
Smarter Infrastructure Upgrade Planning Series

Maximo Asset Configuration Manager (ACM) 7.5

Rob Powell and Lee Cotton

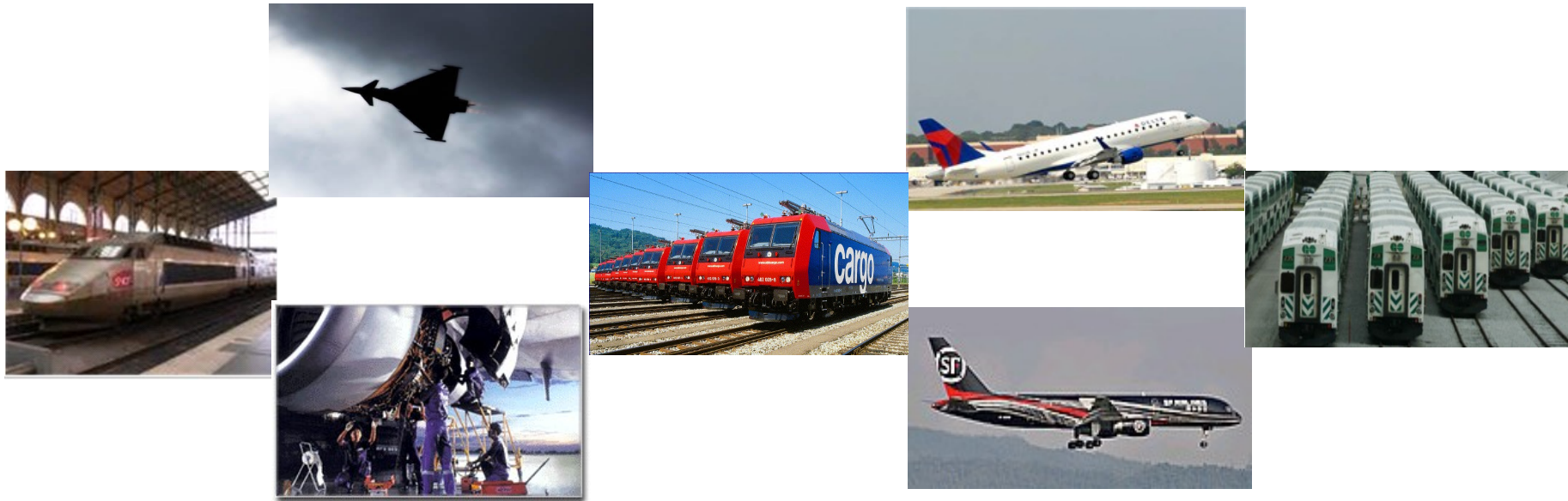
18 October 2012

Agenda

- Introduction and Objectives
- Release Time Line
- Upgrade Paths
- Feature Deep Dive

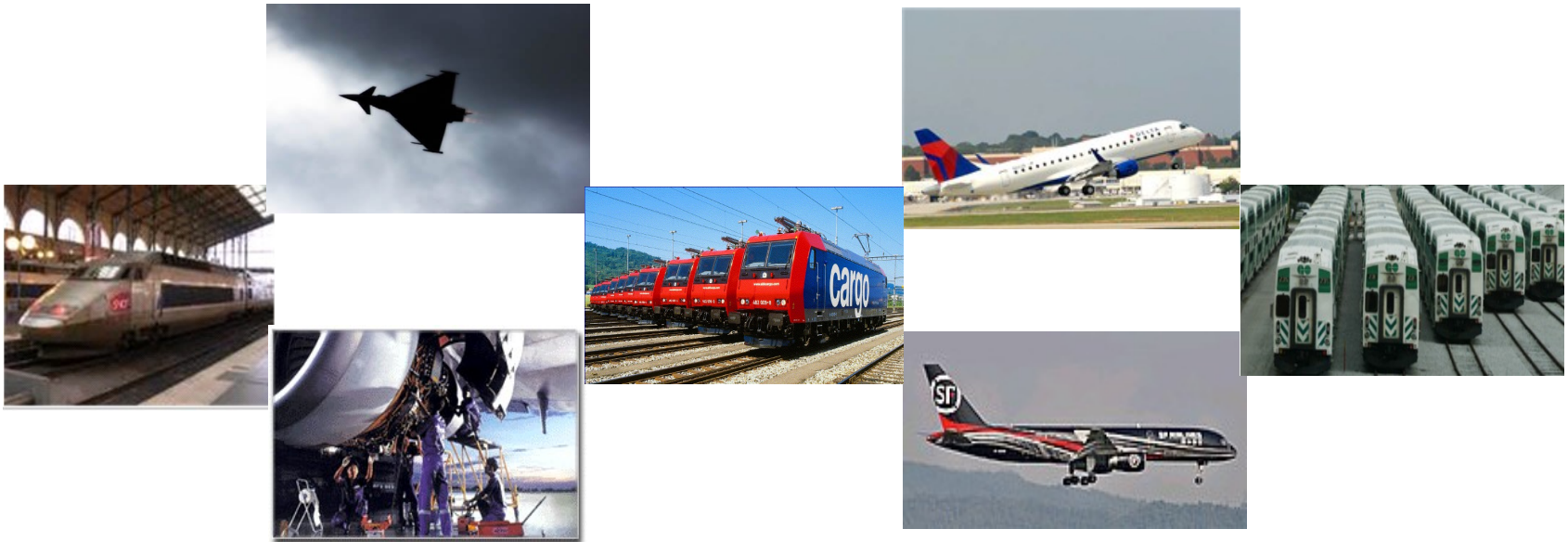
Introductions and Objectives

- Rob Powell
 - Lead Designer & Architect for Maximo ACM
- Lee Cotton
 - Designer & Senior Software Developer for Maximo ACM

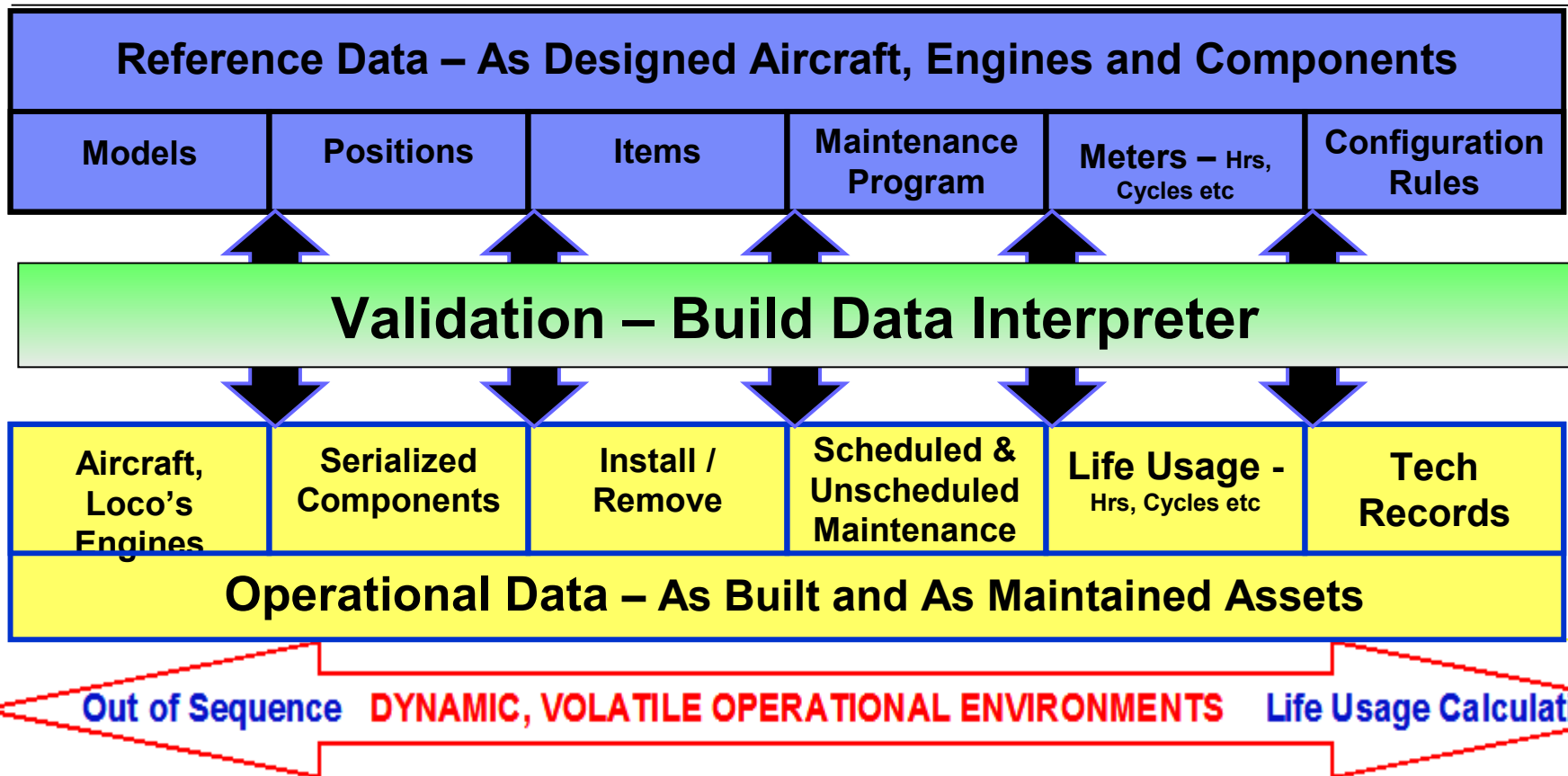


Maximo Asset Configuration Manager (ACM)

- **Maximo ACM** is a 'Maximo Add On Solution'
- Designed to manage the configuration management requirements for complex, high value assets where: Safety, Regulatory Compliance and Asset Availability are critical to the organization
- Asset Configuration Manager automates complex asset lifecycle management by more efficiently managing the current and historical configurations of complex assets and component assets.



Maximo ACM – Design Concept



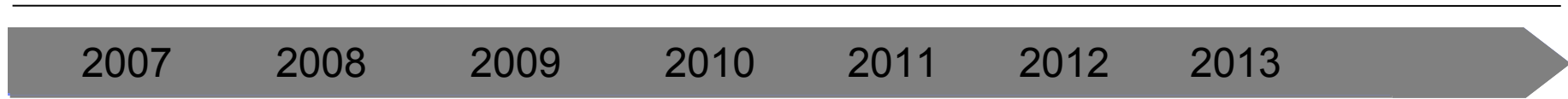
Advantages of the ACM Design – compliance and efficiency!

- Minimises number of Aircraft Models required
- Dynamically validates and alerts aircraft configuration
- Enables out of sequence transactions
- Efficient process for Design Change, e.g. EO / AD / SB effectivity
- Optimisation of Inventory

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Maximo ACM Release Time Line



Version	Release Date	Change
6.2.1	Mar-07	Initial release
6.2.3	23-Jun-08	Fix Pack
6.2.4	12-Mar-09	Fix Pack
7.1.0	26-Sep-08	Initial release on v7
7.1.1	18-Dec-09	Service Lifecycle Management release
7.1.1.1	14-May-10	Fix Pack
7.1.1.2	05-Jul-11	Fix Pack including BDI enhancements
7.5.0	29-Apr-11	Enhancements to Planning functionality
7.5.0.1	14-Oct-11	Fix Pack including BDI, MIF & V-tree enhancements

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Upgrade Paths

Product	v6 Requirements	v7.1 Requirements	v7.5 Requirements
Maximo Asset Configuration Manager	<ul style="list-style-type: none"> • Maximo Asset Management 6.2.8 • Maximo Asset Configuration Manager 6.2.4 	<ul style="list-style-type: none"> • Maximo Base Services 7.1.1.10 • Maximo Asset Configuration Manager 7.1.1.2 	<ul style="list-style-type: none"> • Maximo Base Services 7.5.0.3 • Maximo Asset Configuration Manager 7.5.0.1

Hot Fixes

Latest hot fix for Maximo Base Services and the Industry Solutions and add-ons should be installed.

