

# **RAMCO AVIATION SOLUTION**

## **ENHANCEMENT NOTIFICATION**

**Version 5.8.5**

**Sales**

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## WHAT'S NEW IN CUSTOMER MASTER?

### Field length changes for customer address fields and addition of new address fields

Reference: AHBG-15470

#### Background

Currently, the data length for some fields in the Customer Master is limited and does not fit all the data available. Due to this, the data is truncated when created in Ramco software. Truncating a customer name or address field will have impact in their shipping as well as other outward facing documents. Therefore, this enhancement is to increase field lengths.

#### Change Details

##### Increase in Data Length

The length of the following fields will be changed to 255 alphanumeric characters in all screens where the following fields are currently available:

Field Name	No. of Alphanumeric Characters	
	Presently	After Enhancement
Customer Name	40	150
Address 1	40	255
Address 2	40	255
Address 3	40	255

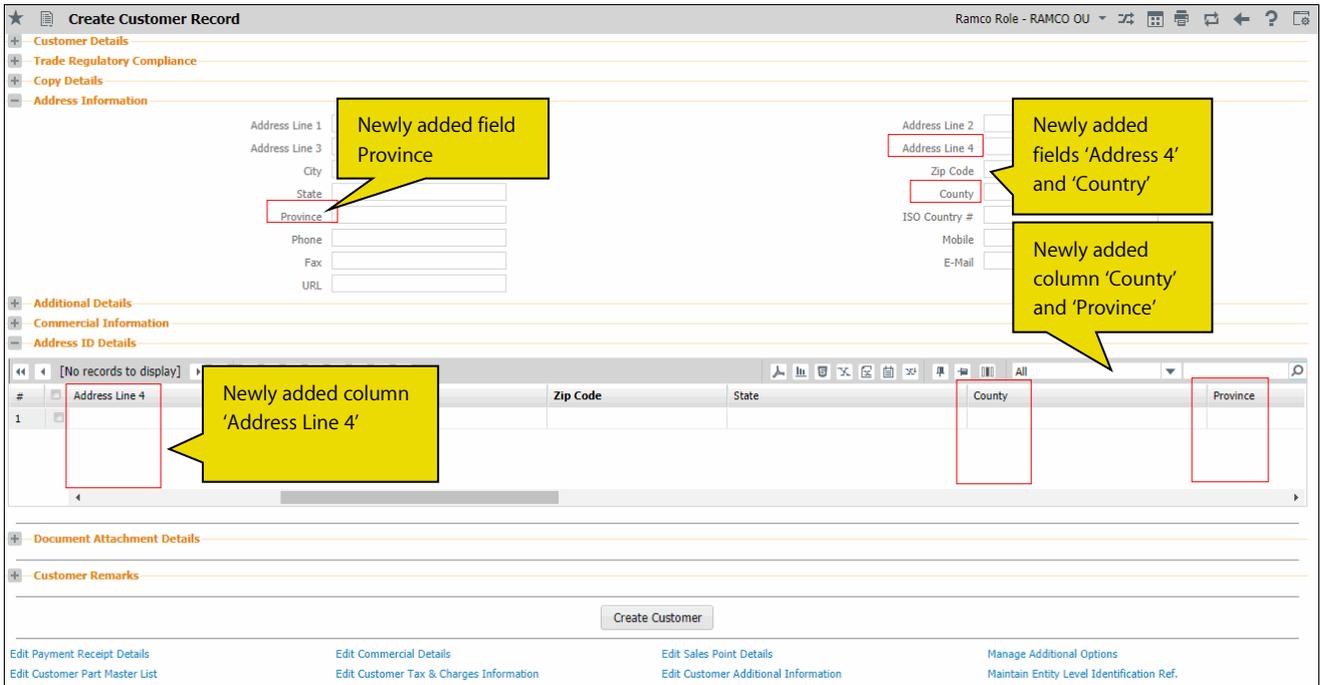
##### Addition of New Fields

New Fields added in Customer master and related screens

Newly added fields	No. of Alphanumeric Characters
Address 4	255
Country	155
Province	155

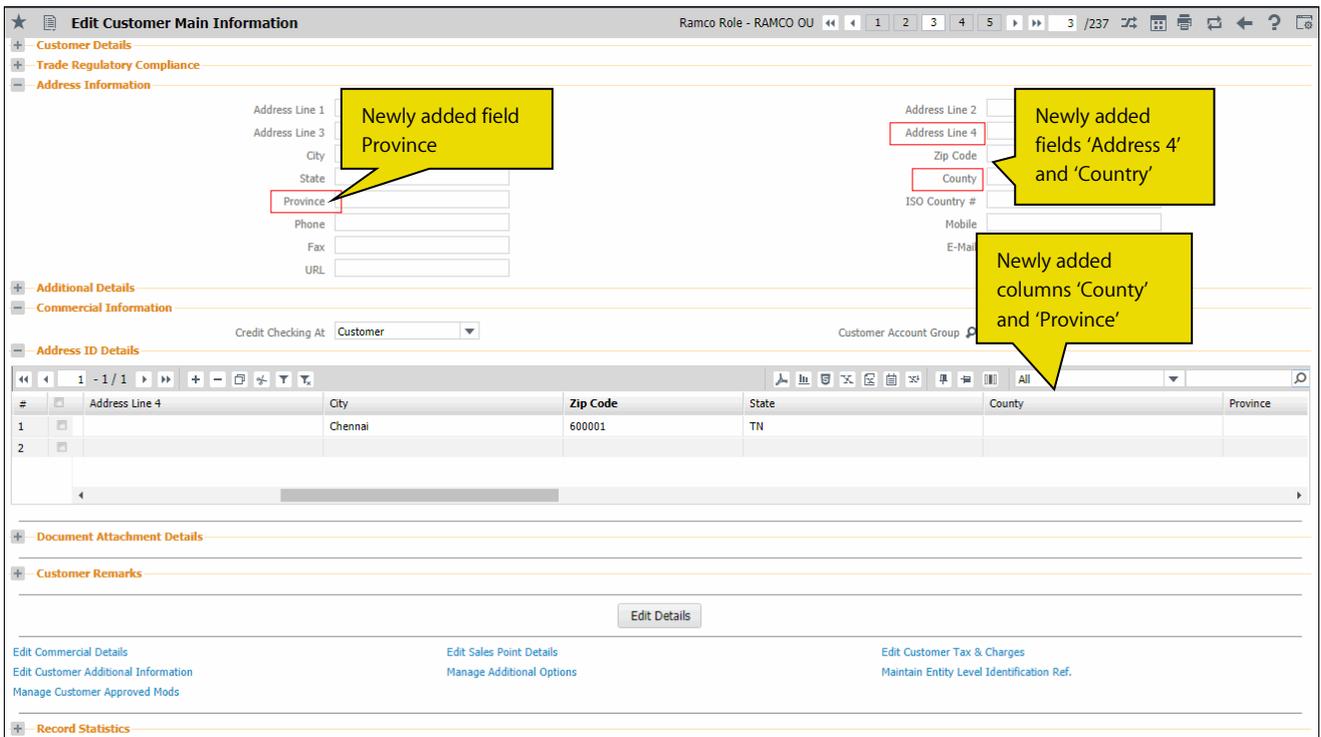
**Exhibit 1:**

**Create Customer Record** activity in the **Customer** business component under the **Sales Setup** business process



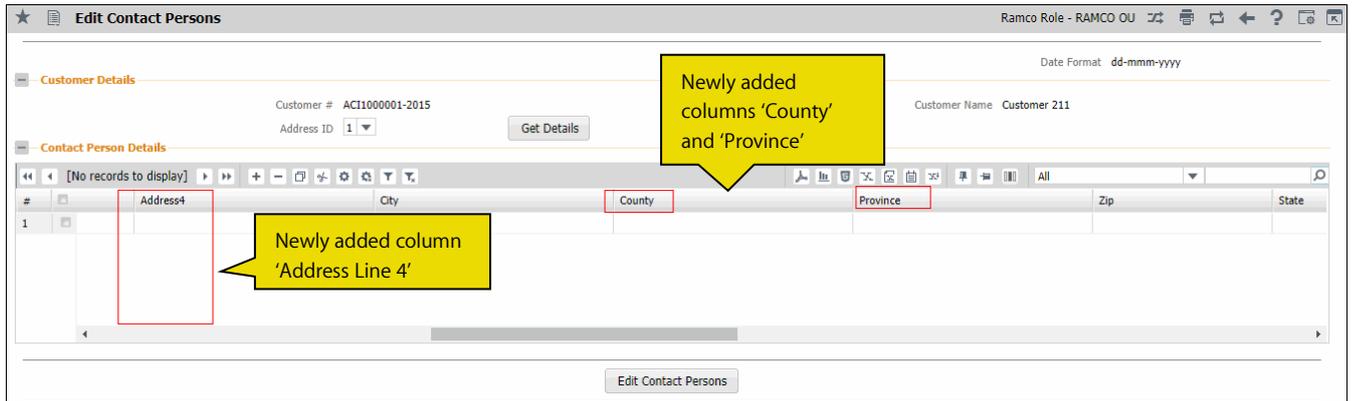
**Exhibit 2:**

**Edit Customer Main Information** link in the **Create Customer Record** activity in the **Customer** business component under the **Sales Setup** business process



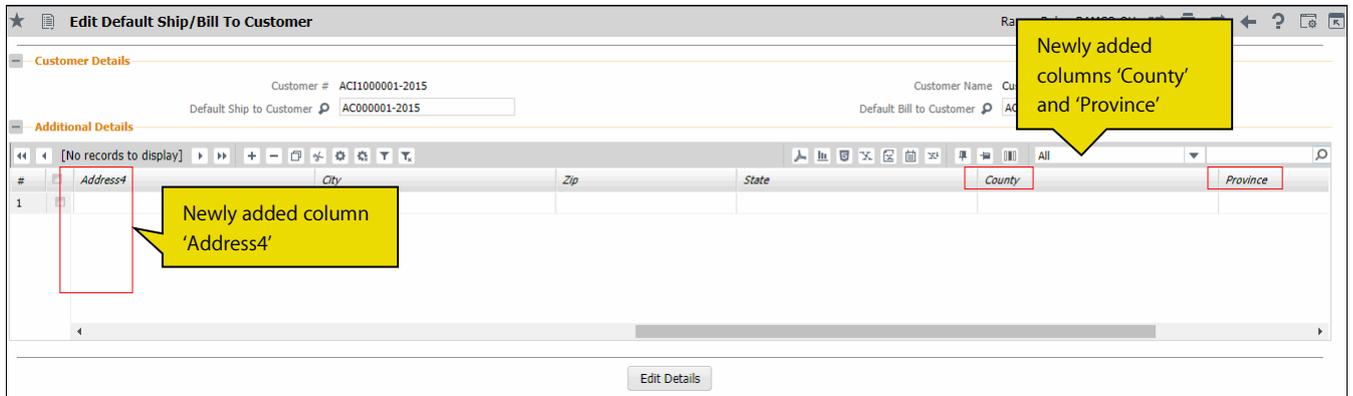
**Exhibit 3:**

**Edit Contact Person** link in the **Edit Sales Point Details** link page in the **Edit Customer Record** activity of the **Customer** business component under the **Sales Setup** business process



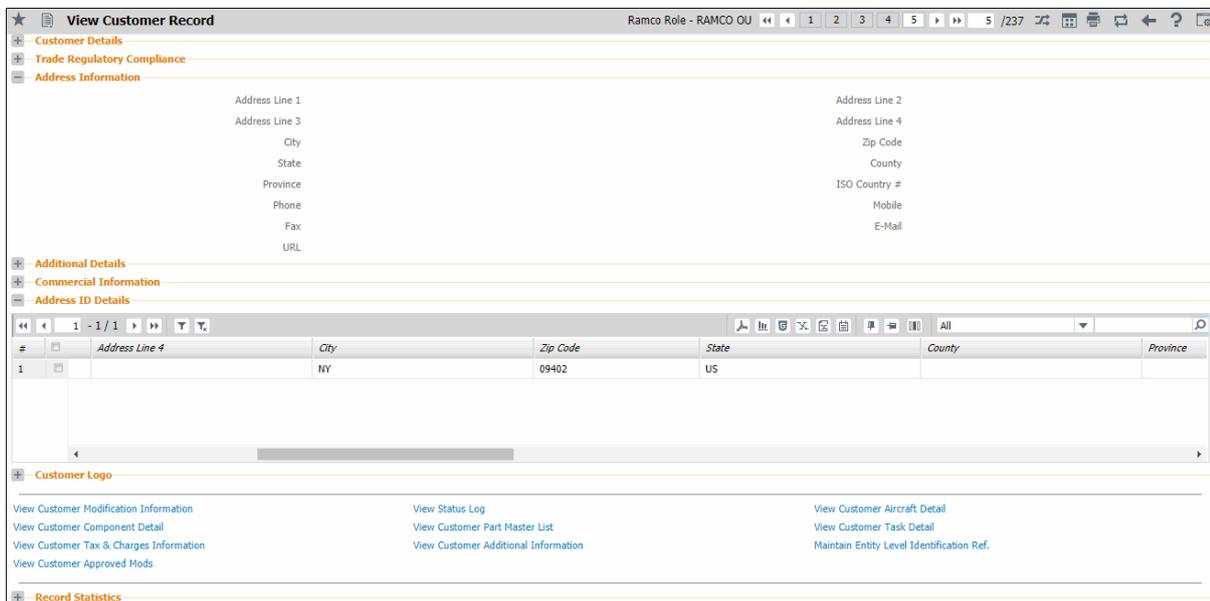
**Exhibit 4:**

**Edit Default Ship/Bill To Customer** link in the **Edit Sales Point Details** link page in the **Edit Customer Record** activity of the **Customer** business component under the **Sales Setup** business process



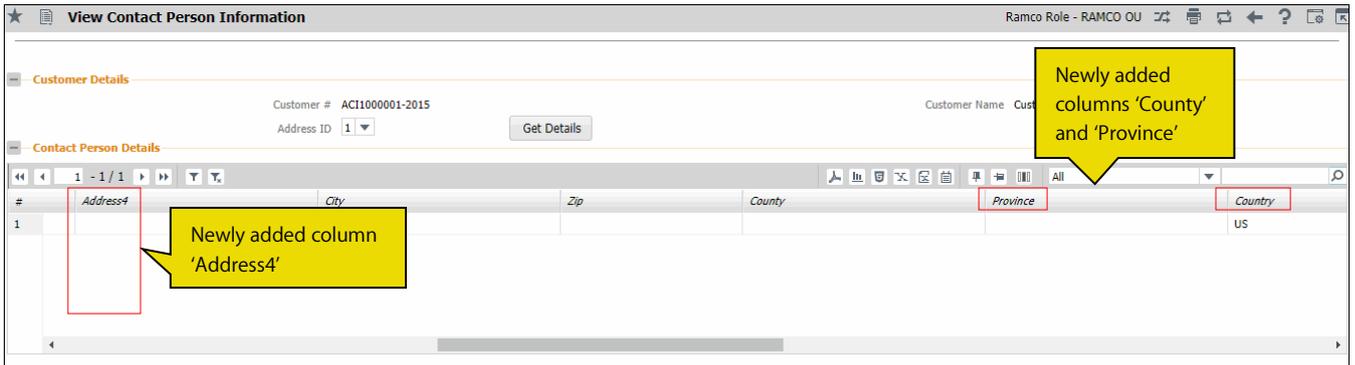
**Exhibit 5:**

**View Customer Record** activity in the **Customer** business component under the **Sales Setup** business process



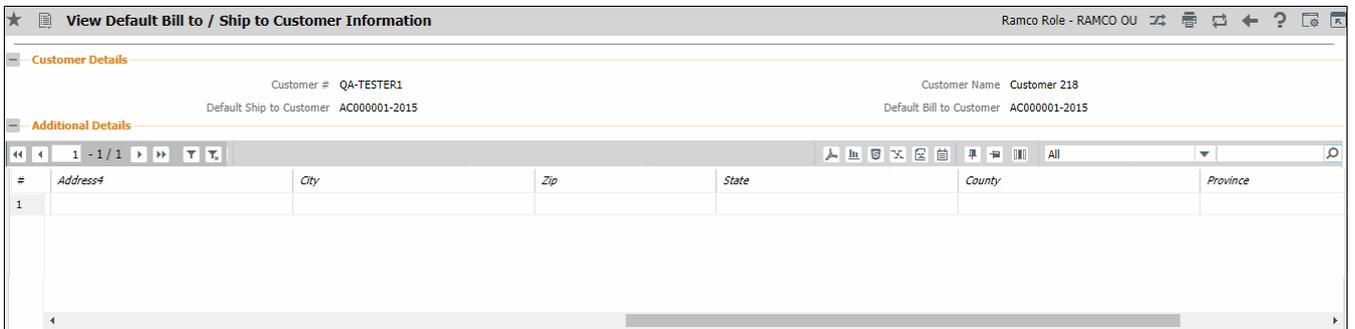
**Exhibit 6:**

**View Contact Person Information** link in the **Edit Sales Point Information** link of the **Edit Customer Record** activity in the **Customer** business component under the **Sales Setup** business process



**Exhibit 7:**

**View Default Bill to / Ship To Customer Information** link in the **View Sale Point Information** link in the **View Sales Point Details** link in the **View Customer Record** activity of the **Customer** business component under the **Sales Setup** business process



**Exhibit 8:**

**Shipping Terms** tab in the **Edit Incoming and Outgoing Terms** link in the **Sale Contract** business component under the **Sales Setup** business process.

**Edit Incoming and Outgoing Terms** Ramco Role - RAMCO OU

**Main Contract Details**

Contract # / Rev. #	2016-FPAEX / 1	Contract Type	Customer Specific	Contract Status	Revised
Contract Category		Sale Type	FP	Contract Date	01-Jan-2012
Customer #	400004	Customer Name	Customer 7	Currency	CAD
Effective from	01-Feb-2012	Effective to	29-Feb-2012	User Status	

Incoming Inspection - Parts | **Shipping Terms** | Billing Terms | Certificate Requirements | Warranty Terms

**Ship to Address**

Ship to Customer #		Ship to Address ID	Bill to	Alternate Permitted	<input type="checkbox"/>
Customer Name		Address 1	4775 Irwindale Avenue	Address 2	
Address 3		Address 4		City	
Zip	91700	State	CA	Country	
Province		Country	US		
Work Phone #		Email		Fax	

**Outbound Delivery Terms**

[Save Shipping Terms](#)

[Confirm Contract](#) [Cancel Contract](#)

[Edit Main Info.](#) [Edit Pricing & Invoicing Details](#) [Edit Terms of Execution](#)

[Record Statistics](#)

Newly added field Province

Newly added fields 'Address 4' and 'Country'

**Exhibit 9:**

**Billing Terms** tab in the **Edit Incoming and Outgoing Terms** link in the **Sale Contract** business component under the **Sales Setup** business process.

**Edit Incoming and Outgoing Terms** Ramco Role - RAMCO OU

**Main Contract Details**

Contract # / Rev. #	2016-FPAEX / 2	Contract Type	Customer Specific	Contract Status	Approved
Contract Category		Sale Type	FP	Contract Date	01-Jan-2012
Customer #	400004	Customer Name	Customer 7	Currency	CAD
Effective from	01-Feb-2012	Effective to	29-Feb-2012	User Status	

Incoming Inspection - Parts | Shipping Terms | **Billing Terms** | Certificate Requirements | Warranty Terms

**Bill to Address**

Bill to Customer #		Bill to Address ID	Bill to	Alternate Permitted	<input type="checkbox"/>
Customer Name		Address 1	4775 Irwindale Avenue	Address 2	
Address 3		Address 4		City	
Zip	91700	State	CA	Country	
Province		Country	US		
Work Phone #		Email		Contact Person	Accounts Payable
				Fax	

**Invoice & Receipt Modes**

**Exchange Rate**

[Save Billing Terms](#)

[Confirm Contract](#) [Cancel Contract](#)

[Edit Main Info.](#) [Edit Pricing & Invoicing Details](#) [Edit Terms of Execution](#)

[Record Statistics](#)

Newly added field Province

Newly added fields 'Address 4' and 'Country'

## Ability to capture Pre-approved Mods from customer

Reference: AHBG-17166

### Background

A list of Mods that are approved by the customers on each Part # is maintained by the MRO. Therefore the requirement is when a Service Bulletin is due on a customer part, the MRO is to check if the MOD corresponding to the Service Bulletin is approved by the customer for the part.



*Note: The service bulletin can be performed on the part only if it is approved.*

SB task effectivity is set at part level and / or serial level. The Mod # change for each effective part is provided in the SB document.

Based on the effectivity of the tasks to the part, technician adds the tasks in the work order. Panasonic maintains a list of mods pre-approved by the customer

If the added mod is pre-approved, no separate mod approval is required. If its not in the pre-approved list, mod should be approved by the customer before executing.

Mod Approval obtained through quote is considered to be applicable for all the parts received from the customer thereon

Compliance of Mod change is recorded on Work completion

### Change Details

**Operational Parameters** tab page in the **Edit Terms of Execution** in the **Sale Contract** business component

The following new parameters for the Category Commercials and for the Element MOD Approval have been added as follows:

Parameter	Permitted Values
Approval for Mods	<ul style="list-style-type: none"> <li>0 means "Required"</li> <li>1 means "Not Required"</li> </ul>
Auto Approve Mod on Quote Approval	<ul style="list-style-type: none"> <li>0 means "Yes"</li> <li>1 means "No"</li> </ul>
Consider Mod Approval in Quotes as pre-approved Mod	<ul style="list-style-type: none"> <li>0 means "Yes"</li> <li>1 means "No"</li> </ul>

**Exhibit 1:**

**Operational Parameters** tab in the Edit Terms of Execution link in the Manage Sale Contract activity of the Sale Contract business component

★ Edit Terms of Execution
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**Main Contract Details**

Contract # / Rev. # 1090000-FPM/1	Contract Type Customer Specific	Contract Status Approved
Contract Category	Sale Type FP	Contract Date 01-Aug-2017
Customer # 1090000	Customer Name Customer 3	Currency CAD
Effective from 01-Aug-2017	Effective to	User Status

**Operational Parameters** | Permitted Work Delays | Part Handling Details | Customer Supplied Parts

#	Category	Element	Description	Value	Auto Hold?	Hold Code	Permitted Values
1	Commercials	Quote - FP In-scope Jobs	Quote for Fixed Price In-scope Jobs	1			Enter '0' for 'Required', '1' for 'Yes'
2	Commercials	Mod Approval	Approval for Mods	1			Enter '0' for 'Required', '1' for 'Yes'
3	Commercials	Mod Approval	Auto Approve Mod on Quote Approval	1			Enter '0' for 'Yes' and '1' for 'No'
4	Execution	Estimates - FP In-scope Jobs	Estimation for Fixed Price In-scope Jobs	1			Enter '0' for 'Required', '1' for 'Yes'
5	Commercials	Quote - FP Out of Scope Jobs	Quote for Fixed Price Out of Scope Jobs	1			Enter '0' for 'Required', '1' for 'Yes'
6	Commercials	Mod Approval	Consider Mod Approval in Quotes as pre Approved Mod	1			Enter '0' for 'Yes' and '1' for 'No'
7	Execution	Estimates - FP Out of Scope Jobs	Estimation for Fixed Price Out of Scope Jobs	1			Enter '0' for 'Required', '1' for 'Yes'
8	Commercials	Quote - T & M In-scope Jobs	Quote for T&M In-scope Jobs	1			Enter '0' for 'Required' and '1' for 'Yes'
9	Execution	Estimates - T&M In-scope Jobs	Estimation for T&M In-scope Jobs	1			Enter '0' for 'Required' and '1' for 'Yes'
10	Commercials	Quote - T&M Out of Scope Jobs	Quote for T&M Out of Scope Jobs	1			Enter '0' for 'Required' and '1' for 'Yes'

Newly added parameters for the Element 'MOD Approval'

Save Parameters
Confirm Contract
Cancel Contract

[Edit Main Info.](#)
[Edit Pricing & Invoicing Details](#)
[Edit Incoming & Outgoing Terms](#)

[Record Statistics](#)

## WHAT'S NEW IN SALE CONTRACT?

### Ability to define fixed monthly charges in Sale Contract

Reference: AHBG-15226

#### Background

In the Aviation Industry when it comes to pricing of aircraft line maintenance services MROs adopt different pricing policies to charge their customers. The most prevalent of them are:

- A. Pricing based on maintenance events**
  - 1. T&M based rates
  - 2. Flat fixed rate that varies based on the types of services provided
  - 3. Flat fixed rate that is specific against a maintenance object
  
- B. Pricing based on the usage of the aircraft / parts covered in the contract**
  - 4. Pricing based on the PBH rates

In addition to the above, a new pricing method is adopted by some MROs, **Fixed Price Per Month**, where any maintenance carried out will not be billed separately as long as the service provided is within the agreed scope. Any out of scope items are billed as soon as the maintenance is performed. That is, this pricing is simply based on a fixed rate per Aircraft Tail # for a month and the same is billed irrespective of the usage unlike PBH.

