

RAMCO AVIATION SOLUTION

ENHANCEMENT NOTIFICATION

Version 5.9.1

MX-Flight Safety

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WHAT'S NEW IN WORK CENTER?

Provision to capture Skill Capacity Available at Shift, Slot and facility level efficiency factor at Work Centre level

Reference: APRP-224

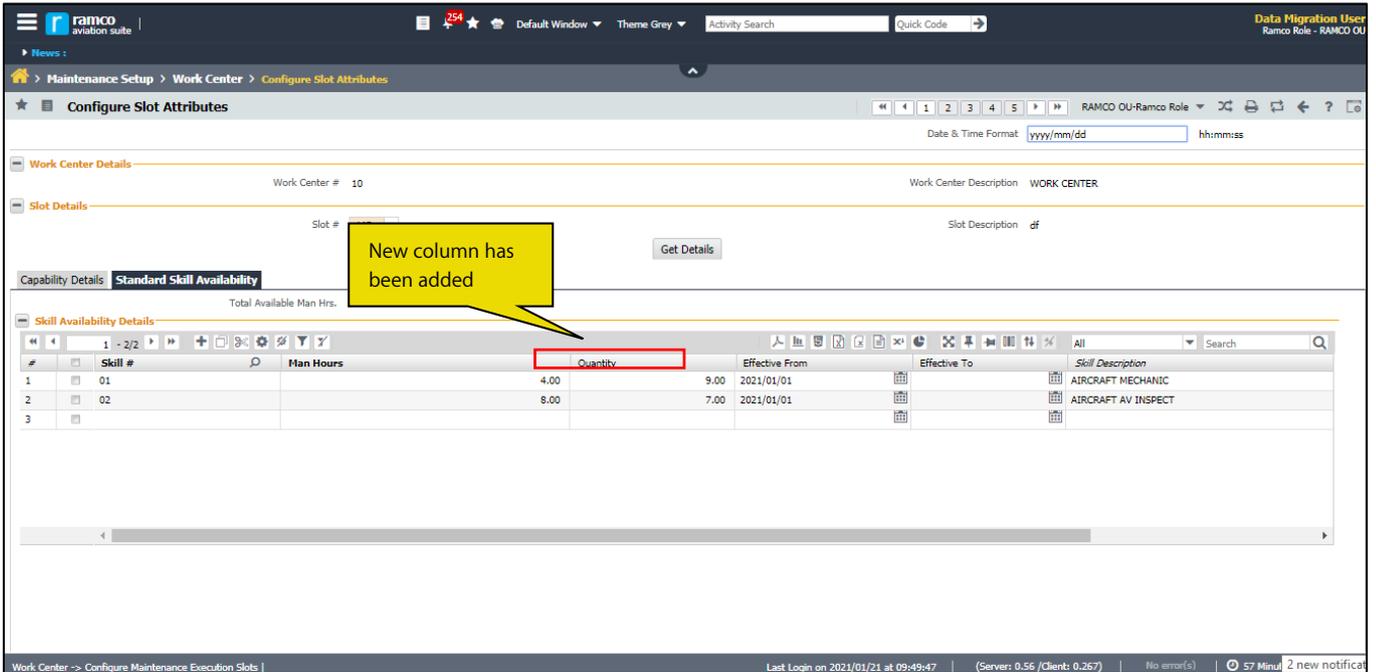
Background

- While scheduling jobs for execution, it is important to know the availability of skill in shift, slot and work centre level. To effectively capture the available capacity these values needed to be defined. This feature enables to capture skill availability in terms of quantity per day in a work centre/slot/skill.
- Efficiency is required to be captured at both skill and Work center level. For the effective functioning of the Work center, efficiency of an employee needed to be defined. This feature enhances the efficiency of the employee against the skill and facility level.
- Overtime and Maximum additional hours is required to be captured at both skill and Work center level. For the effective functioning of the Work center, Overtime and Maximum additional hours of an employee needed to be defined. Overtime is also expressed in percentage. This feature enhances the Overtime and Maximum additional hours of the employee against the skill level.

Change Details

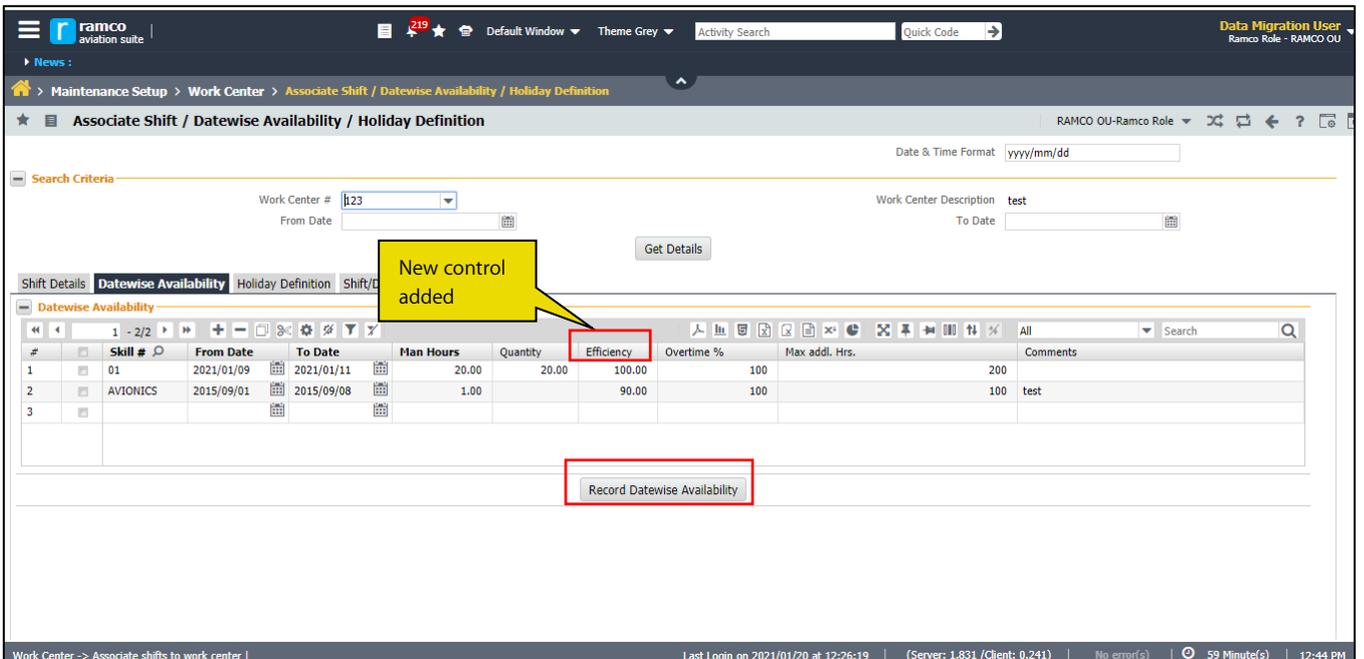
- 1) Changes in Configure Slot Attributes screen in Work Center business component
 - An existing Control 'Man hours/Shift' will be renamed to "Man Hours".
 - A new Control "Quantity" will be added next to Man Hours. It's an editable control
 - On click of "Associate Skill Quantity", ensure 'Quantity' is getting saved along with the existing controls.
- 2) Defining Efficiency
 - New Column - A new editable control "Efficiency %" is added in 'Date wise Availability' multiline of **Associate Shift/Date wise Availability/Holiday Definition** screen.
 - On click of "Record Date wise Availability", ensure 'Efficiency %' is getting saved along with the existing controls.
- 3) Define Overtime
 - New Column - A new editable control "Overtime %" is added to capture the allowable percentage of daily man hours of an employee at skill and work center level in **Date wise Availability** tab under **Associate shifts / date wise availability / Holiday definition** screen which is a link under **Associate Work Center Attributes** activity and **Work Center** component.

Exhibit 1: Configure Slot Attributes screen



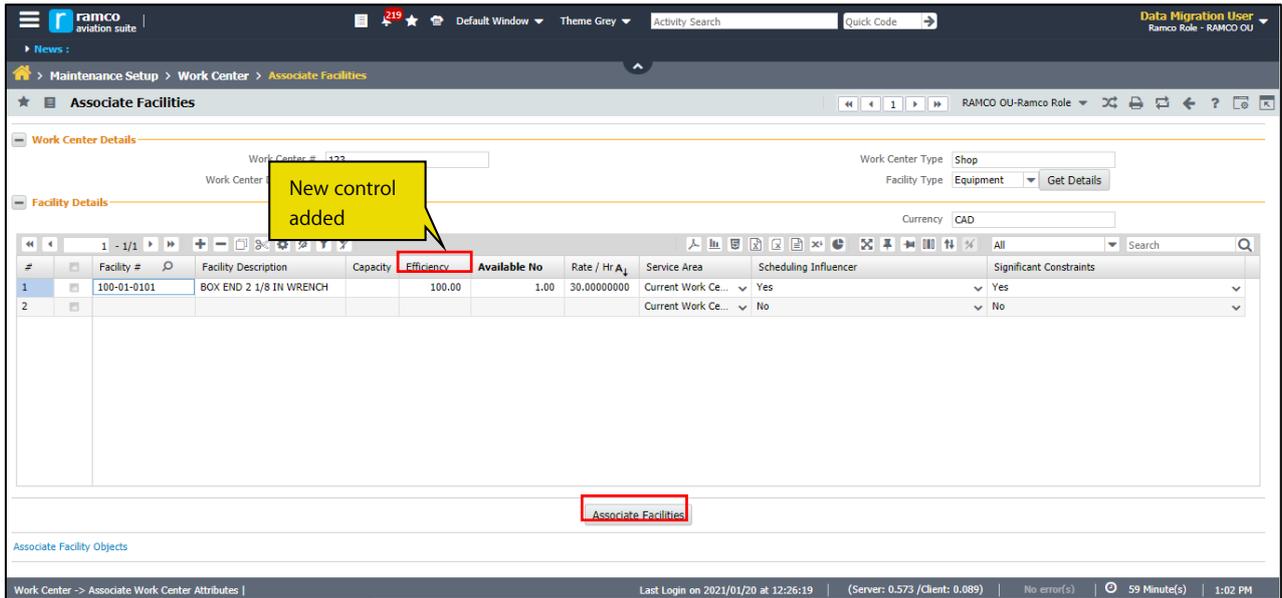
Lack of availability of skill can be overcome by using Skill Capacity Available at Shift, Slot and Work Centre level

Exhibit 2: Associate Shift/Date wise Availability/ Holiday Definition screen



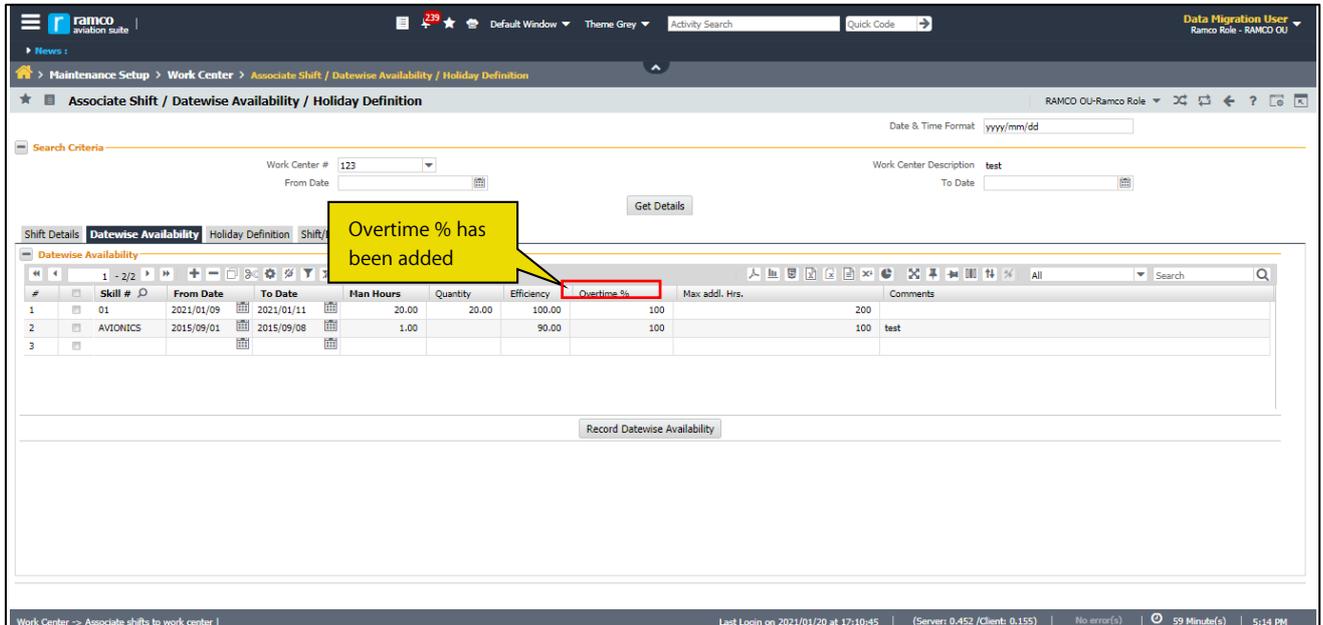
A new Editable Control "Efficiency %" should be added in Facility Details multiline of **Associate Facilities** screen. On click of "Associate Facilities", ensure 'Efficiency %' is getting saved along with the existing controls.

Exhibit 3: Associate Facilities screen



For the effective functioning of the work center this feature has been employed to capture skill and facility level efficiency factor.

Exhibit 4: Associate Shift/Date wise Availability/ Holiday Definition screen



New link to define Additional Man Hours:

A new editable control "Max addl. hrs." is added to capture the maximum additional hours an employee can work at skill and work center level in 'Date wise Availability' tab under 'Associate shifts / date wise availability / Holiday definition' screen which is a link under 'Associate Work Center Attributes' activity and 'Work Center' component.

Exhibit 5: Associate Shift/Date wise Availability/ Holiday Definition screen

Search Criteria

Work Center # 123
From Date
Work Center Description test
To Date

Get Details

Shift Details | **Datewise Availability** | Holiday Definition | Shift/Duty Pattern

#	Skill #	From Date	To Date	Man Hours	Quantity	Efficiency	Overtime %	Max addl. Hrs.	Comments
1	01	2021/01/09	2021/01/11	20.00	20.00	100.00	100		200
2	AVIONICS	2015/09/01	2015/09/08	1.00		90.00	100		100 test
3									

Record Datewise Availability

Work Center -> Associate shifts to work center | Last Login on 2021/01/20 at 17:10:45 | (Server: 0.452 /Client: 0.155) | No error(s) | 59 Minute(s) | 5:14 PM

For the effective functioning of work center, overtime and maximum additional hours need to be defined. This feature captures the overtime and maximum additional hours against skills.

Provision to capture capacity of Part & Model in WC & to define alternate work centers

Reference: APRP-224

Background

- This enhancement speaks about the provision to capture the capacity of Part & Model in a Work center and also to define an alternate work center. Tasks assigned to Work centres can practically be routed to other (alternate) work centers. These alternatives indirectly account towards the available capacity of a work center.
- Hence, to assess the total available capacity a provision to record Alternate Work centres is needed. This feature defines the alternate work centre to any work centre.
- Also, there was a need to capture the capacity of Part & Model at Work center level.