NB. Note your system must be at Maximo 7.1.1.10 before attempting the upgrade to 7.5. There is no direct upgrade from Maximo 6.2.8 to Maximo 7.5

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IBM Maximo 7.5 Functional Modules



Asset Management

- Locations
- **Repair Facilities***
- Asset
- **Asset Templates***
- Failure Codes
- Linear Assets
- **Visual Control***
- Condition Monitoring
- Meters
- Meter Groups
- Asset Attributes (CM)
- Asset Attributes Setup (CM)
- Assets (CM)
- **Models (CM)* includes MEL**
- New Asset Assemblies (CM)
- New Asset Assemblies -Receiving (CM)
- **BDI Queue Status (CM)***
- Build Position Master (CM)
- CM Item Master (CM)
- Technical Records (CM)
- Capability (CM)
- **Company Master (CM)***
- DVL Setup (CM)
- Events Management (CM)
- Fleet Management (CM)
- Fleet Usage Load (CM)

Work Management

- Job Plans
- **Job Plan Revisions***
- Routes
- Service Requests
- Work Order Tracking
- **Assignment Tab***
- **Hard/Soft Reservations***
- **Repair Facilities***
- Safety
- Quick Reporting
- Labor/Crafts
- Tools
- Preventive Maintenance
- **PM Forecasting***
- Master PM
- Assignment Manager
- **Job Plans (CM)***
- **Log Book (CM)***
- Maintenance Forecasting (CM)
- Maintenance Locations (CM)
- **Maintenance Planning (CM)***
- **Master PM (CM)***
- **PM Groups (CM)***
- **Preventive Maintenance (CM)***
- **Work Order Tracking (CM)***

Materials Management

- Item Master
- Storerooms
- Inventory
- **Inventory Usage***
- **LIFO/FIFO Costing***
- **Consignment***
- **Transfer via shipment***
- **Default Costing***
- Condition Codes
- Stocked Tools
- Service Items
- Inventory (CM)
- Issues and Transfers (CM)
- Item Master (CM)

Purchasing

- Request for Quotation
- Receiving
- Receiving Inspections
- **Shipment Receiving***
- Purchase Requisitions
- Invoices
- **Invoice Reversals***
- **Revisions***
- Purchase Orders
- Receipt Tolerance*
- Desktop Requisitions
- Purchase Orders (CM)
- Purchase Requisitions (CM)
- Receiving (CM)
- Request for Quotations (CM)

Contract Management

- Purchase Contracts
- Master Contracts
- Warranty Contracts
- Lease / Rental Contracts
- Labor Rate Contracts
- **Premium Pay Rates***
- Payment Schedules

Service Management

- **Service Groups***
- **SLA Management***
- Incidents
- Problems
- Changes
- Releases
- Solutions

*** New or enhanced in Version 7.5**

Enhanced Workflow in SLAs and Escalation Manager

Configuration – UI, Database Fields, and Applications; Context Based Screens

Maximo Integration Framework (MIF) – Native Integration Capabilities. Migration Manager. Upgrade across suite.

KPIs / Reporting / Analysis

Security & Administration

Maximo ACM 7.5 Release – Total of 36 Applications!

- | | | |
|-----------------------------|---------------------------------------|-------------------------------|
| Asset Attributes (CM) | Inventory (CM) | Organizations (CM) ~ |
| Asset Attributes Setup (CM) | Issues and Transfers (CM) | PM Groups (CM)* |
| Assets (CM) | Item Master (CM) | Preventive Maintenance (CM) ~ |
| BDI Queue Status (CM) | Job Plans (CM) ~ | Purchase Orders (CM) |
| Build Position Master (CM) | Log Book (CM) ~ | Purchase Requisitions (CM) |
| CM Item Master (CM) | Maintenance Forecasting (CM) | Receiving (CM) |
| Capability (CM) | Maintenance Locations (CM) | Request for Quotations (CM) |
| Company Master (CM)* | Maintenance Planning (CM) ~ | Result Set Setup (CM)* |
| DVL Setup (CM) | Master PM (CM) ~ | Security Groups (CM) |
| Events Management (CM) | Models (CM) ~ | Series (CM) |
| Fleet Management (CM) | New Asset Assemblies (CM) | Technical Records (CM) ~ |
| Fleet Usage Load (CM) | New Asset Assemblies - Receiving (CM) | Work Order Tracking (CM) ~ |

* New in 7.5

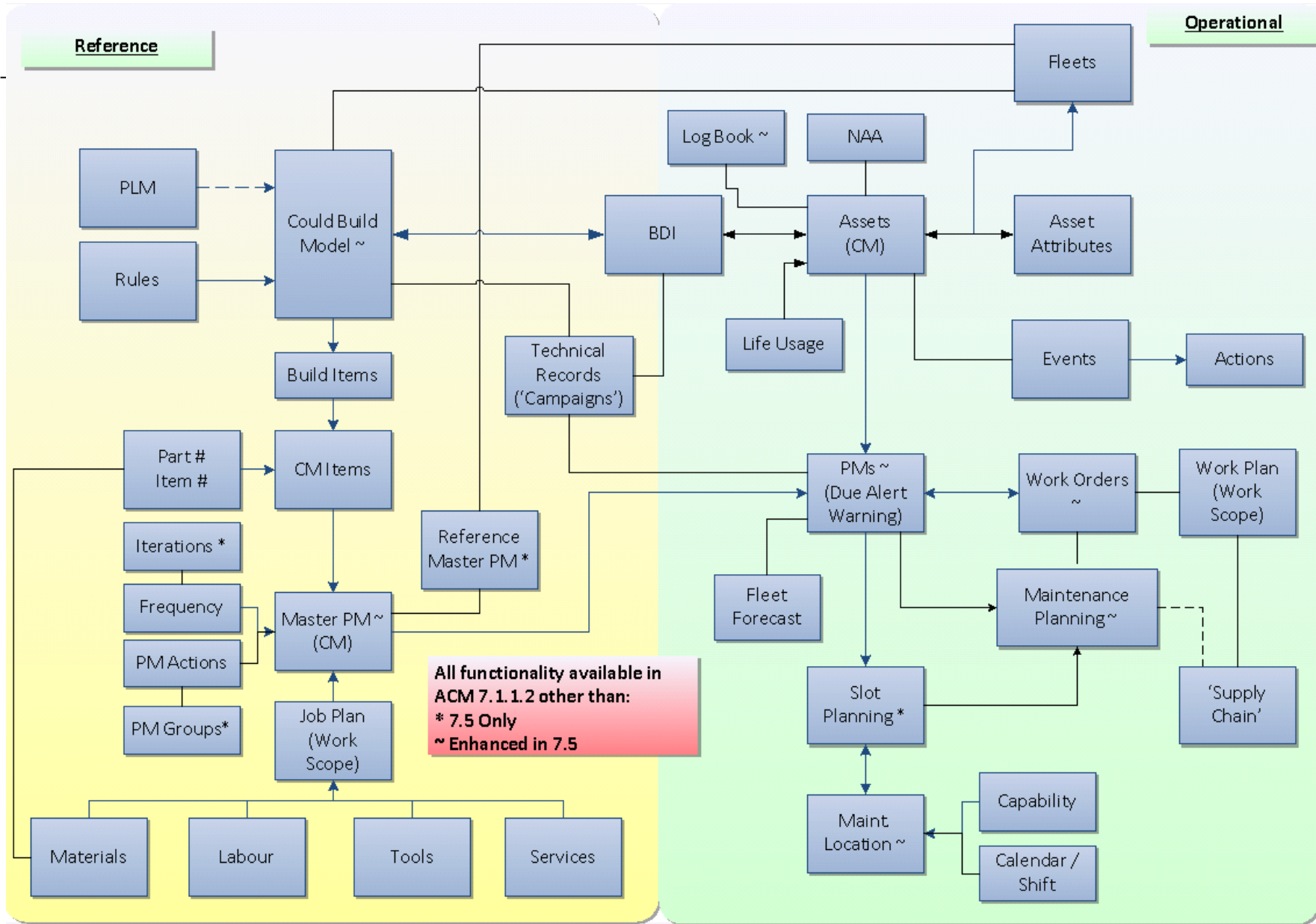
~ Enhanced in 7.5

Maximo ACM 7.5 - Content

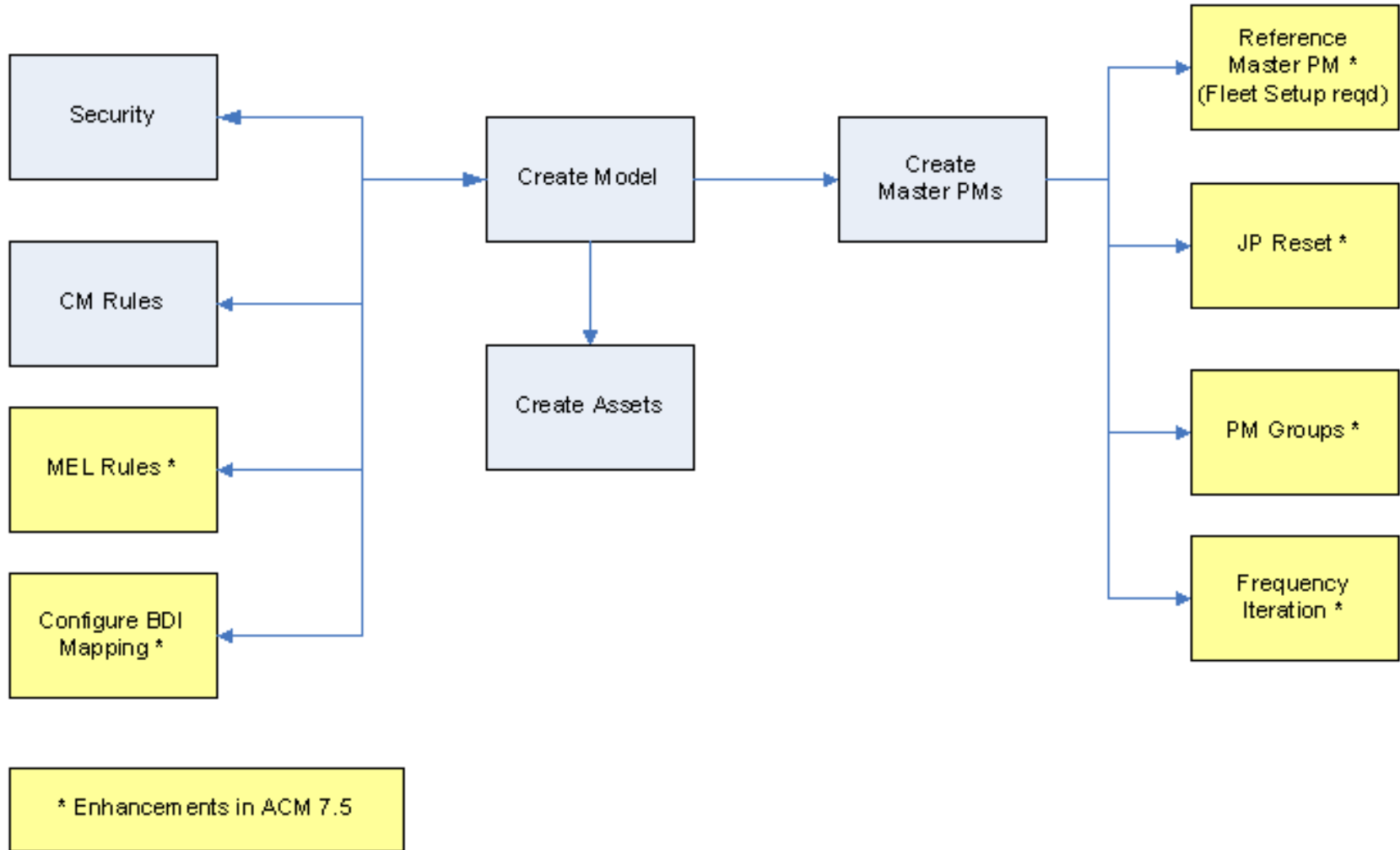
- The following major functional Enhancements were introduced as part of the Maximo ACM 7.5 release:
 - Minimum Equipment List (MEL) capability
 - PM Enhancements
 - Slot Planning (Pt 2)
 - Procurement & Inventory (cannibalization) (Pt 2)
 - Event Planning / Work Packaging (Pt 2)
 - Performance Enhancements

- Maximo AM 7.5.0.1 Fix Pack:
 - Enhancement to MIF
 - BDI Enhancements
 - V-tree enhancements