This enhancement pertains to the ability to define multiple monthly billing elements for aircraft effectivity by introducing 'Fixed Price Per Month'

#### Change Details

##### I. Sale Contract

###### 1. Aircraft Effectivity tab

**Sales Setup** business process > **Sale Contract** business component > **Manage Sale Contract** > **Aircraft Effectivity** tab page

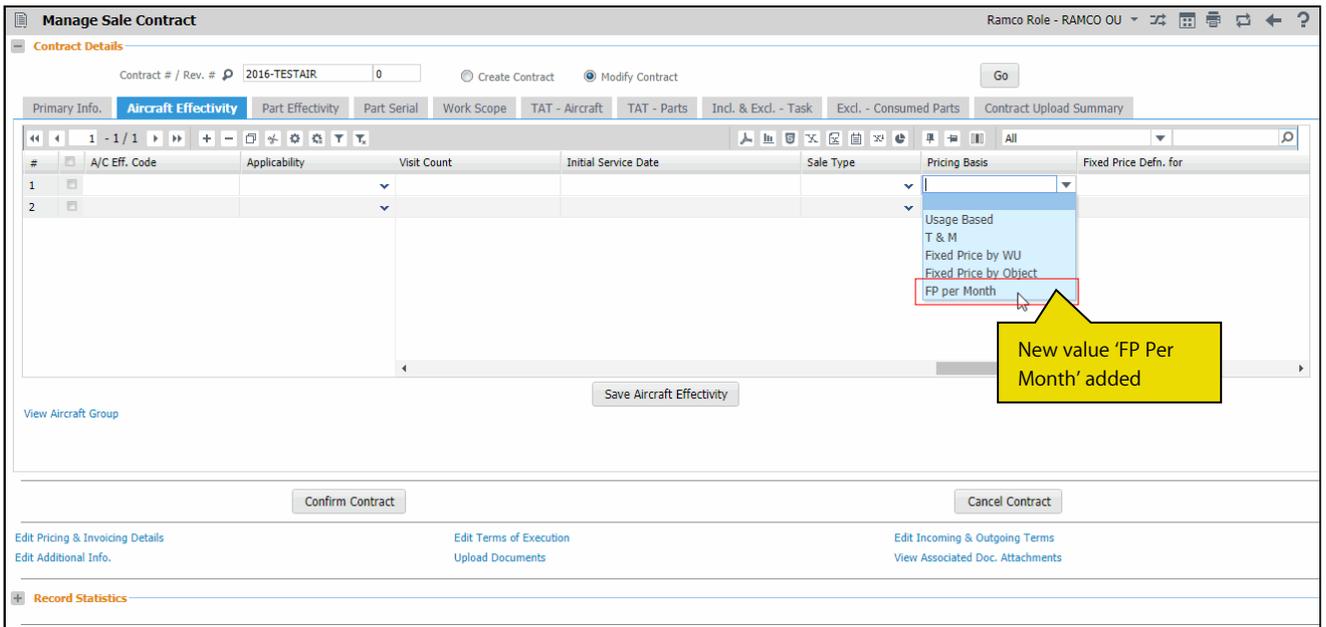
In the **Aircraft Effectivity** tab page:

A new value 'FP Per Month' is added in the 'Pricing Basis' combo in the multiline.

A new editable control 'Exec. Station' is added in the multiline.

**Exhibit 1:**

**Aircraft Effectivity tab in the Manage Sale Contract activity**



**2. Part Effectivity tab**

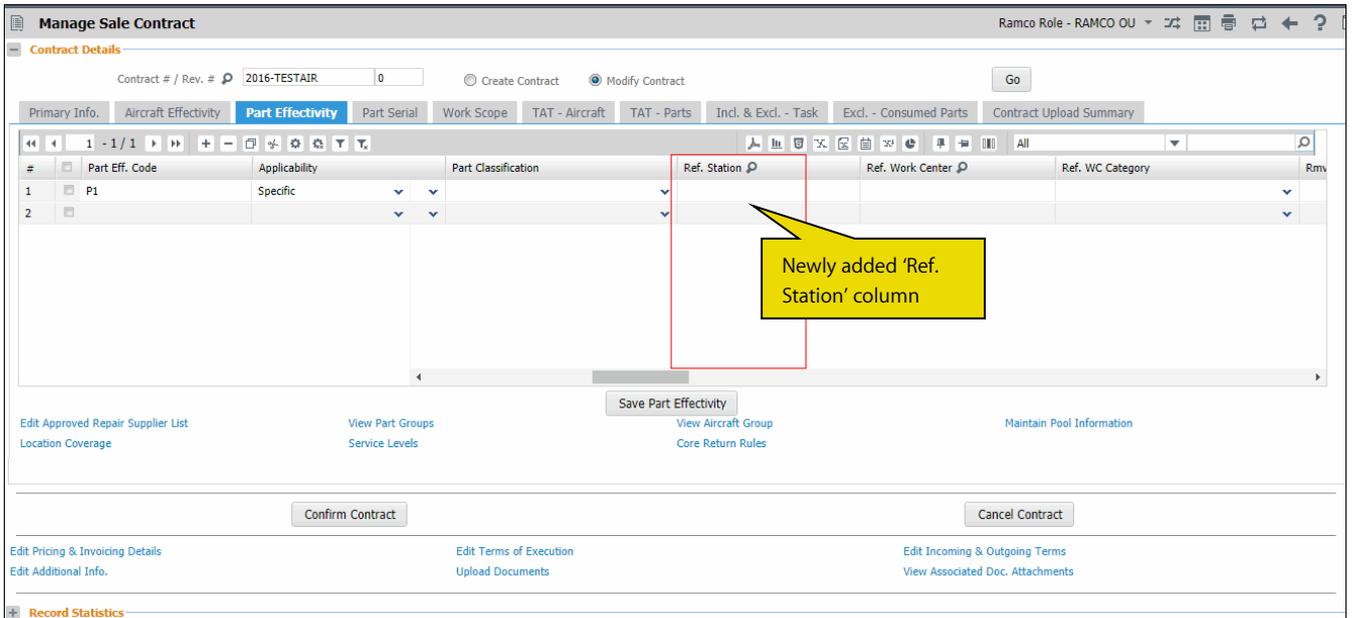
In the **Part Effectivity** tab page:

A new value 'FP Per Month' is added in the 'Pricing Basis' combo in the multiline.

A new editable control 'Ref. Station' is added in the multiline which lists all the active station codes.

**Exhibit 2:**

**Part Effectivity tab in the Manage Sale Contract activity**



**3. Monthly Fixed Charges tab**

**Sales Setup** business process > **Sale Contract** business component > **Manage Sale Contract** > **Edit Pricing and Invoicing** link page

**In the Fixed Pricing tab**

When no object under Aircraft or Part Effectivity tab has been defined with Pricing Basis as 'Fixed Price by WU' then error has been handled on click of the Fixed Pricing tab as 'Pricing Basis 'Fixed Price' is not selected against any object effectivity. Fixed Pricing definition is not applicable.

**In the Monthly Fixed Charges tab**

The "Usage Based Pricing" tab has been renamed as "Monthly Pricing" tab

A new column **Pricing Basis** with the values listed as below has been added in the multiline.

If the Pricing Basis selected against the any object effectivity of the Contract is 'Usage Based':

- Usage Based
- FP Per Month

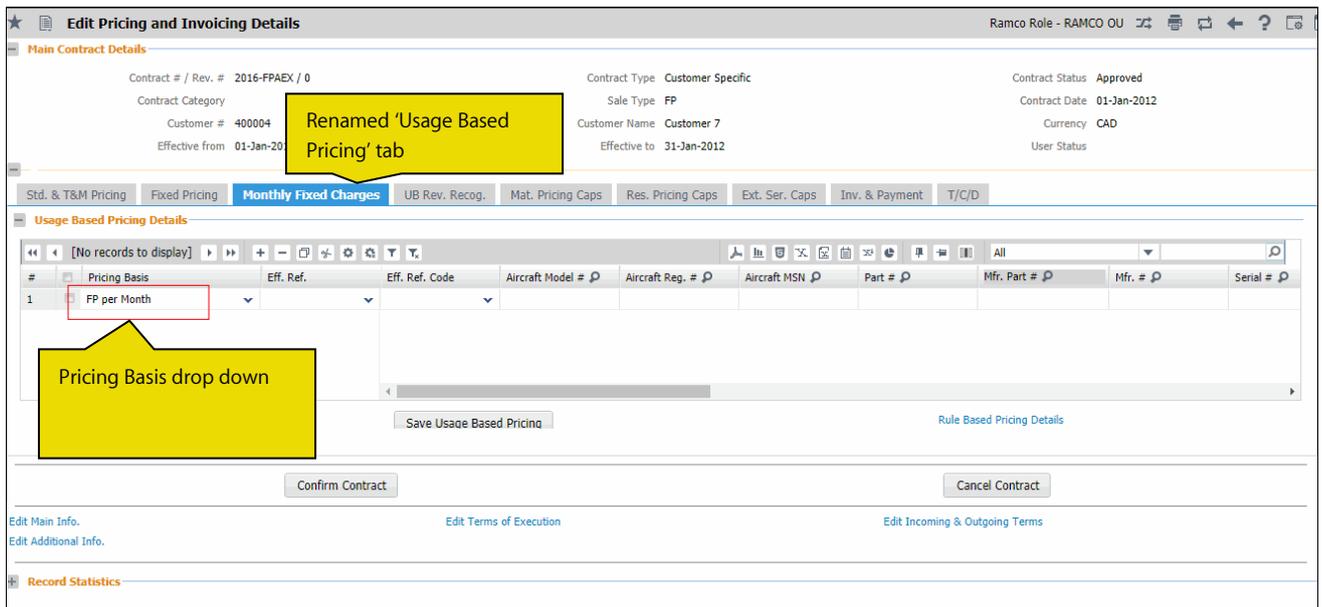
If the Pricing Basis selected against any object effectivity of the Contract is 'Fixed Price Per Month': 'Fixed Price', or 'Time & Material':

- FP Per Month

The Pricing Basis drop down will load 'FP per Month' even when neither FP per Month nor Usage based are chosen as Pricing Basis against any Object Effectivity. This pricing basis is always enabled for defining any Contract level charges that may apply. For example: Warehouse Rental charges, Tech-Records Maintenance Charges, etc.

**Exhibit 3:**

**Monthly Fixed Charges tab in the Edit Pricing and Invoicing Details link in the Manage Sale Contract activity**



A new column **Pricing Method** has been added to recognize Station, Equipment available in Aircraft Configuration and Quantity based pricing variations with values as follows:

- Direct - To define the rates based on the existing parameters such as Aircraft Reg. #, Parameter slabs, Effectivity dates, etc.
- Rule Based - To define the rates based on Execution station, Equipment available in Aircraft Configuration and quantity based slabs.

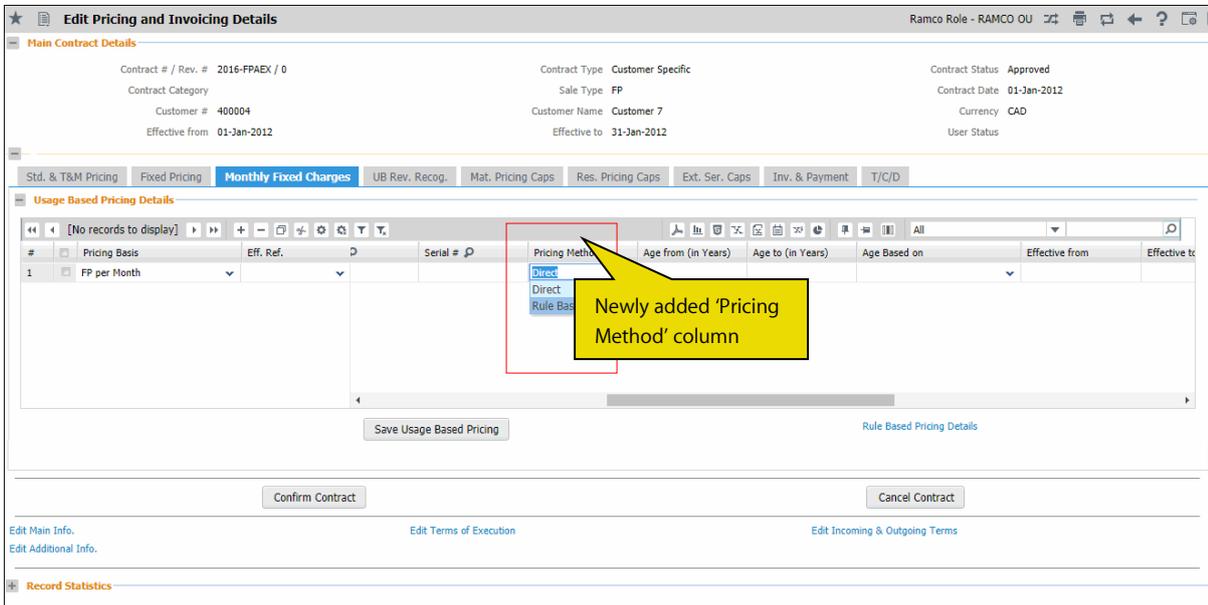


**Note:**

1. The Rule Based pricing is not supported for Fixed Price per Month for Contract level charges.
2. Rule based pricing definition is mandatory if the pricing method for any of the lines is specified as Rule based.

**Exhibit 4:**

**Monthly Fixed Charges** tab in the **Edit Pricing and Invoicing Details** link in the **Manage Sale Contract** activity



Two new values for the Pricing Basis “FP Per Month” will be listed in the **Parameter** column in the ‘Usage Based Pricing Details’ multiline along with the other existing values as below:

- Per Aircraft – To apply the rate defined separately for each aircraft covered in that effectivity line of the contract. The total amount would be the per Aircraft rate multiplied with the no. of Aircrafts available.
- Per Horizon – To apply the billing element once for every billing horizon only irrespective of the Objects

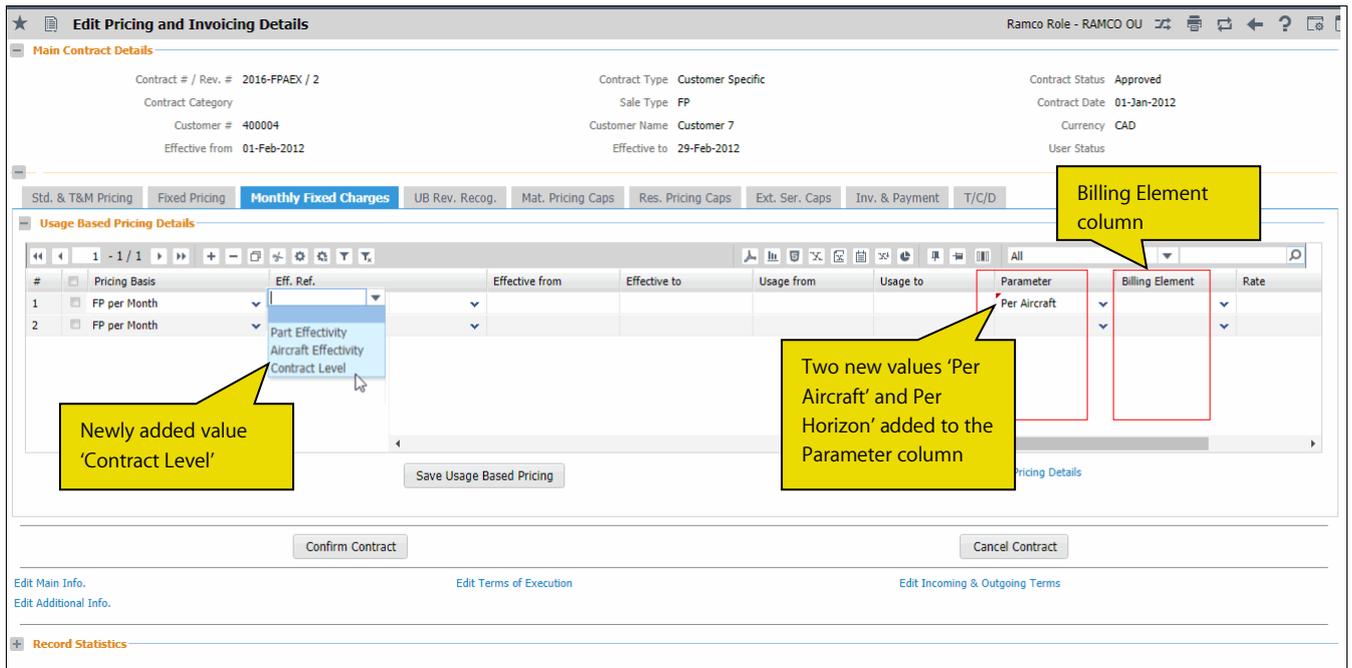
The **Billing Element** Column in the ‘multiline will additionally list all the active Billing Elements as defined in the **Category** business component.

The **Eff. Ref.** column in the multiline will additionally list Contract Level also.

A new editable column **Aircraft Model #** has been added in the “Usage Based Pricing Details” multiline.

**Exhibit 5:**

**Monthly Fixed Charges** tab in the **Edit Pricing and Invoicing Details** link in the **Manage Sale Contract** activity



**Saving Contract Level Charges**

The following error messages have been included while saving Contract level charges:

- 1) Unable to process row # <%1>. Please do not select any Eff. Ref. code for Contract level charges.
- 2) Unable to process row # <%1>. Please do not provide any object information for Contract level charges.
- 3) Unable to process row # <%1>. Please select Parameter as 'Per Horizon' for Contract level charges.
- 4) Unable to process row # <%1>. Please select Pricing method as only 'Direct' for Contract level charges.



**Note:**

*Eff. Ref. code and Object information such as Aircraft Reg. #, Part #, etc., are not applicable for Contract level charges.*

*The suitable parameter for Contract level charges is 'Per Horizon' only.*

*Pricing Method Rule based is not applicable for Contract level charges*

**In the Work Scope tab page:**

A new value 'FP Per Month' is added in the 'Pricing Basis' combo in the multiline.

Exhibit 6:

Work Scope tab in the Manage Sale Contract activity

Manage Sale Contract

Contract # / Rev. # 2016-TEST 0

Create Contract Modify Contract Go

Primary Info. Aircraft Effectivity Part Effectivity Part Serial **Work Scope** TAT - Aircraft TAT - Parts Incl. & Excl. - Task Excl. - Consumed Parts Contract Upload Summary

Work Enumeration

#	Eff. Ref.	Eff. Ref. Code	Work Scope Code	Applicability	WBS Code	Pricing Basis	Fixed Price Defn. for
1	Part Effectivity	RES	WS-01	All		Fixed Price by WU	Labour
2							

Save Work Scope

Confirm Contract Cancel Contract

Edit Pricing & Invoicing Details Edit Terms of Execution Edit Incoming & Outgoing Terms  
Edit Additional Info. Upload Documents View Associated Doc. Attachments

Record Statistics

## Ability to define rule based pricing in Contract for the pricing basis FP per Month

### Ability to define billing reference dates for milestone stamping

Reference: AHBG-15837 / AHBG-15839

#### Background

For the new pricing basis introduced, the pricing variations seem to occur based on multiple parameters like, Equipment Group, Equipment Category, Station and Qty based slabs.

A new pricing basis has been introduced in Sale Contract as 'FP per Month'. Since this pricing basis has a similar pattern to that of existing pricing, Usage based, the pricing definitions have been kept together in Contract. But, for FP per Month, there are multiple variations seen in pricing definition based on Service execution stations, slabs of Quantity of Aircraft flown in a given Month and Equipment Group Category.

'FP per Month' being a monthly invoicing pattern, every billing element has its own date from which it would be eligible for billing. There is a need hence to understand what that reference date is against each Billing Element and also capture the actual dates against the Aircraft Reg. #.

A common need would be to charge the customer for a Fixed Monthly service charge only post the date of entry into Service of a given Aircraft Reg. #. This would be the reference date post which that Aircraft is eligible to be billed for that charge/Billing Element.

#### Change Details

##### Rule Based Pricing Details tab

Pricing definition in contract in which application of rates as per slabs can be either of the following:

- Flat
- Incremental

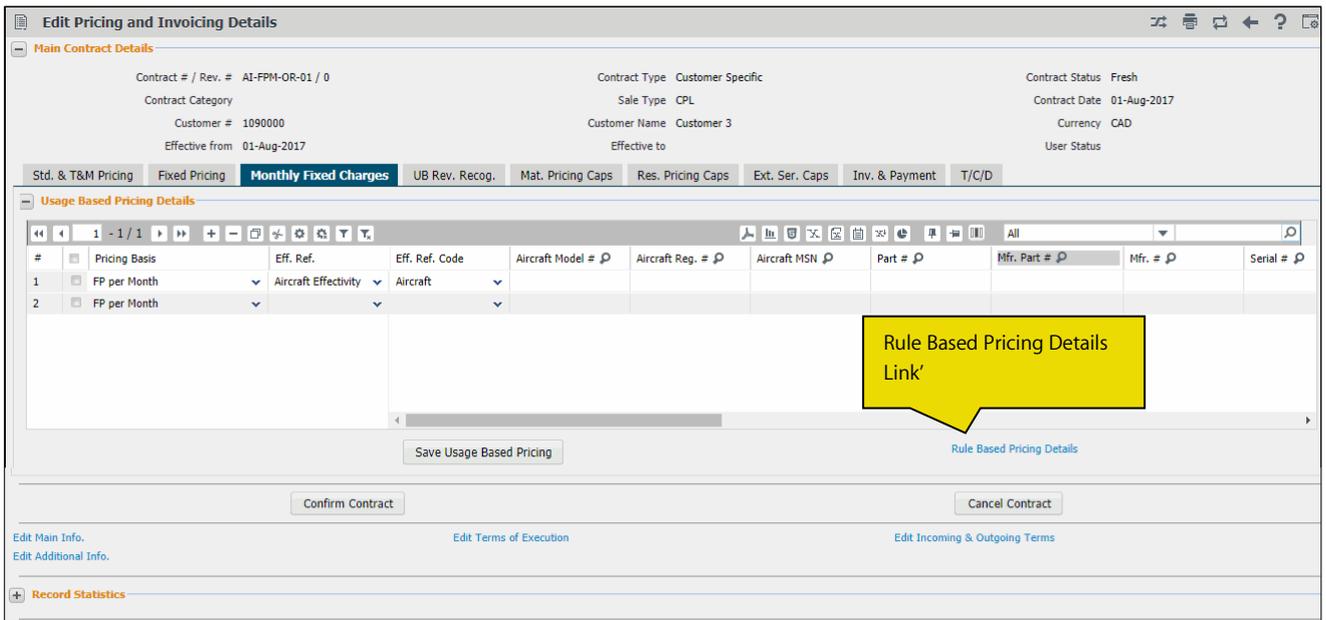
**Sales Setup** business process > **Sale Contract** business component > **Manage Sale Contract** > **Edit Pricing & Invoicing Details** link > **Monthly Fixed Charges** tab page > **Rule Based Pricing Details** link page



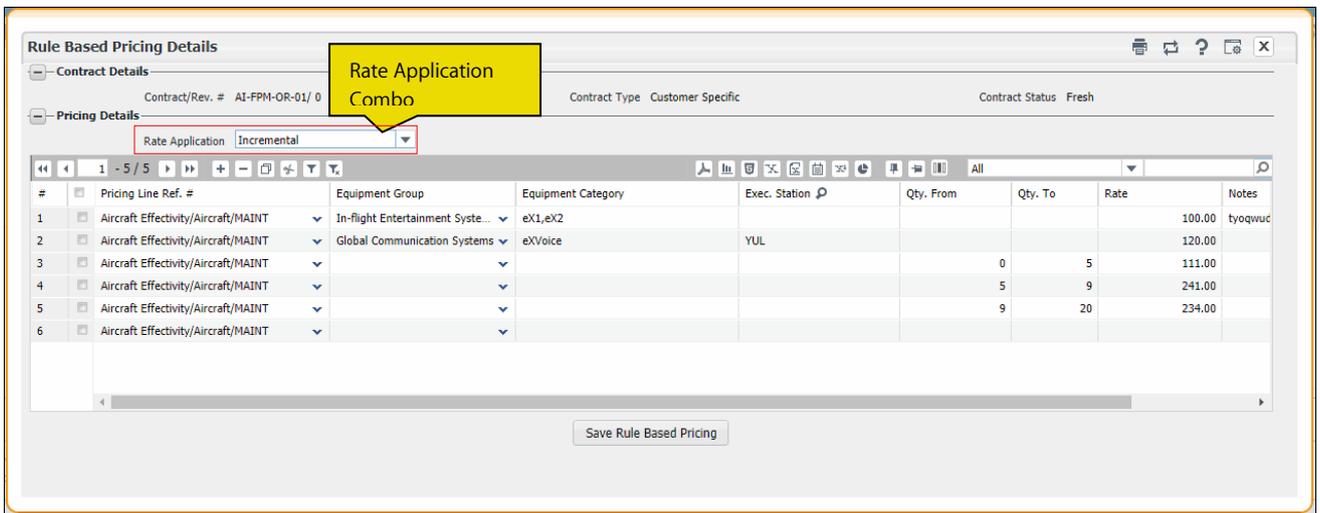
Note:

- Rule based pricing definition is applicable for both FP per Month and Usage Based pricing basis.*
- It is not applicable for any Contract level charges*
- It is mandatory to complete the Rule based pricing definition for all line that have Pricing Method set as 'Rule Based'*

**Exhibit 7:**  
**Monthly Fixed Charges** tab page in the **Manage Sale Contract** activity



**Exhibit 8:**  
**Rule Based Pricing Details** link in the **Monthly Fixed Charges** tab page in the **Manage Sale Contract** activity



**Operation Parameters** tab

Sales Setup business process > Sale Contract business component > Manage Sale Contract > Edit Terms of Execution link page

In the **Operation Parameters** tab page

A new operational parameter **UB/FP per Month pricing** has been added for the Category 'Commercials' with the following description and permitted value:

Description: Billing Start Ref. date for FP per Month and Usage based pricing

Permitted Value:

- '0' for Contract Start date
- '1' for Other Ref. Dates

**Exhibit 1:**

**Operational Parameters tab in the Edit Terms of Execution link in the Manage Sale Contract activity**

The screenshot shows the 'Edit Terms of Execution' window with the 'Operational Parameters' tab selected. The table below lists various parameters:

#	Category	Element	Description	Value	Auto Hold?	Hold Code	Permitted Values	Hold Com
21	Logistics	Auto Authorization of RO	Auto Authorization of RO on Customer Quote	0			Enter '0' for 'Allowed' and '1' for	
22	Logistics	Manual Authorization of RO	Manual Authorization of RO pending Customer	0			Enter '0' for 'Allowed' and '1' for	
23	Commercials	Progressive Billing	Progressive Billing on Task closure	0			Enter '0' for 'Allowed', '1' for 'Not	
24	Commercials	Work Reporting	Work Reporting by a Commercials Role	0			Enter '0' for 'Allowed', '1' for 'Not	
25	Commercials	MonthlyFixedPrice-BillingStart Ref.date	Monthly Fixed Price - Billing Start Ref. date				'0' for Contract Start date, '1' for	
26	Commercials	UB/FP per Month pricing	Billing Start Ref. date for FP per Month and				'0' for Contract Start date, '1' for	
27	Execution	Timesheet Reporting	Allow Time Reporting by Other Employees?	0			Enter '0' for 'Yes' and '1' for 'No'.	
28					No			

A yellow callout box with a pointer indicates that the parameter 'UB/FP per Month pricing' (row 26) is newly added.