Change Details

- 1) A new link **Maintain Alternate Work Center** will be provided in Select Work Center # screen under **Associate Work Center Attributes** screen to define the alternate work centers to any work center.
- 2) A new link **Maintain Standard Work Center Capacity** will be introduced in **Associate Work Center Attributes** activity under the **Work Center** business component. Capacity against part and model can be captured at a work center level.
- 3) A new UI **Maintain Standard Work Center Capacity** is introduced, which has the below mentioned details:

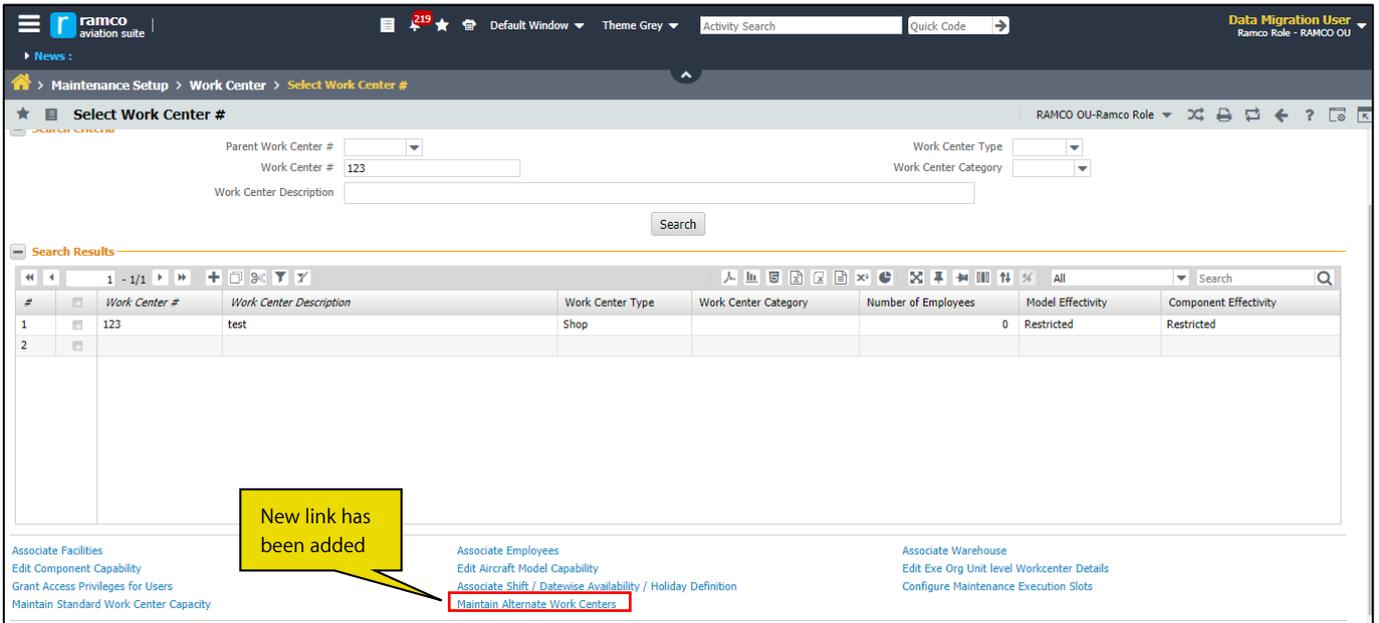
Work Center Details:

- Work Center # - Display Only
- Work Center Description – Display Only

Capacity Details Multiline:

- Maintenance Object Type - Combo
- A/c Model # - Editable Help
- Part # - Editable Help
- Model / Part Description – Display Only
- Qty – Editable, Mandatory
- Record Capacity Details - Button

Exhibit 1: Associate Work Center Attributes screen



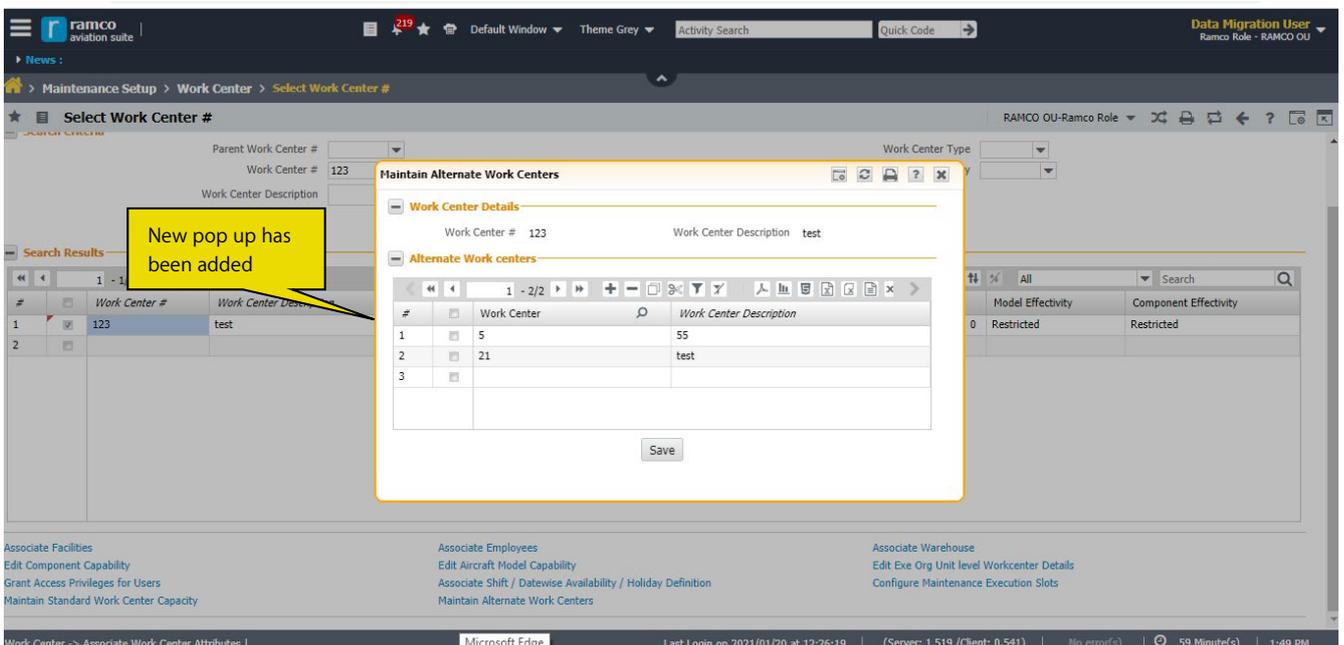
Maintain alternate work center pop-up

Work center details can be captured in this popup. The **Maintain Alternate Work Center** popup contains the following controls:

- Work center: Defines the work center
- Work center description: Describes the work center

On click of 'Save' ensure that the work center entered in this popup is same as the selected work centers.

Exhibit 2: Maintain Alternate Work Center popup



Once the task assigned in the particular work center is completed it can be directly redirected to a new work center by this feature.

Exhibit 3: Maintain Standard Work Center Capacity link addition

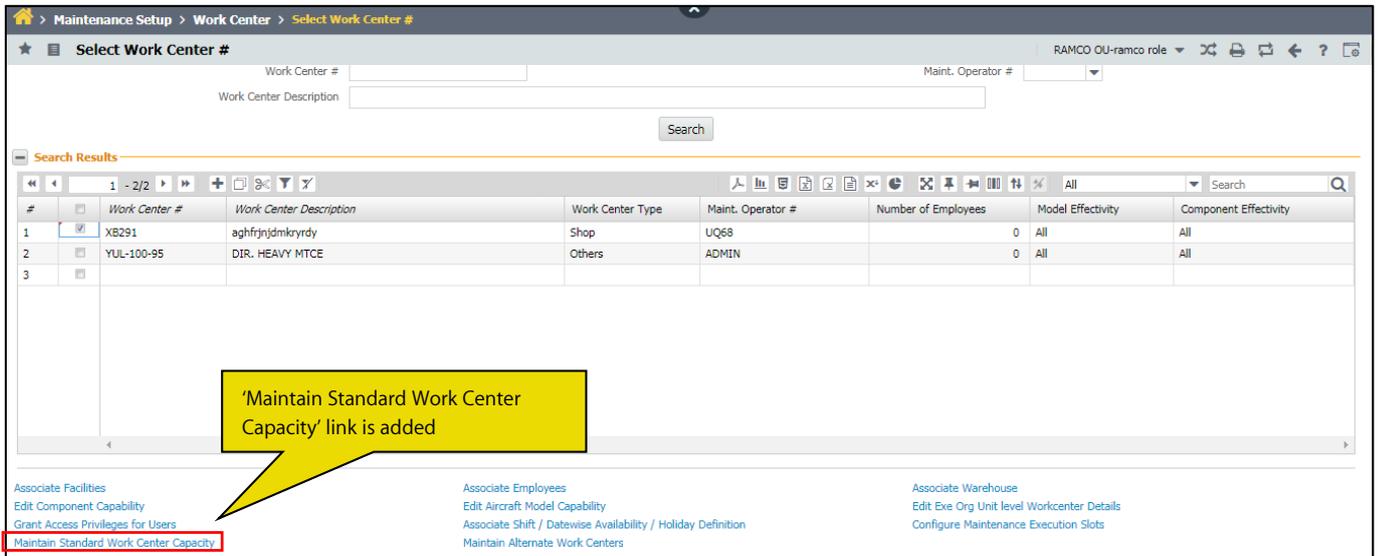
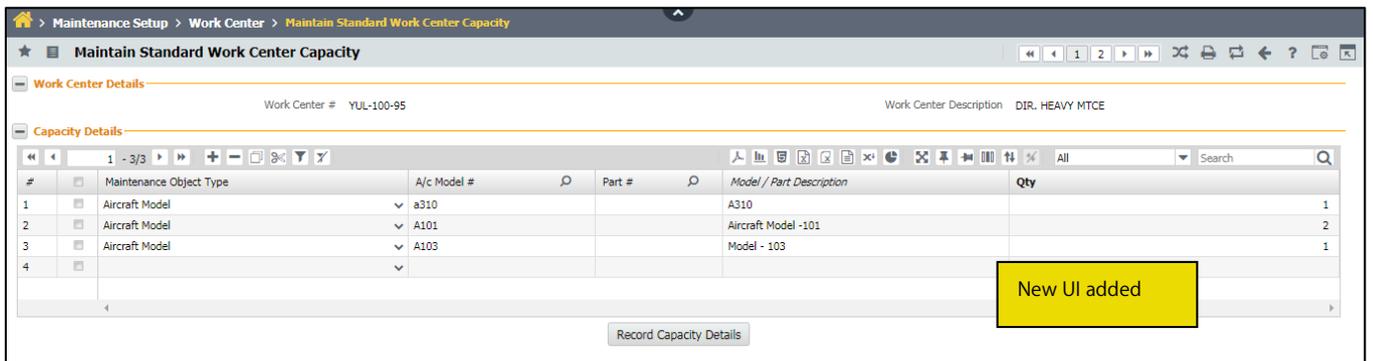


Exhibit 4: Maintain Standard Work Center Capacity screen



In **Associate Work Center Attributes** screen user can select the required Work center and launch **Maintain Standard Work Center Capacity** link; so that **Maintain Standard Work Center Capacity** UI launches. Here, user can select the Maintenance Object Type as either Aircraft Model or Part # and based on the option selected the Model # or the Part # can be provided in the respective fields along with their Quantities.

Provision to capture break timings in a shift & to map shift/duty pattern to work center

Reference: APRP-224

Background

- While scheduling jobs for execution, it is important to know the availability of an employee in a day. Every scheduling has its specific break timings. To effectively capture the available capacity, the work shifts and corresponding break timings need to be defined. This feature enables to capture Break timings in a shift.
- Work center follow specific work timings that consists of defined work shifts. Planning employee loading is mandatory for the effective functioning of the work center. To effectively capture the availability of employee's shift/duty pattern need to be defined. This feature allows mapping of shift/duty patterns that are applicable to work center thereby providing manpower data at work center level.

Change Details

1) New link to define Break Timings

A new column 'Break Time' has been added in the **Maintain Shift/Duty** screen of **Roster Management** business component. Initially the column displays a hyperlink "Not Defined". Once the link is invoked and Break Timings are saved in pop-up, it becomes "Defined".

2) New tab to map shift/duty patterns against work center

A new tab **Shift/Duty** pattern has been added next to **Holiday Definition** Tab in **Associate Work Center Attributes** screen of **Work Center** business component. The Shift/Duty pattern and the effectivity can be defined and saved in this tab. The following controls are available in this tab:

- Shift/Duty Pattern: Define the name of the shift/pattern
- Description: Describes the shift/pattern
- Effectivity from: Starting time of the shift/pattern
- Effectivity to: End time of the shift/pattern
- All the values are mandatory in the tab

Exhibit 1: Break Timings in Maintain Shift / Duty

#	Shift/Duty #	Shift/Duty # Display Name	Description	Color	Status	Start Time	End Time	Effective From	Effective To	Shift/Duty Category	Remarks	Addl. Profess.	Create By	Created Date	Last Modified By	Last Modified Date	Break Time
1	BC	BC	BC	Swe...	Acti...	02:15...	02:...	02-26-...	02-26-...	Planning			DMUSER	03-20-2019	DMUSER	09-03-2019	Not Defined
2	FC	FC	FC	Light...	Acti...	02:52...	02:...	02-26-...	02-26-...	Planning			DMUSER	03-26-2020	DMUSER	09-28-2020	Not Defined
3	ST	ST	ST	Puer...	Acti...	06:41...	06:...	02-27-...	09-11-...				DMUSER	03-26-2020	DMUSER	09-11-2020	Not Defined
4	OFF	OFF	OFF	Illusi...	Acti...	09:20...	05:...	09-01-...	04-21-...				DMUSEI	03-21-2020	DMUSER	04-30-2019	Not Defined
5	LV	LV	LAS VEGAS	Gold...	Acti...	09:21...	07:...	02-26-...	02-26-...				DMUSEI	04-01-2020	DMUSER	09-28-2020	Not Defined
6	LA	LA	LA	Turq...	Acti...	09:21...	05:...	02-26-...	02-26-...				DMUSEI	04-01-2020	DMUSER	04-30-2019	Not Defined
7	NY	NY	NEW YARK	Rose...	Acti...	08:30...	05:...	04-03-...	04-30-...	Planning			DMUSEI	04-03-2020	DMUSER	04-30-2019	Not Defined
8	OR	OR	OREGON	Rosy...	Acti...	08:39...	06:...	04-04-...	04-30-...	Planning			DMUSEI	04-04-2020	DMUSER	04-30-2019	Not Defined
9	NV	NV	NEVADA	Gold...	Acti...	03:32...	09:...	04-04-...	09-11-...				DMUSEI	04-04-2020	DMUSER	09-11-2020	Not Defined
10	YU	YU	YUMA	Illusi...	Acti...	03:49...	05:...	04-04-...	04-05-...				DMUSEI	04-04-2020			Not Defined