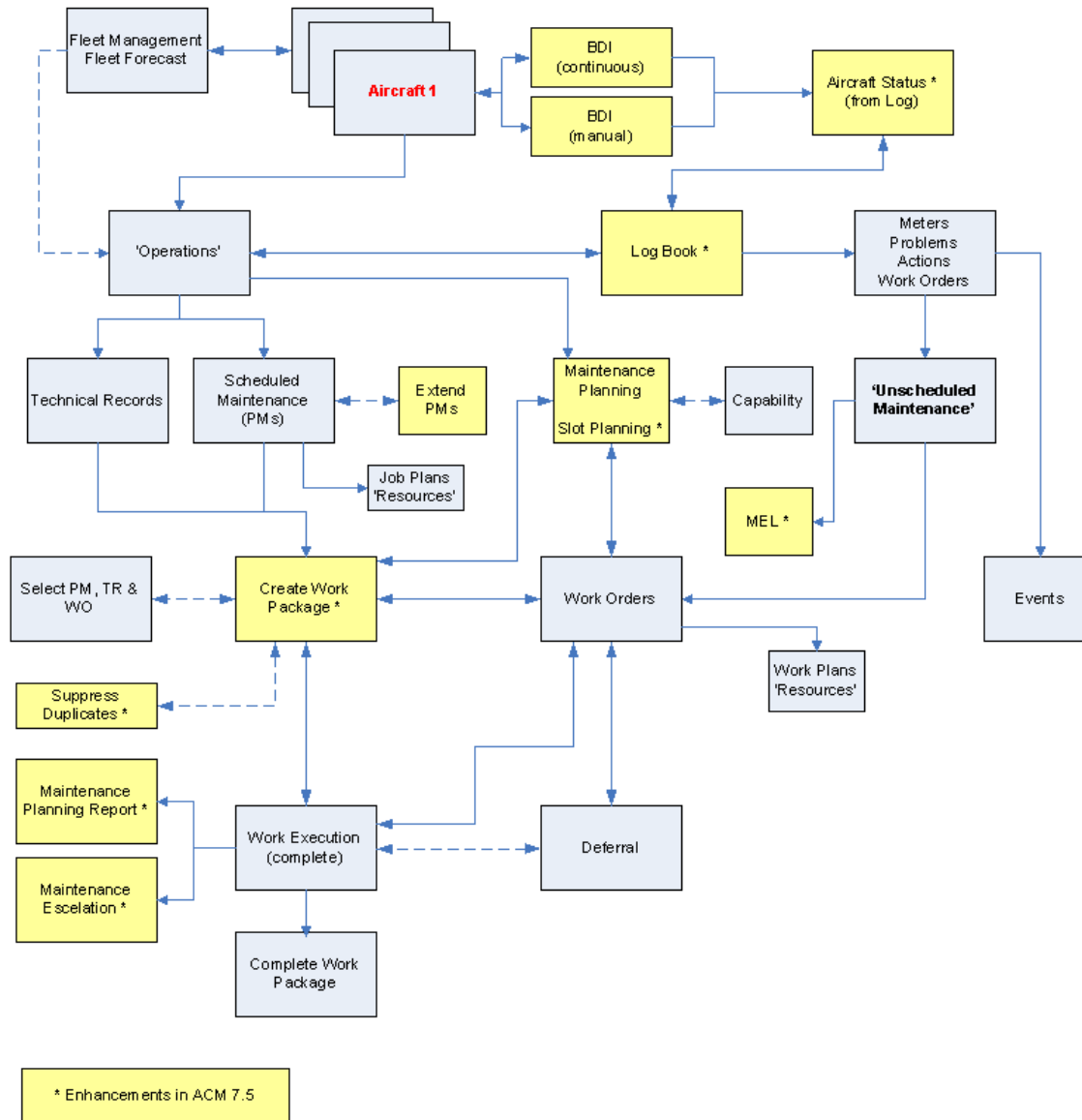
ACM 7.5 'White Board' (schematic)



ACM Reference Data – Changes in 7.5



ACM Operational Data – Changes in 7.5



Minimum Equipment List (MEL)

- MEL is a standard requirement for aircraft operators and is also relevant to rail operations.
- MEL provides the ability to operate the assets in accordance with the approved and regulated configuration. MEL defines the minimum list of equipment (assets) required to be fitted for the assets to operate. It categorises each MEL item and provides the capability to defer the time for which the asset may operate with one or more pieces of equipment not fitted.
- This requirement relates to the following existing ACM applications: Model, WO Tracking (CM), WO Deferral, Logs (CM) and BDI validation processes.

MEL – Reference Data – in the Model

MEL Flag – conditional UI

The screenshot shows the IBM Modeler CM interface. The 'MEL List' tab is selected and circled in red. In the 'Configuration Control' section, the 'MEL?' checkbox is checked and circled in red. Other configuration options include LCN Structure (1), Top LCN (L), and various checkboxes for 'Instalable?', 'Promote Life to Platform?', and 'Security Restriction?'.

Define MEL Rules – the system identifies the number installed by Build Item and Label

The screenshot shows the IBM Modeler CM interface with the 'MEL List' tab selected and circled in red. A table displays equipment items with columns for Label, Build Item, Position, Indicator, Indenture, and LCN. A red arrow points from the 'MEL' tab to the table. Below the table, the 'Minimum Equipment List' section shows details for a 'MODULE' with label '10000', including 'Number installed' (3), 'Number required' (3), and 'Category' (A).

Label	Build Item	Position	Indicator	Indenture	LCN
000000	RP1	E	1	L	
10000	MODULE	1	S	2	L0001
10000	MODULE	2	S	2	L0002
10000	MODULE	3	S	2	L0003
20000	UNIT		S	2	L0004

MEL – Operational Data – in the Asset

Invalid ME condition identified

Label	Position	Position Name	Asset	Serial #	Quantity	CM Item
000000	RP1		EP1	EP1		RP1
10000	1	MODULE	Empty			
10000	2	MODULE	EP1-2	EP1-2		11111
10000	3	MODULE	EP1-3	EP1-3		11111
20000		UNIT	EP1-6	EP1-6		33333

BDI provides details of the MEL rule.

Asset: EP1 Site: BEDFORD

Model	Variation	Revision	Hold Revision	Status	Statused	Updated	Current Configuration
RP1	RP1	0	<input type="checkbox"/>	INVALID	22/03/11 08:27	22/03/11 08:27	<input checked="" type="checkbox"/>

Label	Position	Name	Asset	Problem
000000		RP1	EP1	NAD
10000	1	MODULE	EP1	MEL

CM Item: Narrative: This is a minimum equipment list (MEL) problem. - The MODULE, 10000 when fully operational has 3 installed; currently there are 2 installed and operational. The MEL requires a minimum of 3 to be installed and operational.

Serial:

Maintenance Event:

Check maintenance plan?

MEL – Operational Data – in the Work Order

Work Order Tracking (CM)

Work Order Tracking (CM)

Find: Select Action

List **Work Order** Plans Assignments Related Records Actuals Safety Plan Log Failure Reporting Specifications

Work Order: 2331 This is a minimum equipment list (MEL) item.

Scheduled Start:

Asset: EP1 >> Rob's Model Deferrals? N

Location: NORTH >> Northern District Attachments

Work Location: >>

Work Type: MEL

Parent WO: >>

Classification: >>

Class Description:

Launch Entry Name: >>

Build Item:

Position:

Maintenance Location: >>

Reported Date: 22/03/11 08:27

Material Status Last Updated:

MEL ? : YES

Current Number Installed: 2

Number Installed at WO Gen: 2

Number Required: 3

Rectification Period: 1

Procedure Type: 0

MEL Details defined in the WO associated with the invalid MEL condition

MEL – Operational Data – in the Log Book

Log Book (CM)

Bulletins: (0) Go To Reports Start Center Profile Sign Out Help

All Records Find: Select Action

List Log Book

Log: MRO-1 MEL ? : YES Site: BEDFORD Status: ACTIVE

* Tail: EP1 Rob's Model Attachments

Trip Detail: Filter 0 - 0 of 0 Download

Trip Number	Point of Origin	Destination	Start Date	Utilization	Fuel Quantity	Operator
...No rows to display...						

New Trip

Minimum Equipment List: Filter 1 - 1 of 1 Download

Build Item	Label	Number Installed at WO Gen	Current Number Installed	Number required	Work Order	W/O Status
MODULE	10000	2	2	3	2331	WAPPR

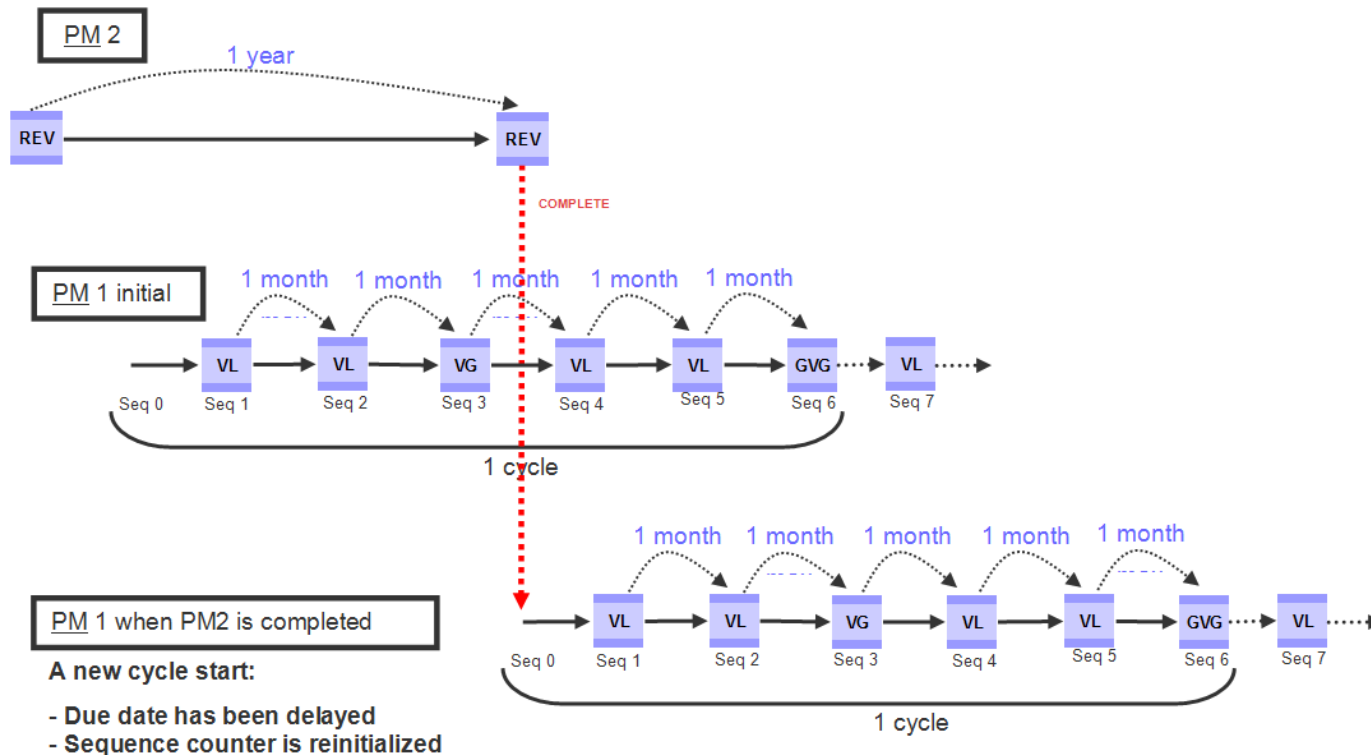
MEL Details displayed in the Log Book – ensures that the operator has visibility of open MEL conditions

PM Enhancements

- ACM has specific functionality for Master PM and PM that extends the standard Maximo capability for managing preventative maintenance. This capability has been further extended by introducing a number of new capabilities that will enable complex maintenance schedules and associated rules to be defined and managed. This includes the utilization of an average ACM meter to derive PM due date, deferral of PM due point, Job Plan sequence counter reset, grouping of PMs.

PM Enhancements - Job Plan Sequence Reset

The Job Plan Sequence reset function builds on the existing PM Actions functionality; when a PM is completed by a PM Action it is possible to 'reset' the Job Plan sequence to its initial value – this is set by a Flag on the Master PM (CM) / PM (CM).



PM Enhancements - Job Plan Sequence Reset

Reset Job Plan Sequence flag added to Master PM Actions – when true the Secondary PM’s Job Plan Sequence will be reset on completion of the Work Order associated with the ‘primary PM’.

The screenshot displays the IBM PM software interface for a Master PM (CM). The top section shows the Master PM details for ID 1018, with the 'JP Seq Complete' flag highlighted. Below this is a table of CM Items, showing a single row for 'RP1' with description 'Rob Model 1'. The 'Work Order Information' section shows 'Work Order Status' as 'WSCH' and 'Work Order Priority' as '0'. The 'Master PM Actions' table at the bottom is the key focus, with a red circle highlighting the 'Reset Job Plan Sequence' checkbox, which is checked for the 'COMPLETE' action.

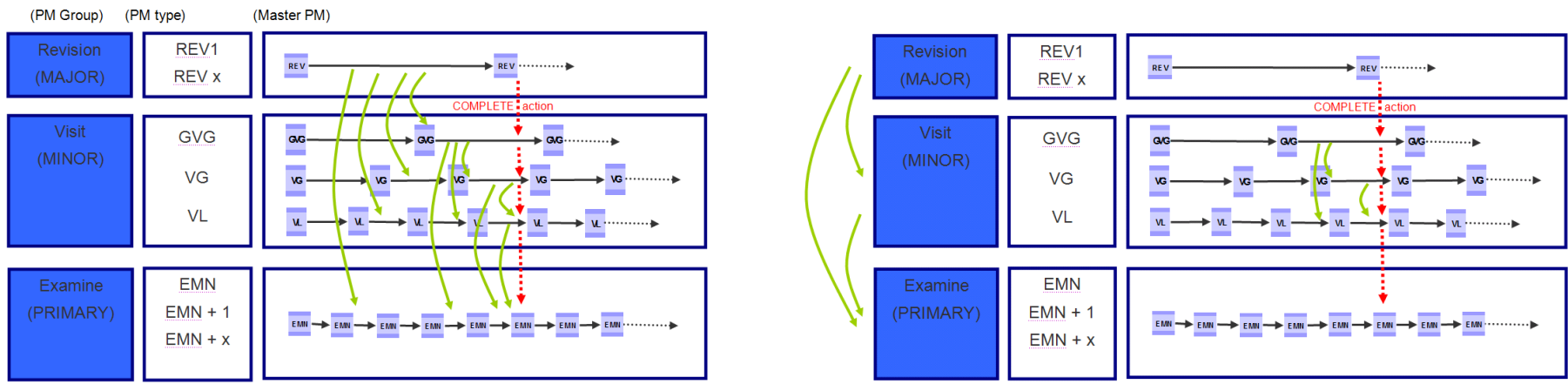
CM Item	Description	Vendor	Description
RP1	Rob Model 1		

PM Group	Action Type	Secondary Master PM	Description	Reset Job Plan Sequence	Scenario
	COMPLETE	1016	JP RESET 1	<input checked="" type="checkbox"/>	(Claim) when Primary PM is Completed

PM Enhancements - PM Groups

The PM Groups enhancement is designed to more efficiently manage multiple "PM actions". This enables the ability to classify Master PMs by "PM Groups" and thereby to enter and manage PM actions more easily. PM Groups is a new application that utilises a graphical, hierarchical UI to create, manage and view PM Groups.