**Inv. & Payment tab**

**In the Inv. & Payment tab**

The earlier CO Based Inv. & Payment tab has been renamed as **Inv. & Payment** tab.

The **Pricing Basis** drop down list box has been added with the values 'Usage Based' and 'FP Per Month' in addition to the existing values.

Based on the Pricing definitions of the Contract, the corresponding values will be loaded in the Pricing Basis drop down list box.



*Note; In-case of FP per Month and Usage Based pricing basis, it is mandatory that both the Monthly Invoice & Payment details as well as CO Based Invoice & Payment details are mandatory.*

**Exhibit 2**

**Inv. & Payment tab in the Edit Pricing and Invoicing Details link in the Manage Sale Contract activity**

**Main Contract Details**

Contract # / Rev. # 2016-FPAEX / 2 Contract Type Customer Specific Contract Status Approved  
 Contract Category Sale Type FP Contract Date 01-Jan-2012  
 Customer # 400004 Customer Name Customer 7 Currency CAD  
 Effective from 01-Feb-2012 Effective to 29-Feb-2012 User Status

Std. & T&M Pricing Fixed Pricing Monthly Fixed Charges UB Rev. Recog. Mat. Pricing Caps Res. Pricing Caps Ext. Ser. Caps **Inv. & Payment** T/C/D

Monthly Invoice & Payment

**Regular Billing Details**

Billing once in Calendar Month Process Reg. Bill After 0 Day(s) Invoice Category  
 On Demand Billing Allowed Pay Term For Reg. Billing Usage Update Consolidated  
 Remarks on Reg. Bill

**Provisional Billing Details**

Provisional Billing Required Process Prov. Bill After Day(s) Invoice Category  
 Prov. Bill Based On Estimates based on Pay Term For Prov. Bill  
 Min. Guaranteed Usage Estimated Usage Remarks On Prov. Bill  
 Notes on Min. Usage

**CO Based Invoice & Payment**

#	Invoice For	Inv. Type	Inv. Category	Invoicing Event	Event Description	Bill Prior to (Days)	Triggering Task
1							

**Auto Set-Up Option for CO based Invoice**

Rel. prep. before Event? Set-up of Invoice Release Release of RTB Invoice  
 Set-up of Cust. Invoice  
 Save Invoice Terms Billing Start Ref Date Details

Confirm Contract Cancel Contract

Edit Main Info. Edit Terms of Execution Edit Incoming & Outgoing Terms

Record Statistics

**Billing Start Ref. Date Details link**

This new screen enables to capture Billing Start Reference Dates against each Billing Element at Aircraft Tail level. The user will also be able to identify the other date references, that is, other than Contract Date, against each Billing Element. These date references may also vary at a 'Ref. Entity' level. For example: Warranty End Date of a certain Entity may vary from Warranty End Date of another and this is best to be split if the pricing is at this level. The Ref. Entities available in this screen are Equipment Group and Equipment Category.

**Exhibit 3:**

**Inv. & Payments** tab page in the **Edit Pricing & Invoicing Details** page of the **Manage Sale Contract** activity.

The screenshot shows the 'Edit Pricing and Invoicing Details' page with the 'Inv. & Payment' tab selected. The page contains various contract details and a table for invoicing events. A yellow callout box highlights the 'Billing Start Ref. Date Details' link located below the 'Auto Set-Up Option for CO based Invoice' section.

#	Invoice For	Inv. Type	Inv. Category	Invoicing Event	Event Description	Bill Prior to (Days)	Triggering Task
1							

**Exhibit 4:**

**Billing Ref. Date Details** link in the **Inv. & Payments** tab page in the **Edit Pricing & Invoicing Details** page of the **Manage Sale Contract** activity

The screenshot shows the 'Billing Ref. Date Details' page. It features a table with the following columns: Billing Ref. & Element, Start Reference Date, Ref. Entity, Entity #, and Remarks. The table contains three rows of data.

#	Billing Ref. & Element	Start Reference Date	Ref. Entity	Entity #	Remarks
1	Usage Revenue/1	Contract Date			
2	Usage Revenue/2	Contract Date			
3		Contract Date			

## Ability to manage the rule based pricing with effectivity dates

Reference: AHBG-19745

### Background

Rule based pricing was a new Pricing method introduced as part of the Fixed Price per month pricing basis. This method supports pricing based on Station or some reference entity, (such as Equipment group/Category), or Quantity based slabs. But there is a need for this pricing to have a definite validity period. This requires effectivity dates to be introduced against the Rule Based Pricing definitions.

### Change Details

In the **Rule Based Pricing Details** screen under the business process **Sales Setup**, component **Sale Contract** and activity **Manage Sale Contract**, two new columns have been included in the multiline as 'Effective From and Effective To', to capture the validity dates for the pricing definition.

#### Exhibit 1:

#### Rule Based Pricing Details screen

The screenshot displays the 'Rule Based Pricing Details' interface. At the top, it shows 'Contract/Rev. # RUL-01/ 0', 'Contract Type Customer Specific', and 'Contract Status Approved'. Below this, a table lists pricing details with the following columns: #, Pricing Line Ref. #, Equipment Group, Equipment Category, Exec. Station, Qty. From, Qty. To, Rate, Effective From, and Effective To. The table contains three rows of data:

#	Pricing Line Ref. #	Equipment Group	Equipment Category	Exec. Station	Qty. From	Qty. To	Rate	Effective From	Effective To
1	1/Aircraft Effectivity/ALL/Maintenance	IFE					7,000.00	01-07-2017	18-08-2017
2	1/Aircraft Effectivity/ALL/Maintenance	IFE					7,200.00	19-08-2017	31-12-2017
3	1/Aircraft Effectivity/ALL/Maintenance								

A yellow callout box with a red border points to the 'Effective From' and 'Effective To' columns, containing the text: 'To define different rates for same parameters for different calendar intervals'. Below the table is a 'Save Rule Based Pricing' button. At the bottom of the screen, there are buttons for 'Confirm Contract' and 'Cancel Contract', along with links for 'Edit Main Info.', 'Edit Additional Info.', 'Edit Terms of Execution', and 'Edit Incoming & Outgoing Terms'. The bottom status bar shows 'Sale Contract - Services -> Manage Sale Contract' and a timer '59 Minute(s) 4:41 PM'.

#### Pricing Impact:

Upon Invoice Release generation, the rate computation would now additionally take into account the effectivity dates as in the Rule Based Definition for deriving the billable amount

## Ability to map billing element to standard tasks

Reference: AHBG-22999

### Background

Generally maintenance tasks that are performed on the aircrafts are grouped and billed to the customer based on the category of work performed, that is Media Upload, IFE Maintenance Service and so on. Sometimes, the invoicing is also done by grouping the jobs based on such categories. For example, if both Media Upload and IFE Maintenance service is performed under a particular package, tasks executed to do Media Upload will be grouped and raised as a single bill. Likewise, tasks executed to perform IFE Maintenance Services will be grouped and raised as separate bill. Therefore the requirement is to map billing element with the tasks.

### Change Details

A new **Set Parameters** screen has been introduced in the Sale Contract business component in order to set parameters based on which Task - Billing element mapping can be done. This screen provides a list of the parameters like Customer, Contract #, Task #, Task Type, Task Category out of which the user can specify the Parameters which needs to be used for mapping the billing element.



*Note: Parameter setting has been developed as a one-time setup and the system does not allow modification of these settings.*

A new activity **Task Billing Element Mapping** has been introduced as a link in the **Set Parameters** screen to enable the user to map the Billing Element with tasks directly or with task attributes like Task Type or Task Category.

1. The 'Task Basis' drop down list box in this screen lists options based on the option settings in the Set Parameter screen as follows:
  - Task #, Task Category, and Task Type if these controls are set as 'Yes' in **Set Parameter** screen.
  - If any of the above three controls were set as 'No', then the respective option will not be listed in the Task Basis combo
2. The 'Task Type' column in the multiline will be loaded with all the Task Types that are in active status only if the Task Type control is specified as "Yes" in the **Set Parameters** screen, else leaves the system leaves the field blank.
3. The 'Task Category' column in the multiline will be loaded with all the Task Categories that are in active status only if the Task Category control is specified as "Yes" in the **Set Parameters** screen, else the system leaves the field blank.

**Exhibit 1:**

**Set Parameters** page in the **Sale Contract - Services** business component

Set Parameter

Set Parameter Details

Customer # Yes Contract # Yes Task # Yes

Task Type No Task Category No

Record Statistics

Task-Billing element Mapping

Set

Created by DMUSER

**Exhibit 2:**

**Task – Billing Element Mapping** activity in the **Sale Contract - Services** business component

Task-Billing Element Mapping

Searchcriteria

Customer # Contract # Task basis

Search

#	Customer #	Contract #	Task #	Task Type	Task Category	Billing Ref. & Element	Created
1	400007	MSA-AAC-01	AIRTASK-1			Fixed Fee	12160
2	400007	MSA-AAC-01	AIRTASK-2			Fixed Fee	12160
3	400007	MSA-AAC-01	AIRTASK-3			Fixed Fee	12160
4	400007	MSA-AAC-01	NST-005946-2018			Maintenance	12160
5	400007	MSA-AAC-01	NST-005947-2018			Maintenance	12160
6	400007	MSA-AAC-01	NST-005948-2018			Maintenance	12160
7		6YJMA-EXE-2	1-50C-0000-CMM-			Fixed Fee	DMUSER
8		6YJMA-EXE-2	0005			Maintenance	DMUSER
9		6YJMA-EXE-2	1-B737-0500-Othe-			On Call Fee	DMUSER
10		6YJMA-EXE-2	2-B737-0500-Othe-			Fixed Fee	DMUSER

Save

## Ability to define per horizon based charges against aircraft effectivity references

Reference: AHBG-22896

### Background

MROs provide maintenance services to Aircrafts by charging customers on a monthly basis. This monthly charge based invoicing can currently be done using the Fixed Monthly Charges (Fixed price per month) in Sale Contract. Apart from the maintenance service charges, there could be other fixed charges for warehouse rent, administrative fee, etc. But, in some cases, these fixed charges are seen to vary based on the number of Aircrafts that were actually in use in the given month.

These fixed charges are seen in parlance with the 'Contract Level' charges in Sale Contract, as they are fixed and not a per aircraft fee, but, the fixed charge itself varies based on the number of aircrafts that are in use in the given month. Thus, the requirement is to provide per horizon charge that would vary with respect to the number of aircrafts in service.

### Change Details

1. The parameter 'Per Horizon' for Aircraft Effectivity charges has been enabled in the 'Parameter' column in the Monthly Fixed Charges tab in the Edit Pricing and Invoicing Details link page of the Manage Sale Contract activity.

The above definition would indicate that the fixed charge is for a billing period which is fixed irrespective of the number of aircrafts.

(i.e., the rate is flat and is not as per the aircraft rate)

In order to have quantity slab-based rate variations, the Rule Based Details screen is enabled such that the quantity slabs can be used.



*Note that the 'Rate Application' combo in the **Rule Based Pricing Details** activity must be selected as 'Flat'.*

2. Based on the Contract definitions, monthly invoice release milestones would be set up. On generating invoice releases, the monthly charges would be evaluated as follows:
  - a. For the given billing period, if the Billing Element has a per horizon based fixed charge defined with Pricing Method as 'Direct', the rate given in Contract would simply be retrieved in the Invoice Release automatically.
  - b. If the pricing method is set as 'Rule Based', fixed charge would be evaluated based on the slabs and effectivity dates defined in the **Rule Based Pricing** link in **Monthly Fixed Charges** tab.  
The number of aircrafts eligible as in-service would be evaluated based on the date references provided in Contract and the corresponding dates in the Maintain Object Reference Dates Activity under **Sale Contract** component.  
Based on the quantity of aircrafts, the fixed charge would get picked from the slab into which the number falls.

**Exhibit 1:**

**Monthly Fixed Charges tab in the Edit Pricing and Invoicing details link page of the Manage Sale Contract activity**

**Main Contract Details**  
 Contract # / Rev. # MSA-FPM-03 / 1 Contract Type Customer Specific Contract Status Fresh  
 Contract Category Sale Type FP Contract Date 01-01-2017  
 Customer # 400006 Customer Name Customer 7 Currency CAD  
 Effective from 01-29-2018 Effective to User Status

**Usage Based Pricing Details**

#	Pricing Basis	Eff. Ref.	Eff. Ref. Code	Pricing Method	Parameter
1	FP per Month	Aircraft Effectivity	A1	Rule Based	Per Horizon
2	FP per Month	Aircraft Effectivity	A2	Rule Based	Per Horizon
3	FP per Month			Direct	

Newly added 'Per Horizon' parameter with Eff. Ref. as 'Aircraft Effectivity'

**Exhibit 2:**

**Rule Based Pricing Details link in the Monthly Fixed Charges tab page of the Edit Pricing and Invoicing Details screen**

**Contract Details**  
 Contract/Rev. # 400006-FPM/ 3 Contract Type Customer Specific Contract Status Fresh

**Pricing Details**  
 Rate Application Flat

#	Pricing Line Ref. #	Qty. From	Qty. To	Rate	Effective From	Effective To	Equipment Group
1	1/Aircraft Effectivity/ALL/Maintenance	0	3	12750.00	01-01-2018	01-31-2018	
2	1/Aircraft Effectivity/ALL/Maintenance	3	4	16614.00	01-01-2018	01-31-2018	
3	1/Aircraft Effectivity/ALL/Maintenance	5	6	20478.00	01-01-2018	01-31-2018	
4	1/Aircraft Effectivity/ALL/Maintenance	0	3	13000.00	02-01-2018	02-28-2018	
5	1/Aircraft Effectivity/ALL/Maintenance	3	4	16750.00	02-01-2018	02-28-2018	
6	1/Aircraft Effectivity/ALL/Maintenance	5	6	21500.00	02-01-2018	02-28-2018	

Effective From and To Dates'

**Exhibit 3:**

**Operational Parameters tab page in the Edit Terms of Execution link page**

**Operational Parameters**

#	Category	Element	Description	Value Selected	Notes	Permitted Values
21	Logistics	Auto Authorization of RO	Auto Authorization of RO on	1 Not Allowed		Enter "0" for 'Allowed' and "1" for 'Not Allowed'.
22	Logistics	Manual Authorization of RO	Manual Authorization of RO	1 Not Allowed		Enter "0" for 'Allowed' and "1" for 'Not Allowed'.
23	Commercials	Progressive Billing	Progressive Billing on Task	0 Allowed		Enter "0" for 'Allowed', "1" for 'Not allowed'
24	Commercials	Work Reporting	Work Reporting by a	0 Allowed		Enter "0" for 'Allowed', "1" for 'Not Allowed'.
25	Execution	Timesheet Reporting	Allow Time Reporting by Other	0 Yes		Enter "0" for 'Yes' and "1" for 'No'.
26	Commercials	UB/FP per Month pricing	Billing Start Ref. date for FP per	1 Other Ref. Dates		for Contract Start date, '1' for Other Ref. Dates
27	Commercials	Billing Automation	Grouping Policy for Automatic	0 One Release per Mile		for One Release per Milestone, '1' One Release per Billing
28	Commercials	Billing Automation	Setup of Monthly Invoice	0 Manual		'0' for Manual, '1' Automatic

Other Ref. Dates

Exhibit 4:

Billing Ref. Date Details link page in the Inv. & Payment tab of the Edit Pricing and Invoicing activity

**Billing Ref. Date Details**

Contract/Rev. # MSA-SINT-AL-7/3      Contract Type Customer Specific      Contract Status Cancelled

**Date Ref. Details**

#	Billing Ref. & Element	Start Reference Date	Ref. Entity	Entity #	Remarks
1		Induction Date			
2		Entry into Service...			
3		Entry into Service...			
4		Entry into Service...			
5		Entry into Service...			

## Ability to modify Object Ref. Dates even after Release Generation

Reference: AHFG-11104

### Background

Monthly Invoice Releases have been given a provision with which the start reference dates for billing can be set in Contract. With regards to these reference dates, there might be situations in which the start reference date might get extended. Considering an example where the Warranty End Date for an aircraft may have been achieved and the customer may have already been billed for out of warranty fees as well. However, there might have been some enhancements made to the aircraft equipment that in turn would give a new Warranty End Date, in other words, the Warranty End Date now stands extended.

In such cases, there is a need to modify the Billing Reference Date even if the date is in the past and invoices have already been generated.

### Change Details

#### Sale Contract

1. Ability to change the reference dates in **Maintain Obj.Ref Dates** activity and being able to change the dates even though the release has been generated for the same aircraft with respect to the same reference date.
2. The user can either extend a given date or pre-poned the date as required.

#### Service Sale Billing

- If the reference date is extended, the system automatically cancels all the pending milestones that are not yet achieved in accordance with the dates that are maintained in the **Maintain Object Ref. Date** activity of the **Sale Contract** business component.
- The system cancels all the milestones that have been achieved but not yet billed.



*Note: Releases that are in Fresh, Confirmed or Invoiced statuses remain unaffected.*

If the reference date is preponed:

- New milestones will be setup starting from the date that has been provided.

## WHAT'S NEW IN CUSTOMER ORDER SERVICES?

### Ability to evaluate a contract based on Serial #

Reference: AHBG-21395

#### Background

With respect to component contracts, for every Customer Service Order, Customer Contract gets evaluated based on a set of parameters including Customer #, Part #, and Part Attributes such as Part Classification, Part Group, etc., Reference Station and Work Center. Though Serial # can be defined in the Contract, evaluation is not with this information. When a Contract matches for a specific Part-Serial # combination, it must be evaluated as the match over a Contract with no Serial # definition.

#### Change Details

- The Serial numbers entered in the **Part Serial** tab in the **Manage Sale Contract** activity of the **Sale Contract - Services** business component will be included for Contract evaluation
- On creation of a CO and SWO for a Part-Serial combination; the Contract matching the exact Serial # will be evaluated.

#### Manage Sale Contract > Sale Contract – Services business component

On saving a contract, the system ensures that the Part # specified in the **Part Serial** tab against a Part Effectively selected is same as the Part # against the Effectivity Code.

#### Manage Customer Order > Customer Order – Services

#### Manage Goods Receipt > Goods Inward

#### Route Unserviceable Components / Parts

On evaluating a contract, the system performs the following:

- Considers the Serial # entered along with the other parameters such as Part #, Station, Customer and so on.
- Retrieves and defaults the contract that matches the exact Serial # in the Contract # field.



*Note: On evaluation, if there exist two contracts for the same combination, one with Serial #, and one without Serial #, the system evaluates the Contract which matches the exact Serial #.*



*Note: Similar Contract evaluation will also occur from Goods receipt and Route Unserviceable parts.*

## Ability to compute customer TAT in Business days

Reference: AHBG-17435

### Background

Generally an MRO has maintenance and repair bases in different geographical locations across the world. However, each of these locations follow different work and leave calendars. Therefore TAT for the Aircraft and part jobs in the Work Centers in these regions is to be computed in business days by - considering the work and leave calendars specific to that region.

### Change Details

1. A new activity **Maintain Standard Work Calendar for Work Center** has been introduced in the **Work Center** business component to define Work Center wise calendar.
2. Also, a new tab **Holiday Master** is provided to associate Holiday Master to the Work Center in the 'Associate Shifts/Date wise Availability' screen

### Customer Service Order

The system computes and retrieves the Promised Delivery Date based on the TAT Start Ref. date based on the Business Calendar of the Location which the CO is being created. Business Days as the business calendar can be set in the 'TAT Stated In' column in the multiline of the TAT-Aircraft/Parts tab in the **Manage Sale Contract** business component.

### Exhibit 1:

**TAT - Parts** tab in the **Manage Sale Contract** activity in the **Sale Contract** business component

The screenshot displays the 'Manage Sale Contract' application window. The 'TAT - Parts' tab is active, showing a table with columns for '#', 'Part Eff. Ref. Code', 'Allowed Qt. App. Duration', 'Std. Qt. Prep. Duration', 'TAT Stated In', and 'TAT Notes'. The 'TAT Stated In' dropdown menu is open, showing 'Business Days' and 'Calendar Days' as options. A yellow callout box highlights the 'Business Days' option with the text: 'Business Days can be set here as the business calendar of the location of the creation of CO'. The interface also includes buttons for 'Save Part TAT Details', 'Confirm Contract', and 'Cancel Contract', along with various utility links at the bottom.

**Exhibit 2:**

**TAT & Commercial** tab in the **Manage Customer Order** activity in the **Customer Service Order** business component

**Manage Customer Order**  
 Order # / Rev. # CO-008351-2017 / 1  
 Create Order | Modify Order | Go

Order Details | Work Execution Info. | **TAT & Commercial** | Shipping Terms | Billing Terms | Taxes / Charges / Discount

**TAT Details**

TAT Stated in: **Business Days** | TAT Duration - Cust. 2 | Adjustment - Cust. Duration ( Days )

Adj. Comments | TAT Duration - Planning 19

Start Ref. Date Manual | Start Date 10-Oct-2017 18:18:24 | Original Contract Req. Date

End Ref. Date Shipment Date | Promised Delivery Date 12-Oct-2017 | Planned End Date 16-Oct-2017 20:09:40

Penalty Notes | TAT Revision Comments tyuhji

Other Order Details | NTE Price | Pricelist Reference

Save TAT & Commercial

Confirm | Cancel

Manage Order Execution | View Parts Information | Manage Exchange Order

Record Statistics

**Exhibit 3:**

**Order Execution Details** tab in the **Manage Order Execution** activity in the **Customer Service Order** business Component

**Manage Order Execution**  
 Ramco Role - RAMCO OU | 36 | 37 | 38 | 39 | 40 | 40 / 72

Order # CO-008512-2017 / 0 | Contract # / Rev. # ABC / 0 | Status Processed

Sale Type T & M | Order Priority Normal | Primary Work Center 185-20

Order Category 1-Repair | Primary Part Group | Customer # 400007

Order Execution Details | Billing & Warranty | Cust. Correspondence | Work Execution | Invoice History | Shipping Details

**TAT Details**

TAT Stated in: **Business Days** | TAT Duration - Cust. 2 | Adjustment - Cust. Duration ( Days )

Adj. Comments | TAT Duration - Planning 2

Start Ref. Date Receipt Date | Start Date 26-10-2017 03:02:05 PM | Org. Contracted Req. Date 28-10-2017 03:02:05 PM

Ex. Delay - Qt-Approval ( Days ) 0.00 | Ex. Delay - Other Approvals ( Days ) | Total Excusable Delay ( Days )

End Ref. Date Shipment Date | End Date | Promised Delivery Date 28-10-2017 03:02:05 PM

Adj. Contracted Req. Date 28-10-2017 03:02:05 PM | Planned End Date 25-10-2017 08:48:36 PM

Penalty Notes | Revision Comments PDD Calculation

**TAT Modification History**

#	Modified by	Modified Date	Start Date	End Date	Adj. TAT duration-Cust.	Promised Delivery Date	Planned End Date
1	DMUSER	26-10-2017					25-10-2017 08:48:36 PM

## WHAT'S NEW IN SALE QUOTATION?

### Ability to Generate the Auto Quote on Release of Estimates

Reference: AHBG-17400

#### Background

Currently, Sale Quotation is generated manually after release estimates, repair order authorization, exchange order confirmation and purchase order authorization. The requirement is to generate the Quote automatically for Ready- to-Quote Work Orders.

#### Change Details

A new parameter has been added in the **Set Sales Process Parameters** screen of the **Customer** business component indicating whether to generate the Sale Quotation automatically in 'Fresh' status or manually.