Maintain shift/break timings pop-up

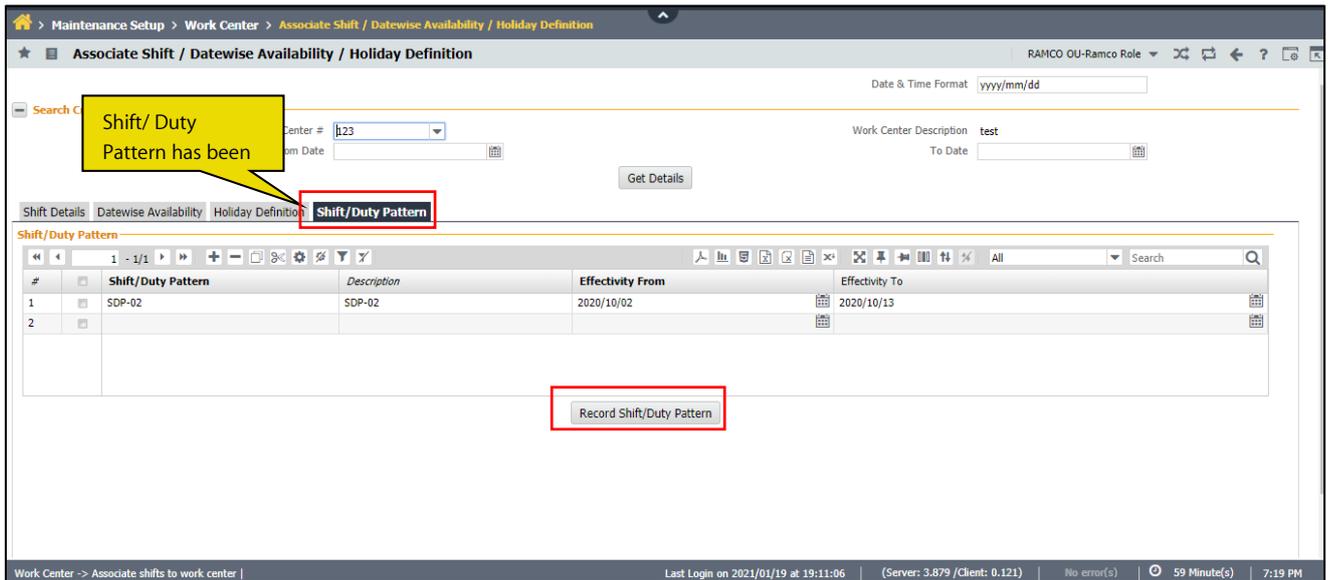
Break Timings will be captured in this pop-up. Maintain shift/duty break timings contains following controls:

- Break ID: Defines the particular for the specific break period
- Break Description: Defines the reason for the break
- Start Time: The starting time of the break periods is captured
- End Time: The end time of the break period is captured
- All the values are mandatory to save break timings

Exhibit 2: Maintain Shift/ Duty Break Timings popup

#	Break ID	Break Description	Start Time	End Time
1	abc	abc	10:39:18	11:10:11
2				

Exhibit 3: New tab addition in Associate Shift/Date wise Availability/ Holiday Definition screen



Scheduling employee timings is effective for proper functioning of work center. This features enhances the ability to map shift / duty pattern to work center.

WHAT'S NEW IN MAINTENANCE SETUP?

Provision to define schedule relationship and the influencing factor

Reference: APRP-224

Background

- This feature is employed to quantify the facilities in the work center and to measure the contribution towards the work flow, we need to drag the facilities if they influence or not. This feature enhances to identify facility as significant constraints and identify those which influence scheduling.
- While scheduling it is important to define relationship between execution phases. During the execution phase, the project team develops the product or service and presents the final product to the customer. The execution phase is the longest in duration. To effectively schedule the relationship this feature has been involved. This feature enhances to define the relationship between execution phases.
- Also, this feature enhances Process Plan with a simple yet powerful feature of defining predecessor to a task. Process Plan contains tasks added manually based on manufacturing requirements. The tasks usually have specific relationships to each other which signify the order in which they need to be performed. This feature addresses this need by enabling to define schedule relationships between tasks in Process Plan. Additionally, a definition of Predecessor Task can be made in Task Relationships Masters. When any such definition exists, it is automatically derived into Process Plan.

Change Details

1) New columns added

- New Column – A new combo control called "Scheduling Influencer" will be added in the multiline in **Associate Facilities** screen which is a link under **Associate Work Center Attributes** activity in the **Work Center** business component.
- A new combo control called "Significant Constraint" will be added in the multiline in **Associate Facilities** screen which is a link in the **Associate Work Center Attributes** activity.

2) New UI to define relationship between execution phases

- A new UI **Execution Phase Schedule Relationships** is added as a left pane activity under **Maintenance Task** Component.
- The Combo control "Package Type" added in the Execution details header section should display all the package types defined under 'Package Type' Entity in **Define Process Entities** activity of **Common Master** component.

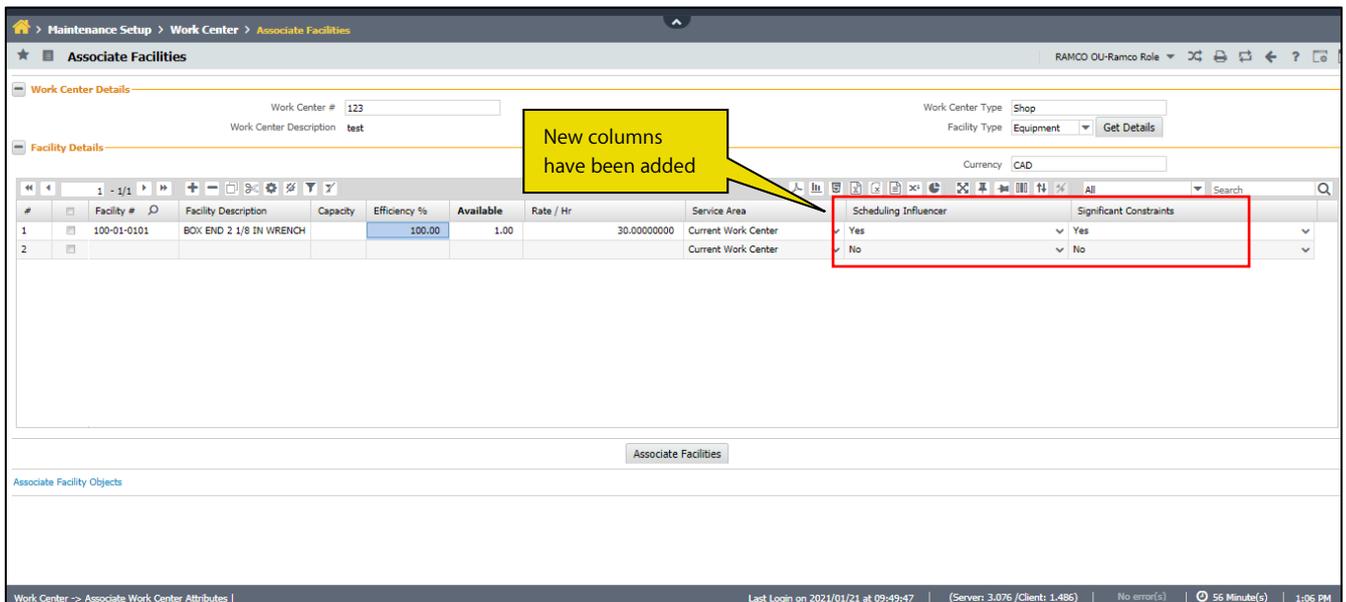
- The new UI contains the following controls: Execution details (header section)
 - Execution Type (Combo UI)
 - Package Type (Combo)
 - Repair Classification (Combo)
 - Execution Relationships (ML section)
 - Primary Execution Phase (Combo)
 - Secondary Execution Phase (Combo)
 - Schedule Relationship (Combo)

3) A new link- Manage Schedule Relationship of Tasks is added to Process Plan screen as depicted.

Note on link and launching of pop-up:

- Process Plan should contain at least two tasks for the pop-up to launch.
- When a task is selected and link is clicked, the selected task is defaulted in Task# control of pop up.
- When no task is selected, the second task in Process Plan is defaulted in Task# control of pop up.

Exhibit 1: Associate Facilities



Lack of quantifying facilities in the work center can be overcome by using Facility as 'Significant Constraints' & Identify Those Which Influence Scheduling.

Exhibit 2: Execution Phase Schedule Relationship

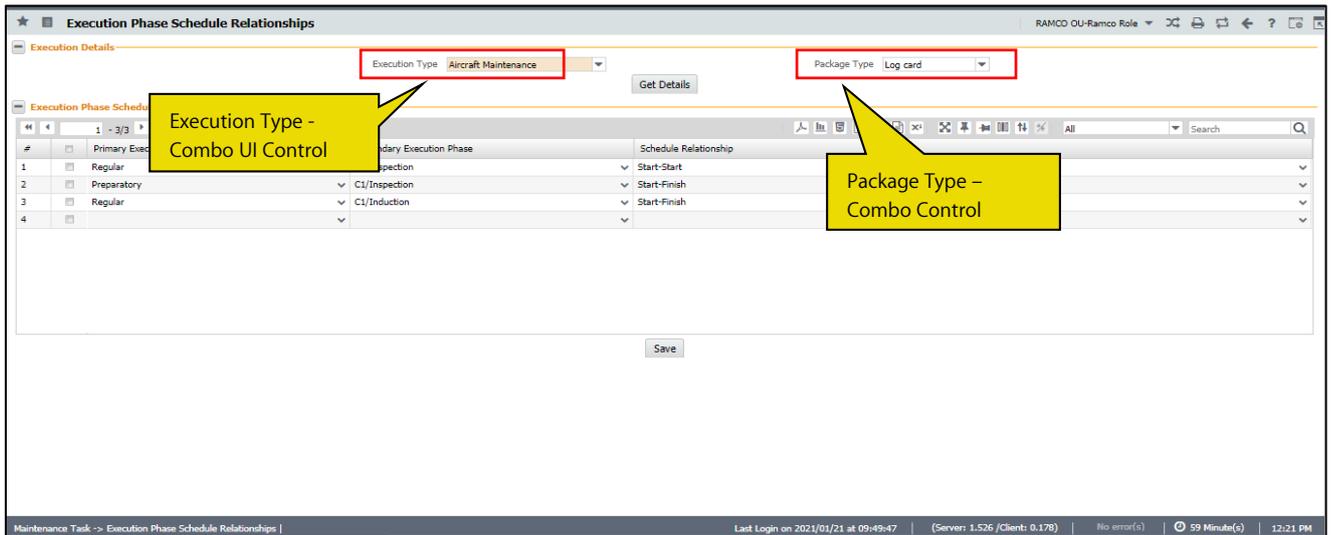
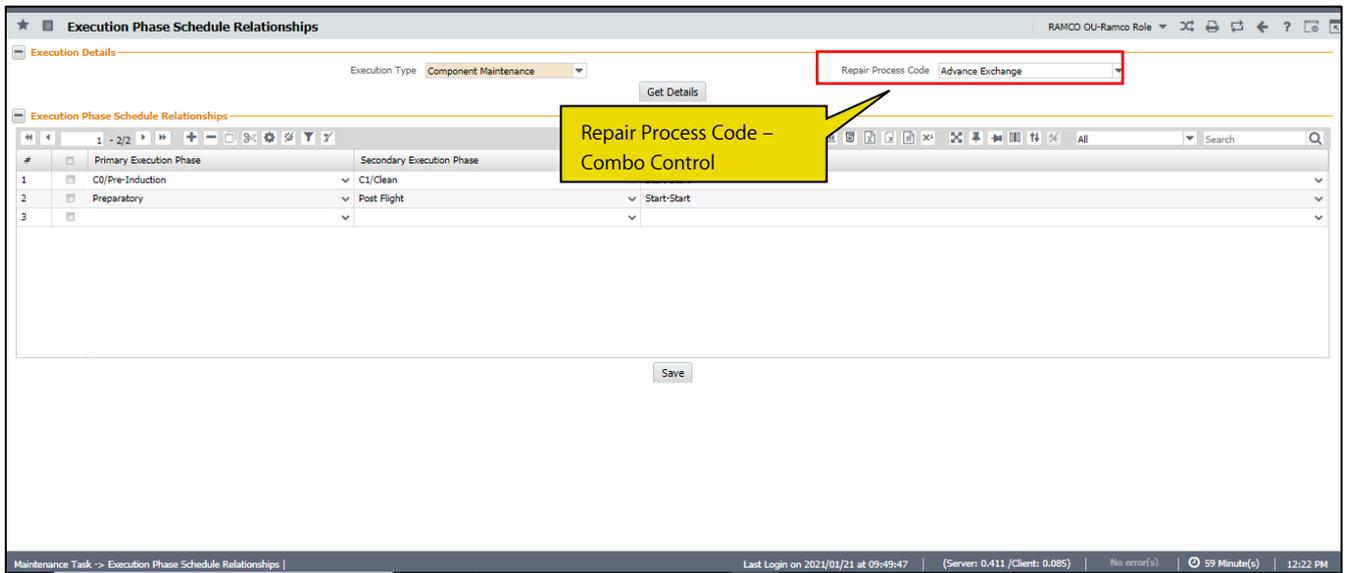
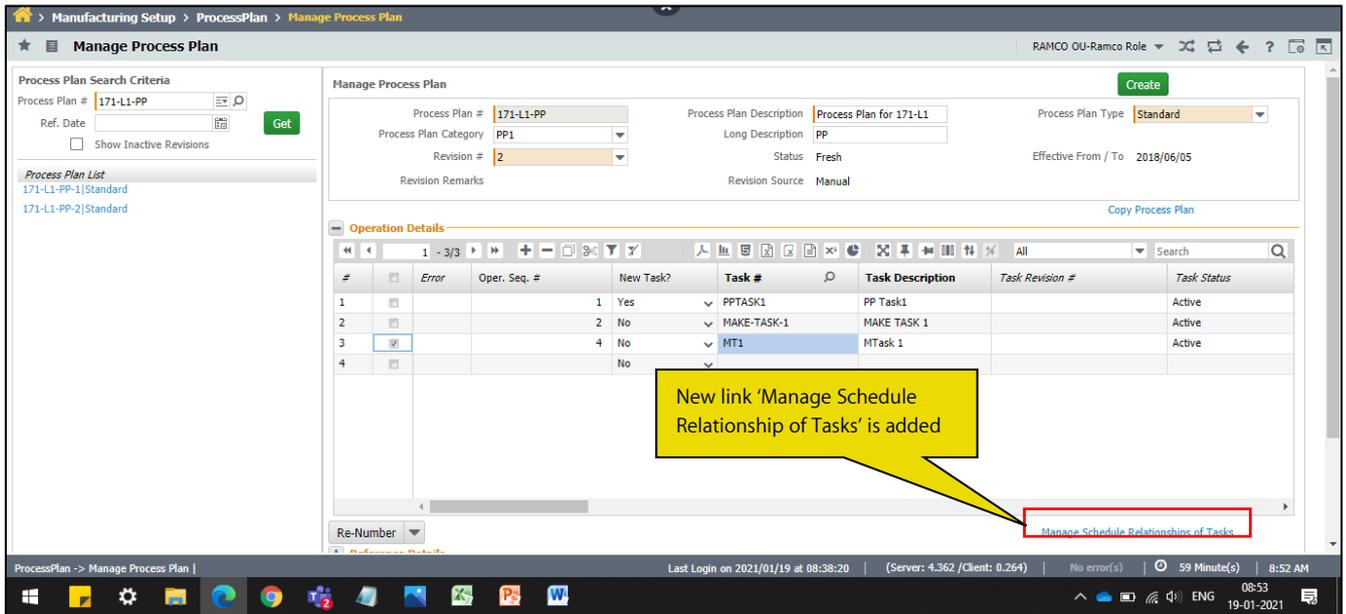


Exhibit 3: Execution Phase Schedule Relationship



Note: Lack of relationship between execution phases can be overcome by defining the schedule relationship between execution phases.