In the example below the number of PM Actions required is reduced by 40%



Without PM Groups – 10
Actions required

With PM Groups – 6
Actions required

PM Enhancements - PM Groups

The screenshot displays the 'PM Groups (CM)' web application interface. The top navigation bar includes 'Bullets: (0)', 'Go To', 'Reports', 'Start Center', 'Profile', 'Sign Out', and 'Help'. Below the navigation bar, there is a search field with 'Find:' and a 'Select Action' dropdown. The main content area shows a 'Details' section for a PM Group named 'AC_REV' with the description 'Aircraft Major Overhaul (Story 2)' and a status of 'ACTIVE'. The 'Details' section includes a tip: 'Select View PM Actions in the action menu to visualize the hierarchy tree of all members and actions related to this PM group. You can right-click nodes to manage actions, members and groups in this v-tree. [More information](#)'. The main content area displays a hierarchical tree structure:

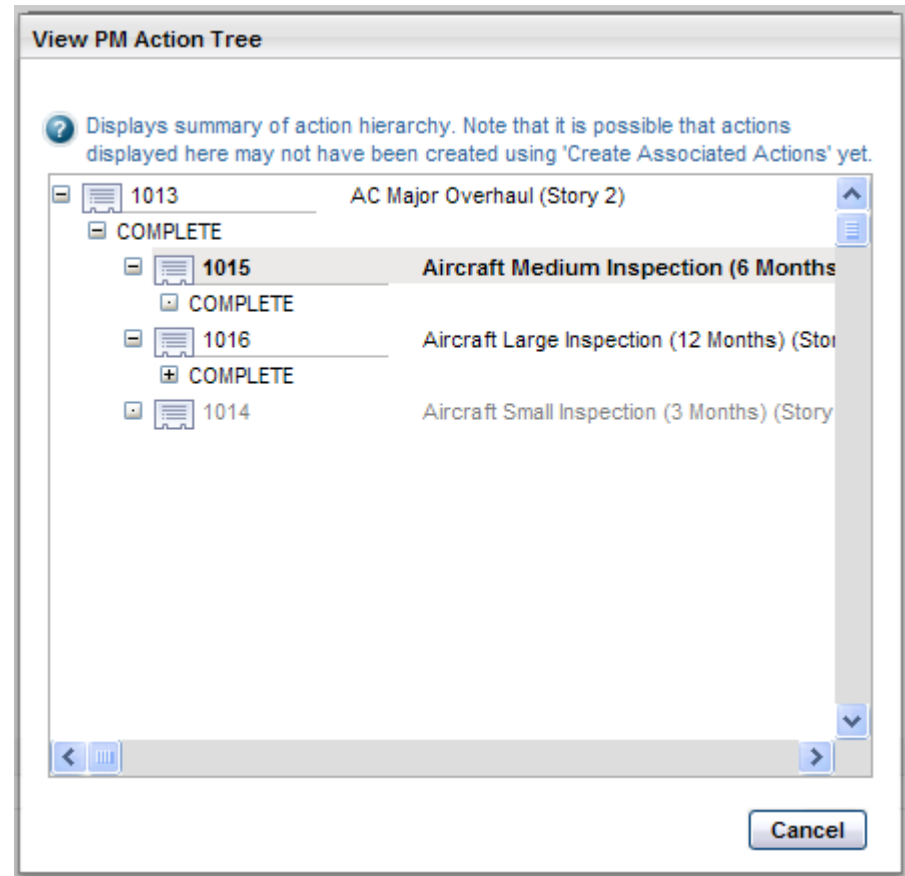
- AC_REV Aircraft Major Overhaul (Story 2)
 - Members
 - 1013 AC Major Overhaul (Story 2)
 - 1030 AC Major Overhaul (Story 2)
 - 1036 AC Major Overhaul (Story 2)
 - 1042 AC Major Overhaul (Story 2)
 - 1048 AC Major Overhaul (Story 2)
 - Actions
 - COMPLETE
 - AC_VISIT Aircraft Inspections (Story 2)
 - Members
 - 1015 Aircraft Medium Inspection (6 Months) (Story 2)
 - 1016 Aircraft Large Inspection (12 Months) (Story 2)
 - 1014 Aircraft Small Inspection (3 Months) (Story 2)

PM Groups – graphical representation of PM Groups, Master PMs and their relationships with PM Actions.

The Actions defined here are written to the Master PM as PM Actions

PM Enhancements - PM Groups

By selecting any node in the PM Action Tree can be launched to display a summary of the PM Groups, associated Master PMs, PMs and PM Actions.



PM Enhancements - Meter Average

“As a maintenance planner I want the system to calculate the next due date of a meter based PM based on the average meter utilisation of the related asset so that I can plan maintenance efficiently”.

The screenshot displays the IBM Assets (CM) interface. The main view shows the 'Initial Readings' tab for asset STAC001. The 'Details' section for the 'FLTHRS' meter is highlighted with a red box, showing the following configuration:

- Meter: FLTHRS >> Flight Hours
- Average Calculation Method: ALL (All readings)
- Sliding Window Size: [empty]
- Average Units/Day: 0.00
- Initial Reading Date: 01/01/00 00:00
- Initial Count: 0.00
- Since: 0.00
- Current: 0.00
- Predicted Life?
- Predicted Life Value: 0.00
- Active?
- Estimated?
- Default?
- Site: BEDFORD

Meter Average added to Assets (CM) / Initial (meter) tab

PM Enhancements - PM Meter Based Frequency

Meter Based Frequency Filter 1 - 1 of 1 Download

Meter	Description	Frequency	Alert Interval	Warning Interval	Units to Go	Generate WO Ahead By	PM extended by
FLTHRS	Fight Hours	2,000.00	1,500.00	1,700.00	950.00		

Details

Meter: FLTHRS >> Flight Hours

Alert Interval: 1,500.00 Average Units/Day: 73.05

Frequency: 2,000.00 Warning Interval: 1,700.00 Rollover:

Generate WO Ahead By:

Last Work Order Information Next Work Order Projections

Meter Reading: Next Meter Reading: 2,000.00

Meter Reading Date: Units to Go: 950.00

Estimated Next Due Date: 4/7/11

New Row

The meter average is used to calculate the 'Estimated Next Due Date' for a PM Meter Based Frequency

PM Enhancements - Extensions

As a maintenance planner I want to be able to extend the due date of a PM and for subsequent PM due dates to be automatically recalculated so that I can efficiently manage changes to the maintenance plan.

The screenshot shows the 'Master PM (CM)' interface. The 'Extendable?' checkbox is checked and circled in red. A 'Select Value' dialog box is open, showing two options: 'ADD TO NEXT FREQUENCY' and 'NOT ADDED TO NEXT FREQUENCY'. A red arrow points from the 'Extendable?' checkbox to the dialog box.

Extendable?

Extension impact:

Select Value

Value	Description
ADD TO NEXT FREQUENCY	When extension is complete the next occurrence = original frequency - extension period
NOT ADDED TO NEXT FREQUENCY	When extension period is complete the frequency reverts to the original frequency

Cancel

'Extendable' flag dynamically changes UI to display 'Extension Impact' – allows the extension value to be either added to the next frequency value or the value to revert to original frequency

PM Enhancements - Frequency Iterations

As a maintenance planner I want to be able to define PM frequency iterations against planned maintenance so that I can meet the regulatory and safety requirements.

Client Example: An Airline will often have a need to vary the frequency between inspections; for example, when a problem has been detected with the main landing gear it may be necessary to increase the frequency of periodic inspections. The first 2 inspections take place at 1,000 cycle intervals, the 3rd at 1,500 cycles and all subsequent inspections at 2,000 cycle intervals. A similar example may also be applied to time based frequencies by replacing cycles with days.

PM Enhancements - Frequency Iterations

‘Variable Iterations’ flag dynamically changes UI to display ‘Frequency Iterations’ frame – allows multiple iterations to be displayed with specific Job Plans per iteration if required/

The screenshot displays the Master PM (CM) interface. The 'Frequency' tab is active, showing 'Master PM 1007' and 'Frequency Iteration Test Master PM 1'. The 'Work Order Generation Information' section includes checkboxes for 'Use Last Work Order's Start Information to Calculate Next Due Frequency?' (unchecked), 'Extended Date' (disabled), 'Adjust Next Due Date?' (unchecked), and 'Update Existing PMs?' (checked). The 'Life Span' section has 'Start Date' and 'Stop Date' fields. The 'Alert and Warning Interval State' section has radio buttons for 'Absolute from Active' (selected), 'Percent of Frequency from Active', and 'Absolute prior to Due'. The 'Time Based Frequency' and 'Meter Based Frequency' tabs are visible. The 'Meter Based Frequency' section shows a table with 'Meter' (FLTHRS) and 'Description' (Flight Hours). The 'Frequency Iterations for FLTHRS' table is shown below, with columns for Frequency, Alert Interval, Warning Interval, Iterations of this Frequency, and Iteration Sequence Number. The 'Details' section for iteration 2 is highlighted, showing 'Iteration Sequence Number' 1 and 'Iterations of this Frequency' 2. The 'Job Plan' is set to 'FITESTJP1' and 'Frequency Iterations Test Job Plan 1'. A 'Variable Iterations?' checkbox is checked and circled in red, with a red arrow pointing to the 'Frequency Iterations' table.

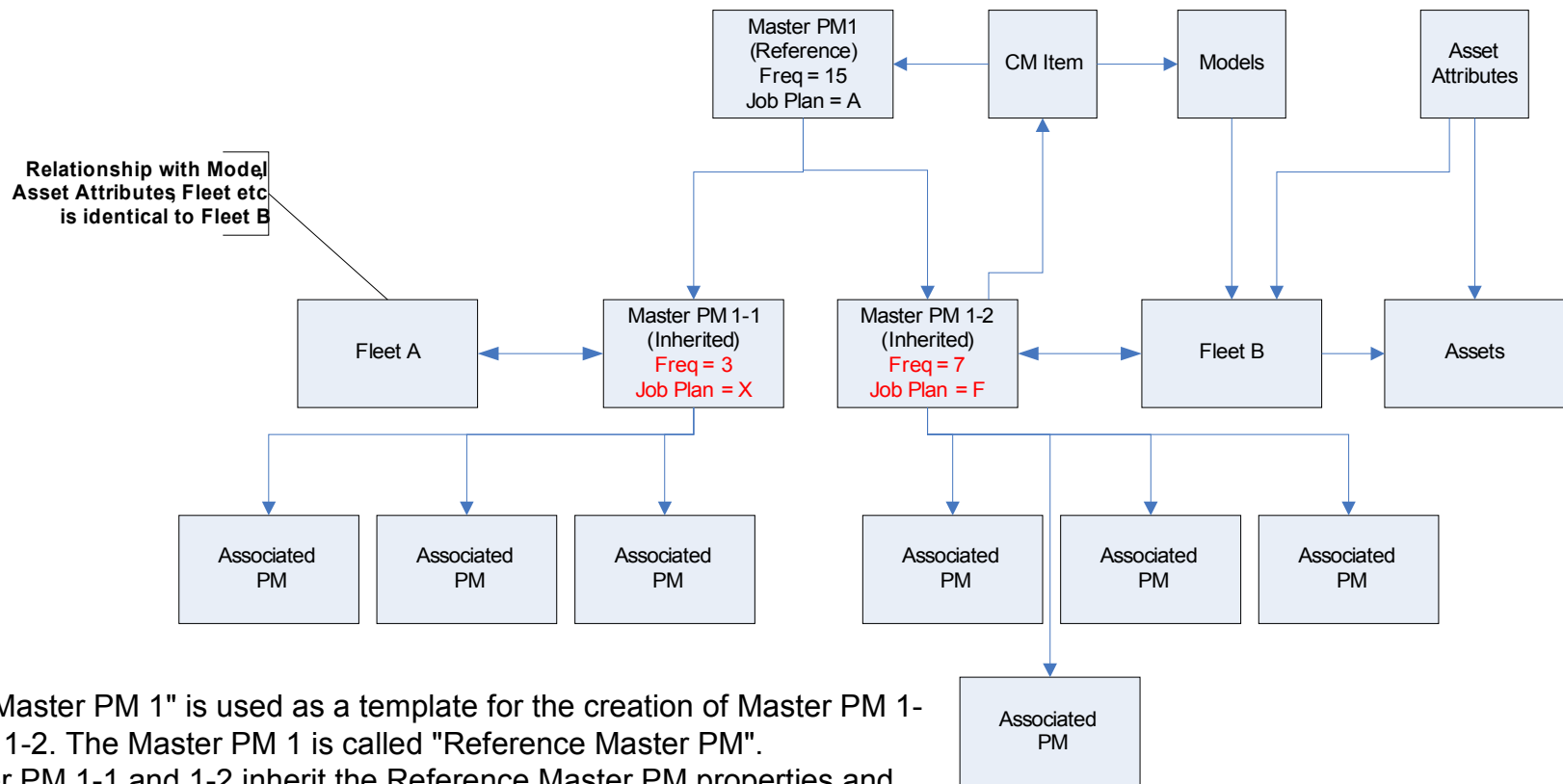
Frequency	Alert Interval	Warning Interval	Iterations of this Frequency	Iteration Sequence Number
2,000.00	1,800.00	1,900.00	2	1
1,000.00	800.00	900.00	1	2
500.00	400.00	450.00		3