#### Exhibit 1

**Operation Parameters** tab in the **Set Sales Process Parameters** activity of the **Customer** business component

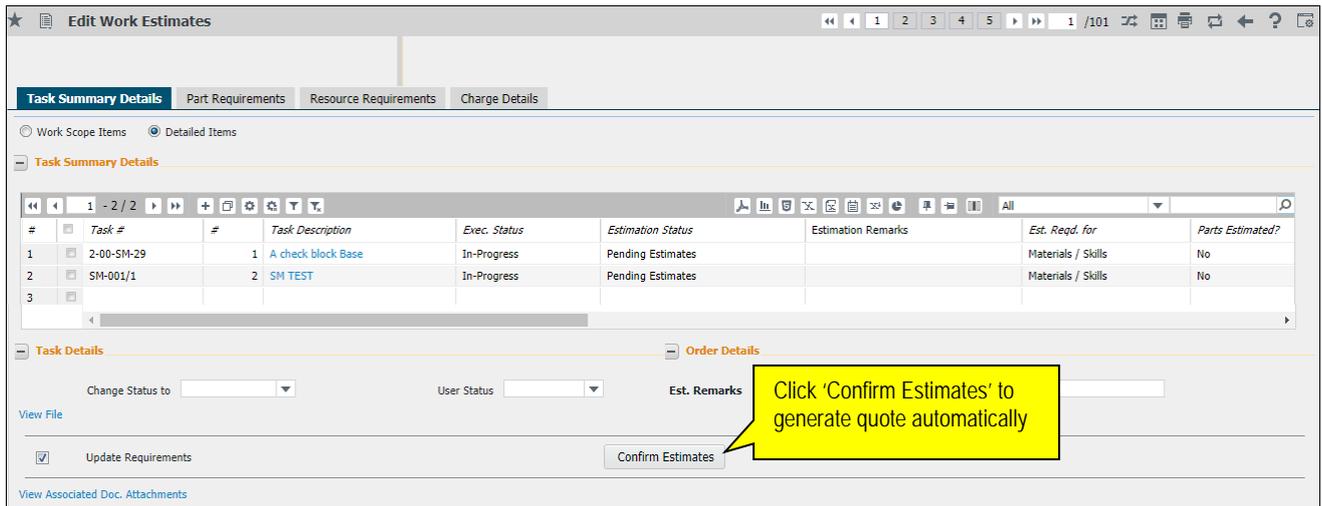
The screenshot shows the 'Set Sales Process Parameters' interface. The 'Process Parameter List' table is displayed with the following data:

#	Parameter for	Process Parameter	Value	Value Selected
49	Part Pricelist	Source Catalogue for Slab rate computation	REFCAT	
50	Customer Portal	Enable payment against Service Sale / Part Sale Orders	0	
51	Customer – Bill back invoice	Billing basis of PO's raised on behalf of customer	0	
52	SaleQuote	Auto generation of Sale Quote for Ready to Quote Work Orders	1	
53	Customer – Bill back invoice	Allow billing the Partially received / Invoiced Purchase Orders?	0 for No, 1 for Yes	1
54	Customer – Bill back invoice	Apply Exchange rate as on	0 for Supplier Invoice authorization date, 1 Bill	1
55	Customer – Bill back invoice	Allow billing the Invoice Variance	0 for Not applicable	0
56	Customer Order – Services	Allow modification to Customer PO in Customer Order	Specify "0" for "Not Allowed" and "1" for	0

A yellow callout box points to the new parameter in row 52: "Auto Generation of Sale Quote for Ready to Quote Work Orders".

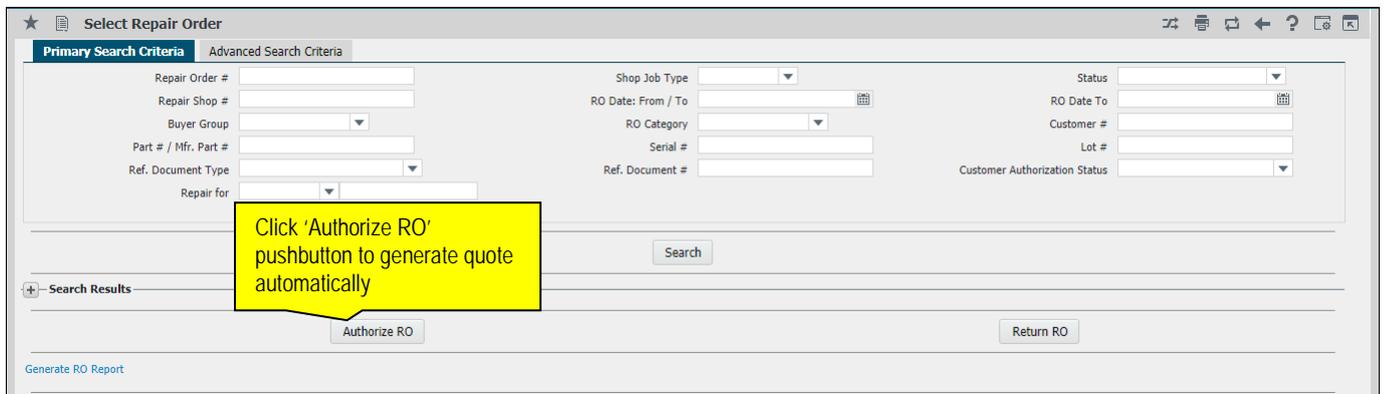
**Exhibit 2**

**Task Summary Details** tab in the **Edit Work Estimates** activity of the **Work Monitoring and Control** business component



**Exhibit 3**

**Authorize Repair Order** activity of the **Repair Order** business component



**Exhibit 4**

**Authorize Purchase Order** activity of the **Purchase Order** business component

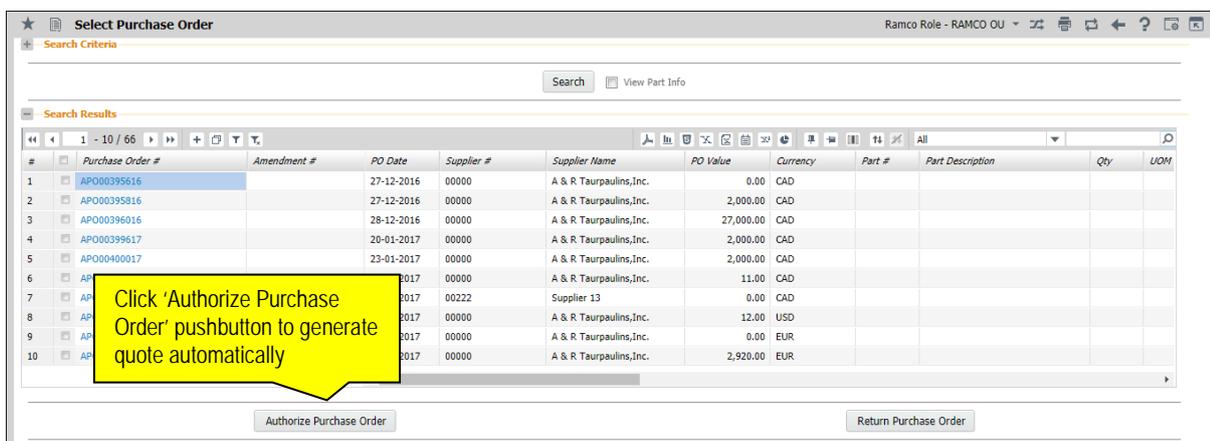


Exhibit 4

Manage Exchange Order activity of Customer Part Exchanges

★ Manage Exchange Order Ramco Role - RAMCO OU

---

Exchange Order Info Status Info

---

Initiating Doc. Info Sourcing Info Exchange Part Info Exchange Activity Log

Initiating Ref. Doc. # Customer Order CO-000164-2012 Get Details

Initiated by 00000011 Initiated Date 02-01-2012 05:05:00 PM

Parent SWO # Exch. MR # Reason For Exch. Adv.Exchange Request Customer

Customer Order # CO-000164-2012 Customer # 400016

Parent Part # Parent Mfr. Serial # Customer Name Customer 11

Parent Part Desc. Parent Part Desc.

---

#	Core Part #	Mfr. Part #	Mfr. #	Exch. Qty	UOM	Core Mfr. Serial #	Core Mfr. Lot #	Core Condition	Core Stock Status
1	3957985115:F9111	3957985115	F9111	1.00	EA				
2									

Save

---

Other Info

Confirm Cancel Short Close Force Close

---

Record Statistics

Click 'Confirm' to generate quote automatically

# Ability to quote / invoice for external repair charges based on a flat value or flat mark-up fee

Reference: AHBG-15243

## Background

In some cases MRO Sends customer parts for external repair, these repairs are billed to the customers at a value that is equal to the repair invoice value plus an additional flat markup fee. Currently Ramco application allows definition of mark up as a percentage of repair order quote/ invoice value only. Therefore this requirement is to make provision for defining such flat markup fee for repair orders..

## Change Details

### Service Pricelist

#### External Repair Pricing Details

- Application will be enhanced to allow input of 0 as price factor for RO

#### Additional Task Level Charges

- 'Additional Task Level Charges' tab renamed as 'Additional Charges'
- A new column 'Job Type' added in the 'Additional Task Level Charges' tab page. Job Type should be loaded with the meta data 'Repair Order' and blank.

The flat markup value applicable for the repair orders will be displayed in the quotation

The system automatically displays 'Flat Markup' for every Repair Order in the **External Services** tab of the quotation / invoice release if charges are defined for the Repair Order.

### Exhibit 1:

#### Manage Service Pricelist activity in the Service Pricelist business component

The screenshot shows the 'Manage Service Pricelist' interface. A yellow callout box points to the 'Pricing Factor for RO' field, which is currently set to 0.00000000. A red box highlights this field. The interface includes sections for Identifier Details, Material Pricing Details, Copy from, Other Pricing Details, and External Repair Pricing Details. The External Repair Pricing Details section contains fields for Pricing Basis, Pricing Factor for RO, Pricing Factor for Adhoc PO, Pricing factor for bill back PO, Applied on (Total Value), Pricing Factor for Service PO, and Pricing Factor for Direct Service. The Pricing Factor for RO field is highlighted with a red box, and a yellow callout box points to it with the text 'New field added to provide '0' as the pricing factor'. The interface also includes a Comments section, Save, Confirm, and Cancel buttons, and links for Edit Roster Code Details, Edit Non-Billable Elements, Upload Documents, Activate / Inactivate Service Pricelist, View Associated Doc. Attachments, and Record Statistics.

**Exhibit 2:**

**Additional Charges tab in the Manage Service Pricelist activity in the Service Pricelist business component**

Additional Task Level Charges' tab renamed as 'Additional Charges'

New combo 'Job Type' added which lists the option "Repair Order" and blank.

#	Task #	Description	Charge Code	Variant #	JobType	Pricing Basis	Price	Factor
1					Repair Order			
2								

**Exhibit 3:**

**Ext. Services tab in the Manage Sale Quotation activity in the Service Sale Quote business component**

Charges added in the 'Ext. Services' tab

#	Doc. #	Status	Exch. Ind.	Supplier #	Supplier Name	Part #	Mfr. Part #	Mfr. #	Part Serial # / Lot #	Repair Qty.	BER Qty.	Q. Type	Fact. Applied	Price	BER Cos
1	AFRO-003341-2017	Authorized		00198	Supplier 12	V-COM-SER-AC-			ch5	1.00000000			Basic Value	1,000.00000000	
2	AFRO-003341-2017	Authorized		00198	Supplier 12	V-COM-SER-AC-			ch5	1.00000000			Basic Value	200.00000000	
3															

**Exhibit 4: Ext. Services tab in the Manage Invoice Release activity of the Service Sale Billing business component**

Charges added in the 'Additional Charges' tab

Charges will be added in the 'Ext. Services'

#	Exe. Doc. #	Billing Element	Part Group	Qty.	UOM	Fact. Applied on	Basic Rate (CO Curr.)	Unit Tax (CO Curr.)	Unit C
1	AFRO-003332-2017	FLTHK		1.00		Basic Value	2,500.00000000		
2	AFRO-003332-2017	Repair Cost		1.00	EA	Basic Value	2,867.00000000		
3									

## Visibility of parts and resources of a fixed price task in Sale Quotation

Reference: AHFG-11112

### Background

Generally a quote or an invoice will show only the Parts/Resources that are priced under T&M basis and anything that is included within the FP will not be shown. However, some MROs process all their Quotes and Invoices to check if these included Parts/Resources can actually be exempted or if they need to be priced separately. If any part is of a high value, the commercials team makes the decision to price this Part as per the actual rate and makes the change in Quote or Invoice directly.

The requirement is to view Materials / Resources estimated for the contracted tasks that are running under Fixed Pricing basis during quote generation so that the commercial person can review if any additional material / resources are estimated against FP tasks

### Change Details

- On Sale Quote generation, all the parts and resources that are estimated against the selected Customer Order will come under the Materials and Resources tab irrespective of the Pricing Basis.
- All parts and resources that are included under a Fixed Price task must have their pricing basis as Fixed Price
- The Part/Resource will have Sys. Billable as 'Yes', Billable as 'No' and COA? as 'In-scope'.



*Note: To modify the billability, user must manually change the Billable flag to 'Yes' and also mandatorily change COA to Out-of-scope.*

## Ability to view estimated cost in Sale Quotation

Reference: AHBG-22122

### Background

While execution of task on the maintenance object, it is required by the commercial personnel to review the estimated cost and approve the same. Until then work execution needs to be on hold.

Also on reviewing the cost, if any of the cost seems to be high, Commercial role may propose the production team to reduce the cost. For example, if any of estimated material cost is too high, sales person will suggest the purchase team to check for the lowest price in market and purchase the part.

Therefore, the need is to create a provision for the commercials personnel to review the estimated cost of the job at each entity level that is Materials, Resources, External Repair and Additional Charges before executing work on the maintenance object.

### Change Details

- The existing **Assessment Info** section in the **Manage Sale Quote** activity of the **Service Sale Quote** business component has been enhanced to display the cost for all the estimated entities that is Materials, Resources, External repair and Additional Charges.
- Set options, at organization level has been introduced in the **Set Process Parameters** activity of the **Sale Quotation** business component to determine the source for computing the material cost whether it is Standard Cost available in the Part master or rate available in the Price list.

Parameter For	Parameter	Parameter Values
Sale Quotation	Source for Estimated materials cost computation	Enter: <ul style="list-style-type: none"> <li>• '0' for 'Standard Cost'</li> <li>• '1' for 'Pricelist based'</li> </ul>
Sale Quotation	Source Pricelist for Estimated materials cost computation	Enter: <ul style="list-style-type: none"> <li>• '0' for Max. Price</li> <li>• '1' for Min. Price or specify valid pricelist of type Ref. catalog / OEM in Active status</li> </ul>

- Based on the set options, computation of the estimated cost of materials is as per the rate available in the Pricelist (Ref. catalog, OEM pricelist)
- Resource costing and External Repairs cost will continue to get computed based on skill based costs and the RO cost.

## WHAT'S NEW IN SERVICE SALE BILLING?

### Ability to bill MRO Customers based on usage of the object

Reference: AHBG-3423

#### Background

MROs charge their customers for the services provided based on the Usage of the Aircraft / Component. MROs generally receive the usage from their customers on a periodic basis and charge them accordingly based on contractually agreed rates.

All in-scope jobs are charged based on the actual usage, while out of scope jobs get charged based on other pricing basis. Actual usage based bills are sent to the customer every month.

#### Change Details

Provision has been made in Contract to define Billing and Invoicing terms for Usage based billing. The user can define these terms for Regular and Provisional Billing.

Regular Bill is the one sent to customer based on actual usage details, while Provisional Bill is the one sent based on some estimated usage value.

Rates can be defined in Contract at multiple levels, such as, Aircraft Registration number, Aircraft Groups, Aircraft Models, Part-Serial, Component level and so on. These rates can also be defined with varying effectivity with respect to Calendar, Usage and/or Age of Aircraft.

Once Contract is defined, milestones are set-up for the dates on which the bill must be sent for the Contract effectivity period. As and when the milestones are achieved, user can choose to update the usage and generate the bill. Multiple bills can be combined later to generate a single Invoice to be sent to the Customer.

#### I. Contract Set-up

The Pricing and invoicing details must be set up at the Contract level. For usage based billing, 'Pricing Basis' must be set as 'Usage Based' at the Object Effectivity level. Once the Object Effectivity is defined, the rates must be defined for the Object for a Parameter with which it needs to be charged.

Billing frequency can be set for Regular Billing as either once in a Calendar month or a financial period. A buffer time for billing can be set by defining the number of days required to process Regular bill or Provisional bill.

Provisional Bill can be done based on either Estimated Usage of object defined in Contract or Min. Guaranteed usage also defined in the Contract.

**Exhibit 1:**

The **Edit Pricing and Invoicing Details** screen

**Main Contract Details**

Contract # / Rev. # ub-rb-01 / 0  
 Contract Category  
 Customer # 1090000  
 Effective from 01-08-2017

Contract Type Customer Specific  
 Sale Type FHC  
 Customer Name Customer 3  
 Effective to

Contract Status Approved  
 Contract Date 01-08-2017  
 Currency CAD  
 User Status

Std. & T&M Pricing Fixed Pricing Monthly Fixed Charges UB Rev. Recog. Mat. Pricing Caps Res. Pricing Caps Ext. Ser. Caps **Inv. & Payment** T/C/D

Monthly Invoice & Payment

Regular Billing Details

Billing once in Calendar Month  
 On Demand Billing Not Allowed  
 Remarks on Reg. Bill

Process Reg. Bill After 2 Day(s)  
 Pay Term For Reg. Billing Net 45  
 Invoice Category FINAL  
 Usage Update Consolidated

Provisional Billing Details

Provisional Billing Not Required  
 Prov. Bill Based On  
 Min. Guaranteed Usage  
 Notes on Min. Usage

Process Prov. Bill After Day(s)  
 Estimates based on  
 Estimated Usage  
 Invoice Category  
 Pay Term For Prov. Bill Net 45  
 Remarks On Prov. Bill

CO Based Invoice & Payment

#	Invoice For	Inv. Type	Inv. Category	Invoicing Event	Description	Bill Prior to (Days)	Triggering Task
1	Regular Repair						

Confirm Contract Cancel Contract

Edit Main Info. Edit Terms of Execution Edit Incoming & Outgoing Terms

Record Statistics

**Exhibit 2:**

Monthly Fixed Charges tab in the **Edit Pricing and Invoicing Details** screen

**Main Contract Details**

Contract # / Rev. # ub-rb-01 / 0  
 Contract Category  
 Customer # 1090000  
 Effective from 01-08-2017

Contract Type Customer Specific  
 Sale Type FHC  
 Customer Name Customer 3  
 Effective to

Contract Status Approved  
 Contract Date 01-08-2017  
 Currency CAD  
 User Status

Std. & T&M Pricing Fixed Pricing **Monthly Fixed Charges** UB Rev. Recog. Mat. Pricing Caps Res. Pricing Caps Ext. Ser. Caps Inv. & Payment T/C/D

Usage Based Pricing Details

#	Pricing Basis	Eff. Ref.	Eff. Ref. Code	Aircraft Model #	Aircraft Reg. #	Aircraft MSN	Part #	Mfr. Part #	Mfr. #	Serial #
1	Usage Based	Aircraft Effectivity	ALL							
2	Usage Based	Aircraft Effectivity	ALL							
3	FP per Month									

Save Usage Based Pricing Rule Based Pricing Details

**Exhibit 3:**

**Inv. And Payment** tab in the **Edit Pricing and Invoicing** Details activity of the **Sale Contract** business component

#	Invoice For	Inv. Type	Inv. Category	Invoicing Event	Event Description	Bill Prior to (Days)	Triggering Task
1	Regular Repair	Regular	FINAL	Work Completion			
2	Regular Repair	Regular					

All the 'Monthly Invoice Releases' invoicing terms are to be defined under the **Inv. & Payment** tab along with the invoice and payment terms of a CO Based Invoice release.

On Demand Billing:

If the user wishes to bill the customer as and when usage information is received (anytime during a month), then 'On-Demand Billing' option can be enabled, such that user can generate bill on any day throughout the Contract effectivity period. Also, the user can choose to bill the customer at individual entity level or at higher level in a consolidated manner. This can be defined against the control 'Update Usage'.

**II. Regular / Provisional Bill Generation**

Based on the billing frequency defined in the Contract, milestones for bill generation will be set-up on Contract Approval. As and when the milestone date is achieved, the user will be able to pick up the date and update usage for objects and generate bill with rates from Contract. Bill can be generated at individual Aircraft Registration number level.

This facility has been provided as part of **Manage Usage Based Billing** screen under the **Service Sale Billing** business component.



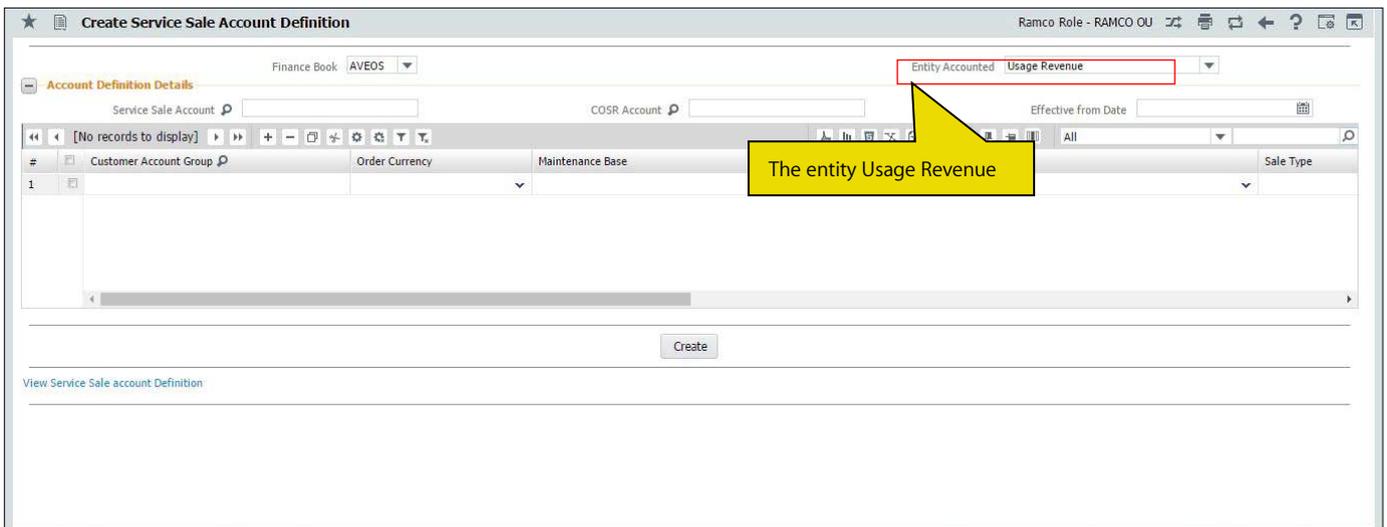
*Note: Separate milestones will be set-up for Regular and Provisional Bill. The system automatically fetches the Provisional bill from Contract along with the rates.*

**III. Account Rule Definition for Service Sale**

Account Rule Definition for Service Sale with Usage based pricing basis can be defined under the entity 'Usage Revenue' in **Create Service Sale Account definition** screen under **Account Rule Definition** business component.

**Exhibit 4:**

The **Create Service Sale Account Definition** screen



- If the user does not require a parameter based definition, then the complete definition can be given in the header itself by just providing 'Service Sale Account' and its 'Effective from Date'.
- On the other hand, if the user wants to have parameter based definitions, service sale account definition can be defined based on Sale Type and Customer Account Group.

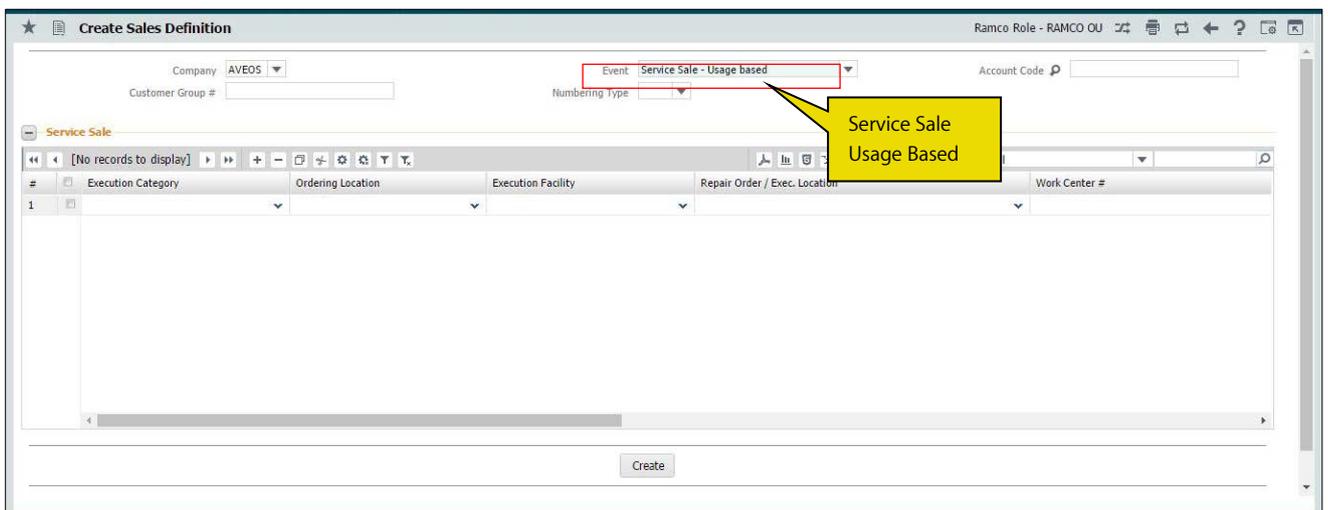
*Note: Ensure that Customer Account Group and Sale Type parameters have been enabled in the **Set Process Parameters** screen to be able to define Account rules for the Entity 'Usage Revenue'.*

#### IV. Cost Center Rule Definition for Service Sales

Cost Center Rule Definition for Service Sale with Usage based pricing basis can be defined under the Event '*Service Sale - Usage based*' in **Create Sales Definition** screen under the **Cost Center Rule Definition** business component.