Exhibit 4: Manage Schedule Relationship of Tasks - Link

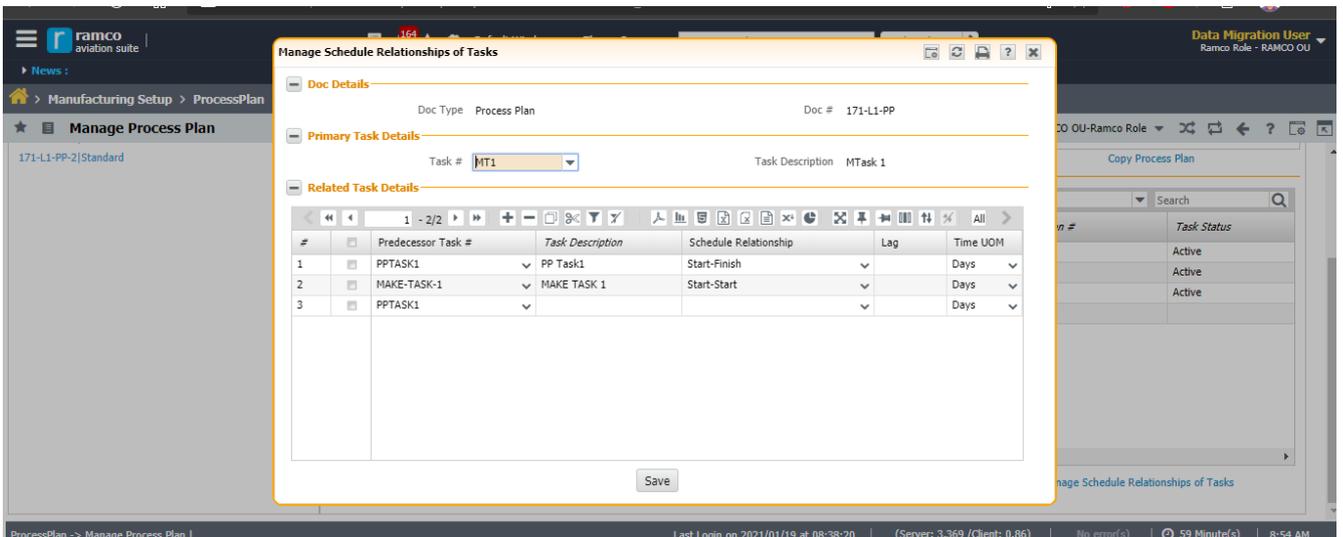


Manage Schedule Relationship of Tasks – Popup

The pop-up captures Schedule Relationship between a task (selected in Task # in Primary Task details section) and a predecessor task in the process plan.

Note on Predecessor Task: A Task is said to be a predecessor to another task based on sequence number sorted ascending.

Exhibit 5: Manage Schedule Relationship of Tasks – Popup



Provision to capture Standard Output Quantity against Manufacturing Task in Process Plan

Reference: APRP-224

Background

This enhancement speaks about the provision to capture standard Output quantity against manufacturing task level in a Process Plan. Standard output quantity is needed to be defined related to output quantity type. It describes if the elapsed time of a task is variable or fixed. This feature enhances to capture Standard output quantity against process plan.

Change Details

1. A new link is added in the **Manage Process Plan** screen to define Standard output quantity.
2. A new display only control "Output qty. type" is added to 'Operational details' ML section. On launch of **Manage Process Plan** screen, when a Process Plan # is selected, ensure if "Output qty. type" column is visible and the value is fetched from Task additional details header section of Task Master and displayed for a Task #.

Exhibit 1: Changes in Manage Process Plan screen

The screenshot displays the 'Manage Process Plan' interface. On the left, there are search criteria for Process Plan # and Ref. Date. The main area is divided into sections: 'Manage Process Plan' with input fields for Process Plan # and Category, and 'Operational Details' which contains a table. A yellow callout box highlights the 'Output Qty. type' column in the table, with the text 'Output Qty. type has been added'. The table also includes columns for 'Std. Output Qty.' and 'Time UoM'. The 'Std. Output Qty.' column shows a value of 4.00 for the first task. The interface also features a 'Create' button, a 'Copy Process Plan' link, and a 'Save' button at the bottom.

#	St. Man Hrs.	Est. Elapsed Time	Time UoM	Drawing Exists?	Output Qty. type	Std. Output Qty.
1			Days			4.00
2			Days			

3. A new editable control "Std. Output Qty" is added to 'Operational details' ML section. On launch of **Manage Process Plan** screen, when a Process Plan # is selected, ensure if "Std. Output Qty" column is visible and the value is fetched from Task Master and displayed for a Task #.

Exhibit 2: Changes in Manage Process Plan screen

The screenshot displays the 'Manage Process Plan' interface. On the left, there are search criteria for 'Process Plan #', 'Ref. Date', and a 'Get' button. Below this is a 'Process Plan List' section showing 'Found no rows to display!!!'. The main area contains a 'Manage Process Plan' form with fields for 'Process Plan #', 'Process Plan Description', 'Process Plan Category', 'Process Plan Type', and 'Effective From'. A 'Create' button is present. Below the form is an 'Operation Details' table with columns: '#', 'st. Man Hrs.', 'Est. Elapsed Time', 'Time UoM', 'Drawing Exists?', and 'Output Qty. type'. A new column, 'Std. Output Qty.', has been added to the table, highlighted with a red box and a yellow callout box containing the text 'Std. Output Qty. has been added'. The value '4.00' is visible in this column for the first row. Below the table are sections for 'Reference Details' and 'Record Statistics', each with a 'Save' button and a 'Quick Links' dropdown. The footer shows 'ProcessPlan -> Manage Process Plan | Last Login on 2021/01/21 at 09:49:47 | (Server: 2.781 /Client: 0.268) | No error(s) | 59 Minute(s) | 10:34 AM'.

#	st. Man Hrs.	Est. Elapsed Time	Time UoM	Drawing Exists?	Output Qty. type	Std. Output Qty.
1			Days			4.00
2			Days			

WHAT'S NEW IN TASK MASTER?

Flagging Output quantity as Fixed or Variable and Loading Employees for Elapsed or Wrench Time

Reference: APRP-224

Background

This feature enhances Task Master through definitions that could be made to Task and Sub-Tasks. In a Workcenter, when a task is performed, the output quantity resulting from the task could be a constant, independent of constraints or variable, dependent on constraints in the workcenter. The nature of output from a task is necessary to effectively schedule tasks in workcenters.

Workload in a workcenter need to be distributed among employees based on the nature of tasks. Some tasks require more Wrench Time while others require less. Elapsed Time for a task need not necessarily be greater for the tasks with greater Wrench Time. In order to utilize available man hours to the fullest, it is necessary for the planner to choose if the employees should be loaded for Elapsed Time or Wrench Time.

Change Details

Control additions

In four screens of Task Masters, i.e. Create, Edit, View and Maintain Activated Tasks screens, the below controls have been added.

Task Additional Details header section:

1. Employee Loading for – Combo control with values Elapsed Time and Wrench Time
 - This value indicates the system whether employee loading is to be considered for elapsed time or wrench time. By default, it is set 'Elapsed Time '.
2. Output Qty. Type – Combo control with values Fixed and Variable.
 - This value indicates the system whether the output from performing the task is a fixed or a variable quantity. By default, it is set 'Fixed'.

Sub-Task Details multi-line section:

1. Est. Elapsed Time – Editable control
 - This records the estimated elapsed time for a sub-task.
2. Time UOM – Combo control with values Hours, Days and Minutes.
 - This records the time unit for elapsed time. By default, it is set 'Hours'
3. Output Qty. Type – Combo control with values Fixed and Variable.
 - This value indicates the system whether the output from performing the task is a fixed or a variable quantity. By default, it is set 'Fixed'. If output quantity type of a task is Fixed, sub-tasks can only be of Fixed output quantity.

4. Employee Loading – Combo control with values Yes and No.
 - When this is set ‘Yes’, the sub-task is considered for Employee Loading. When this is set ‘No’, the sub-task is not considered for Employee Loading.

Exhibit 1: Create Task - Create Task Information – New controls added in header and sub-tasks multi-line

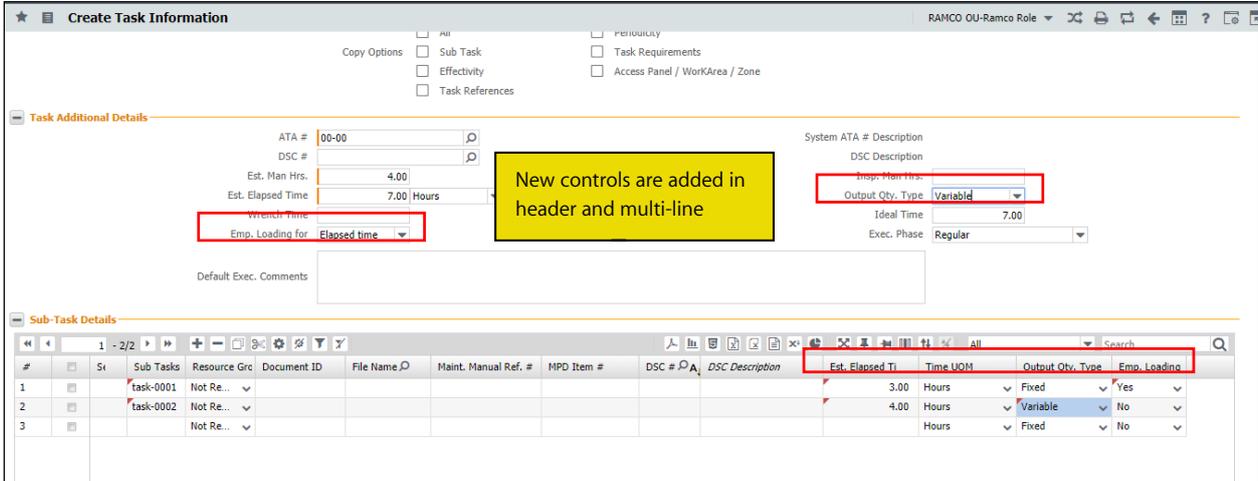


Exhibit 2: Edit Task- Edit Task Information – New controls added in header and sub-tasks multi-line

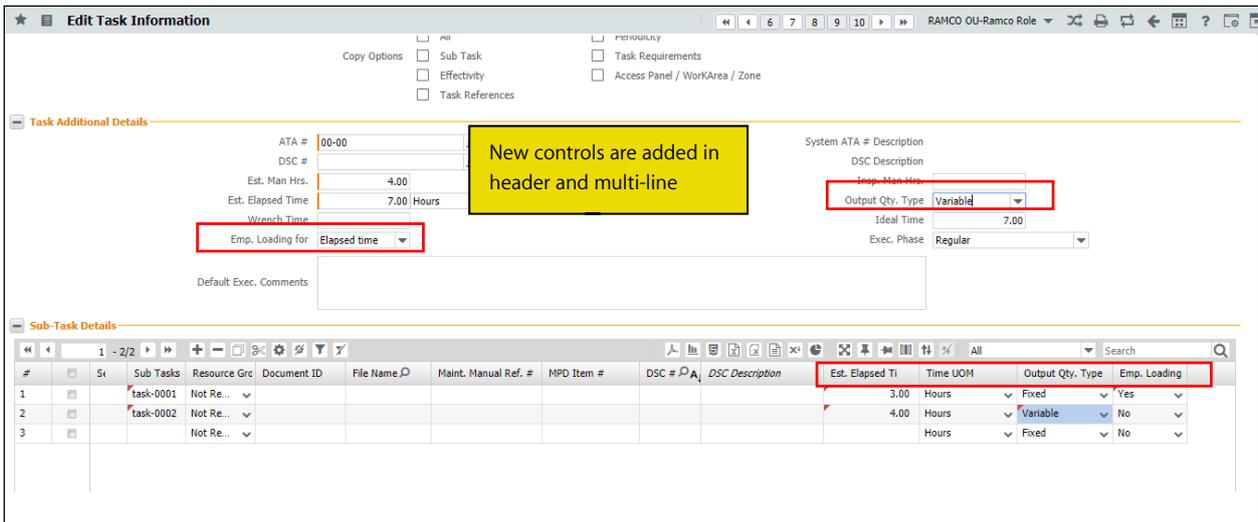


Exhibit 3: Maintain Activated Task - Edit Task Information – New controls added in header and sub-tasks multi-line

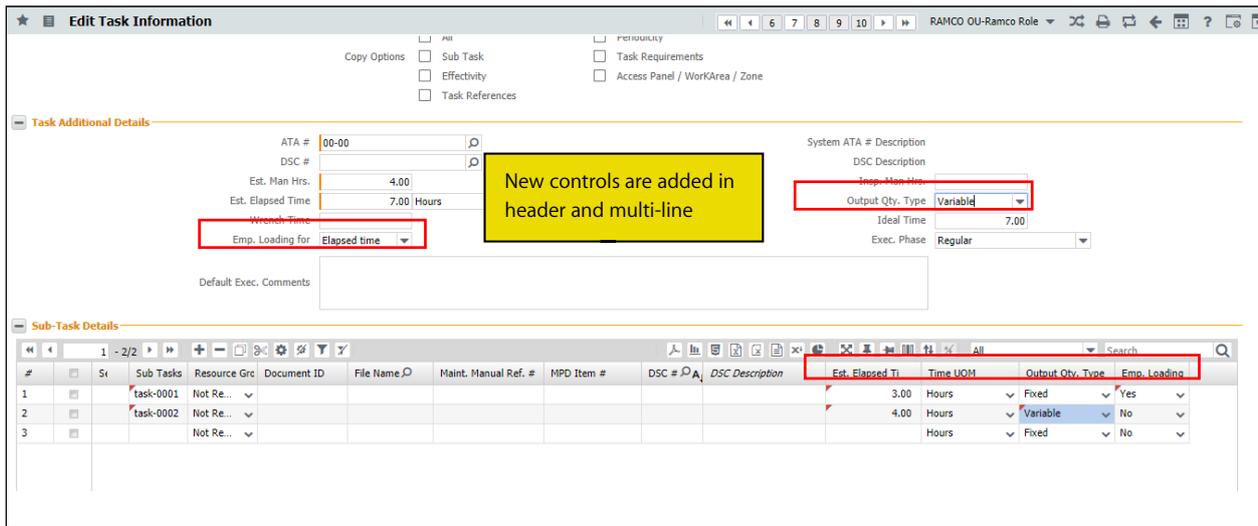
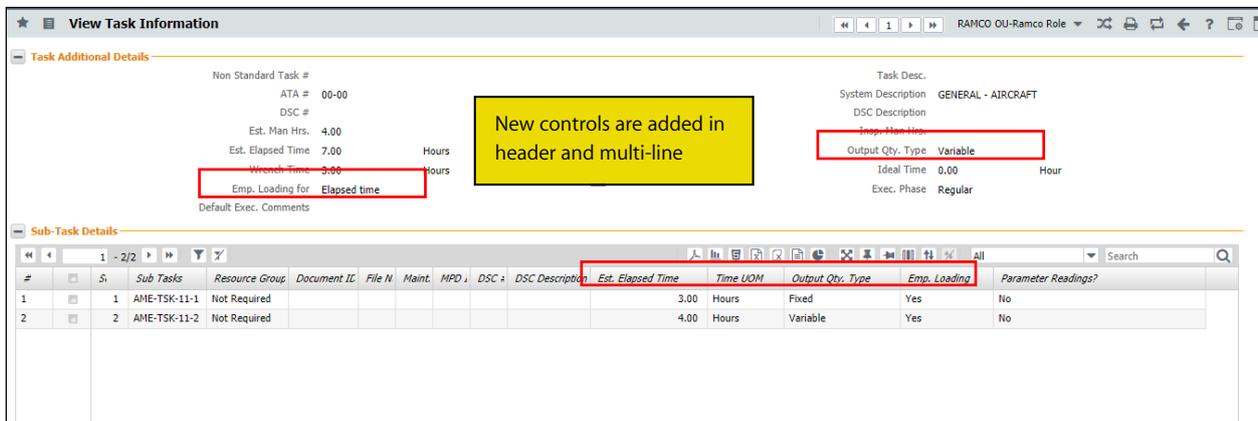


Exhibit 4: View Task - View Task Information – New controls added in header and sub-tasks multi-line



WHAT'S NEW IN CONFIGURATION?