Details for Iteration 2:

- Iteration Sequence Number: 1
- Iterations of this Frequency: 2
- Job Plan: FITESTJP1
- Frequency Iterations Test Job Plan 1

PM Enhancements - Reference Master

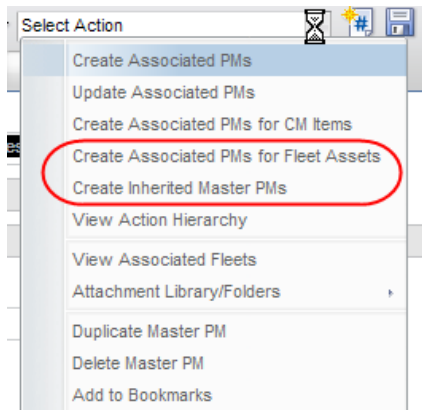
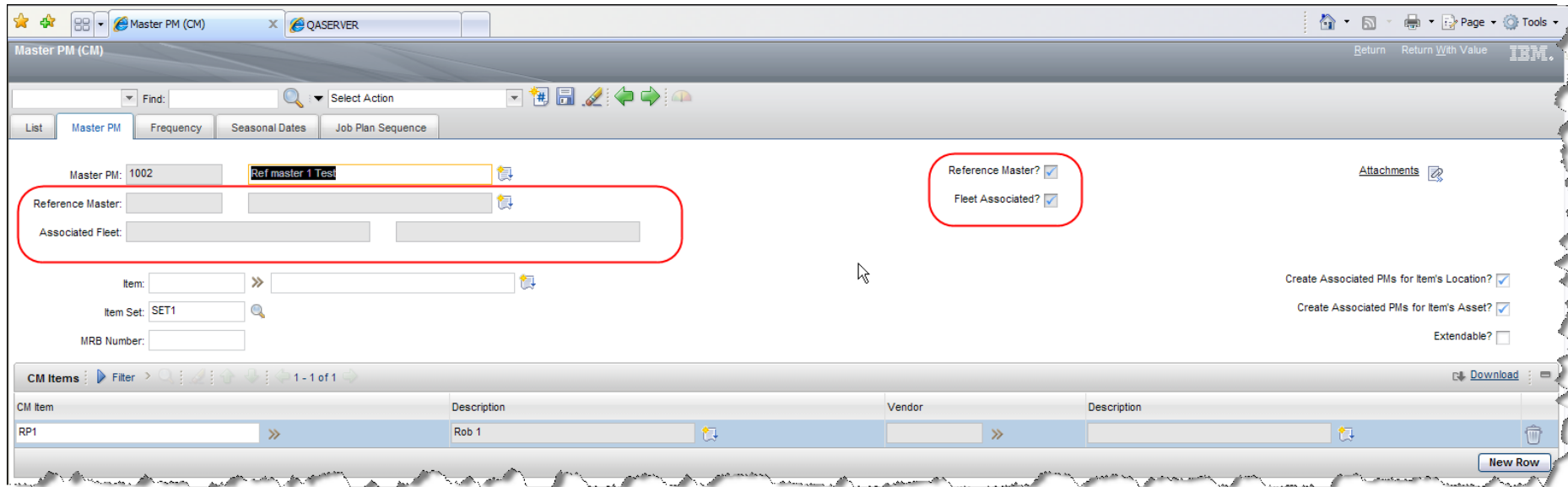
As a maintenance planner I want to be able to be able to manage Master PMs based on a **'Master PM template'** so that I can manage Master PMs more efficiently based on a **Fleet**.



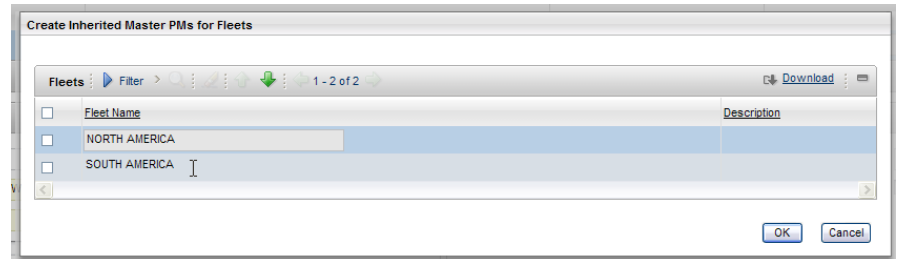
The "Master PM 1" is used as a template for the creation of Master PM 1-1 and 1-2. The Master PM 1 is called "Reference Master PM". Master PM 1-1 and 1-2 inherit the Reference Master PM properties and are called "Inherit Master PM".

PM Enhancements - Reference Master

'Reference Master' and 'Associated Fleets' fields added to Master PM(CM)



New Actions to created 'Inherited Master PMs' and 'Associated PMs for Fleet Assets'



Inherited Masters are related to Fleet Assets

PM Enhancements - Manage Open Work Orders That Are Associated With Deactivated PMs

As a maintenance planner I want any open work orders that are associated with a PM, or Technical Record, that is 'deactivated' to be appropriately managed to ensure that regulatory and safety requirements are not compromised.

The Maximo ACM capability allows for PM Actions to be created associated with PMs that are subject to existing PM Actions, this can cause problems when an 'open' Work Order exists that is associated with a PM that has been deactivated by another PM.

PM Enhancements - Manage Open Work Orders That Are Associated With Deactivated PMs

Added a new Maxvar that allows users to choose how they treat open Work Orders whose PM is going to be deactivated by a PM Action

Other Organization Options

Default Downtime Start:

On Reported Date
 On Actual Start Date
 None

Set Actual Start Date:

On Change Status Initiate
 On Change Status Complete

Display Warranty Status?

Display Downtime Report Prompt upon WO Completion for Asset in a 'Down' Status?

Set Active Date based on Actual Finish when WO is Completed?

Allow WO to be completed with a PM action to deactivate a PM with an open WO?

Process Nested Job Plans in the Background Allow WO

Ignore storeroom availability for work order status?

Ignore direct issue availability for work order status?

Enable Repair Facilities?

Bypass Site Mismatch Warning Message?

Clear Material Reservation When WO Status Changes:

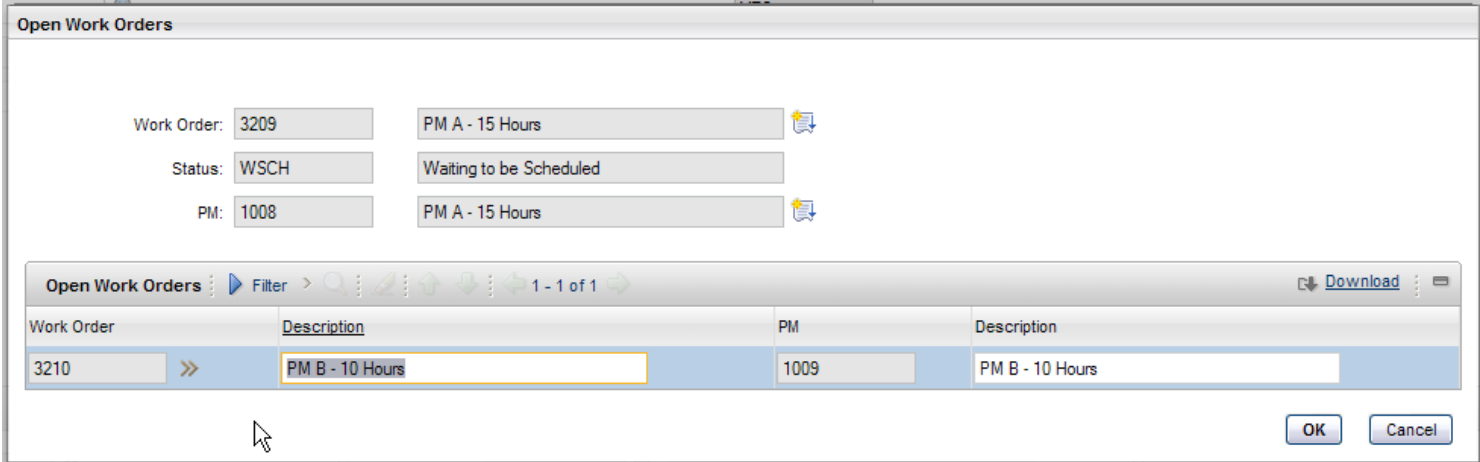
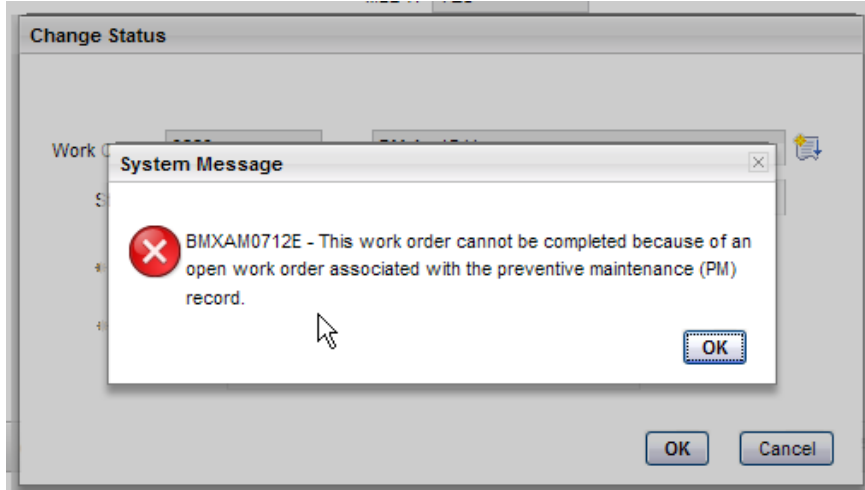
To Complete
 To Closed

Display Duplicate Problem Warning

On Asset? On Location?

PM Enhancements - Manage Open Work Orders That Are Associated With Deactivated PMs

If a Work Order is attempted to be completed by a Status Change and on completion it will deactivate a PM which has an open Work Order (and the maxvar is true) then the error message is displayed – the user will have to take action to resolve the situation before proceeding.