**Exhibit 5:**

The **Create Sales Definition** screen



*Note: The existing definition for Customer Order Based Service Sale definition will further have to be done for the Event 'Service Sale – Maint. Based'*

Definition for 'Service Sale – Usage based' event can be done only for parameters; Aircraft Model, Part Category, Part Group and Component Type.

## V. Invoice Generation

Once the bill is generated and confirmed, Invoice can be generated for individual bills. Alternatively, multiple bills can also be combined to generate a single Invoice. The generated Invoice would queue up in **Customer Service Invoice** screen in 'Fresh' status.

In case there are any further corrections, Invoice can also be returned back to modify the bill and a new Invoice can be generated, using the 'Return Release' button.

Upon auto generation of Invoice, based on the Bill to Customer, the Account code will be derived from the ARD and using the combination of Object # for which usage is defined and the Customer #, matching Cost Center will be derived.

## VI. Accounting for Usage Based Billing

PBH accounting is based on a parameter **Set Sales Process Parameters** screen under *Customer* component.

Parameter for: **Service Sale Billing**

Process Parameter: **Revenue booking Policy for Usage based Billing**

Permitted Value: *Specify "0" for "Booking based on actual usage" or "1" for "Booking based on notional margin"*

- If the parameter is set as 'Booking based on actual usage', upon finance invoice creation, the following entry should be generated but actual postings to FBP can happen only on Invoice authorization
  - ✓ *Debit* - Customer Control Account (based on receivables ARD)
  - ✓ *Credit* - Usage based Sales Account (Based on service sale ARD)
- If the policy is set as '*Booking based on notional margin*',
  - i. On processing an release against any in-scope task covered under PBH, the following entry should be passed
    - ✓ *Debit* - Deferred Revenue account
    - ✓ *Credit* - Service Sales Revenue (based on service sale ARD)
  - ii. Upon finance invoice creation, the following entry should be generated but actual postings to FBP can happen only on Invoice authorization
    - ✓ *Debit* - Customer Control Account (based on receivables ARD)
    - ✓ *Credit* - Deferred Revenue Account

This method takes care of balancing between Cost and Revenue as notional revenue is booked as and when cost gets booked. At any point in time, the balance sitting in deferred revenue account will represent the under recovery of revenue over cost, (if in debit – meaning expected margin over cost is not recovered), and the additional recovery of revenue over cost, (if in credit). This information will be helpful to revise usage based rates over a period of time.

### Important points to be noted

- Regular / Provisional Bill can be set once in every Calendar Month or Financial period.
- If On-Demand Billing is set as 'Allowed' then, Provisional Bill cannot be set as 'Required'.

- Bill milestone will be listed for bill generation only when the milestone date has been achieved. If any buffer time is set in the contract for 'Process Reg. Bill After' then the milestone date will be set up only after the number of days defined.
- On-Demand milestones will be fetched for all Contracts that are enabled with On-Demand billing with current date as a temporary milestone. The date would change every day until the user chooses to generate a bill.
- A free form billing has also been enabled to provide user the ease to bill missed out bills with the help of Direct Billing. User must manually update everything right from Contract information.
- At the time of Bill generation, the user can update the usage either manually or get the values from the Parameter Value information. Any fetched value can also be modified.
- Usage can be updated to the objects on two different basis: at individual entity level or at a Consolidated (higher) level.
- When usage is updated at individual entity level, facility is provided to generate separate Releases for each entity.
- Bill can be generated for individual objects or for all objects under the contract effective for the duration.
- If there are any exceptions, wherein Usage for specific object is not available and if the user wishes to send a separate bill for that object later with the same milestone date, then user can proceed with the bill generation for the rest of the available information with the check box 'Retain Milestone for Exceptions' enabled. This will allow user to update usage and generate separate bill later for the missed out objects.
- Rates fetched from Contract can also be modified as per needs in the Bill.
- Invoice generation is facilitated from Bill, which would generate a Customer Service Invoice in 'Fresh' status.

### Manage Usage Based Billing – Select Documents

Under the business process **Service Sale Management**, business component **Service Sale Billing** and **Manage Usage Based Billing** activity, user will be provided with list of Contracts and milestones for which Bill generation is pending as part of **Select Documents** screen.

### Exhibit 6

The screenshot displays the 'Select Documents' interface. At the top, there are tabs for 'Update Usage / Generate Bill' and 'Process / View Generate Bill'. Below the search bar, a filter bar shows counts for various document statuses: All (3473), Alert (1099), Overdue (2350), On-Demand (10), and Cancelled (14). The main table lists document entries with columns for Invoice Type, Milestone Type, Mode of Billing, Customer #, Customer Name, Nature of Contract, Contract #, and Revision #. A yellow callout box highlights a 'Cancel Milestones' button located at the bottom right of the table area.

#	Invoice Type	Milestone Type	Mode of Billing	Customer #	Customer Name	Nature of Contract	Contract #	Revision #
1	Regular	Regular	Milestone Based	1090000	Customer 3	Service Contract	SC-PBH-04	0
2	Regular	Regular	Milestone Based	101	Customer 2	Service Contract	SaleContract-PBH-04	0
3	Regular	Regular	Milestone Based	1090000	Customer 3	Service Contract	SC-00021	1
4	Regular	Regular	Milestone Based	101	Customer 2	Service Contract	SC-PBH-01	0
5	Regular	Regular	Milestone Based	101	Customer 2	Service Contract	SC-PBH-01	1
6	Regular	Regular	Milestone Based	1090000	Customer 3	Service Contract	SC-PBH-21	0
7	Regular	Regular	Milestone Based	1090000	Customer 3	Service Contract	PBH-21	1
8	Regular	Regular	Milestone Based	400004	Customer 7	Service Contract	PBH-23	0

The **Select Documents** screen has been categorized into two parts:

**Update Usage / Generate Bill** – Lists all pending milestones for various Contracts for which bill generation is pending in multiple groups, such as; **Alert, Overdue, Cancelled** and **On-Demand**

- **Process / View Generated Bills** – Lists all generated bills under various statuses. The user can select and act upon any open bills that need quick processing.

The above categorization of a Milestone being Alert or Overdue is determined by a set option in **Set Sales Process Parameters** under the Parameters for 'MRO Sales'.

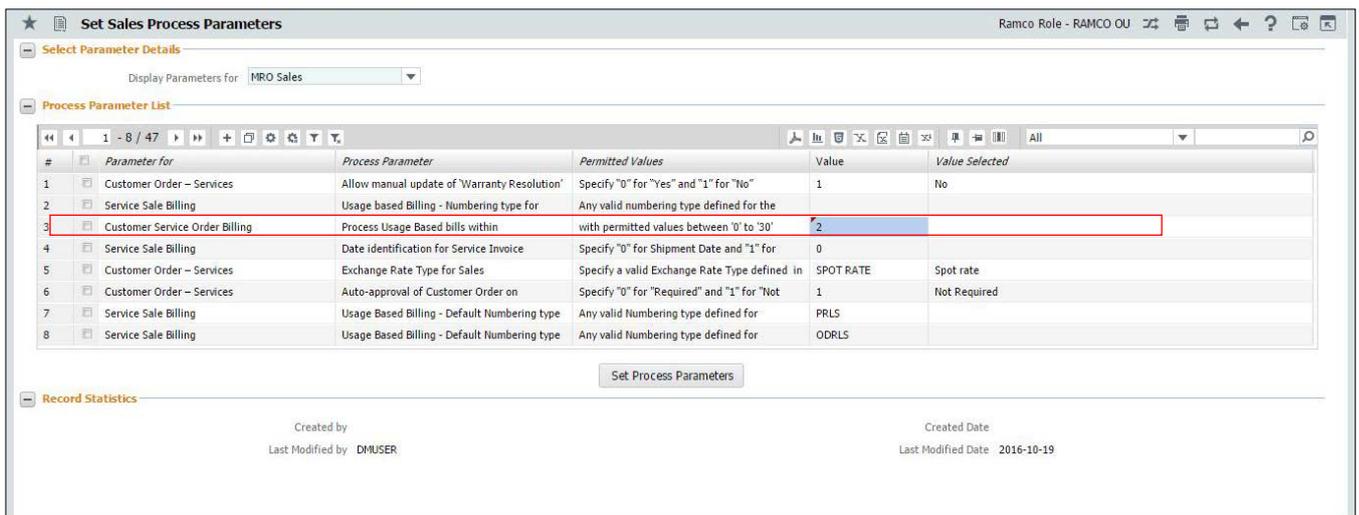
Parameter for: **MRO Sales**

Process Parameter: **Process Usage Based Bills within**

Permitted Value: Specify values between 0 to 30

**Exhibit 7:**

The **Set Sales Process Parameters** screen

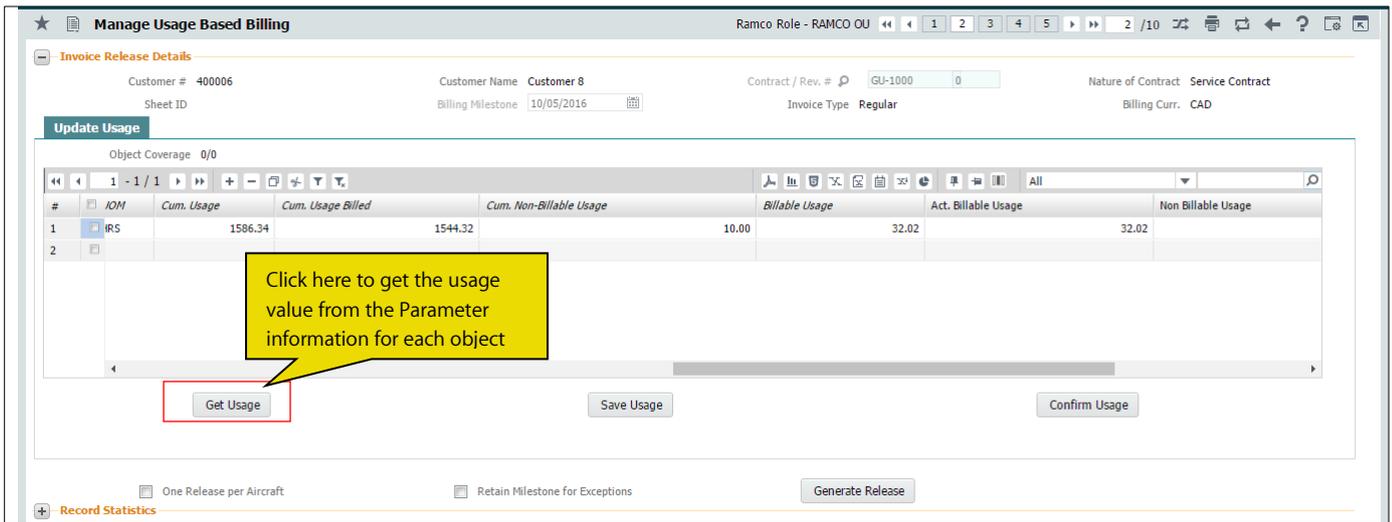


**Manage Usage Based Billing – Get Usage**

'Get Usage' is applicable for the aircrafts for which 'Update Usage' is selected as "Individual Entity". On click of 'Get Usage', the usage is fetched from the Parameter information of the Object. The system Fetches usage already billed, non-billed and provisional usage already billed automatically. Though the actual usage is defaulted from the parameter value information, the user has facility to modify this value, for each value for each project

**Exhibit 8:**

The **Manage Usage Based Billing** screen

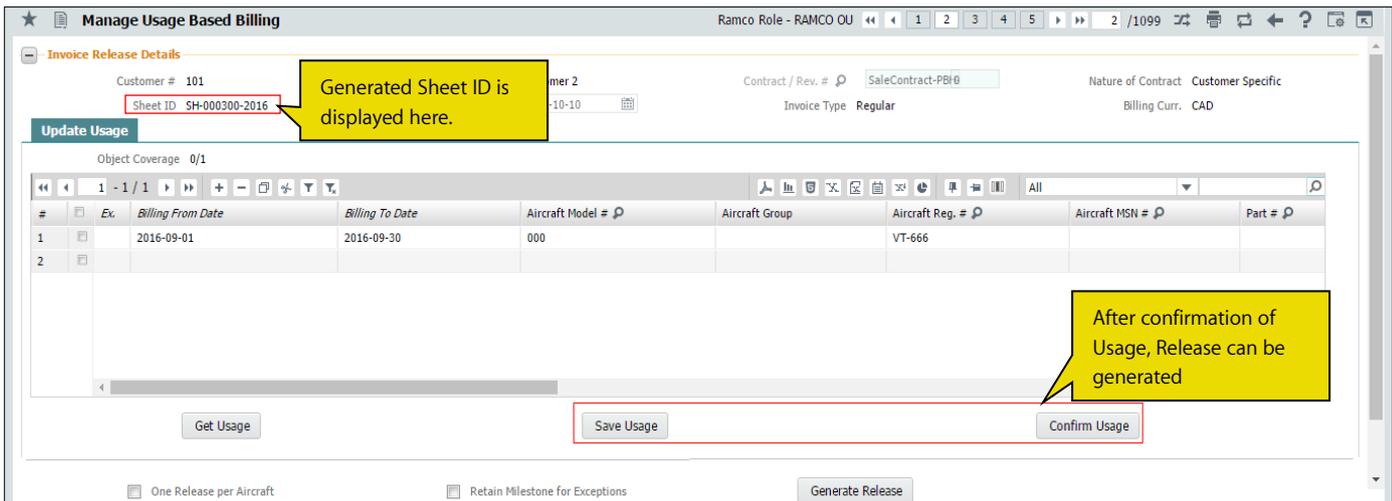


**Manage Usage Based Billing – Release generation**

On selection of a specific milestone from the **Select Documents** screen, all the Objects that are effective for the selected Contract will be fetched for the user to upload the usage against and generate a unique 'Sheet ID' for the same. The usage can either be manually updated or be fetched from the Parameter Value information of the Object.

**Exhibit 9:**

The **Manage Usage Based Billing** screen



This Sheet ID can be converted into a single or multiple Releases (Bills) as required by the user, by using the option 'One Release per Aircraft' while generating release.

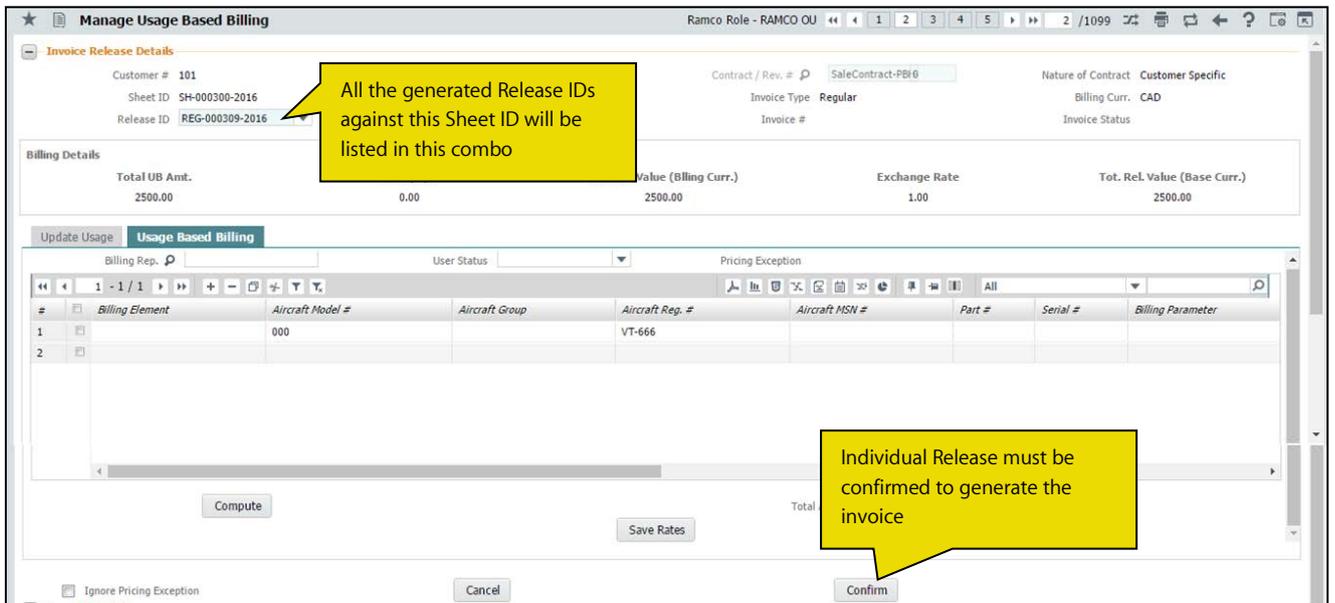
*Note: The option of 'One Release per Aircraft' is applicable only for Aircraft Effective Contracts.*

If there are any objects for which Usage is not available, then while generating Release, 'Retain Milestone for Exception' can be used to retain the same milestone for creating a new Release for the left out objects.

On successful generation of Release, the rates defined in the Contract for each object will be fetched and the Release amount will be arrived at. Again, as in the case of usage, the rate can also be modified by the user.

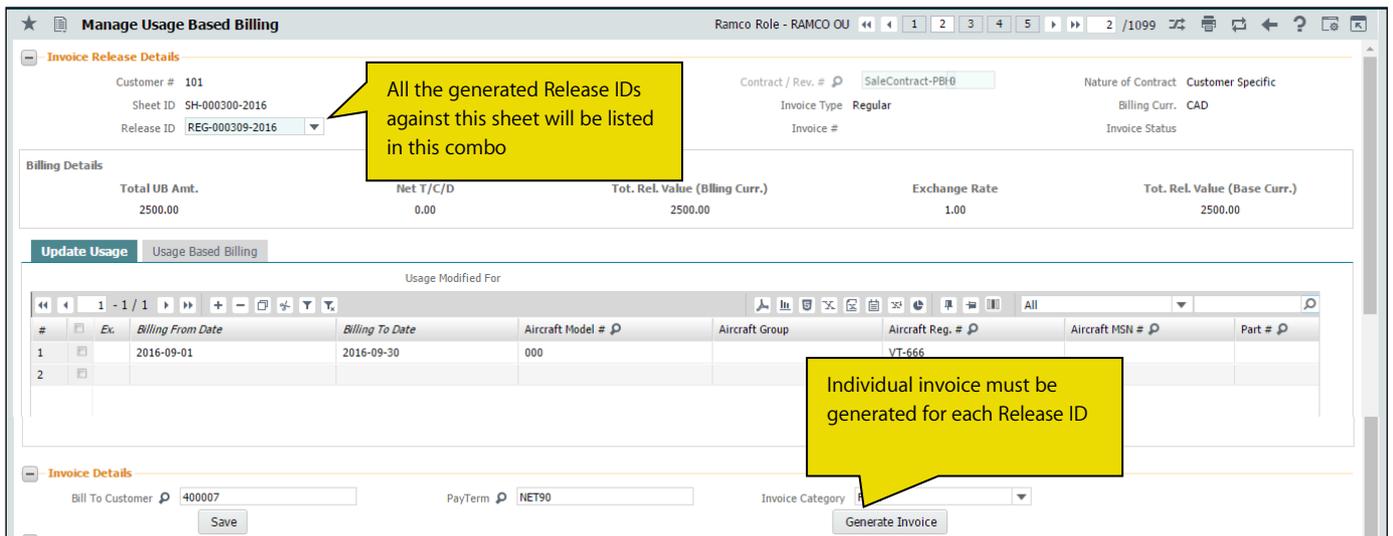
**Exhibit 10:**

The **Manage Usage Based Billing** screen



**Exhibit 11:**

The **Manage Usage Based Billing** screen



Once Confirmed, Release can be converted to Invoice directly or the user can go back to **Select Documents** screen to generate Invoice for multiple Releases under 'Process/View Generated bills' category.

**Exhibit 12:**

The **Select Document** screen

Update Usage / Generate Bill | **Process / View Generate Bill**

Search: [ ] Release status: Confirmed | Not-Invoiced | Date From/To: [ ] Ex: [ ]  
 User Status: [ ] Bill Rep: [ ] **Search**

Search Results

All 34 | **Alert 5** | Overdue 29

#	Customer #	Customer Name	Contract #	Revision #	Nature of Contract	Release #	Aircraft Reg #	Part #	Serial #
1	1090000	Customer 3	SC-PBH-05	1	Service Contract	REG-000238-2016			
2	400007	Aviation	SC-PBH-07	0	Service Contract	REG-000295-2016			
3	101	Customer 2	SC-PBH-87	1	Service Contract	REG-000288-2016			
4	400007	Aviation	PBH-UBB-111	0	Service Contract	REG-000259-2016			
5									

Group By: [ ] **Generate Invoice**

Manage Direct Billing

**Exhibit 13:**

The **Manage Usage Based Billing** screen

Manage Usage Based Billing

Customer # 101 | Customer Name Customer 2 | Contract / Rev. # SaleContract-PBH-0 | Nature of Contract Customer Specific

Sheet ID SH-000300-2016 | Billing Milestone [ ] | Invoice Type **Regular** | Billing Curr. CAD

Release ID REG-000309-2016 | Release Status Confirm | **Invoice # CI-000331-2016** | Invoice Status Fresh

Billing Details

Total UB Amt. 2500.00 | Net T/C/D 0.00 | Tot. Rel. Value (Billing Curr.) 2500.00 | Rel. Value (Base Curr.) 2500.00

Update Usage | Usage Based Billing

Usage Modified For

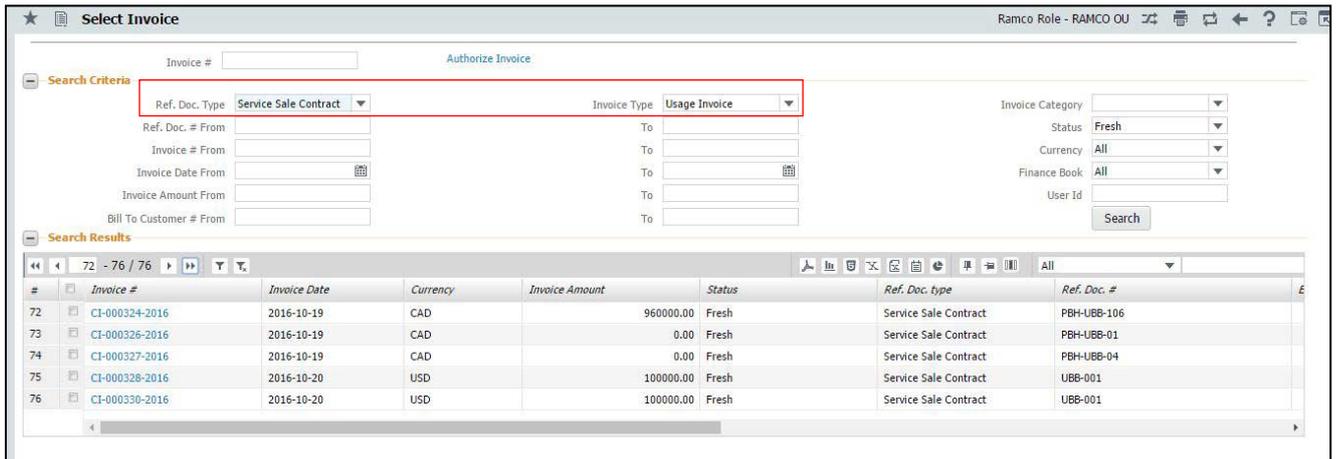
#	Ex.	Billing From Date	Billing To Date	Aircraft Model #	Aircraft Group	Aircraft Reg. #	Aircraft MSN #	Part #
1		2016-09-01	2016-09-30	000		VT-666		
2								

**Customer Service Invoice**

The generated Invoices from **Manage Usage Based Billing** screen, is queued up in the **Authorize Invoice** screen under **Customer Invoice** business component in 'Fresh' status.