Ability to inherit the Parameter values of components based on "Issued to" Aircraft

Reference: APRP-1047

Background

This enhancement brings improvements in 'Configuration', for an ITM vendor. In order to track the component maintenance schedules, the usage values of the component are the key input and when a component is attached on an aircraft, the usage of component can be derived based on the Aircraft usage.

But, in organizations which does not track the attachment with configuration of Aircrafts, the issue of a component is required to be considered as attachment and hence based on this parameter can be tracked. Additionally, when components are attached/issued or removed from the aircraft during sometime time mid of a month, the utilization of component is required to be derived automatically from Aircraft's monthly usage by calculating the daily average usage of Aircraft.

Change Details

This enhancement speaks about addressing the above mentioned issues:

- A new parameter to enable Parameter tracking for non-tracked components based on Issue & receipt will be added.
- CR History will be updated with the attached Aircraft & date & time details from Issue and removal from receipt, but without position codes.
- PV to attached components will be inherited based on above info. and once removed the inheritance will automatically be stopped.
- Monthly Utilization / Usage of Aircrafts will be updated using a new UI which will be used to break the monthly usage into Daily average utilization for Component PV inheritance
- Maint. Forecast of the component to be done based on attached Aircraft's avg. utilization.

Record Periodic Aircraft Utilizations: The new UI contains the following controls:

Header controls:

- **Search On** – Search can be performed using 'Aircraft Reg. #, Aircraft Model, Aircraft Group. **Parameters** – Parameters like Consumption, Range, Technical and Attributes can be used as search filters.
- **Utilization Date From/To** – From and To date can also be used to fetch the resultant utilization details.

Multiline controls:

- **Aircraft Reg. #** - Aircraft Utilization info can be recorded against an Aircraft Reg. # using this control.
- **Aircraft MSN** – Corresponding Aircraft Manufacturer Serial number gets fetched against the Aircraft Reg. #.
- **Aircraft Model #** - Corresponding Aircraft Model # gets fetched against the Aircraft Reg. #.

- Parameter – All the active parameters gets loaded here.
- **Current Value – Since New** – This will display the current value of the parameter set for the Aircraft Reg. #
- **Utilization from** – It is used to define the start date of the utilization period.
- **Utilization to** – It is used to define the end date of the utilization period.
- **Since New** – User can able to key in Utilization value i.e. Since New for an Aircraft.
- **Update Mode** – By default it should be Delta for a record.
- **Last Updated Date & Time** – This will display the last updated Date and Time.
- **Last Updated Value**– This is display the last updated value.
- **Utilization Comment** – It is a user defined field, were user can add comments on a particular record.

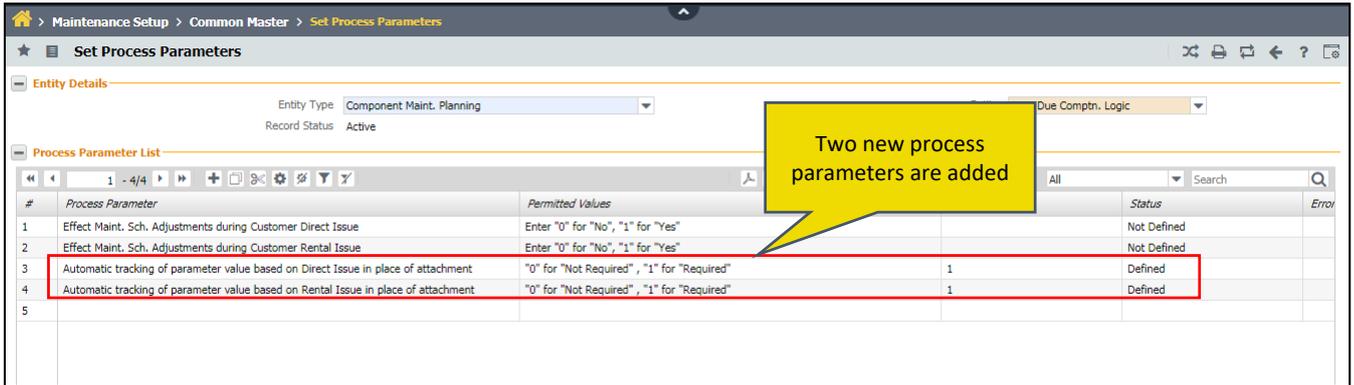
Exhibit 1: Record Periodic Aircraft Utilizations screen

#	Aircraft Reg. #	Aircraft MSN	Aircraft Model #	Parameter	Current Value - Since New	Utilization From	Utilization To	Since New	Update Mode	Last Updated Date & Time	Last Updated Value
1	35-101	35-10101	A320-211	FH	10	08-3-2020	08-4-2020	20	Delta	09-24-2020 02:21 PM	20.00000000
2	35-101	35-10101	A320-211	FH	10	08-11-2020	08-15-2020	20	Delta	09-24-2020 07:49 PM	20.00000000
3	35-101	35-10101	A320-211	FH	10	09-2-2020	09-2-2020	12	Delta	09-24-2020 12:13 PM	12.00000000
4	35-101	35-10101	A320-211	FH	10	09-15-2020	09-15-2020	10	Delta	09-24-2020 12:24 PM	10.00000000
5	35-101	35-10101	A320-211	FH	10	09-21-2020	09-23-2020	30	Delta	09-24-2020 11:24 AM	30.00000000
6	35-102	ASDFASFD445	A320-211	FH	200	08-5-2020	08-13-2020	100	Delta	09-24-2020 12:35 PM	100.00000000
7	35-102	ASDFASFD445	A320-211	FH	200	09-2-2020	09-2-2020	12	Delta	09-24-2020 12:13 PM	12.00000000
8	35-102	ASDFASFD445	A320-211	FH	200	09-3-2020	09-11-2020	10	Delta	09-24-2020 12:24 PM	10.00000000
9	35-102	ASDFASFD445	A320-211	FH	200	09-15-2020	09-15-2020	10	Delta	09-24-2020 12:24 PM	10.00000000
10	35-102	ASDFASFD445	A320-211	FH	200	09-16-2020	09-17-2020	10	Delta	09-24-2020 12:24 PM	10.00000000

In **Record Periodic Aircraft Utilizations** screen, user can come in and record utilization info for any time period. Here, duplication and modification of records are restricted.

Note: When parameter for an UOM is set as cycle. Then system will validate if user enters a value which will get split up across dates in decimal values.

Exhibit 2: Set Process Parameters screen



Two new process parameters are added in Entity Type 'Component Maint. Planning' and Entity 'Next Due Comptn. Logic'. These parameters are added to consider the parameter tracking based on 'Direct, Rental' issue in place of attachments.

Issues: For an ITM each issues happening for an Aircraft will be considered as an attachment. Some of the issue scenarios are 'Unplanned Issue, General Issue and Rental Issue'. Whenever the above issues are confirmed the system will consider the issued component is attached to the respective Aircraft. User can provide the utilization info using 'Record Periodic Aircraft Utilizations' and by default the values will get splitted across each days.

The value gets updated in the following screens,

- 1) View Parameter values
- 2) View History of Parameter value update
- 3) View Consumption & Range Parameters

Removals: Removals are considered from GI and Rental Receipt confirmation. When the above scenarios are performed, it is considered that the components are no more attached to the aircraft and any further updation to the utilization will not impact the Component utilization.

Exhibit 3: View Parameter values screen

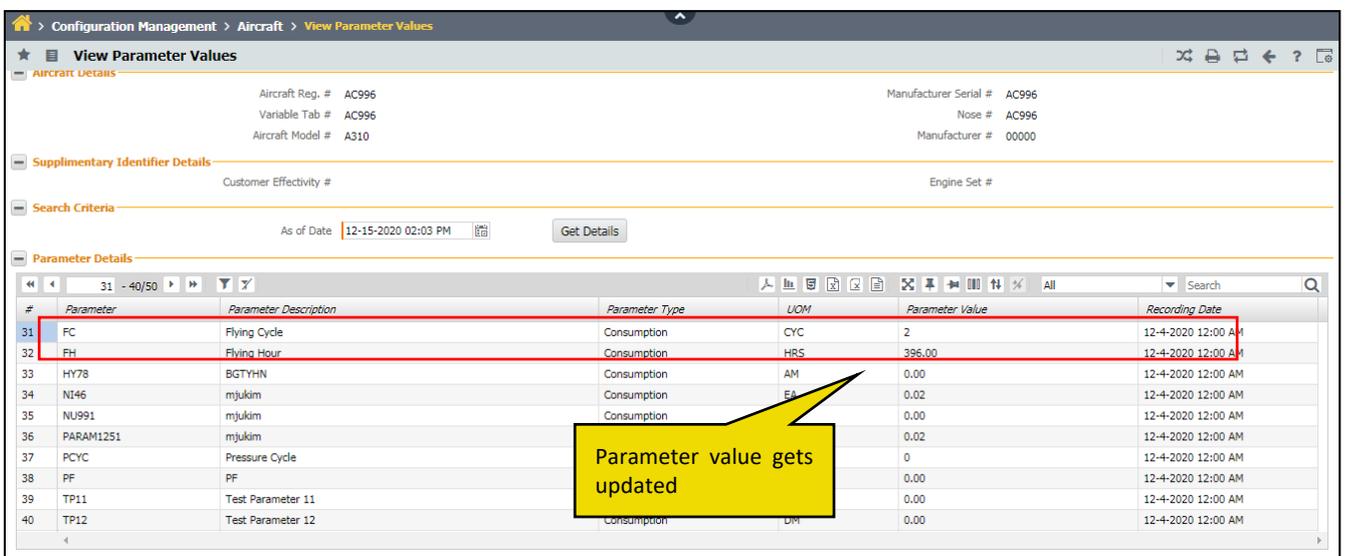


Exhibit 4: View History of Parameter value update screen

View History of Parameter Value Update

Aircraft Details
 Aircraft Reg. # AC996
 Variable Tab # AC996
 Aircraft Model # A310
 Manufacturer Serial # AC996
 Nose # AC996
 Manufacturer # 00000

Supplementary Identifier Details
 Customer Effectivity #
 Engine Set #

Parameter Details
 Parameter: FH
 Parameter Description: Flying Hour
 Present Value: 396.00
 Parameter Type: Consumption
 UOM: HRS
 As of Date

Display Filter
 From Date: 11-16-2020
 To Date: 12-16-2020

Parameter Update History

#	Updated Value	Updated Date	Update Mode	Cumulative Value	Transaction #	Transaction Type
1	20.00	12-4-2020 04:16 PM	Delta	340.00	MPV0005482020	MANUAL
2	56.00	12-4-2020 04:08 PM	Delta	396.00	MPV0005472020	MANUAL

Parameter value gets updated

Exhibit 5: View Consumption & Range Parameters screen

View Consumption & Range Parameters

Aircraft Details
 Aircraft Reg. # AC996
 FH Log Mode: Actual Flight Time
 Manufacturer Serial # AC996

Parameter Details

#	Parameter	UOM	Parameter Type	Life Parameter	Parameter Source	Present Value	As of Date	As of Time	Range: From
7	FH	HRS	Consumption	No		396.00			
8	HY78	AM	Consumption	No		0.00		12:00 AM	
9	NI46	EA	Consumption	No		0.02		12:00 AM	
10	NU991	AM	Consumption	No		0.00			
11	PARAM1251	AM	Consumption	No		0.02			

Parameter value gets updated

Spanish Language Conversion of Technical Records Hub for ASES projects

Reference: APRP-739

Background

Technical Records Hub screen is used by mechanics who maintains the flight operations. In certain regions where the regional language is Spanish; they feel Spanish is a better language to work with than English. It would be better to render the screen in Spanish for better usability. This feature enhances the conversion of Spanish language of Technical Records Hub screen.

Change Details

This enhancement speaks about the conversion of Technical Records Hub into Spanish language. This can be achieved by changing the context of the screen on login itself.

The entire screen - captions and error messages are now translated and displayed in Spanish. However, link screens and Help On screens are still in English.

