create a new task with a task type of PM Service:

The screenshot shows the 'Basic Info' tab for a new task. The 'Task ID' is 'A' and the 'Description' is 'PM SERVICE A'. The 'Task type' dropdown is set to 'PM SERVICE'. Other fields include 'Repair task ID associated with PM task', 'Default priority ID', 'Benchmarking task ID', 'Inventory rebuild' (unchecked), 'Ignore comebacks' (checked), 'Always on repair work orders' (unchecked), 'Always on PM work orders' (unchecked), 'Active' (checked), 'Associated file' (empty), 'Path and file name', 'Description', 'Override time code for indirect time', and 'Default account ID for indirect time'.

Create the PM Checklist Items

To create a PM checklist item, select a task type of PM TASK.

The screenshot shows the 'Basic Info' tab for a new task. The 'Task ID' is '999-002' and the 'Description' is 'CHECK COVER'. The 'Task type' dropdown is set to 'PM TASK'. Other fields include 'Repair task ID associated with PM task' (107-004), 'FU - AIR - CLAMPS / TIES', 'Default priority ID', 'Benchmarking task ID', 'Inventory rebuild' (unchecked), 'Ignore comebacks' (checked), 'Always on repair work orders' (unchecked), 'Always on PM work orders' (unchecked), 'Active' (checked), 'Associated file' (empty), 'Path and file name', 'Description', 'Override time code for indirect time', and 'Default account ID for indirect time'.

Associate PM Service and PM Task

On the Class/Task Information screen, filter for the Equipment Class/PM Service. Add the PM Tasks to the service in the PM Tasks tab.

Setting Up Preventive Maintenance Programs

Equipment class ID	NF-D35-04-2300	NF-D35-04-2300
Task or standard ID	A	PM SERVICE A

PM Tasks

☐ Checklist performance is tracked by exception only

Row #	Delete	PM task ID	Sequence	Test type ID	Test group ID	Standard job ID	Description
1	☐	999-002	20				CHECK COVER
2	☐	999-007	70				CHECK FOR DEBRIS
3	☐	999-008	80				CHECK HORN(S) BUTTON OPERATION(S).
4	☐	999-009	90				CHECK THE OPERATION OF DIRECTIONAL AND HEADLIGHT FT SWITCH
5	☐	999-010	100				CHECK THE CONDITION AND OPERATION OF SUN VISORS.
6	☐	999-011	110				CHECK AMEREX FIRE AND/OR GAS DETECTION
7	☐	999-012	120				CHECK THE OPERATION OF THE RADIO; PA SYSTEM; AND SPEAKERS
8	☐	999-013	130				CHECK FRONT DOOR AIR RELEASE WITH POWER OFF.
<							