**Exhibit 14:**

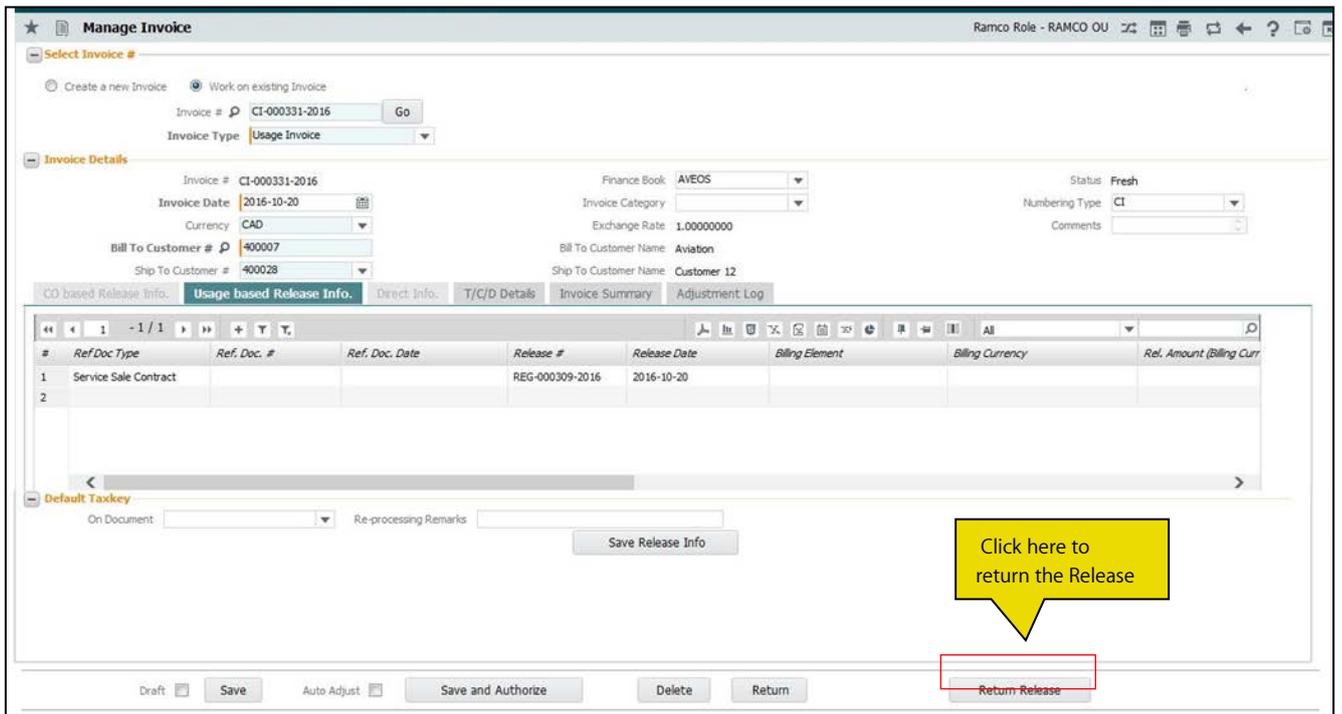
The **Select Invoice** screen of the **Customer Service Invoice** activity



Just like Customer Order based Invoices, these Invoices can be modified, Authorized or even Returned. One more facility has been provided to Return and Re-process the Release associated to the invoice.

**Exhibit 15:**

The **Manage Invoice** screen



The 'Return Release' button is used to put the Release in 'Returned' status, where it can be edited and confirmed against to generate a new Invoice.

## Ability to view/modify Billing Element for Direct Rel. Info in CO based Invoice Release

Reference: AHFG-10476

### Background

While Billing a customer job, Tasks can be categorized into groups of Billing Elements which would indicate the purpose of billing. Billing Elements are also required while raising a Direct Invoice release where Task may not be known but the billing can still be done for a certain purpose which could be correlated with the Billing Element.

This enhancement enables provision to select a Billing Element against billable rates for a Direct Invoice Release under the 'Direct Rel. Info' tab. Billable values can be provided against the Billing Elements. The release level Billing Element will be updated with the selected value as in case of Regular Invoice Release.

### Change Details

#### Service Sale Billing

- A new drop-down field 'Billing Element' has been added in the 'Direct Release Details' multiline of the 'Direct Rel. Info.' tab in the **Manage Invoice Release** screen. The system displays all the active Billing Elements as defined in the **Maintain Category Codes** activity of the **Category** business component.



*Note: On click of 'Save', if there are multiple lines in the multiline with same Billing Element, the system updates the Billing Element in the Release header with the same value. If there are multiple Billing Elements, the system updates the header Billing Element with value 'Multiple'.*

**Exhibit 1:**

Identifies the **Manage Invoice Release** screen in the **Service Sale Billing** business component:

**Manage Invoice Release**

**Release Main Info.**

Cust. Order # / Rel. #  Inv. Rel. Readiness Release Status  
 Customer # Customer Name Currency  
 Sale Type / Pricing Basis Pend. Rel. Exists?  
 Basic Value Order Level TCDs Total Value  
 Exchange Rate Total Value ( Base Curr. )  
 Bill To Customer 100004 1 Ship To Customer 100004 1

**Exe. Doc. Info.**

Reg. Billing Info. Actuals Info. Materials Resources Ext. Services CO Prepayment Info. **Direct Rel. Info.** NTE Price & Exceedance Addl. Charge

**Release Details**

Invoice Type Regular Invoice Category  Inv. Rel. Date 28-08-2018  
 Invoice Basis Billing Rep. 00041383 User Status   
 Proj. Inv. Rel. Date  Rel. Remarks

Re-pro. Remarks

**Direct Release Summary**

Material Price Labour Price Oth. Res. Price  
 Charges Ext. Services Basic Value

**Direct Release Details**

[No records to display]

#	Pricing Description	Billing Element	Material Price	Labour Price	Oth. Res. Price
1					

Save Direct Rel. Info.

Update Rel. Readiness  Confirm Process Evaluate Invoice Cancel

View Accounting Info. for Rev. Recog. Upload Documents View Associated Doc Attachments

**Record Statistics**

Created by Created Date  
 Last Modified by Last Modified Date  
 Confirmed by Confirmed Date  
 Processed by Processed Date

## Ability to generate Fixed Monthly Invoice Releases and also price the out of scope jobs running under the pricing policy FP per Month under CO based Invoice releases

Reference: AHBG-17120 / AHBG - 17156

### Background

'Fixed Price Per Month' is yet another periodic pricing method found in MROs apart from the Usage Based Pricing. There is a requirement to invoice for services provided on a monthly basis with a fixed charge set at Aircraft level or even fixed for a period, i.e, it could be a Fixed Price Per Aircraft or Fixed Price Per Month. Either way, this is equivalent to the monthly Usage Based bills.

The new pricing basis is required to be setup in Contract and the Invoices are required to be generated regularly with system prompting with apt milestones.

### Change Details

'Fixed Price Per Month', being similar to Usage Based Billing, the **Manage Usage Based Billing** screen is reused where it has been renamed as **Process Monthly Invoice Releases** with automatic release generation enabled for 'FP per Month' Invoice Releases

A new tab **Monthly Fixed Charges** has also been introduced.

Before getting into the Invoice Release generation, there are a few pre-requisites to be setup as following:

- Requirement of Monthly Invoice Release generation automatic or Manual: This is to be setup in the Contract under the **Operational Parameters** tab in the **Edit Terms of Execution** link in the **Manage Sale Contract** business component.
- If Monthly Invoice Release is to be setup automatically, set the grouping policy for the releases - Set grouping policy as either 'One release per Milestone' or 'One release per Billing Element'

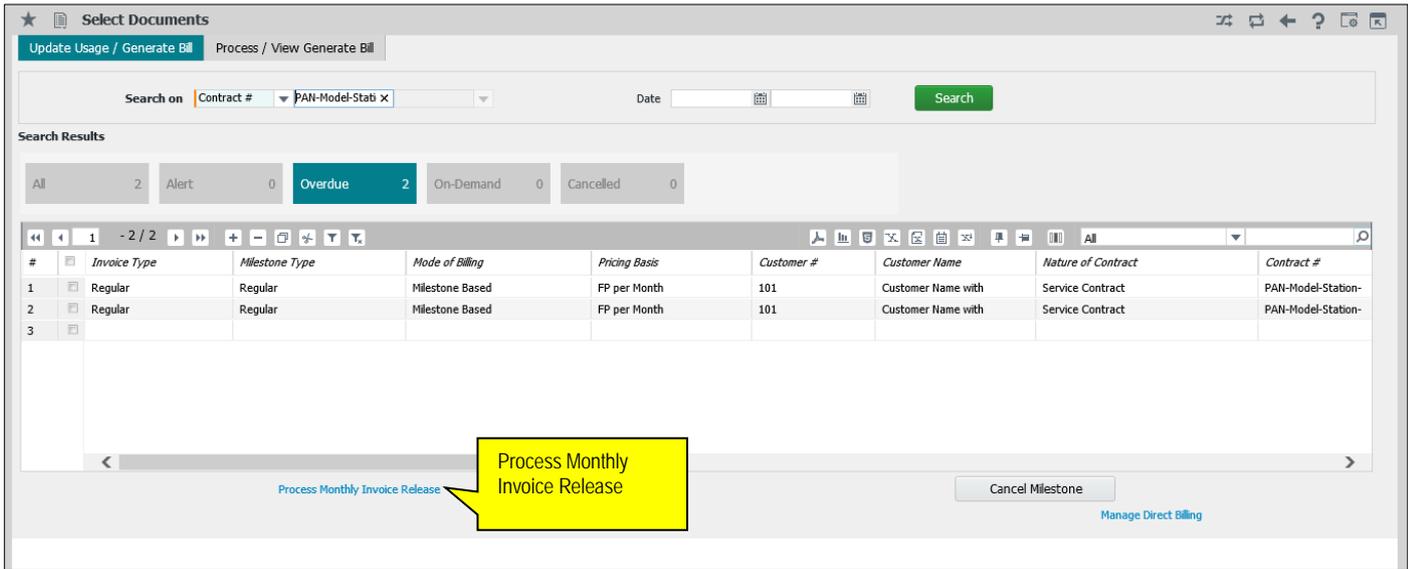
### Monthly Invoice Release Generation

#### I. Manual Release generation

In order to manually generate Monthly Invoice Releases, it is necessary that the monthly milestone is achieved. These milestones will be retrieved in the **Select Documents** screen of **Manage Monthly Invoice** release activity.

**Exhibit 1:**

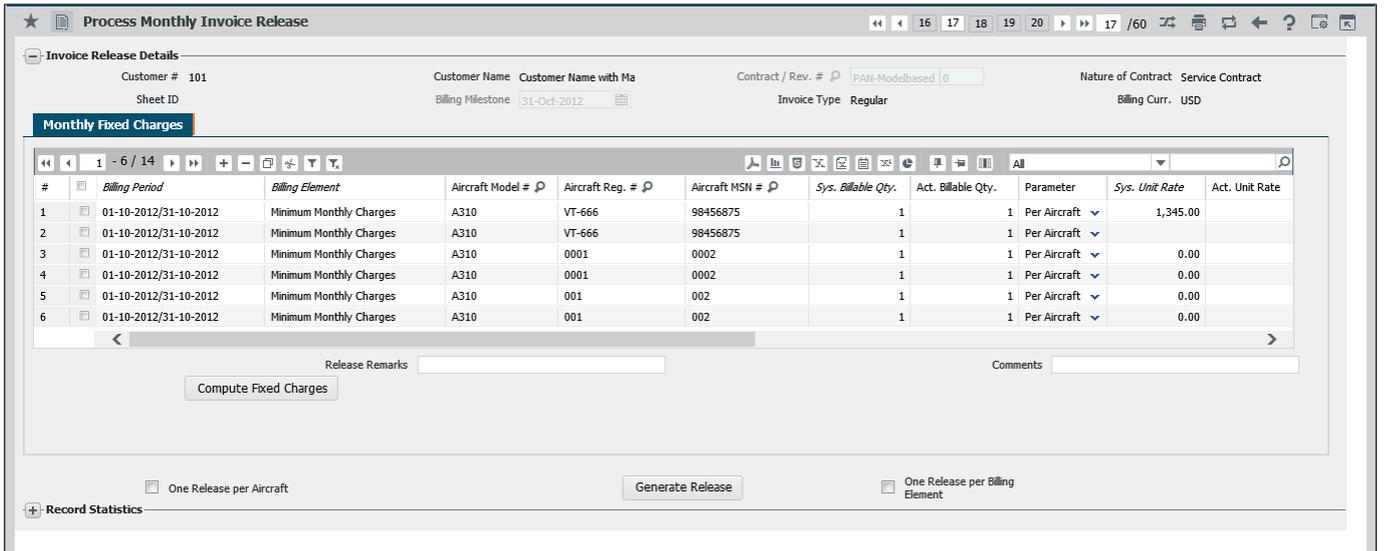
Select Documents page of the **Service Sale Billing** business component



The milestones once retrieved will have to be selected and processed for Invoice Release by clicking on the **Process Monthly Invoice Release** link.

**Exhibit 2:**

Monthly Fixed Charges tab page in the **Process Monthly Invoice Release** business component



New **Monthly Fixed Charges** tab has been introduced. All applicable objects eligible for billing are retrieved automatically and on click of 'Compute Fixed Charges' the rates defined as per in Contract will be automatically applied. Release can be generated and confirmed for Customer Invoice preparation. While generating release, two options are available: One release per Aircraft – which will generate individual Invoice release for each Aircraft retrieved and One release per Billing Milestone – which will generate individual Invoice release for each Billing Element applicable.

Automatic Monthly Invoice Release Generation:

If set as automatic generation, Monthly Invoice Releases would be automatically set up once the monthly milestones are achieved. All generated Invoices can be seen in **Select Document** screen of **Manage Monthly Invoice Release** screen in 'Fresh' status.

**Exhibit 3:**

**Select Documents** page in the **Service Sale Billing** business component

The screenshot displays the 'Select Documents' interface. At the top, there are search filters for 'Release status' (set to 'Fresh'), 'Date From/To', and 'Ex.'. Below the filters is a 'Search' button. The 'Search Results' section shows a summary: 'All 405', 'Alert 0', and 'Overdue 405'. A table below lists 6 documents with columns for #, Customer #, Customer Name, Contract #, Revision #, Nature of Contract, Release #, Aircraft Reg #, Sheet ID, and Invoice Type. At the bottom, there are 'Confirm' and 'Cancel' buttons, and a 'Manage Direct Billing' link.

#	Customer #	Customer Name	Contract #	Revision #	Nature of Contract	Release #	Aircraft Reg #	Sheet ID	Invoice Type
1	400007	Air India	PANFPM-002	0	Service Contract	REG-000169-2016	RC2993		Regular
2	400007	Air India	PANFPM-002	0	Service Contract	REG-000168-2016	RC2992		Regular
3	400007	Air India	UB-PAT-8	0	Service Contract	REG-000082-2016	RC2992	SH-000053-2016	Regular
4	400007	Air India	PANFPM-002	0	Service Contract	REG-000167-2016	RC2991		Regular
5	400007	Air India	UB-PAT-8	0	Service Contract	REG-000084-2016	RC2592	SH-000053-2016	Regular
6	400007	Air India	PANFPM-002	0	Service Contract	REG-000166-2016	OFF2C		Regular

The Releases can be reviewed in this screen and bulk confirmed for Customer Invoice generation. Invoices can be generated from the same screen as well, if preferred.

Manage Direct Billing:

The Direct Billing link is enabled for user to define both Usage based and Fixed Monthly charges. The behavior of the screen remains the same as it was developed.

CO Based Invoice Release Generation:

Just like for Usage Based Pricing, Fixed Price per Month also can be configured for the requirement of processing the CO Based Invoice Release for In-scope items as per Contract. Apart from this, releases can also be grouped based on Billing Elements just as in the Monthly Invoice Releases.

Pre-requisites to be setup:

- If automatic release setup is enabled, set the grouping policy for the releases under **Operational Parameters** tab in **Sale Contract** business component, which could be either 'One Release per Milestone' or 'One Release per Billing Element'.
- If the above option is set as 'One Release per Billing Element', then Billing Elements will have to be mapped against the tasks that are going to be performed. This Billing Element mapping is possible at two levels; either Package Type level or Task level. Default Billing Element for other external documents can also be defined.

**Set Process Parameters** link in the **Define Process Parameters** activity of the **Common Master** business component

#	Entity Type	Process Parameter	Permitted Values
1	Package Type	Billing Element Association level for Invoicing	Enter: <ul style="list-style-type: none"> <li>'0' for Package Type</li> <li>'1' for Task</li> </ul>
2	Package Type	Default Billing Element for Package Type	Enter a valid Billing Element defined in Maintain Category Codes

**Set Sales Process Parameter** activity in the **Customer** business component

#	Entity Type	Process Parameter	Permitted Values
1	Service Sale Billing	Default Billing Element for External Repairs	Enter valid Billing Element define in Maintain Category Codes
2	Service Sale Billing	Default Billing Element for Exchange Orders	Enter valid Billing Element define in Maintain Category Codes
3	Service Sale Billing	Default Billing Element for Purchase Orders	Enter valid Billing Element define in Maintain Category Codes
4	Service Sale Billing	Default Billing Element for Expense Invoice	Enter valid Billing Element define in Maintain Category Codes
5	Service Sale Billing	Process CO based Release / Invoice for In-scope Fixed Price/Month Jobs	Specify "0" for "Required" and "1" for "Not Required"

Once the above parameters are set, Invoice Releases are generated automatically based on defined requirements similar to how it is currently working.



*Note: If automatic grouping policy is set as 'One Release per Billing Element', the same Customer Order may have multiple invoice releases in 'Fresh' status simultaneously.*

Process the Release to retrieve the Releases in the **Customer Invoice** screen.

### **Auto generated Invoice Release**

#### **1. Billing Element association at Package Type level**

- The system retrieves and displays all the automatically generated Invoice Releases post their release milestone.
- The system generates Invoice Release for the entire Aircraft Maintenance package against the Default Billing Element defined in the **Define Process Entities** activity of the **Common Master** business component.
- For all out of scope tasks running under Pricing Basis 'FP per Month', if release generation is set as automatic and Grouping Policy for Automatic CO based Invoice Releases generation is set as 'One release per Billing Element',

**Example:** CO # - CO-00037-2017

Package #: AME-003781-2017

Package Type: Adhoc Service

Default Billing Element for Adhoc Service - 'On Call Service Charge'

In the above scenario, upon billing milestone achievement, the system automatically generates one Invoice Release for the CO against the Billing Element 'On Call Service Charge'

## 2. Billing Element Association at Task level

While auto-generating an Invoice Release with grouping policy 'Billing Element', the Invoice Releases as per the Billing Element, on splitting, is done only at the Pricing / Parent Task level and not at the Operational Tasks level. The Billing Element of the Pricing Task is automatically applied to all the Operational Tasks under it.

## 3. Billing Element association at Task Category level

On Search, the system retrieves and displays all automatically generated Invoice Releases post their release milestone. For all out of scope tasks running under Pricing Basis 'FP Per Month' the system generates Invoice Releases grouping tasks that have same Billing Element associated to them if the following conditions are true:

1. Release generation is set as automatic
2. Grouping Policy for Automatic CO based Invoice Releases generation is set as 'One release per Billing Element',

**Example:** CO # - CO-00037-2017

Package #: AME-003781-2017

- I. Tasks : Media Load - TV > Billing Element - 'Media Load charges'
- II. Non-Routine > Billing Element - 'Adhoc Services'

In above scenario, upon billing milestone achievement, the system automatically generates two Invoice Releases, one against the Billing Element 'Media Load Charges' and another again 'Adhoc Services'

## 4. Billing Element of Invoice Release

On creation of an Invoice Release, the system maintains and updates a Billing Element in the Invoice Release header that must have the Billing Element of the Tasks being billed with in the release.

The system performs the following:

- i. If there is only one Billing Element in the Release, update the same for the Billing Element of the Inv. Release
- ii. If there are multiple Billing Elements in the Release, update the Billing Element of In. Release as 'Multiple'



*Note: This Billing Element of the Invoice Release will not be displayed anywhere in the front end of Process Invoice*

### Processing Auto-Generated Inv. Release

- **Deletion of Task:** Task from the Release that has been deleted is considered as Pending and yet to be billed, and therefore will not be part of the current release.
- **Addition of Pending Task:** Click the **Get** pushbutton to fetch a task that was earlier deleted from a release into another release.
- **Save the addition of Pending Task:** On click of **Save** pushbutton, a new task is added into the Release.

- Modification of Billing Element:** On click of **Save**, if any of the Billing Elements of the Tasks in the Release are modified, the changes are saved and the Billing Element of the Invoice Release is updated accordingly if required.



*Note: No automatic re-generation of Release is required on Billing Element modification of the Task.*

**Exhibit 4:**

**Set Process Parameters** link in the **Define Process Parameters** activity of the **Common Master** business component

#	Process Parameter	Permitted Values	Value	Status	Error Mess.
76	Allow Unscheduled Task addition in Work Reporting Hub?	Enter "0" for 'Not Allowed', "1" for 'Allowed'	1	Defined	
77	Allow Non Standard Task creation in Work Reporting Hub?	Enter "0" for 'Not Allowed', "1" for 'Allowed'	1	Defined	
78	Allow Discrepancy creation in Work Reporting Hub?	Enter "0" for 'Not Allowed', "1" for 'Allowed'	1	Defined	
79	Allow Deferred/Pending Discrepancy addition in Work Reporting Hub?	Enter "0" for 'Not Allowed', "1" for 'Allowed'	1	Defined	
80	Allow only valid Deferral Item #?	Enter "0" for 'Not Allowed', "1" for 'Allowed'	0	Defined	
81	Collapse Document Info cards section by default in the Work Reporting Hub?	Enter '0' for 'Not Required', '1' for 'Required'.	1	Defined	
82	Allow Exe. Comments modification after Task Completion?	Enter "0" for 'Not Allowed', "1" for 'Allowed'	1	Defined	
83	Document Info cards display order in the Work Reporting Hub?	Enter the corresponding card numbers separated by commas. 3-Customer, 4-	3,4,10,6,7,8,9,5,11	Defined	
84	Revert Sign-off while recording new Execution Comments for a Signed-off task?	Enter "0" for 'No', "1" for 'Yes'	0	Defined	
85	Allow Exe. Comments modification after Task Sign-Off?	Enter "0" for 'Not Allowed', "1" for 'Allowed'	1	Defined	
86	Show only Clocked-on items by default on launch of Work Reporting Hub?	Enter '0' for 'No', '1' for 'Show only My Clock', '2' for 'Show only All Clock'	0	Defined	
87	Automatically stop login user's running clock during Completion/Closure/Pre-Closure	Enter '0' for 'No', '1' for 'Yes'	0	Defined	
88	Automatically stop login user's running clock during Closure/Deferral/Transfer of	Enter '0' for 'No', '1' for 'Yes'	0	Defined	
89	Default Tasks/Discrepancies as New Records in the Part Requirements/Request tab	Enter "0" for 'Not Required', "1" for 'Required without Existing Records', "2" for		Defined	
90	Copy ATA code from Source during creation of non routines?	Enter '0' for 'No', '1' for 'Yes'	0	Defined	
91	Billing Element Association level for Invoicing	Enter '0' for Package Type and '1' for Task	0	Defined	
92	Default Billing Element for Package Type	Enter a valid Billing Element defined in Maintain Category Codes	0	Defined	

**Exhibit 5:**

**Set Sales Process Parameter** activity in the **Customer** business component

#	Parameter for	Process Parameter	Permitted Values
1	Customer - Bill back invoice	Allow billing the Invoice Variance	0 for Not applicable
2	Customer - Bill back invoice	Allow billing the Partially received / Invoiced Purchase Orders?	0 for No, 1 for Yes
3	Customer - Bill back invoice	Apply Exchange rate as on	0 for Supplier Invoice authorization date,
4	Customer Order - Services	Allow manual update of 'Warranty Resolution' in CO & SWO?	Specify "0" for "Yes" and "1" for "No"
5	Customer - Bill back invoice	Billing basis of PO's raised on behalf of customer	0 for Supplier Invoice
6	Service Sale Billing	Default Billing Element for Expense Invoice	Enter valid Billing Element define in Maintain
7	Service Sale Billing	Default Billing Element for Exchange Orders	Enter valid Billing Element define in Maintain
8	Service Sale Billing	Default Billing Element for Purchase Orders	Enter valid Billing Element define in Maintain

**Exhibit 3:**

**Set Sales Process Parameter** activity in the **Customer** business component

The screenshot shows the 'Set Sales Process Parameters' window for the 'MRO Sales' entity. A table lists various parameters with their descriptions and permitted values. A red box highlights row 9, and a yellow callout points to rows 9-16.

#	Parameter for	Process Parameter	Permitted Values	Value	Value Selected
9	Service Sale Billing	Default Billing Element for External Repairs	Enter valid Billing Element define in Maintain		
10	Service Sale Quote	Allow Price revision of Fixed Prices on getting the latest Estimates	Specify '0' for No and '1' for Yes		
11	Service Sale Billing	Process CO based Release / Invoice for Inscope Fixed Price/Month Jobs	Specify '0' for "Required" and "1" for "Not		
12	Service Sale Billing	Process CO based Release / Invoice for Inscope FP per Month Jobs	"0" for "Required" and "1" for "Not Required"		
13	Customer Order - Services	Allow modification to Customer PO in Customer Order	Specify "0" for "Not Allowed" and "1" for		
14	Customer Service Order Billing	Process Usage Based bills within	with permitted values between '0' to '30'	1	
15	Customer Order - Services	Exchange Rate Type for Sales	Specify a valid Exchange Rate Type defined in	~BR~	
16	Service Sale Billing	Date identification for Service Invoice generation	Specify "0" for Shipment Date and "1" for	0	

Record Statistics: Created by DMUSER, Last Modified by DMUSER, Created Date 11-Oct-2017, Last Modified Date 11-Oct-2017.

**Exhibit 4:**

**Manage Invoice Release** activity in the **Service Sale Billing** business component

The screenshot shows the 'Manage Invoice Release' window. It includes sections for 'Current Ref. Details', 'Billing Summary', and 'Billing Ref. Details'. A table at the bottom lists billing elements, with a red box highlighting the 'Billing Element' column.

#	Exch. Ind.	Task #	Task Seq. #	WBS Code	Task Desc.	Billing Element	Pricing Basis
1							
2							
3							
4							
5							

# Provision to extract a report of all open Invoice releases at a detailed Task/Billing Element level to review rates and other details

Reference: AHBG-19267

## Background

It is important to have a thorough review of rates of an Invoice release prior to processing it into an Invoice. Today, this review has to be done for individual documents with no way to do this in bulk. A detailed report on this regards would help make the processes effective on reviewing rates not having to go through documents one by one.