Exhibit 1: Tech Records Hub – Configuration Tab

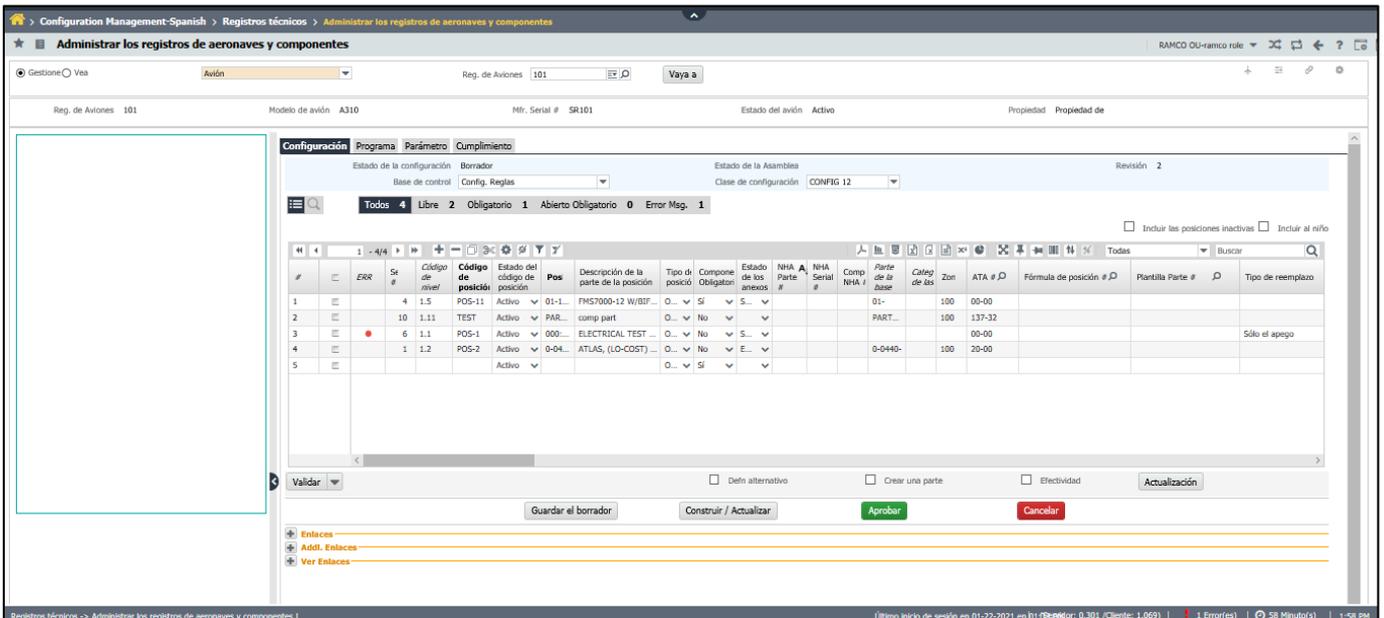


Exhibit 2: Tech Records Hub – Program Tab

#	EBR	Parte #	Serial...	Tarea #	Tarea Rev #	Descripción de la tarea	Tarea de Plantilla #	Parámetro	Unidad de tiempo	Valor umbral	Intervalo
1				EO-590-1		590 Task 1		Calendario	▼ Días	▼	10.00
2				EO-590-2		590 Task 2		Calendario	▼ Días	▼	10.00
3				PHASE 2-2		Phase 2		Calendario	▼ Días	▼	2.00
4				PHASE 2-2		Phase 2		FH	▼	▼	2.00
5				PHASE 4-4		Task		Calendario	▼ Días	▼	2.00
6				PHASE 4-4		Task		FH	▼	▼	2.00
7				TASK-04062020		desc		Calendario	▼ Días	▼	
8				TASK-090		desc		Calendario	▼ Días	▼	
9				TSK-000369		task testing		Calendario	▼ Días	▼	
10				TSK12345		testing		Calendario	▼ Días	▼	

Exhibit 3: Tech Records Hub – Parameter Tab

#	Parámetro	UOM	Desde el nuevo	Desde la revisión	Desde la reparación	Desde que la Inspectoría	Desde la última visita a la tienda	Actualizar la fecha y la hora	Observaciones	Init. c/Valor desconocido
2	APUH	HRS	234		345.00	678.00	456.00	465.00	01-22-2021 02:54 PM	234
3	COV	INR								
4	ECH	HRS								
5	ENOGT	CC								
6	FC	CYC								
7	FH	HRS								
8	HY78	AM								
9	NI46	EA								
10	NI991	AM								
11	PARAM1251	AM								
12	PCYC	CYC								

User can find it easy to work on the preferred Spanish language instead of English, which will be beneficial for usability stand point.

Exhibit 4: Tech Records Hub – Compliance Tab

The screenshot displays the 'Administrar los registros de aeronaves y componentes' (Administer aircraft and component records) interface. The 'Cumplimiento' (Compliance) tab is active, showing a table with columns for '#', 'Parte #', 'Serial...', 'Tarea #', 'Valor actual', 'Rem. Valor', 'Fecha prevista', and 'Fecha de cumplimiento real'. The table is currently empty, displaying the message 'No se encontraron filas para mostrar!!!' (No rows found to display!!!). The interface includes a search bar, filters for 'All' and 'Overdue', and a status bar at the bottom indicating the last session start time and system status.

#	Parte #	Serial...	Tarea #	Valor actual	Rem. Valor	Fecha prevista	Fecha de cumplimiento real
No se encontraron filas para mostrar!!!							

WHAT'S NEW IN ENGINEERING CHANGE MANAGEMENT?

Ability to define Adv. Part Effectivity within EO

Reference: APRP-610

Background

In an MRO industry SB/AD/SIL are received from vendors/regulatory authority to perform a modification to parts. SB/AD/SIL have an effectivity section that mentions the criteria to identify the components or the specific components to which the document applies. In our system we allow user to create a direct Engineering Order, but there is a gap in enhancing 'Manage Adv. part effectivity' while creating direct EO.

Change Details

This enhancement speaks about bringing the feature to provide 'Adv. Part Effectivity' while creating direct EO. A link "Manage Advanced Part Effectivity" is added next to 'Auto Embodiment Required?' check box of "Effectivity Tab" in EO. On clicking of 'Manage Adv. Part Effectivity' link, the "Edit Advanced Part Effectivity" popup launches.

The "Edit Advanced Part Effectivity" popup will launch only,

- a) If the EO has been created independently without any MCR reference. (If the EO has MCR reference, any update of advanced part effectivity must be carried out in the MCR component).
- b) If EO Applicability is 'Component' or 'Engine'.
- c) In the View-only mode, if you have launched the "Manage Engineering Document" activity in the View mode (selected the View radio button).
- d) If the status of the EO # or Rev # is Fresh or Revised and not Released.

The "Edit Advanced Part Effectivity" popup will not launch, if part effectivity has been defined in the serial range for the EO # using Effectivity Tab.

If a MCR # based PCR is created for which 'Adv. Part effectivity' is defined in the MCR and, if an existing direct EO # is provided as a reference to the PCR, the system will include the Adv. Part effectivity defined in MCR to the EO# in addition to the direct EO.

Exhibit 1: Manage Eng. Document screen

Eng. Doc. # / Rev. # : EO-001160-2020 / 0

Applicability: Component | Status: Fresh | Revoked?: No

Buttons: Create, Edit, Revise, View

Tab: Effectivity

Link: Manage Adv. Part Effectivity

Effectivity Level: At Serial Level

#	Part #	Serial #	MSN	Serial Exists?	App. Grp. #	Applicable ?
1	000:99999	101	101	Yes	0	Yes
2	000:99999	14	14	Yes	0	Yes
3	000:99999	5	5	Yes	0	Yes
4	000:99999	SL006	SL006	Yes	0	Yes
5	000:99999	SL007	SL007	Yes	0	Yes

Update Maint. Prog. Template

Save

Provision to map Post MOD # to EO tasks before EO release

Reference: APRP-1304

Background

This enhancement brings improvements in Engineering Change Management screens with the ability to map post-mod # to EO tasks before EO release. While recording a Maintenance Change Request for an Engineering change, required tasks can be authored anew within MCR along with required schedules. Once those tasks are compiled, there is consequently a need to update the component with MOD # associated with the task.

Change Details

Maintenance Change Request

In below Create, Edit and Revise MCR screens, a new link - "Manage Task Part MOD Details" is added. Once the MCR is 'Confirmed', the link could not be launched.

Exhibit 1: Create Maintenance Change Request screen

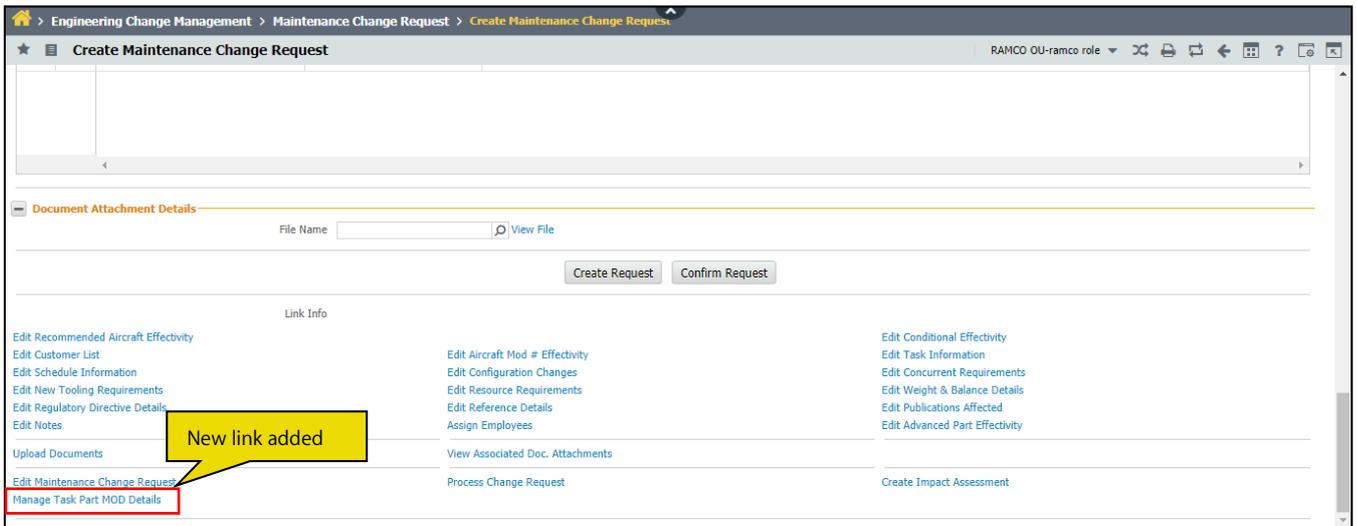


Exhibit 2: Edit Maintenance Change Request screen

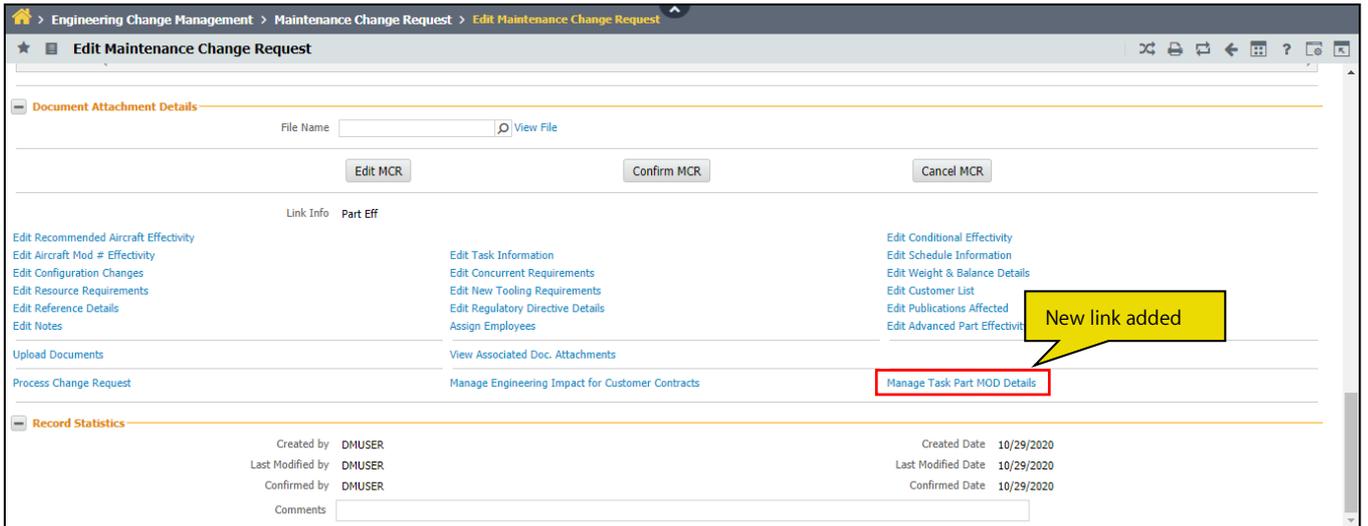
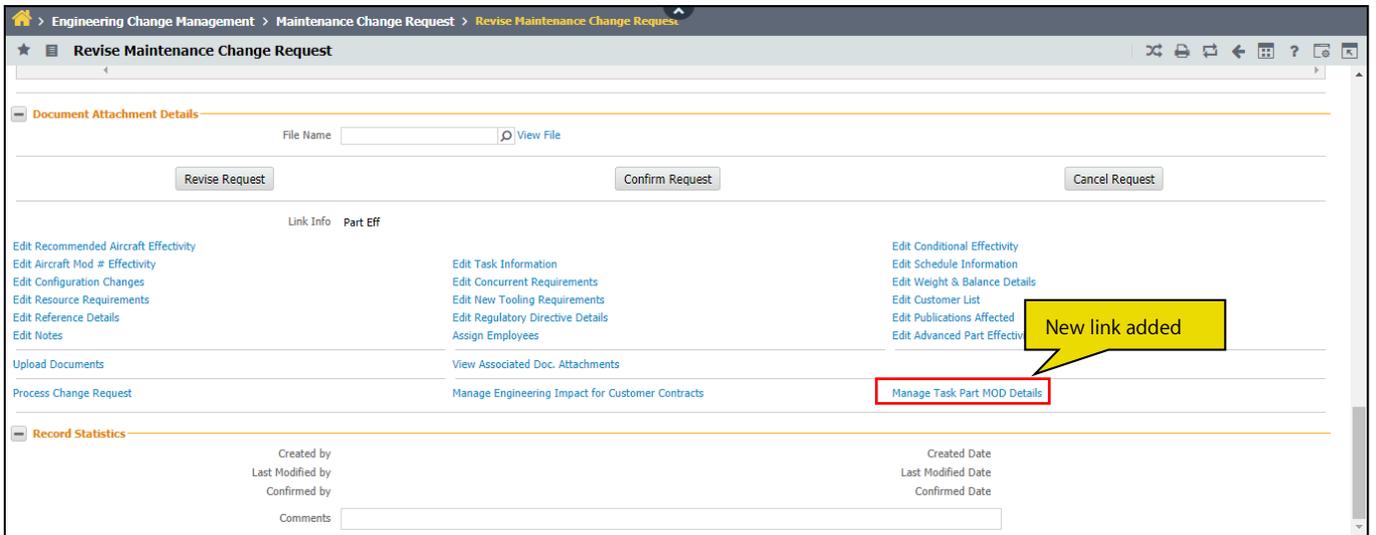
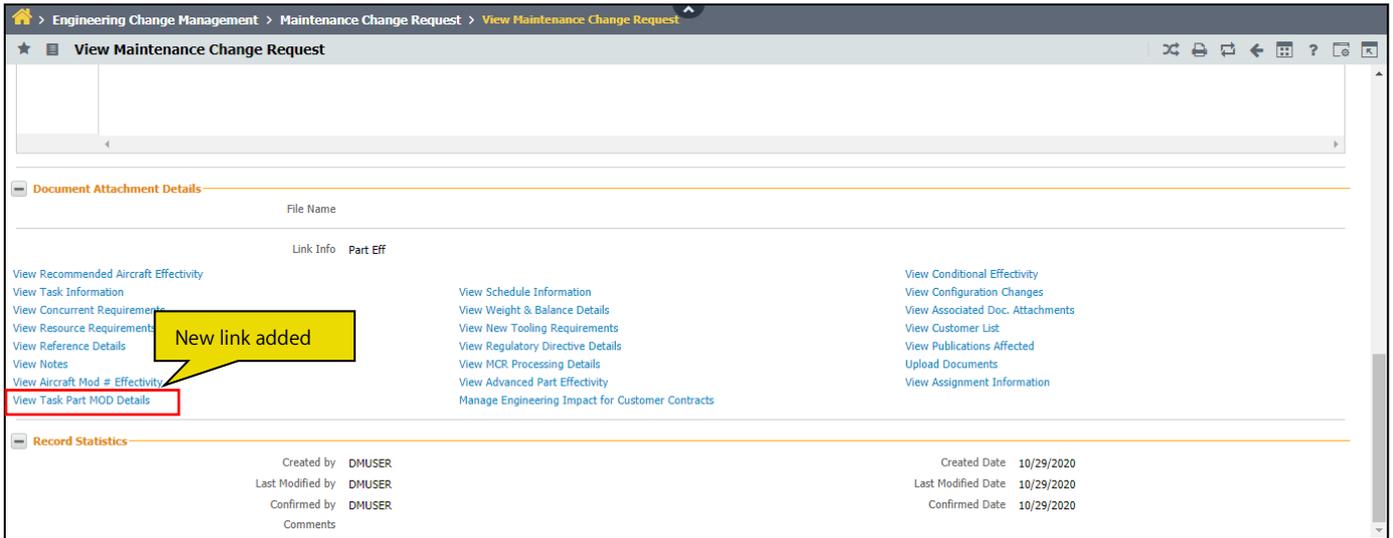


Exhibit 3: Revise Maintenance Change Request screen



In View Maintenance Change Request, a new link “View Task Part MOD Details” is added and user could only view MOD details.