Dialog displays the open Work Orders that require action – once resolved the origination WO can be completed and the associated PM Action

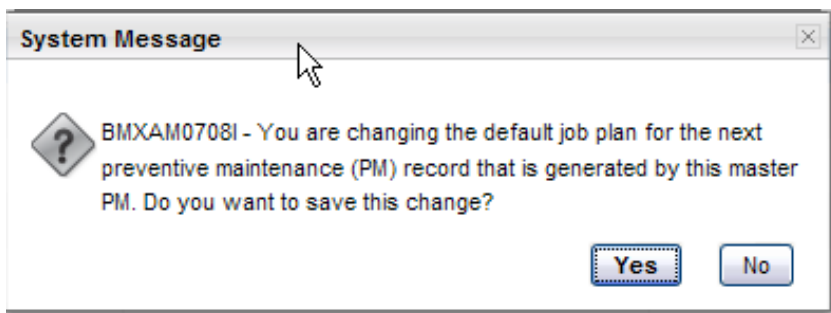
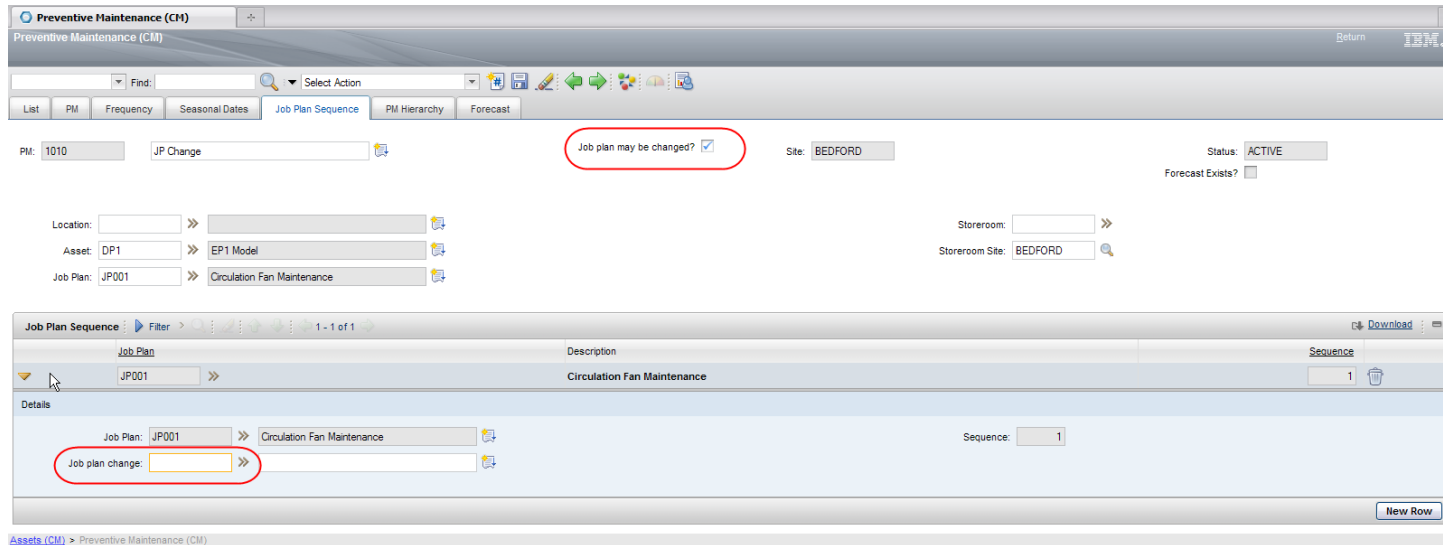
PM Enhancements - Allow Job Plan to be amended based on the selected Maintenance Location

As maintenance planner I want to be able to amend the Job Plan associated with a PM at any point prior to the generation of associated work orders, so that changes in work execution can be accommodated dependent on work location.

Client Example: a national rail operator utilises multiple maintenance locations for carrying out maintenance on the same locomotive types with identical maintenance frequencies, the maintenance processes are standardized as far as possible but there are a number of variances based on specific maintenance locations, e.g. resource differences. At a point prior to the asset arriving at the maintenance location the Job Plan associated with the PM is amended to select the correct Job Plan based on the maintenance location.

PM Enhancements - Allow Job Plan to be amended based on the selected Maintenance Location

Added new flag for 'Job Plan may be changed' on Job Plan Frequency tab of PM – when true a new field 'Job Plan Change' is displayed – this allows an alternative Job Plan to be entered.



A warning is displayed to the user before the change is committed.

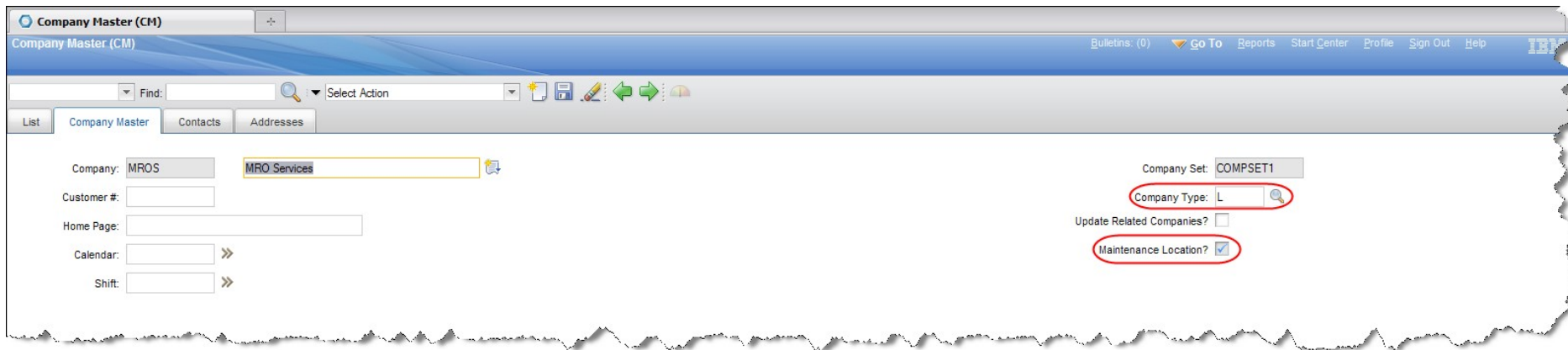
The Job Plan is for the next PM WO generation only – after completion it reverts to the original Job Plan.

Slot Planning

- The ACM 7.1.1 release introduced capability for Fleet Planning and Maintenance Forecasting. The 'Slot' planning capability extends and builds on this capability. The mobile and dynamic nature of typical ACM assets makes planning and scheduling of maintenance activities very complex as often the asset that had been planned for maintenance is not in the correct location at the correct time. This leads to logistical difficulties and inefficiencies as maintenance capacity (resources) are required to be utilised to their maximum extent in order to be efficient and competitive.
- To overcome this problem the maintenance location resources are defined as 'slots' (a defined capacity that is capable of performing specific maintenance activities on defined asset types) and the asset is only assigned to the slot when the degree of confidence is high of the asset being available to fill the slot.

Slot Planning – Company Master (CM)

New clone of Company Master to define Maintenance Locations



Slot Planning – Slots

New capability to define 'maintenance slots'. Each Maintenance Location may be divided into 'Slots' (where maintenance may be performed), each Slot requires a Calendar and Shift to be associated, each Slot may have 'Capability' defined (where capability defines the 'approved' type of work that can be performed) and each Slot may have 'Availability Periods defined'.

The screenshot displays the 'Maintenance Locations (CM)' application interface. The 'Slots' tab is selected, showing a list of slots. Two red circles highlight the 'Calendar' and 'Shift' dropdown menus for Slot 3. Below this, the 'Capabilities for Slot 3' section shows a table with 'JAR-145' and 'MRO-7272' highlighted. A red arrow points from the 'JAR-145' row to the 'Availability Periods for Slot 3' table. The 'Availability Periods for Slot 3' table contains the following data:

Period ID	Calendar	Shift	Start date	End date	Total Duration	Allocated	Status
756	LONG-DAY	DAY-1	20/03/11 06:00	20/03/11 22:00		<input type="checkbox"/>	AVAIL
757	LONG-DAY	DAY-1	21/03/11 06:00	21/03/11 22:00		<input checked="" type="checkbox"/>	CONASS
758	LONG-DAY	DAY-1	22/03/11 06:00	22/03/11 22:00		<input type="checkbox"/>	AVAIL
759	LONG-DAY	DAY-1	23/03/11 06:00	23/03/11 22:00		<input type="checkbox"/>	AVAIL
760	LONG-DAY	DAY-1	24/03/11 06:00	24/03/11 22:00		<input type="checkbox"/>	AVAIL
761	LONG-DAY	DAY-1	25/03/11 06:00	25/03/11 22:00		<input checked="" type="checkbox"/>	CONASS
762	LONG-DAY	DAY-1	26/03/11 06:00	26/03/11 22:00		<input type="checkbox"/>	AVAIL
1,181	LONG-DAY	DAY-1	26/03/11 10:00	26/03/11 18:00		<input type="checkbox"/>	AVAIL
763	LONG-DAY	DAY-1	27/03/11 06:00	27/03/11 22:00		<input type="checkbox"/>	AVAIL
764	LONG-DAY	DAY-1	28/03/11 06:00	28/03/11 22:00		<input type="checkbox"/>	AVAIL

Slot Planning – Slots

Feature highlights in red – the Slot Planning is also linked to the Maintenance Planning functions for the allocation of work.

Maintenance Locations (CM) Bullets: (0) Go To Reports Start Center Profile Sign Out Help

Find: Select Action [Icons]

List Maintenance Location Contacts Addresses Branches Capability **Slots**

Slot List Slot Availability Chart

Slots Filter > 1 - 2 of 2 Slot Period Creation icon - on selection will create Periods based on Calendar / Shift [Icon] Download

Slot	Description	Calendar	Shift	Allocated	Status	[Icons]
2	SLOT 2	LONG-DAY	DAY-1	<input type="checkbox"/>	ACTIVE	[Icons]
3	SLOT 3	LONG-DAY	DAY-1	<input checked="" type="checkbox"/>	ACTIVE	[Icons]

Capabilities for Slot 2 Filter > 1 - 1 of 1 Download

Capability	Description	Job Plan	Description	Default
JAR-145	JAR-145 Repair Station	MRO-7272	Bay Plan	<input checked="" type="checkbox"/>

Details

- Capability: JAR-145 >> JAR-145 Repair Station
- Job Plan: MRO-7272 >> Bay Plan

Availability Periods for Slot 2 Filter > 1 - 10 of 378 Download

Period ID	Calendar	Shift	Start date	End date	Total Duration	Allocated	Status	[Icons]
378	LONG-DAY	DAY-1	20/03/11 06:00	20/03/11 22:00	16.00	<input type="checkbox"/>	CONASS	[Icons]
379	LONG-DAY	DAY-1	21/03/11 06:00	21/03/11 22:00		<input type="checkbox"/>	AVAIL	[Icons]
755	LONG-DAY	DAY-1	21/03/11 08:15	22/03/11 16:00		<input type="checkbox"/>	AVAIL	[Icons]
380	LONG-DAY	DAY-1	22/03/11 06:00	22/03/11 22:00		<input type="checkbox"/>	AVAIL	[Icons]
381	LONG-DAY	DAY-1	23/03/11 06:00	23/03/11 22:00		<input type="checkbox"/>	AVAIL	[Icons]
382	LONG-DAY	DAY-1	24/03/11 06:00	24/03/11 22:00		<input type="checkbox"/>	AVAIL	[Icons]
383	LONG-DAY	DAY-1	25/03/11 06:00	25/03/11 22:00		<input type="checkbox"/>	AVAIL	[Icons]
384	LONG-DAY	DAY-1	26/03/11 06:00	26/03/11 22:00		<input type="checkbox"/>	AVAIL	[Icons]
385	LONG-DAY	DAY-1	27/03/11 06:00	27/03/11 22:00		<input type="checkbox"/>	AVAIL	[Icons]
386	LONG-DAY	DAY-1	28/03/11 06:00	28/03/11 22:00		<input type="checkbox"/>	AVAIL	[Icons]

System Message: BMXAM0755I - The selected allocation overlaps with another existing allocation. Click OK to continue with this allocation or cancel the operation.

Details

Period ID: 378 Start date: 20/03/11 06:00 End date: 20/03/11 22:00 Status: CONASS

Calendar: LONG-DAY Shift: DAY-1 Total Duration: 16.00 Registration: EP1

Capability: JAR-145 >> JAR-145 Repair Station Job plan: MRO-7272 >> Bay Plan PM:

Asset: EP1 Slot reservation work order: 1536 Asset work order:

Slot Reservation Work Order and Job Plan used to 'reserve resources' prior to asset allocation.

Slot Planning – Slot Availability Chart

The Slot Availability Slot tab is a read only view of Slots, Availability Periods, Asset Allocations and allocation overlaps. It is designed to give the user a quick graphical view of the Slot availability status by selecting the required date – the display automatically refreshes on date selection.