## Change Details

Two new links have been added as below:

- In the **Select Customer Order - Services** page of the **Process Invoice** activity of the **Service Sale Billing** business component:
  - CO based invoice release** link - On click of this link, an excel-based report that can be saved is generated. The report would list down all the open Invoice Releases at Task level, with the break-up of rates across Labour, Materials and so on.
- In the **Select Documents** page in the **Process Monthly Invoice Release** activity in the **Service Sale Billing** business component :
  - Monthly Invoice Release – Summary Report** link - On click of this link, an excel-based report that can be saved is generated. The report would list down all open Monthly Invoice Releases at Billing Element level.

### Exhibit 1:

Select Customer Order - Services page of the Process Invoice activity of the Service Sale Billing business component in the Service Sales Management business process

The screenshot shows the 'Select Customer Order - Services' page. The 'Search Criteria' section includes fields for 'Inv. Type / Cat.' (Regular), 'Inv. Rel. Readiness' (Ready To Bill), 'Inv. Rel. Basis', 'Order Based', 'Customer Based', 'Work Center', 'COA Exists?', 'Release Status' (Pend.Procd.), 'Sale Type', 'Cust. Service Rep.', 'Invoice Basis', 'CO Currency', 'Execution Status', 'Maint. Object', 'Addl. Search', and 'Date from/ to'. A 'Search' button is located below these fields. A yellow callout box points to a newly added link 'CO Based Inv. Release'. A red box highlights the 'CO based Inv. Release - Summary Report' link.

#	P?	Error Log	Inv. Rel. #	Event Compl.?	Exe. Doc. #	Execution Status	Customer #	Cust. Order #	Cust. PO #	Sale Typ
1			1	Yes	AWO-000001-2011		417895	CO-000027-2011	QQQ	TIME AN
2			2	Yes	EWO-000031-2011		400007	CO-000052-2011	CAVER772-733395-OV	TIME AN
3			1	Yes	AFRO-000024-2011		400420	CO-000054-2011	Ops-cmc-024	TIME AN
4			1	Yes	AWO-000003-2011		417895	CO-000143-2011	PO-XXXX1234	TIME AN
5			1	Yes	CWO-000153-2012	Closed	400420	CO-000234-2012	12121	TIME AN
6				Yes	CWO-000616-2012	Closed	400007	CO-001045-2012	CPO-111333-2012	TIME AN
7				Yes	AFRO-000833-2012	Closed	408876	CO-002098-2012	CO-PO-0FA9B1	POWER I
8			1	Yes	AFRO-000915-2012	Closed	401288	CO-002291-2012	TY-56C4F	POWER I
9				Yes	AFRO-001236-2012	Closed	408876	CO-003163-2012	CO-PO-785413	POWER I

**Exhibit 2:**

Select Documents page in the **Process Monthly Invoice Release** activity in the **Service Sale Billing** business component

**Select Documents**

Update Usage / Generate Bill | **Process / View Generate Bill**

Search: [ ] Release status: **Confirmed** | **Not-Invoiced** Date From/To: [ ] Ex: [ ]  
 User Status: [ ] Bill Rep.: [ ] **Search**

Search Results

All 39 | Alert 0 | Overdue 39

#	Customer #	Customer Name	Contract #	Revision #	Nature of Contract	Release #	Aircraft Reg #	Part #	Serial #
1	400007	Air India	PAN-CONT	0	Service Contract	REG-000241-2016	Multiple		
2	490592	Customer 202	PANFPM-10	0	Service Contract	REG-000233-2016	Multiple		
3	490592	Customer 202	PANFPM-09	1	Service Contract	REG-000181-2016			
4	490592	Customer 202	PANFPM-09	1	Service Contract	REG-000194-2016			
5	400007	Air India	UB-PAT-1	0	Service Contract	REG-000109-2016	N995		
6	400006	Customer 8	UB-PAT-7	1	Service Contract	REG-000120-2016			

Group By: [ ] **Generate Invoice** [Manage Direct Billing](#)

**Newly added link "Monthly Invoice Release - Summary Report"**

[Monthly Invoice Release - Summary Report](#)

# Ability to bulk update CPO # in Invoice releases to proceed with bulk processing

Reference: AHBG-22652

## Background

Billing and Invoicing for the jobs or services provided by an MRO are generally done on job completion. But there are some MROs that invoice their customers periodically, on a monthly basis, consolidating all services that were provided in a given month. When it comes to month end billing process, every detail review and modifications are expected to be done for multiple records at a time, i.e., in bulk. While the current Invoice release framework does help in this scenario, Customer Purchase Order is yet another such information that requires bulk processing.

Therefore the requirement is to enable bulk modifications to the Customer PO in the Process Invoice select screen itself, without launching the Manage Invoice Release screen.

## Change Details

1. The existing **Customer PO #** display only column in the **Select Customer Order - Services** activity has been made an editable column.
2. This Customer PO will be followed up further to the customer service invoice and all the invoice documents.

### Exhibit 1:

Select **Customer Order - Services** activity in the **Service Sale Billing** business component

The screenshot displays the 'Select Customer Order - Services' screen. At the top, there are search criteria including 'Inv. Type / Cat.' (Regular), 'Inv. Rel. Readiness', 'Inv. Rel. Basis', 'Order Based', 'Sale Type', 'Execution Status', 'Customer Based', 'Cust. Service Rep.', 'Maint. Object', 'Work Center', 'Invoice Basis', 'Add. Search', 'COA Exists?', 'CO Currency', and 'Release Status' (Fresh). A 'Search' button is located below these criteria.

The main data table is titled 'Process Invoice' and contains the following columns: #, Error Log, Inv. Rel. #, Event Compl.?, Evt. Doc. #, Execution Status, Customer #, Cust. Order #, Cust. PO #, and Sale Type. The 'Cust. Order #' and 'Cust. PO #' columns are highlighted with a red box, and a yellow callout box points to them with the text 'Customer PO # column has been made editable'.

Below the table, there are several buttons and fields: 'Update Cust. PO #' (highlighted with a red box and a yellow callout box stating 'Newly added "Update Cust. PO#" pushbutton'), 'Create Direct Invoice', 'Customer Order #', 'Invoice Type' (Regular), 'Direct Invoicing', 'Evaluate Invoice Readiness', 'Re-setup Invoice', and 'Process Invoice'. At the bottom, there are links for 'Manage Invoice Release', 'View Quotation', 'View Invoice', and 'View Accounting Info. for Rev. Recog.'.

**Exhibit 2:**

**Select Documents** activity in the **Service Sale Billing** business component of the **Service Sales Management** business component

★ **Select Documents**

🔍
🔔
←
?
🖨

Update Usage / Generate Bill
Process / View Generated Bill

Search

User Status

Release status Fresh

Bill Rep.

Date From/To

Ex.

Search

Search Results

All
88
Alert 0
Overdue 88

#	Customer #	Customer Name	Contract #	Revision #	Nature of Contract	Release #	Customer PO #	Aircraft Reg #	Part #
25	400006	Customer 7	MSA-PBH-01		Service Contract	ABC-000142-2014			
26	400006	Customer 7	MSA-PBH-02		Service Contract	ABC-000206-2014	PO-MSA-PBH-02	Multiple	
27	400007	Customer 8	PBH1		Service Contract	ABC-000015-2014	PO-400007-PBH1		
28	400007	Customer 8	PBH3		Service Contract	ABC-000017-2014	PO-400007-PBH3		
29	400007	Customer 8	PBH1		Service Contract	ABC-000015-2014	PO-400007-PBH1		
30	400006	Customer 7	MSA-FPM-UB-01		Service Contract	ABC-000156-2014	PO-MSA-FPM-UB-01	Multiple	

Update Cust. PO #

Confirm
Cancel

Manage Direct Billing
Monthly Invoice Release - Summary Report

## Ability to enter invoice release directly in the manage invoice release

Reference: AHBG-23125

### Background

Some MROs process large number of Invoice Releases in a given month. In order to review each order in detail one by one, the user would have to traverse between the **Process Invoice** and **Manage Invoice Release** screens repetitively. This could cause loss in efficiency. Thus, in order to improve the efficiency and also to enhance the user experience, the Invoice Release # within the **Manage Invoice Release** screen has been made editable such that the user can change the document number and review them without having to traverse back and forth.

### Change Details

- Customer Order # field in the header of the **Manage Invoice Release** screen has been modified to editable field and provided with Smart Search functionality
- The Release # is provided in a drop-down since there could be multiple releases against the same Customer Order in various statuses.
- User can select the Release # for review.
- Based on the Release # selected in the drop down, the details of the screen will be refreshed.

User will be able to generate a Summary Report from the **Process Invoice** screen to review the rates at Task level for every Customer Order / Release. The report will help in analyzing the details before entering into the **Manage Invoice Release** screen and it will also help identify the documents which need more detailed analysis on screen. The user will be able to type out the Customer Order # with the report as the reference.

### Exhibit 1:

#### Manage Invoice Release screen

The screenshot displays the 'Manage Invoice Release' application window. The 'Release Main Info.' section is visible, containing the following fields:

- Cust. Order # / Rel. #:** CO-007670-2015 1 (highlighted in red with a callout: "Customer Order # has been made editable with UI and Smart Search functionality")
- Customer #:** 4000
- Inv. Rel. Readiness:** Ready To Bill
- Release Status:** Confirmed
- Customer Name:** Customer 8
- Currency:** USD
- Total Value:** 14,600.00

Below the main info, the 'Release Details' section is expanded, showing:

- Invoice Type:** Regular
- Invoice Category:** Final
- Invoice Basis:** Quote
- Billing Rep. #:** 00041383
- Proj. Inv. Rel. Date:** [Calendar icon]
- Event Description:** [Text field]
- Rel. Remarks:** [Text field]
- Inv. Rel. Date:** 27-Jan-2015
- User Status:** [Dropdown menu]
- Re-pro. Remarks:** Bank
- Cust. PO #:** 111

Other sections like 'Warranty Details' and 'Current Ref. Details' are partially visible.

Exhibit 2:

Select Customer Order - Services screen in the Service Sale Billing business component

★ Select Customer Order - Services

Order Based: [Dropdown] Sale Type: [Dropdown] Execution Status: [Dropdown]  
 Customer Based: [Dropdown] Cust. Service Rep.: [Dropdown] Maint. Object: [Dropdown]  
 Work Center: [Dropdown] Invoice Basis: [Dropdown] Addl. Search: [Dropdown]  
 COA Exists?: [Dropdown] CO Currency: [Dropdown] Date from/ to: [Dropdown]  
 Release Status: Fresh [Dropdown] Age from/ to: [Dropdown]

Search

Process Invoice

#	Error Log	Inv. Rel. #	Event Compl.?	Eve. Doc. #	Execution Status	Customer #	Cust. Order #	Cust. PO #	Sale Type
1		1	Yes	CWO-000618-2012	Closed	400007	CO-001047-2012	CPO-111333-2012	T & M
2		1	Yes	AFRO-001453-2012	Closed	401288	CO-003724-2012	TY-C2182	PBH
3		2	Yes	CWO-008601-2015	Closed	400007	CO-007691-2015	00001413	FP
4		1	Yes	AFRO-002914-2017	Closed	400006	CO-007839-2017	5678	T & M
5		1	Yes	AWO-000043-2017	Closed	400604	CO-008076-2017	5678	T & M
6		1	Yes	VP-006033-2018	Closed	400604	CO-008287-2018		PBH
7		1	Yes	VP-006034-2018	Closed	400604	CO-008289-2018		PBH
8		1	Yes	VP-006803-2018	Closed	400007	CO-008340-2018	123	T & M
9		1	Yes	VP-007367-2018	Closed	400604	CO-008360-2018		PBH
10		1	No	AWO-000072-2018	Not Closed		CO-008373-2018	Great	T & M

Update Cust. PO #

CO based Inv. Release - Summary Report

Link to Summary Report

## WHAT'S NEW IN CUSTOMER INVOICE?

### Ability to group CO based Releases & Monthly Releases in Customer Service Invoice

Reference: AHBG-17200

#### Background

With the introduction of the new pricing basis 'FP per Month', period invoicing which was so far meant only for Usage Based Pricing has become yet another Monthly/Periodic billing. To handle this along with UB, the same **Manage Usage Based Billing** screen is reused with automatic release generation enabled for 'FP per Month' Invoice Releases. For an organization running their services on different pricing basis such as Time and Material, Fixed Price by Work Unit, Usage Based and Fixed Price Per Month, it is expected to group all releases and generate a single Invoice for a Customer.

#### Change Detail

The option "Fixed Monthly Charges" has been added in the **Entity Accounted** drop-down list box in the **Create Service Sale Account Definition** activity in the **Account Rule Definition** business component

##### Service Sale Account definition - Non Parameter Based

Note that Service Sales Account and Effective From Date can be specified. However, COSR cannot be provided for this entity

##### Service Sale Account definition - Parameter Based

Note that Customer Account Group, Sale Type, Service Sale Account Code & Effectivity Date alone can be specified. Any other column including the COSR cannot be provided for this entity.

The **Ref.Doc Type** drop down list box in the header of the **Generate Customer Service Invoice** activity of the **Customer** business component will list the following options:

- Service Sale Contract
- Customer Order

The **Billing Element** drop-down list box in the header of the **Generate Customer Service Invoice** activity of the **Customer** business component lists all the active Billing Elements as defined in the **Maintain Category Codes** activity in the Customer business component.

The Invoice Type drop-down list box in the header of the combo **Generate Customer Service Invoice** activity of the **Customer** business component lists values as follows:

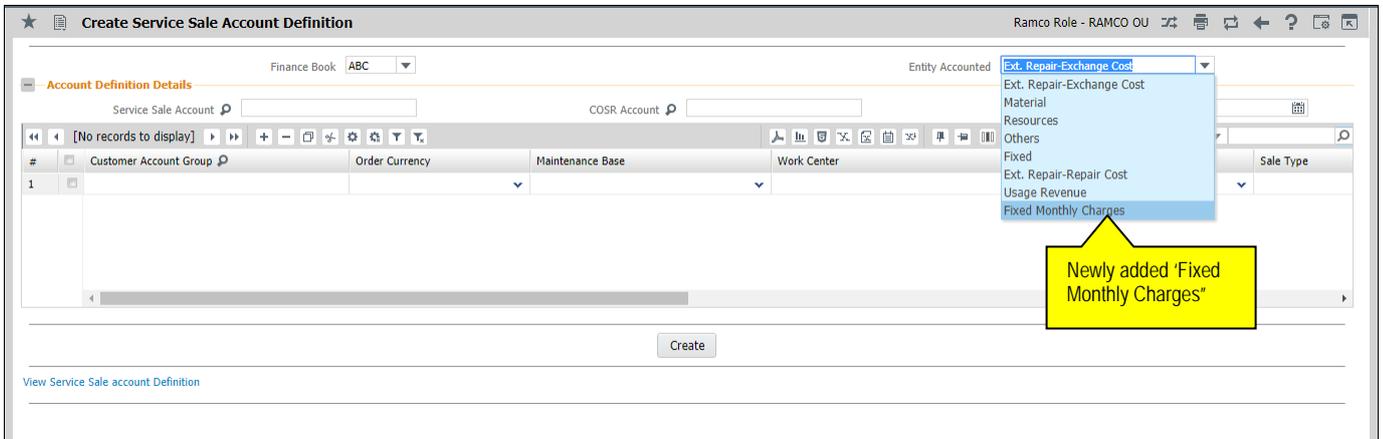
Selection in the Ref.Doc Type field	Invoice Type lists the following:
Customer Order	<ul style="list-style-type: none"> <li>• Service Invoice</li> <li>• Prepayment Invoice</li> </ul>
Sale Contract	<ul style="list-style-type: none"> <li>• Monthly Invoice</li> </ul>

With the above fields enabled, all Invoice Releases that are processed from both Manage Monthly Invoice Releases and Process Invoice activities will be retrieved in the **Generate Customer Service Invoice** screen.

Monthly Invoice Releases will be retrieved with their Reference Documents as their corresponding Sale Contracts and the CO Based Invoice Releases will as usual have their Reference Document as the Customer Order Release.

**Exhibit 1:**

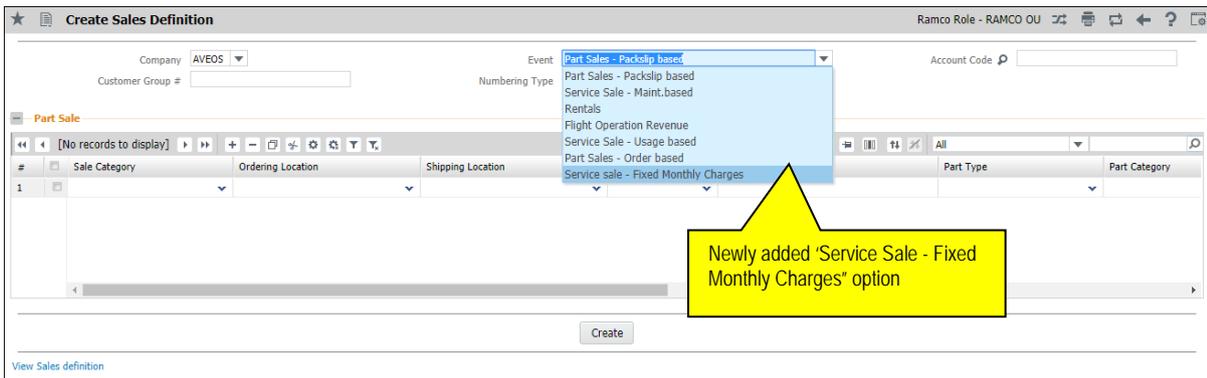
**Create Service Sale Account Definition** activity in the **Account Rule Definition** business component of the **Book Keeping** business process



*Note: Similarly, New Entity - 'Fixed Monthly Charges' has been added in both Delete/View Service Sale Account Definition under Account Rule Definition in Book Keeping Business Process."*

**Exhibit 2:**

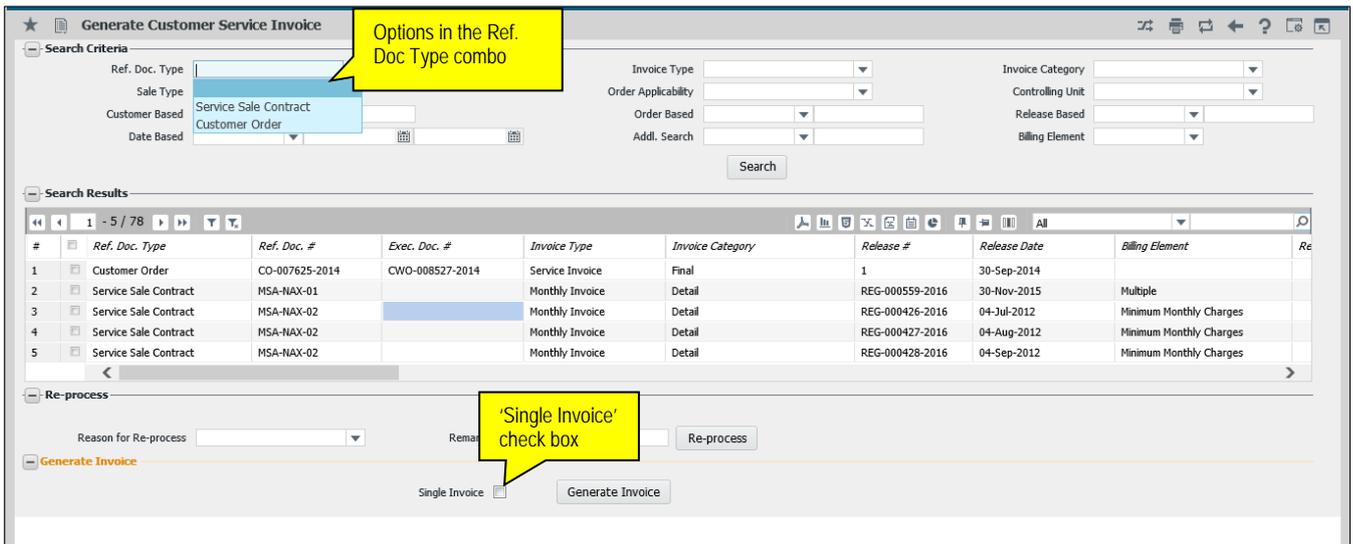
**Create Sale Definition** activity in the **Cost Center Rule Definition** business component of the **Management Account** business process



*Note that similarly the Event combo in both the Delete Sale Definition and View Sale Definition pages have been added with the option "Service Sale – Fixed Monthly Charges"*

**Exhibit 3:**

**Generate Customer Service Invoice activity in the Customer Invoice business component**

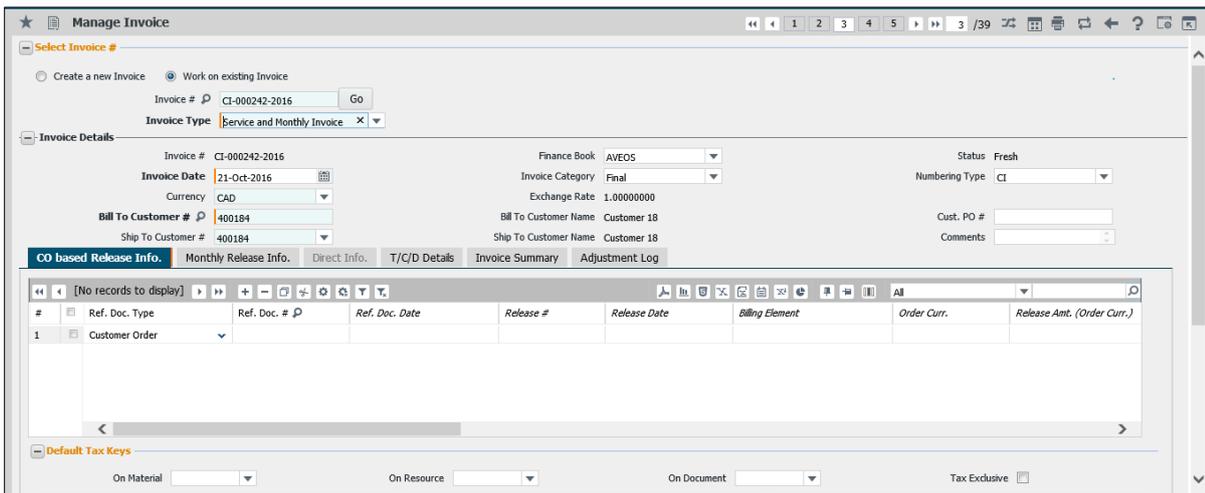


All Invoice Releases can be grouped into a Single Invoice by simply selecting the required Invoice Releases from the multiline and Generating Invoice with the Single Invoice check box checked.

Once Invoice is generated, all CO based Invoice Release details will be displayed under the **CO Based Release Info.** tab and all **Monthly Invoice Releases** will be displayed in the **Monthly Release Info.** tab.

**Exhibit 4:**

**CO Based Release Info. tab in the Manage Invoice activity of the Customer Service Invoice business component**



**Exhibit 5:**

**Manage Invoice** screen in the **Edit Invoice** activity of the **Customer Service Invoice** business component

The screenshot displays the 'Manage Invoice' interface. At the top, there's a navigation bar with a star icon and the title 'Manage Invoice'. Below it is a toolbar with various icons. The main area features a table with the following columns: '#', 'Ref. Doc. Type', 'Ref. Doc. #', 'Invoice Amount', 'Material', 'Labour', 'Other Resources', and 'Fixed Price'. Two rows are visible, both with 'Customer Order' in the 'Ref. Doc. Type' column. Below the table, there's a 'Default Tax Keys' section with a dropdown for 'On Document' and a 'Tax Exclusive' checkbox. A 'Compute' button is present. Below that is a 'View Customer Order' link. At the bottom, there's a 'Save Dir. Info.' button. The bottom-most section contains several buttons: 'Draft' (with a checkbox), 'Save', 'Auto Adjust' (with a checked checkbox), 'Save and Authorize', 'Delete', and 'Return'. A yellow callout box points to the 'Return' button with the text: 'Click here to return the generated invoice to 'Return' status for further modifications'.

In the **Edit Invoice** page of the **Customer Service Invoice** business component all following activities are made available:

- **Delete Invoice:** The generated Invoice is deleted and all the releases, CO based release and monthly releases, in the Invoice are again made eligible for creating a new Invoice.
- **Return Invoice:** The generated Invoice is updated to 'Returned' status for further modifications.
- **Reverse Invoice:** The generated Invoice is updated as 'Reversed' and a new Invoice is generated for all the releases inside it.
- **Return Release:** The system does not allow return release if the invoice does not have any CO based releases.

Returns both UB and FP per Month releases back to release stage for reprocessing.

## Ability to restrict cost booking on recording additional charges in Customer Order

Reference: AHBG-21965

### Background

Expenses incurred during maintenance of an aircraft, for example Freight Expense, Travel Expense and so on needs to be billed to the customer; however vendors send the actual invoice for such expenses only at a later date. Therefore the requirement is to enable the users to record the maintenance expenses as and when required

### Change Details

- Access rights have been provided to the **Record Additional Charges** screen in the **Manage Invoice Release** activity of the **Service Sale Billing** business component to enable the users to record the Travel expense, Freight charges and so on whenever they are required to do so.
- Provision has been made to avoid double booking while recording these additional charges. That is, on receiving the expense invoice from vendors, the Finance Team will record the expense invoice with reference of CO / AME / SWO documents. Hence cost booking will be done to the respective COSR account. In case where the additional charges are added by users, the cost booking will be done again which will lead to double cost booking.
- A new set option at organization level has been added for the parameter 'Customer Order – Services' in the **Set Sales Process Parameters** screen of the **Customer** business component to specify if the cost booking is required or not on recording the additional charges at customer order level.