Exhibit 4: View Maintenance Change Request screen



Manage Engineering Document

A new link – “Manage Task Part MOD Details” is added to Link section of Manage Engineering Document screen. The link could be launched only if Task details have been saved in ‘Edit Task Details’ screen. When an EO is released, the link will not be available.

With this enhancement, a new task could be added into Engineering Document without adding the task to Task Master. Instead, once the EO is released, the new task is added automatically to Task Master by the system.

Once a MOD task (new or existing) is complied, the MOD # of the task is updated against the Part #.

Exhibit 5: Manage Engineering Document screen – Fresh Document

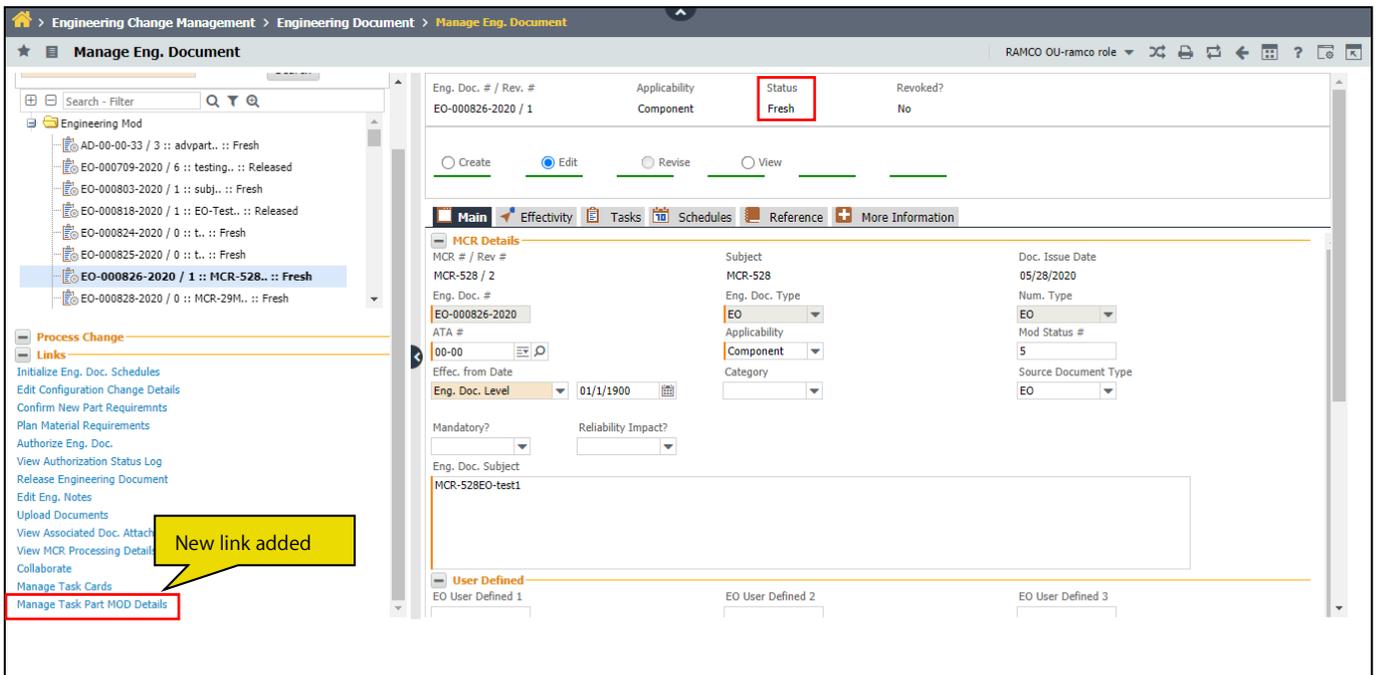


Exhibit 6: Manage Engineering Document screen – Released document

The screenshot shows the 'Manage Eng. Document' interface. At the top, the document is identified as 'EO-001146-2020 / 0' with a status of 'Released'. The 'Status' field is highlighted with a red box. Below the document details, there are tabs for 'Main', 'Effectivity', 'Tasks', 'Schedules', 'Reference', and 'More Information'. The 'Main' tab is active, showing 'MCR Details' and 'Eng. Doc. Details'. A yellow callout box with a pointer to the 'Links' section on the left contains the text: 'When EO is released, the link will not available'.

Exhibit 7: Maintain Task Part Mod Details screen

The screenshot displays the 'Maintain Task Part Mod Details' screen. It features search criteria for 'Task #/Rev. #', 'Part #', and 'Source Doc. #'. Below this is a table titled 'Task Part Mod Details' with columns for '#', 'Task #', 'Rev. #', 'Task Description', 'Part #', 'Part Description', 'MSN - From', 'MSN - To', 'New Mod #', 'Conditional Effectivity', and 'Remarks'. The first row of data shows 'TSK_TEST_004' with a 'New Mod #' of '3A', which is highlighted with a red box. A yellow callout box with a pointer to this value contains the text: 'When the task is complied, Part # is updated with this MOD #'. A 'Save' button is located at the bottom of the screen.

WHAT'S NEW IN IMPACT ASSESSMENT?

Additional Improvements in Impact Assessment for Customer Contracts

Reference: APRP-1490

Background

This feature enhances Impact Assessment (IA) with minor and yet practically useful changes. Once the Impact assessment documents are created and saved with data, approvals need to be complied. Obviously, Internal, Engineering and Customer Approvals could not be updated instantaneously. VE would need to open an IA document multiple times for recording approvals. It is only intuitive that the VE lands on Approvals screen with the 'Pending' rows on the top followed by 'Approved' ones.

An IA document needs to be modified based on data obtained from any of approval processes. To facilitate this, modifications are now allowed to IA document except when a document is in 'Confirmed' and entirely 'Approved' status.

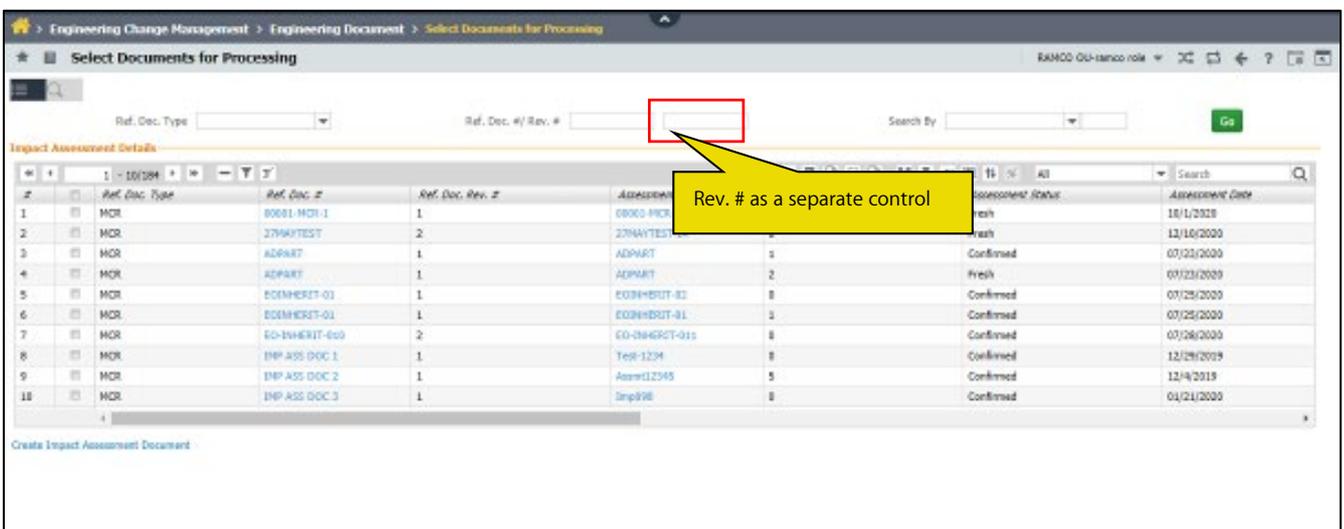
While fetching contracts associated with impacted components, the load on the system could be reduced by filtering out contracts that have nothing to do with IA. This would improve the user experience by reducing the time taken to fetch contracts for the impacted components.

Change Details

Search based on Rev.

A new editable control is added to Search section of Select Documents for Processing screen of Impact Assessment to input Ref. Doc.'s Rev. #.

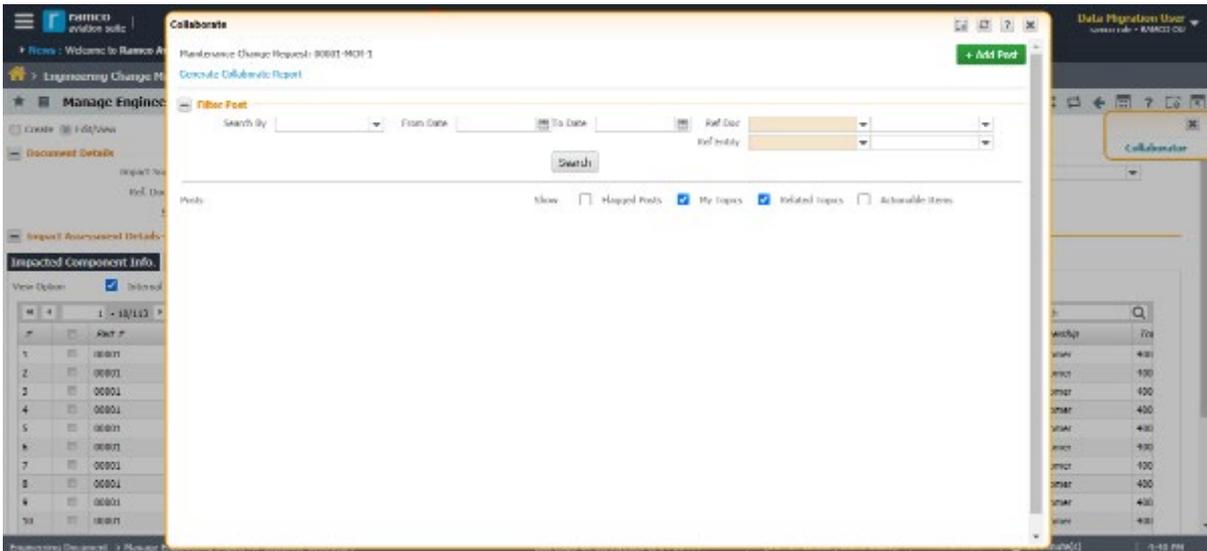
Exhibit 1: Search based on Rev.



Collaborate Inclusion for Impact Assessment

Collaborate functionality is added to Impact Assessment screen.

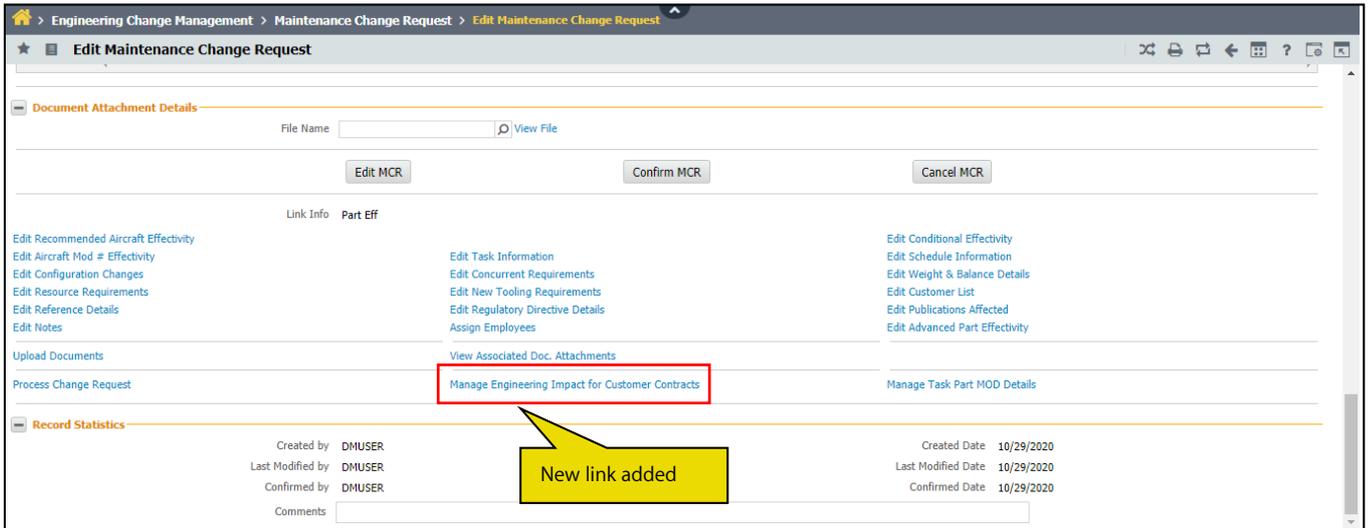
Exhibit 2: Collaborate Inclusion for Impact Assessment