Maintenance Locations (CM) Bulletins: (0) Go To Reports Start Center Profile Sign Out Help IBM

Find: Select Action

List Maintenance Location Contacts Addresses Branches Capability Slots

Slot List Slot Availability Chart

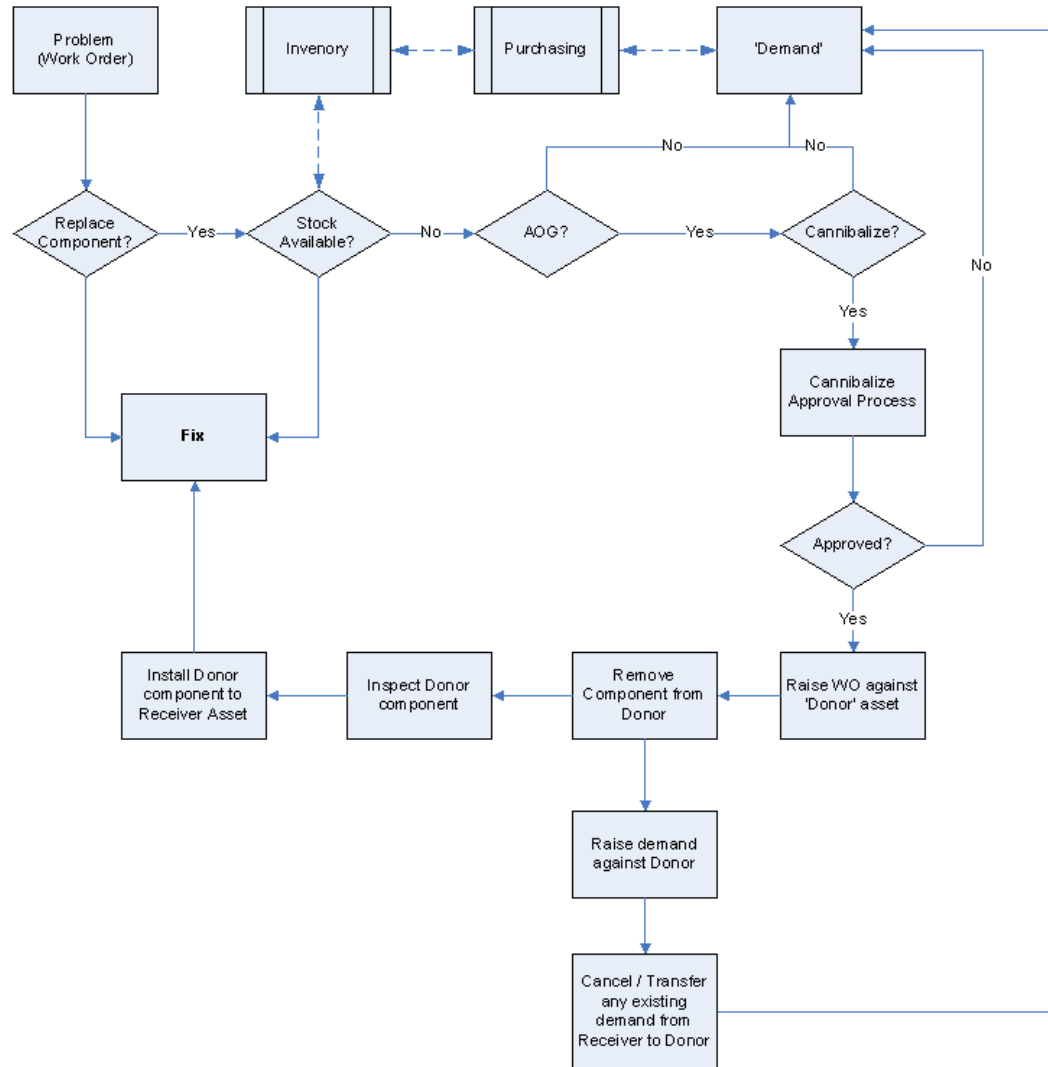
<	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	>																	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec																		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MRO Services																														
SLOT 2																														
SLOT 3																														

Tuesday, March 22, 2011																								
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
SLOT 2																								
SLOT 3																								

Procurement - Cannibalization (Robbery) Process

- *In order to meet operational requirements and to despatch an asset (aircraft, train etc) it may be necessary to replace a defective component, this is normally achieved by issuing a replacement component from Inventory, installing it, completing the work and releasing the asset into service. However, there may be instances where there is zero balance available from inventory and the lead time to obtain a replacement from alternative sources exceeds the operational schedule requirements. In this case a cannibalization (robbery) may be authorised, this requires the required component be removed from a designated asset (the 'donor'), it is inspected and then installed on the unserviceable asset (the 'receiver') – once the work is completed the asset is then able to be despatched into service. A work order will have been raised against the 'donor' asset; this will be used to generate the demand against inventory in the normal manner. Any reservations that were made against the 'receiver' need to be cancelled or transferred to the 'donor'.*

Procurement - Cannibalization Process



Procurement - Cannibalization Process

Work Order Tracking (CM)

Find: [] Select Action []

List Work Order Plans Assignments Related Records Actuals Safety Plan Log Failure Reporting Specifications

Work Order: 2371 Robbery Site: BEDFORD Status: WAPPR

Parent WO: []

Children of Work Order 2371: 0 - 0 of 0

Tasks for Work Order 2371: 0 - 0 of 0

Materials: 1 - 1 of 1

Task	Item	Description	Quantity	Unit Cost	Line Cost	Storeroom	Direct Issue
			1.00	0.00	0.00		<input type="checkbox"/>

Details

Task: []

Item: []

Line Type: Item

Quantity: 1.00

Order Unit: []

Unit Cost: 0.00

Line Cost: 0.00

Storeroom: []

Storeroom Site: BEDFORD

Reservation Type: AUTOMATIC

Direct Issue?

Vendor: []

Stock Category: []

Condition Code: []

Condition Rate: []

Condition Enabled?

Robbery?

PR: []

PR Line: []

Issue To: []

Required Date: 25/03/11 06:54

Requested By: MAXADMIN

Robbery Details: 1 - 1 of 1

The cannibalization (robbery) process happens when you have an AOG status and your inventory balance is zero, but you have no available time to purchase, receive, inspect, and install a new component to that asset. Here you specify the details of the donor asset, from which you remove the component to install on the faulty asset. [More information](#)

Status	AOG status	Donor asset work order	Donor asset registration	Donor asset	Donor asset serial number
PENDG	<input type="checkbox"/>	[]	[]	[]	[]

Details

Status: PENDG

Status changed by: MAXADMIN

AOG status?

Donor asset work order: []

Donor asset registration: []

Donor asset: []

Donor asset serviceable?

Donor asset inspected by: []

Donor asset serial number: []

Procurement actioned?

Procurement actioned by: []

The Work Order Tracking (CM) Plan / Materials tab has a new 'Robbery' flag – when true dynamically displays 'Robbery Details')

Procurement - Cannibalization Process – Robbery Details

Robbery Details Filter > 1 - 1 of 1 Download

The cannibalization (robbery) process happens when you have an AOG status and your inventory balance is zero, but you have no available time to purchase, receive, inspect, and install a new component to that asset. Here you specify the details of the donor asset, from which you remove the component to install on the faulty asset: [More information](#)

Status	AOG status	Donor asset work order	Donor asset registration	Donor asset	Donor asset serial number
PENDG	<input checked="" type="checkbox"/>	2370	KP1	KP1-1	KP1-1

Details

Status: Donor asset work order: >> Donor asset: >> Donor asset serial number:

Status changed by: Donor asset registration: Donor asset serviceable? Procurement actioned?

AOG status? Donor asset inspected by: >> Procurement actioned by: >>

If a robbery (cannibalization) is required the ‘Robbery Details’ frame is displayed – the fields are used to define the details of the donor asset, work order, asset status and procurement action – the ‘rob action’ has a status associated with it to authorise the process.

A example Workflow has been created to support this process.

Event Planning / Work Packaging – Part 2

- The ACM 7.1 release introduced capability for Event Planning (forecasting) and work packaging. It is intended to build on and extend this capability to identify and manage duplicate tasks (also known as suppression) within a selected package. This applies to PM records and occurs in both rail and aviation maintenance where identical maintenance requirements are called within a work package. By identifying and managing these duplicates the maintenance is carried out in a more efficient manner.
- The Log Book is also enhanced to allow Actions and Labor to be recorded against Log Book Problems

Management of duplicate tasks within a PM Work Package

The screenshot displays the IBM Maintenance Planning (CM) interface. At the top, the 'Select Action' menu is open, with 'Display Duplicate MRB Records' highlighted in blue. A red arrow points from this menu item to a dialog box titled 'Display Duplicate MRB Records'. The dialog box contains a table with the following data:

PM	MRB Number	Description	Duplicate master	Add to duplicate master
1008	53-10-12	50 Hour Inspection	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1009	53-10-12	Fwd Fuselage Inspection	<input type="checkbox"/>	<input type="checkbox"/>
1010	53-10-12	Fwd Fuselage Inspection	<input type="checkbox"/>	<input type="checkbox"/>
1011	53-10-12	Fwd Fuselage Inspection	<input type="checkbox"/>	<input type="checkbox"/>
1012	53-10-12	Bilge Drain Inspections	<input type="checkbox"/>	<input type="checkbox"/>
1013	53-10-12	Bilge Drain Inspections	<input type="checkbox"/>	<input type="checkbox"/>
1014	53-10-12	Bilge Drain Inspections	<input type="checkbox"/>	<input type="checkbox"/>

Below the table are 'OK' and 'Cancel' buttons. In the background, the main software interface shows a table of PM records with columns for PM, Description, Asset, Serial #, End Item, MRB Number, Due Date, Due Meter, Units To Go, Work Order, Duplicate master, Duplicate, and Primary. The 'Duplicate master' column in this table also has a red circle around it.

Once PMs are selected for the Work Package, a new Action to 'Display Duplicate MRB Records' is available to identify duplicate records – this action allows a 'master' record to be defined that acts as the Primary PM for the duplicate PMs – PM Actions are created to 'claim' these PMs on completion of the 'master PM'

Log Book Enhancements

The Log Book has been enhanced to allow for 'Actions' to be defined against a Log Problem, where an 'action' may be a asset 'removal' or 'installation' – this uses the capability developed for Events Management.

It is now also possible to add Actual Labor records against the Log Problem.

The screenshot displays the Log Book interface with several sections:

- Log Problems:** A table with columns for Trip Number, Label, Description, Maintenance Recommendation, Create WO, and Work Order. A single entry with Trip Number 1 is visible.
- Log Problems Form:** Fields for Trip Number (1), Asset (XS250), Label, Description, Reported By (MAXADMIN), CM Item (RP1), Item Description (Rob's Model), Position, and Operator Comments.
- Maintenance Evaluation:** Fields for Problem, Maintenance Recommendation, Maintenance Comments, Aircraft Status, Urgency, and Log Deferral?
- Associated Work Order:** Fields for Create WO?, Work Order, Status (WAPPR), Status Date (25/03/11 13:57), and Log Problem ID (2).
- Actions:** A table with columns for Action DateTime, Sequence, Action, CM Item, Serial Number, and Description. One action is listed: 25/03/11 13:58, Sequence 10, Action REMOVAL. A red circle highlights the 'Actions' header.
- Actual Labor:** A table with columns for Activity, Labor, Name, Approved, Start Date, Start Time, End Time, Regular Hours, and Rate. It shows no rows. A red circle highlights the 'Actual Labor' header.

These enhancements support the requirements for 'first line' operations

Deriving Asset in Work Order Tracking (CM)

Position Name	Position	Asset	Serial #	Parent	Top Asset
BUILD_1002	1001	N-IBM-1		N-IBM-0	N-IBM-0
BUILD_1002	1001	G-MRO8-1	G-MRO8-1	G-MRO8	G-MRO8

The Asset may be derived by the user entering the Build Item and Position Values – if there is more than one asset that meets the criteria then a dialog is displayed that lists the candidate assets for the user to select from.

Performance Enhancements

- Maximo Asset Configuration Manager (ACM) is designed to manage the configuration management requirements of complex assets operating in the aerospace, defence and rail sectors where safety and regulatory compliance is of primary importance. An integral part of Maximo ACM is the Build Data Interpreter (BDI).
- At the most basic level the BDI analyses configuration managed Assets position by position to ensure that they comply with the configuration rules established in the corresponding model.
- The BDI has been the focus of the performance enhancements, in addition there has been a review of indexing and code optimisation.

Performance Enhancements - BDI

The following items have been enhanced relating to the BDI performance

- **Single Variant Processing**
 - The BDI Status Dialog has been enhanced to enable the 'Update Map' feature to be executed for the current configuration or all variations.
 - The BDI Status Dialog has been enhanced to allow individual variations to be processed independently (a icon has been added adjacent to each variation)
 - A new Crontask parameter has been developed for 'ProcessMode' with possible values of 'ALL' or CURRENTCONFIG' to all BDI Crontasks (Continuous, End Item, Sub Assembly). Simultaneous BDI Processing and BDI Status Visibility
 - The BDI has been enhanced to allow multiple instances of the Continuous, End Item and Sub Assembly CronTasks to be launched in parallel.
- **The system has been enhanced to ensure the BDI is prevented from running for the same Asset simultaneously.**
 - Developed intelligence into the BDI transaction queue to prevent more processing than is necessary.
 - Created new application (BDI Queue Status) to provide the end user visibility of the status of Assets scheduled for processing.
- **Configurable MAP Codes**
 - The Model application has been enhanced to allow the user to define which BDI Map Codes are applicable to the Model.
- **Configurable Maintenance Plan Processing**
 - A check box has been added to the BDI dialog that when false disables the BDI map code for maintenance plan processing.
- **Configurable Node Level Processing**
 - The Model Build Hierarchy and Position Rules tab / Position List has been enhanced to include a check box that when true disables BDI map processing against the selected node and all of its children.
- **BDI Status History Maintenance**
 - A new Maxvar has been developed (Organizations (CM)) / System Settings that when false will BDI historical data to not be retained. By default the setting is set to true.

Performance Enhancements – BDI Map Codes

Models (CM) Bulletins: (0) Go To Reports Start Center Profile Sign Out Help IBM

Find: Select Action [Icons]

List Model **Configurations** Build Hierarchy and Position Rules Advanced

Model: RP1 Rob's Model [Icon]

Abstract	Variation	Description	Status	Comments
<input type="checkbox"/>	RP1	Base Variation	ACTIVE	

BDI Map Codes have been added to the Model – these may be deselected so that the BDI does not check these codes.