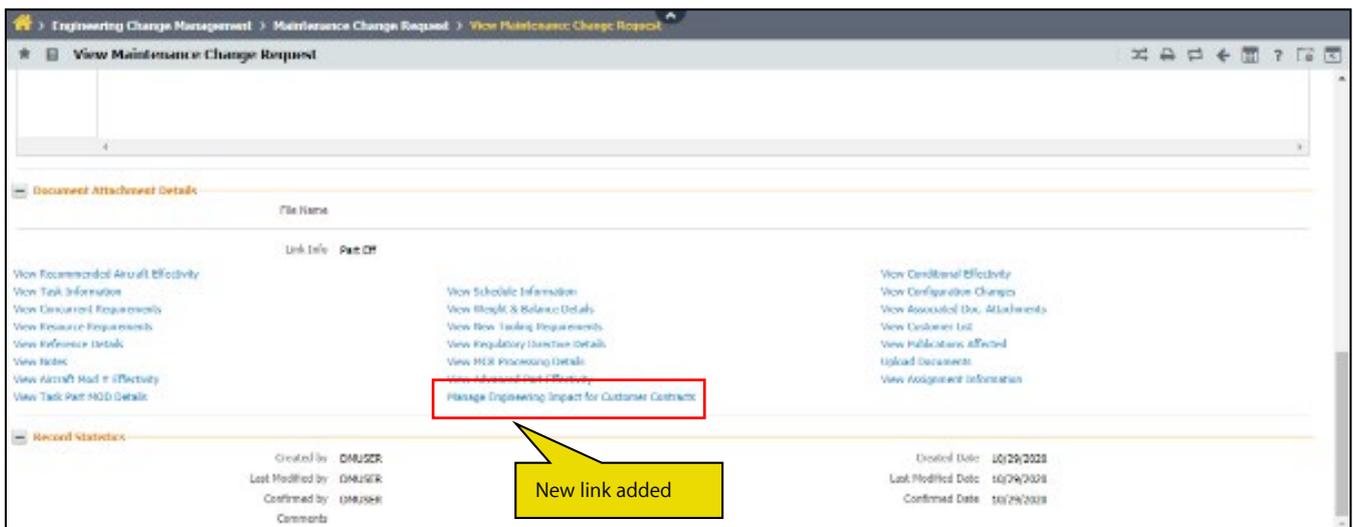
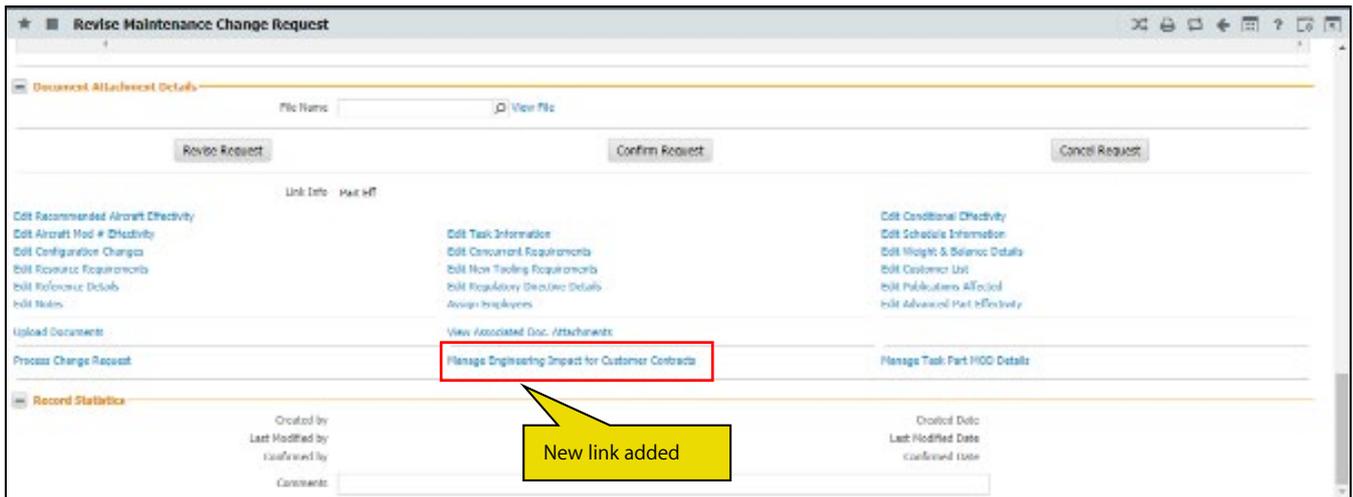


Link to Impact Assessment from Edit & View MCR

The link “Create Impact Assessment” has been replaced by “Manage Engineering Impact for Customer Contracts” in Edit Maintenance Change Request, View Maintenance Change Request and Revise Maintenance Change Request screens.

Exhibit 3: Link to Impact Assessment from Edit & View MCR





Fetch Customer Contracts of specific Sale Type only

Define Process Entities

A new process parameter “Applicable for Engineering Impact Assessment” is added under the Entity Type ‘Service Sale Type’ in all Entities in the ‘Set Process Parameters’ screen of the ‘Define Process Entities’ activity of the ‘Common Master’ business component.

- If the set option is set as ‘0’ (No), then those sale types will not be available in the ‘Sale Type’ combo and will not be included when system searches for impacted contracts
- If the set option is set as ‘1’ (Yes), then those sale types will be available in the ‘Sale Type’ combo and will not be included when system searches for impacted contracts
- By default, the parameter is set as ‘1’ (Yes)

Exhibit 4: Fetch Customer Contracts of specific Sale Type only

#	Process Parameter	Permitted Values	Value	Status	Error Message
1	Applicable Contract Classification	Enter "0" for "Regular" and "1" for "US Defense"	1	Defined	
2	Reference Contract Classification for CO Generation for US Defense Jobs	Enter "0" for "Contract" and "1" for "Task Order"	1	Defined	
3	Execution Type	Enter "0" for "Non-maintenance Based" and "1" for "Maintenance Based"		Not Defined	
4	Default Pricing Basis	Enter "0" for "TSM", "1" for "Fixed Price", "2" for "Usage Based", "3" for "Price by W	1	Defined	
5	Default Category for Customer Order - Part Jobs	Enter a valid Order Category defined in Common Masters business component.	1-Repair	Defined	
6	Default Category for Customer Order - Aircraft Jobs	Enter a valid Order Category defined in Common Masters business component.	1-Repair	Defined	
7	Numbering Type for Contract	Enter "0" for 'Manual Numbering type' or a Valid numbering type defined in Docume	0	Defined	
8	Numbering Type for Customer Order Services	Enter a valid document numbering Type defined in Document Numbering class busin	CO	Defined	
9	Default Repair Order Category for External Repair	Specify a valid Category as defined in 'Create Common Category' activity of 'Logistic	CS-Repair	Defined	
10	Contract Category to be considered for default Contract evaluation during CO auto-g	Specify a valid Contract Category as defined in 'Maintain Category Codes' activity of		Not Defined	
11	Auto Generation of Sale Quote on approval of Pre-quote based Customer Orders	Enter "0" for 'Not Required' and "1" for 'Required'		Not Defined	
12	Home Based Stocking	Enter "0" for 'Yes', "1" for 'No'		Not Defined	
13	Default Reason Code for Exchange ?	Enter a valid Reason Code for Exchange	Adv.Exchange Request	Defined	
14	Acknowledgement Required on confirmation of Customer Order	Enter "0" for 'No', "1" for 'Yes'		Not Defined	
15	Numbering Type for Task Orders	Enter "0" for 'Manual Numbering Type' or a Valid numbering type defined in the Doi	0	Defined	
16	Default Repair Process Code for automation of 'Customer Requests into Customer Or	Enter a valid Repair Process Code		Not Defined	
17	Standard Exchange Applicable ?	Enter "0" for 'No', "1" for 'Yes'		Defined	
18	Exchange Applicability ?	Enter "0" for 'Repair Exchange', "1" for 'Flat Ex		Defined	
19	Default Repair Process Code ?	Enter a valid Repair Process Code		Not Defined	
20	Numbering Type for "Bid" Contract	Enter "0" for 'Manual Numbering type' or a Valid numbering type defined in Docume		Not Defined	
21	Applicable for Engineering Impact Assessment	Enter "0" for "No", "1" for "Yes"	1	Defined	
22					

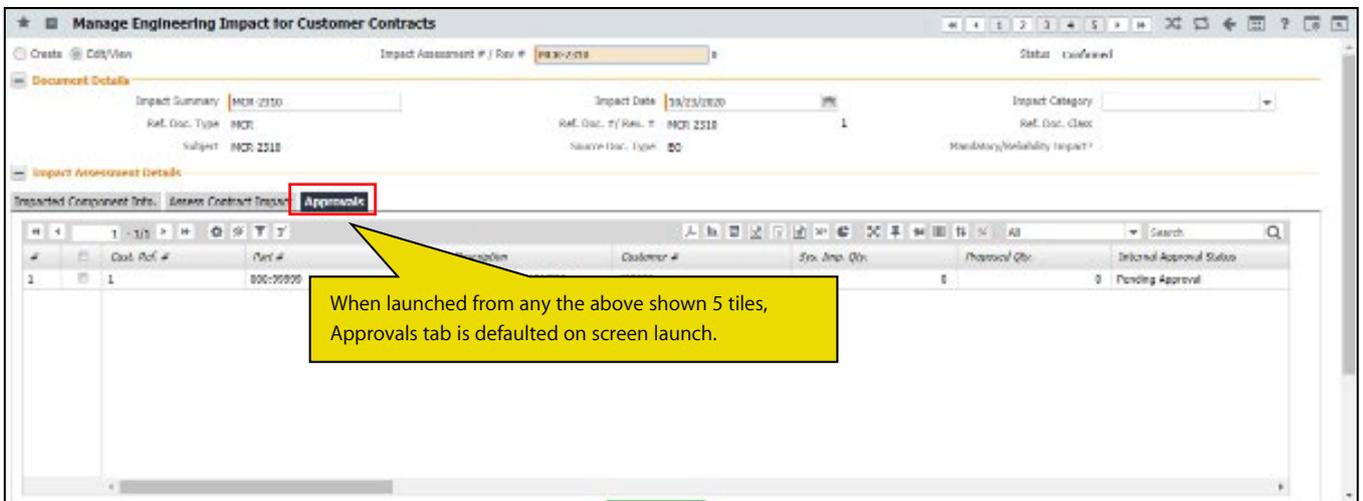
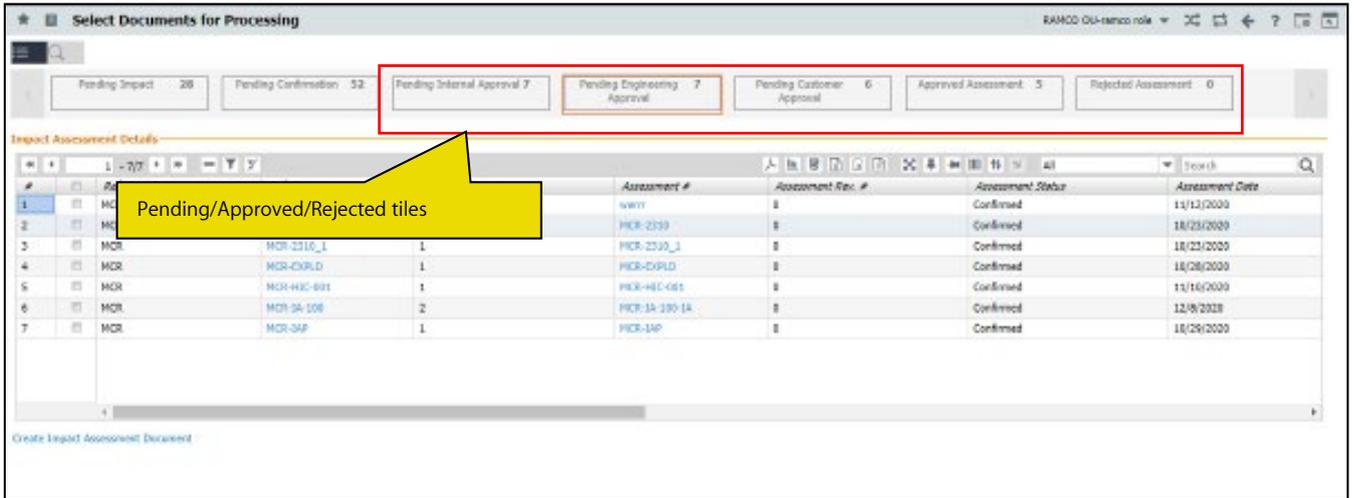
#	Part #	Part Description	Customer #	Contract #	Sale Type	Ass. from A/C	Reg.	T.S.H
1	724008-99167	ELECTRICAL IDG HARNESS	40006	80E965A0016	FP			A320-211
2	725308-99167	ELECTRICAL IDG HARNESS	40006	CPYNDT3	FP			A320-211
3	723208-99167	ELECTRICAL IDG HARNESS	40006	CPYNDT9	FP			A320-211
4	723208-99167	ELECTRICAL IDG HARNESS	40006	HanceTestContract2	FP			A320-211
5	724008-99167	ELECTRICAL IDG HARNESS	40006	HanceTestLR09	FP			A320-211
6	725308-99167	ELECTRICAL IDG HARNESS	40006	HanceTestLR02	FP			A320-211
7	723208-99167	ELECTRICAL IDG HARNESS	40006	HanceTestLR00	FP			A320-211
8	723208-99167	ELECTRICAL IDG HARNESS	40006	HanceTestLR01	FP			A320-211
9	724008-99167	ELECTRICAL IDG HARNESS	40006	HanceTestLR02	FP			A320-211
10	725308-99167	ELECTRICAL IDG HARNESS	40006	HanceTestLR03	FP			A320-211

Defaulting to Approvals tab and enhanced sorting logic

When "Manage Engineering Impact for Customer Contracts" is launched from any of the Pending Approval/Approved/Rejected tiles, 'Approvals' tab will be defaulted on screen launch.

Sorting logic in 'Approvals' tab of "Manage Engineering Impact for Customer Contracts" is enhanced to show rows that have the most 'Pending' statuses on the top, followed by the most 'Approved' statuses and the most 'Rejected' statuses.

Exhibit 5: Defaulting to Approvals tab and enhanced sorting logic



WHAT'S NEW IN FLIGHT OPERATIONS

Ability to round off Flight Hours recorded in Journey Log to user-defined decimal settings

Reference: APRP-1493

Background

This enhancement brings improvements in '**Flight Operations**', for a flight operator. System follows a mathematical rounding off logic to round off minutes of flight to hours of flight up to one decimal place. This round off does not match the expectation of the organization in certain values, hence a standard rounding off matrix is to be used to round off minutes of flight hours.

Change Details

To achieve the standard rounding off format the below mentioned formulations are implemented:

- A back end set option will be enabled to toggle between matrix based rounding off logic and existing mathematical rounding off logic.
- A back end rounding off matrix will be setup for common services to refer when it comes to rounding of minutes of flight to FH.

Range of Minutes and their corresponding rounding off factor:

1 – 2mins = 0.0 Hours

3 – 8mins = 0.1 Hours

9 - 14mins = 0.2 Hours

15 - 20mins = 0.3 Hours

21 – 26mins = 0.4 Hours

27 – 33mins = 0.5 Hours

34 – 39mins = 0.6 Hours

40 – 45mins = 0.7 Hours

46 – 51mins = 0.8 Hours

52 – 57mins = 0.9 Hours

58 - 60mins = 1.0 Hours

Exhibit 1: View Journey Log

The screenshot displays the 'View Journey Log' interface. At the top, it shows aircraft details: Manufacturer Serial # 98456875, Aircraft Model # A310, Total Flying Cycles 369, and Hobbs Meter Reading. The status is 'Approved'.

The 'Leg Details' section contains a table with the following data:

#	Line #	Flight #	Leg #	Dep. STN	Arr. STN	Dep. Date	Dep. Time	Take Off Date	Take Off Time	Landing Time	Arr. Date
1	1			AIR	AIR	11-22-2020	01:00	11-22-2020	01:05	02:55	11-22-2020
2	2			AIR	AIR	11-22-2020	03:30	11-22-2020	03:40	04:50	11-22-2020
3	3			AIR	AIR	11-22-2020	06:00	11-22-2020	06:00	07:00	11-22-2020

The 'Operational Details' section includes 'File Name' and 'Remarks'.

The 'Computed Flight Parameters' section shows:

- Flight Hours: 4.00
- Flight Cycles: 3
- Engine Hrs / Cycles: 5.18 / 3
- Block Hours: 5.30

Parameter details include: Parameter 1 COW 0.00 INR, Parameter 2 ECH 0.00 HRS, and Parameter 5 N146 0.00 EA.

A yellow callout box states: "Flight Hours & Block Hours getting updated in required format".

By setting up the above matrix format, the decimal values have been rounded off to standard method. FH will have downstream impact on those places where Flight hours are being used from Journey Log.

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