Configuration Mode: Filter > 1 - 1 of 1 Download

Base	Abstract	Variation	Description	Status	Comments
<input checked="" type="checkbox"/>	<input type="checkbox"/>	RP1	Base Variation	ACTIVE	

Details

Base? Description: Base Variation

Abstract? Status: ACTIVE

Variation: RP1 Comments:

Revisions: Filter > 1 - 1 of 1 Download

Revision	Description	Revision Date	Status	Active Date	Inactive Date
0	BASE REVISION	25/03/11 11:24	ACTIVE		

BDI Map Codes Filter > 1 - 7 of 7 Download

Here you can configure the status code checking at the model level. The list of map codes is automatically added on creation of a new model. You can choose to activate or disable each individual validation by using the checkbox on the right of each row. [More information](#)

Value	Description	Active
AOG	Aircraft is AOG. An Open AOG (Aircraft On Ground) Work Order exists for the Asset.	<input checked="" type="checkbox"/>
BMR	Invalid Position. The Interpreter is unable to find a valid CM Build for the Asset.	<input checked="" type="checkbox"/>
ISR	Invalid Install / Remove History. Overlapping Install / Remove history was found for the Asset or a Position	<input checked="" type="checkbox"/>
NAD	Non-AOG Discrepancy. An Open non-AOG Incident exists.	<input checked="" type="checkbox"/>
SEI	Empty Mandatory Position. An existing Mandatory Build Position is empty.	<input checked="" type="checkbox"/>
SIR	Invalid Part installed. The part installed in the Build Position is invalid for the Model / Variation / Revision d.	<input checked="" type="checkbox"/>
SSR	Duplicate Part/Serial. More than one Asset was found to have the same CM Item and Serial.	<input checked="" type="checkbox"/>

Performance Enhancements – BDI Map Codes

Models (CM) Bulletins: (0) [Go To](#) [Reports](#) [Start Center](#) [Profile](#) [Sign Out](#) [Help](#)

Find: Select Action [Icons]

List Model Configurations **Build Hierarchy and Position Rules** Advanced

Model: RP1 Rob's Model Revision Context: 0

Hierarchy Tree **Position List**

Build Positions and Rules Filter [Icons] 1 - 7 of 7 [Download]

Build Item	Position	Indicator	Indenture	LCN
RP1		E	1	L
MODULE	1	S	2	L0001
MODULE	2	S	2	L0002
MODULE	3	S	2	L0003
UNIT		S	3	L00030001
UNIT	LH	S	2	L0004
UNIT	RH	S	2	L0005

Details

Build Item: MODULE LCN: L0003

Position: 3 Max Linear Units:

Indicator: S Linear Expression:

Indenture: 2 **Skip BDI checks?**

Position CM Items Maintenance Plan Formulas Labels

Position Information **Non Serialized** **By Variation**

Indenture: 1 Non Serialized?

Higher LCN: Mandatory?

Indicator: E Min Qty:

LCN Suffix: L Max Qty:

Mandatory?

Create WO?

Allow Any Part?

Events Inactive?

Sys on Sys Configuration

Rule	Variation	Description	Status	Comments
<input checked="" type="checkbox"/>	RP1	Base Variation	ACTIVE	

Serial Effectivity Filter [Icons] 0 - 0 of 0 [Download]

Sel	CM Item	Serial Range UOC	Serial Range Expression
...No rows to display...			

Build Hierarchy nodes may be flagged for 'Skip BDI Checks' – this means that the BDI will not run against the selected node and any children associated with the node.

Performance Enhancements – BDI Map Codes

BDI Status

Asset: Site:

Asset Configurations Filter 1 - 1 of 1 Download

Model	Variation	Revision	Hold Revision	Status	Stated	Updated	Current Configuration
RP1	RP1	0	<input type="checkbox"/>	INVALID	25/03/11 12:21	25/03/11 12:21	<input checked="" type="checkbox"/>

Problems Filter 1 - 5 of 7 Download

Label	Position	Name	Asset	Problem
000000		RP1	XV199	ENR
10000	1	MODULE	XV199-1	ENR
10000	2	MODULE	XV199-2	ENR
10000	3	MODULE	XV199-3	ENR
20000		UNIT	XV199-4	ENR

Check maintenance plan?

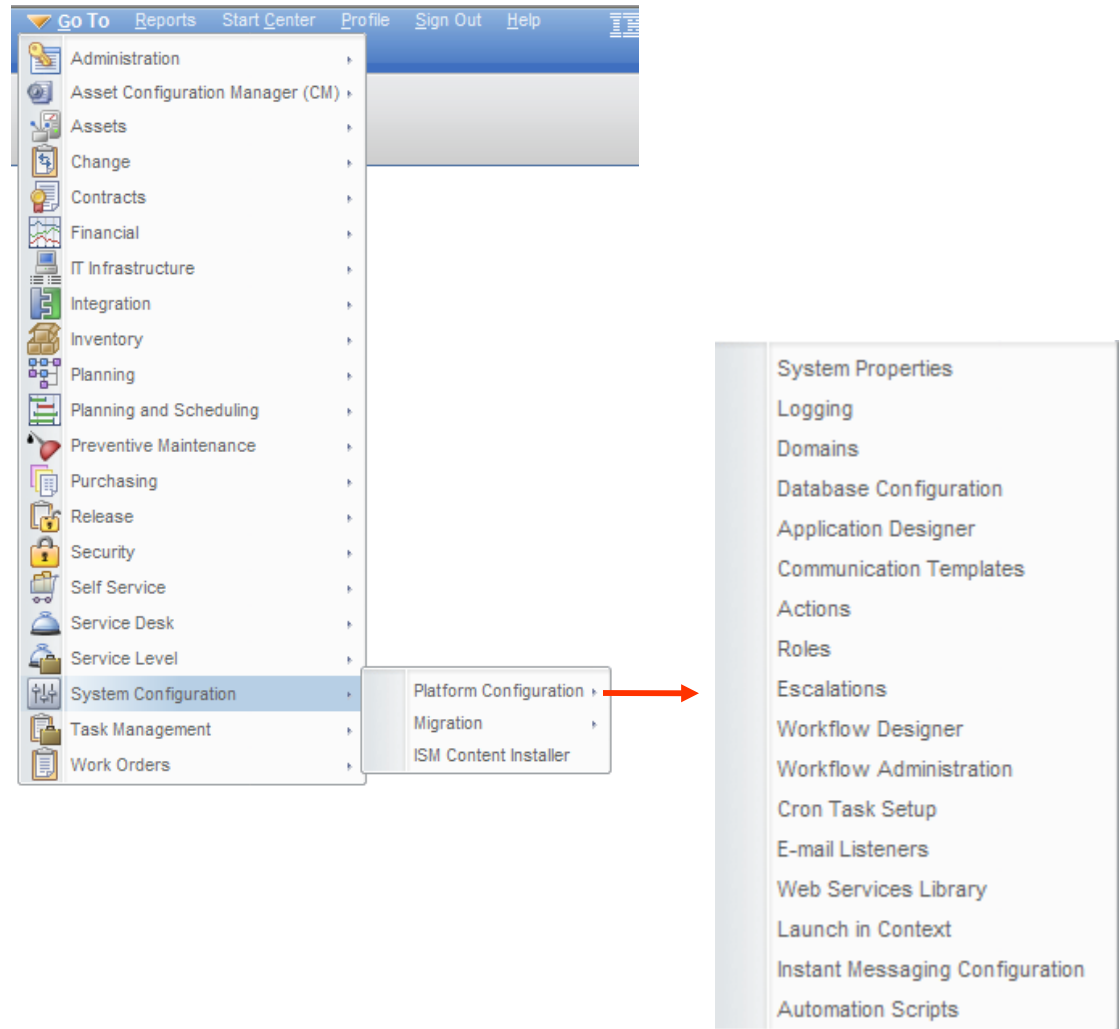
For the manual BDI a 'Check Maintenance plan?' flag has been added, this is true by default. When made false the BDI will not check the maintenance plans for the selected variation – this can be a significant performance saving.

System Message

BMXAM0732W - This crontask validates all models or variations applicable to the configuration-managed (CM) item of the selected asset. Click Yes to continue or No to validate the current configuration only.

Configure

- Maximo ACM can be configured using the 'standard' System Configuration tools
- There are a number of specific ACM variable settings – described on following slides



Configure – Other Organization Settings

- Allows user to choose how they will treat Work Order completion in the situation where its completion will deactivate a PM that has an open work order associated with it.

Other Organization Options

Default Downtime Start:

On Reported Date
 On Actual Start Date
 None

Set Actual Start Date:

On Change Status Initiate
 On Change Status Complete

Display Warranty Status?

Display Downtime Report Prompt upon WO Completion for Asset in a 'Down' Status?

Set Active Date based on Actual Finish when WO is Completed?

Allow WO to be completed with a PM action to deactivate a PM with an open WO?

Process Nested Job Plans in the Background?

Ignore storeroom availability for work order status?

Ignore direct issue availability for work order status?

Enable Repair Facilities?

Bypass Site Mismatch Warning Message?

Clear Material Reservation When WO Status Changes:

To Complete
 To Closed

Display Duplicate Problem Warning

On Asset? On Location?

Configure – System Settings

- Allows user to:
 1. Set the 'Tree Page Size – this is the v-tree hierarchy used in the Model and Assets (CM) applications.
NOTE: 7.5.0.1 negated the need for this setting as the v-tree is now configured via the xml
 2. Choose if historical BDI data is to be retained

The screenshot shows the 'System Settings' web interface. The 'CM Options' section is highlighted with a red rounded rectangle. It contains the following settings:

- * Tree Page Size: 5
- Retain historical BDI data?

Other sections visible in the interface include:


- Calendar:** Start Date: , End Date:
- GL Configuration:** Character to Display for Unspecified GL Components: ?
- Classification Catalog:** Delimiter in Asset Descriptions:
- Timer:** Confirm Time Calculated by Timer?
- People:** Radio buttons for display format: Firstname Lastname, Lastname, Firstname, Lastname Firstname, LastnameFirstname
- IT Options:**

Configure – CM Options

- Allows user to:
 1. Set the Default Label System that is associated with the Model
 2. Define the Label and Position field widths

NOTE: 7.5.0.1 negated the need for this setting as the v-tree is now configured via the xml
 3. Activate the use of EBNF controls (Extended Backus–Naur Form) – a specific rule type.
 4. Activate meter offsets – meter readings entered during asset install / remove process
 5. Set the number of meter readings that will be used to calculate predicted life values

CM Options

Default Label System: 

Label Width:

Position Code Width:

EBNF Control?

Record Meter Offsets?

Predicted Life:

OK Cancel

Configure – BDI Color Setup (CM)

- Allows user to set which colours will be used for specific BDI mapping codes – these colors are displayed in the Assets (CM) V-tree and BDI Status dialog window.

BDI Color Setup (CM)

BDI Condition Colors Filter 1 - 20 of 26 Download

Condition code	Color	ORGID	
ALERT	ORANGE	EAGLENA	
AOG	RED	EAGLENA	
BMD	GREEN	EAGLENA	
BMR	RED	EAGLENA	
CONVERSIONS PENDING	GREEN	EAGLENA	
EBA	ORANGE	EAGLENA	
EBD	RED	EAGLENA	
EBW	ORANGE	EAGLENA	
EID	GREEN	EAGLENA	
EMC	GREEN	EAGLENA	
ENR	RED	EAGLENA	
INACTIVE	GRAY	EAGLENA	
INVALID	RED	EAGLENA	
ISR	RED	EAGLENA	
MEL	RED	EAGLENA	
NAD	ORANGE	EAGLENA	
NONSERIALIZED OK	PINK	EAGLENA	
OK	BLACK	EAGLENA	
SED	ORANGE	EAGLENA	
SEI	RED	EAGLENA	

New Row

OK Cancel

ACM Reports

Report File Name	Description	Application	Report Folder	Report Type	Comments
plusaasset_mel.rptdesign	Asset (CM) - MEL Report	PLUSAASSET	PLUSAASSET	BIRT	Details of Assets with MEL (Minimum Equipment List) records
plusaasset_reliability.rptdesign	Reliability Report	PLUSAASSET	PLUSAASSET	BIRT	Reliability based on Log Problems
plusaasset_events_details.rptdesign	Events Details	PLUSAASSET	PLUSAASSET	BIRT	Events Management related
plusaasset_life_remaining.rptdesign	Life Remaining Report	PLUSAASSET	PLUSAASSET	BIRT	Life remaining to maintenance event
plusaasset_life_remaining_detail.rptdesign	Life Remaining Detail Sub Report	PLUSAASSET	PLUSAASSET	BIRT	Life remaining to maintenance event - details
plusaasset_life_usage.rptdesign	Life Usage Report	PLUSAASSET	PLUSAASSET	BIRT	Life usage of asset
plusaasset_life_usage_trace.rptdesign	Life Usage Trace Sub Report	PLUSAASSET	PLUSAASSET	BIRT	Life usage of asset - details
plusaasset_bdi_status.rptdesign	BDI Status Report	PLUSAASSET	PLUSAASSET	BIRT	Asset BDI Status
plusaasset_bdi_narrative.rptdesign	BDI Narrative Sub Report	PLUSAASSET	PLUSAASSET	BIRT	Asset BDI Status - details
plusacm_mel.rptdesign	Model - MEL Report	PLUSACM	PLUSACM	BIRT	MEL Rules by Model

Questions?



Thank You!