Process Parameter	Permitted Values
Cost booking on recording additional charges	Specify '0' for 'Required' and '1' for 'Not Required'

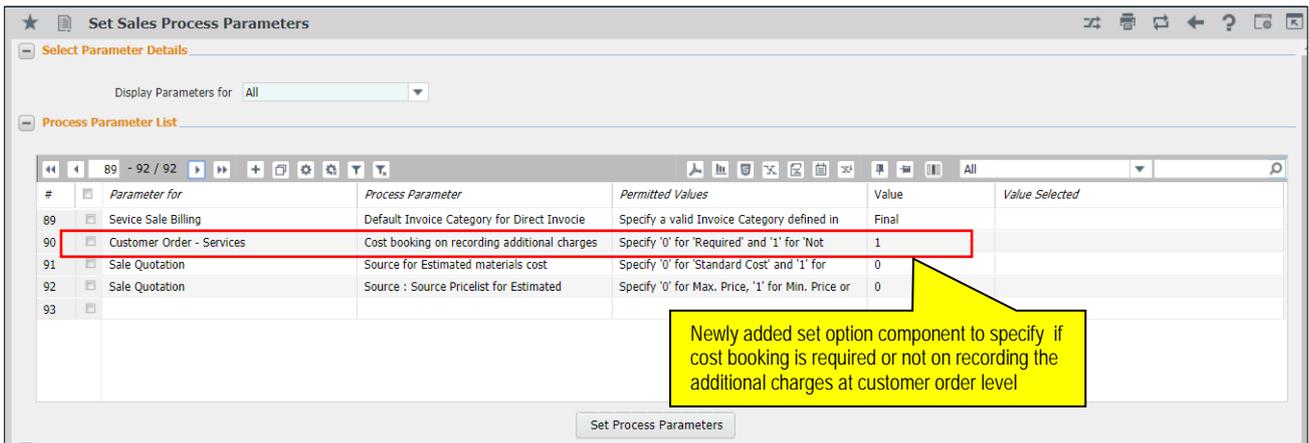


*Note: If the set option 'Cost booking on recording additional charges' is set as 'Not Required' then the system treats the additional charges added against the Customer Order as normal TCD and cost booking will not be done for the same based on the accounting usage selected.*

*However, if this option is set as 'Required', the system retains the existing behavior, that is cost booking will be done for the additional charges available at Customer Order level based on the accounting usage selected.*

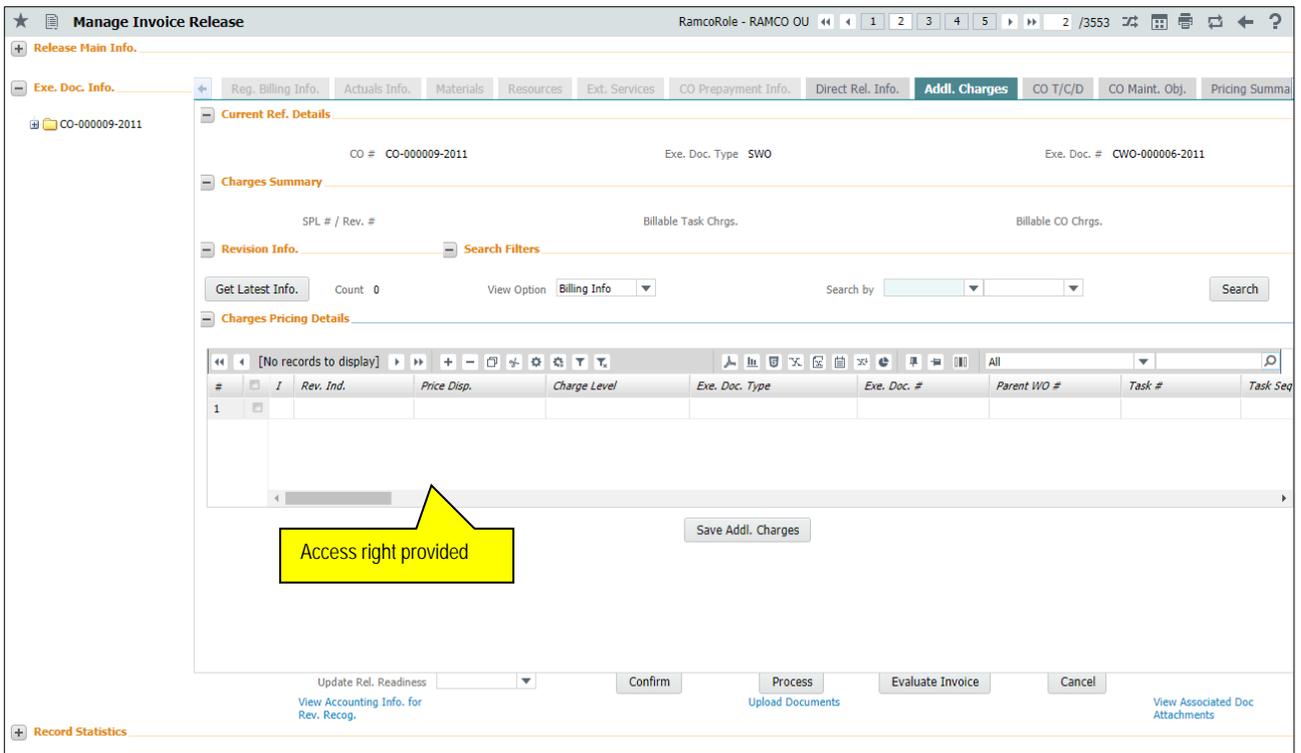
**Exhibit 1:**

**Set Process Parameters activity in the Customer business component**



**Exhibit 2:**

**Additional Charges tab page in the Manage Invoice Release activity of the Service Sale Billing business component**



## WHAT'S NEW IN CUSTOMER DEBIT CREDIT NOTE?

### Auto Defaulting Account Code From and To in the Search Screen

Reference: AHBG-19746

#### Background

Some MROs have 'Analysis Code' as Contract and 'Sub Analysis Code' as Employee Group. This has left them with a combination of around 3 lakh records in the Account-Analysis-Sub Analysis Combinations.

Due to performance issues, in various screens the selection of such Analysis Codes using Smart Search or the Help enabled pages are not giving the desired output. Since this is directly related to profitability reporting, the requirement is to ease the selection of this.

#### Change Details

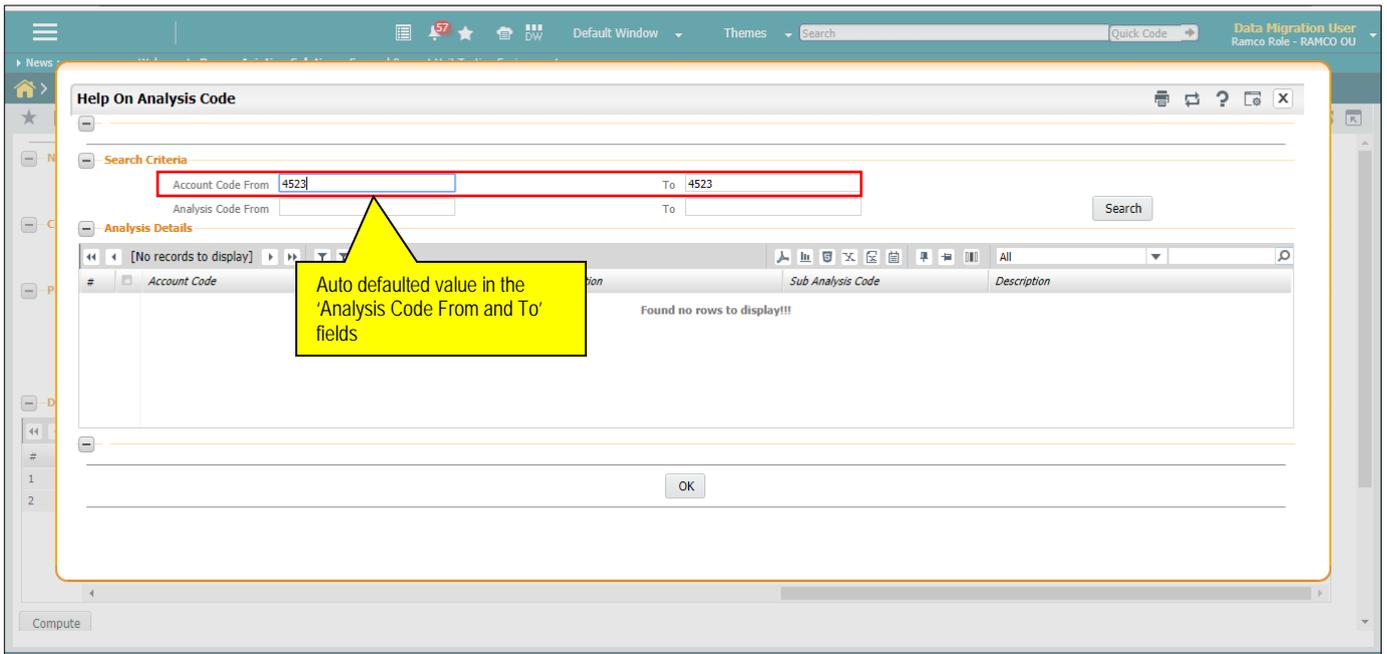
Provision has been created to auto default Account Code in Analysis Code Help screens of the **Customer Debit Credit Note** activity of the **Receivables Management** business component.

Account Code From and To auto defaulted in the **Analysis Help** screen in the following activities

Activities in which changes have been made in the Analysis Help screens	Defaulted Value from the multiline
Create Item Based Note	Usage ID #
Create Account Based Note	Account #
Edit Item Based Note	Usage ID #
Edit Account Based Note	Account #
Authorize Item Based Note	Usage ID #
Authorize Account Based Note	Account #

Exhibit 1:

Help on Analysis Code screen



## WHAT'S NEW IN TIME TRACKER?

### Simple Average based time apportioning for task running in parallel

Reference: AHBG-15933

#### Background

Currently, when it comes to apportioning time for parallel running tasks, the system apportion the time based on the elapse time given for the task. However, the requirement is to apportion the time on an equal basis for the parallel running tasks.

#### Change Details

In order to apportion the time based on Simple Average or Weighted Average, a new set option has been added in the **Set Process Parameters** activity of the **Time Tracking Setup** business component under the **Time Tracker** business process.

Process Parameter	Permitted Value
Time Apportioning logic for parallel running tasks	Enter: <ul style="list-style-type: none"> <li>• 0 for Weighted Average</li> <li>• 1 for Simple Average</li> </ul>

#### Example:

Task-01 Started at 11:00AM with elapse time 120 min  
 Task-02 Started at 11:00AM with elapse time 180 min  
 Task-03 Started at 11:00AM with elapse time 60 min  
 Clock stopped successfully at 11:30AM

Given that total clocked time is 30mins, the time apportioning happens as follows:

#### 1. Weighted Average Method:

Based on elapsed time, 30 minutes is to be distributed among the 3 parallel running tasks

Task-01 = 10 min (0.17 in decimals)

Task-02 = 15 min (0.25 in decimals)

Task-03 = 5 min (0.08 in decimals)

#### 2. Simple Average Method:

Irrespective of elapsed time, 30 minutes will be distributed among the 3 parallel running tasks equally

Task-01 = 10 min (0.17 in decimals)

Task-02 = 10 min (0.17 in decimals)

Task-03 = 10 min (0.17 in decimals)

Exhibit 1:

Set Process Parameters page in the **Time Tracking Setup** business component of the **Time Tracker** business process

The screenshot displays the 'Set Process Parameters' interface. At the top, there are navigation icons and a title bar. Below the title bar, there are dropdown menus for 'Parameters for' (set to 'Common') and 'Status' (set to 'Active'). The main area is titled 'Process Parameter List' and contains a table with the following data:

#	Process Parameter	Permitted Values	Value	Value Selected	Status
11	Allow Modifications to Approved Time Off Records	Specify "0" for 'No', "1" for 'Yes' and "2" for 'Not	0	No	Defined
12	Bar Code based login into T&A system	Specify "0" for 'No', "1" for 'Yes'	1	Yes	Defined
13	Enable Clock your time - Multiple Time bookings?	Specify "0" for 'No', "1" for 'Yes'	0	No	Defined
14	Time records approval by alternate authorizer	Specify "0" for "Not Required", "1" for "Required"	1	Required	Defined
15	Allow attendance reporting by Alternate authorizer beyond effectivity period	Specify "0" for 'No' and "1" for 'Yes'	1	Yes	Defined
16	Time Apportioning logic for the parallel running tasks	Specify "0" for Weighted Average and "1" for Simple	1	Simple	Defined
17					

A yellow callout box with a pointer to row 16 contains the text: "Newly added parameter "Allow Apportioning logic for".

## Ability to report time sheet in multiple stations based on parameter

Reference: AHBG-14538

### Background

**Time Tracker** is an interface which facilitates an employee to record attendance / timesheet for the tasks performed on a day- to-day basis. The employee can also raise time off requests as required.

Some MRO organizations have their base in multiple locations where planning of work is done in one location and execution happens in other locations. In such cases, the requirement is for the organization to maintain the time sheet for all the employees in the time zone of the Main Base Location instead of maintaining it in the respective Work Station time zones.

On the other hand, some organizations maintain the employee time sheet in the time zone of the respective work location, wherein the supervisor authorizes the time sheet / attendance records based on the Work Station in which the employee has reported time.

### Change Details

New Set Options have been added in **Set Process Parameters** activity of the **Time Tracking Setup** business component. This set option enables the user to specify whether the time sheet records are to be maintained in respective Work Station timings or the time zone of the Main Base Station.

If time sheet needs to be maintained in the time zone of Base Station, then the respective Base Station must be specified in the **Time Management** master as mentioned in Exhibit 1 below.



*Note: If the default Base Station is specified, then the time difference between default Base Station specified and time zone of the location where the system is operates i.e., System / OU time zone in the application must be '0'.*

### Exhibit 1:

**Set Process Parameters** activity in the **Time Tracking Setup** business component of the **Time Tracker** business process

#	Process Parameter	Permitted Values	Value	Value Selected	Status
9	Allow timeoff request entries spanning across dates	Specify "0" for 'No' and "1" for 'Yes'	0	No	Defined
10	Manage Attendance Reporting/Approval within T&A System	Specify "0" for 'No' and "1" for 'Yes'	1	Yes	Defined
11	Allow Modifications to Approved Time Off Records	Specify "0" for 'No', "1" for 'Yes' and "2" for 'Not	0	No	Defined
12	Bar Code based login into T&A system	Specify "0" for 'No', "1" for 'Yes'	1	Yes	Defined
13	Enable Clock your time - Multiple Time bookings?	Specify "0" for 'No', "1" for 'Yes'	0	No	Defined
14	Time records approval by alternate authorizer	Specify "0" for "Not Required", "1" for "Required"	1	Required	Defined
15	Allow attendance reporting by Alternate authorizer beyond	Specify "0" for 'No' and "1" for 'Yes'	1	Yes	Defined
16	Duration to be equal with the difference between Start and	Specify "0" for 'Not Required' and "1" for 'Required'	0	Not Required	Defined
17	Station based time reporting required	Specify "0" for 'No' and "1" for 'Yes'	1		Defined
18	Default Base Station	Specify Default Base Station			Defined

Set Options to specify if the time booking is to be maintained in the time zone of the respective Work Station or to be maintained in the time zone of the Base Station

# WHAT'S NEW IN FLIGHT OPERATIONS?

## Provision to attach documents in Flight Contract, Flight Sheet and Flight Billing

Reference: AHBG-19929

### Background

In some cases, supporting documents of expenses incurred during a flight journey like for example handling charges, invoice received from the vendor, authority charges and so on are required to be attached to the Contract/Flight Sheet/Invoice Release. Therefore the requirement is a provision to attach documents in Flight Contract.

### Change Details

Two links **Upload Documents** and **View Associated Documents** have been added to upload and attach the required documents in the **Flight Contract, Flight Sheet** and **Flight Billing** business components and then view the attached documents.

### Exhibit 1:

**Manage Flight Contract** activity in the **Flight Contract** business component

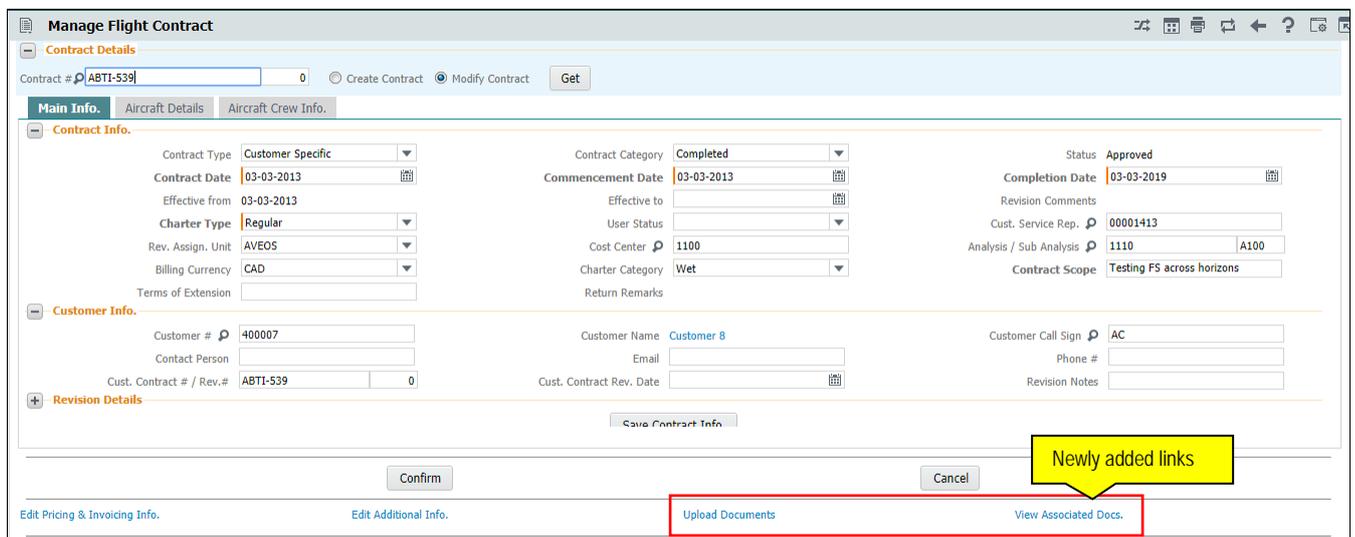


Exhibit 2:

Manage Flight Sheet activity in the Flight Sheet business component

**Manage Flight Sheet**

Flight Sheet # FS-000094-2013      Date from / to / UTC Zone 04-12-2017      04-12-2017      UTC# \$      Status Confirmed

Customer Name Customer 13      Contract # / Rev. # / Line # GHC/0/2      0      Charter Type EMS

**Main Info.**    Usage Info.    Parameter Info.    No Flight Info.    Duty Info.    A/C Activity Info.    Emp. Activity Info.    Crew Charges    Other Charges    Additional Info.

**Flight Sheet Info.**

Flight Sheet Date 04-12-2017      User Status      Source Journey Log

Billing Remarks      Return Remarks      Flight Ref. Doc. #

**Aircraft Info.**

Aircraft Reg. # 1132      Aircraft Model # B767-200      Replaced A/C #

A/C Assign. Type Exclusive

**Customer Info.**

Customer Call Sign GHC      Customer # 400096      Contract # / Rev. # GHC 0

Charter Type EMS      Charter Category Dry      Line # 2

**Billing Head Summary**

#	Billing Head	Billing Category	Charge Type	Unit	Qty. - Billable	Qty. - Non-Billable	Currency	Value	Contracted?	Remarks
1	Block Hour Charges	testing	Std. Rate	Per Block Hour	9.00				Yes	
2	Flight Hour Charges	testing	Std. Rate	Per Flight Hour	9.00				Yes	
3										

Buttons: Save Main Info., Upload Documents, View Associated Documents, Confirm, Cancel

Record Statistics

Exhibit 3:

Manage Flight Invoice Release activity in the Flight Billing business component

**Manage Flight Invoice Release**

Inv. Release # FIR-000002-2017      Billing Horizon Multiple      Release Status Confirmed

Customer # 100004      Customer Name SINGAPORE AIRLINES      Contract # / Line # ghc-test-3

Charter Type Regular      Charter Category Wet      Billing Currency CAD

Rel. Value (Billing Curr.) 2,750.00      Exchange Rate 1.00      Rel. Value (Base Curr.) 2,750.00

**Main Info.**    Fixed Charges    Operating Charges    Crew Charges    Other Charges    Flight Sheet Ref.    Fuel Uplift Ref.    Charge Back Ref.    Exceptions

**Release Info.**

Inv. Rel. Date 13-12-2017      Inv. Category INV01      User Status

Rev. Assign. Unit AVEOS      Billing Rep. 00001394      Bill to Customer 100004

Release Remarks      Pay Term NET45

**Billing Summary**

#	Billing Head	Billing Category	Inv. Element	Pricing Currency	Amount	Amount (Billing Curr.)	Avg. Exch. Rate
1	Flight Hour Charges		Operating Charges	CAD	2,600.00	2,600.00	
2	Landing Fee		Operating Charges	CAD	150.00	150.00	
3							

Buttons: Save Main Info., Upload Documents, View Associated Documents, Confirm, Cancel

Record Statistics

## Ability to define billing heads at line level in Flight Contract

Reference: AHBG-19701

### Background

In Heli-chartering services, operators have established Contracts with customer for providing chartering services under which multiple A/C Reg # or A/C Models are covered. Some of the A/C Reg # are exclusively assigned and others are flying on ad hoc basis. In such case, billing and pricing terms are varying based on each item # (A/C Reg # / A/C Model # / Assignment type). For Example, for the aircraft assigned exclusively to the customer, 'Hourly rate' alone will be charges which is inclusive of crew charges as well as Fuel rates. But on flying the aircraft on ad hoc basis, 'Hourly rate' charged to the customer may be higher than the usual rate and other charges such as Crew accommodation, Fuel charges will be billed separately.

Hence, there is a requirement to have the Billing Head definition separately for each line item (A/C Reg # / A/C Model # / Assignment Type) covered under contract and billing also need to be done at line level.

### Change Details

#### Flight Contract

- OU level set option addition to specify if Billing Head definition at line level is required or not. If the option is set as 'required', then below mentioned changes are applicable or else current behavior will be retained.
- Addition of a Line # under Aircraft Effectivity details which is the unique identification of each line definition.
- Addition of line # under crew coverage details which facilitates the crew coverage definition at line level.
- Addition to new fields such as 'Defn. at' and 'Line #' fields under Invoice Basis and Invoice Rates section which facilitates to define the Billing Head and rate definition at line. Hence, different rates can be maintained for the same billing head based on the line #.
- Addition of Line # under 'Usage Based - Slab Rates' section which facilitates the rate definition at line level based on the usage of aircraft.
- Addition of Line # under crew charges which facilitates to define different rates for the crews based on the Aircraft Reg # / Model #

#### Flight Assignment

- Addition of a new column 'Line #' in the multiline in the **Manage** and **View** screens of the **Flight Assignment** business component.
- Enhancement in behavior to support the contract evaluation based on the Line #

#### Flight Sheet

- Enhancement in the behavior of the contract evaluation which facilitates the contract evaluation based on the Line #.
- Visibility to the Line # of contract during contract evaluation as well as after Flight Sheet generation.
- Enhancement in the behavior of Flight Sheet to get the billing head applicable for the Line # for which Flight Sheet is generated.

#### Flight Billing

- Visibility to the Line # during the Invoice Release setup.

- Provision to group the Billing Head and generate the Invoice Release based on the Line #
- Visibility to the Line # in the invoice release generate if the same is grouped at Line # level.

**Exhibit 1**

**Aircraft details section** of the **Manage Flight Contract** activity in the **Flight Contract** business component under the **Fight Operations** business process

#	Line #	Aircraft Model #	Aircraft Reg. #	Nos.	A/c Assign. Type	Primary Field Base	Field Base Desc.	Subst. Allowed?	Effective from	Effective to	Coverage Notes	Primary Subst. Mo
1	1	737-200	AI-7077	1.00	Exclusive	AIR	AIR INDIA	Yes				737-200
2	2	737-200	AI-7078	1.00	Exclusive	AIR	AIR INDIA	Yes				737-200
3	3	737-200	C-GCNO	1.00	Exclusive	AIR	AIR INDIA	Yes				737-200
4	4	737-200	C-GCNS	1.00	Exclusive	AIR	AIR INDIA	Yes				737-200
5	5	737-200	C-GGNV	1.00	Exclusive	AIR	AIR INDIA	Yes				737-200
6	6	737-300		1.00	Adhoc Flying	AIR	AIR INDIA	Yes				737-200
7	7	737-800		1.00	Adhoc Flying	AIR	AIR INDIA	Yes				737-200
8	8	737-200		1.00	Adhoc Flying	AIR	AIR INDIA	Yes				737-800

**Exhibit 2**

**Crew Coverage section** of the **Manage Flight Contract UI** in the **Flight Contract** business component under the **Fight Operations** business process

#	Line #	Aircraft Model #	Aircraft Reg. #	Crew Type	Nos.	Crew Assign. Type	Crew Specs.	Charge Basis	Currency	Unit	Rate Per No. / Unit	Defn. for A/c
1	1		AI-7077	Co-pilot	1.00	Full Time		Additional	EUR	Days	3,000.00	As Primary incl. Su
2	1		AI-7077	Pilot	1.00	Full Time		Additional	EUR	Days	2,500.00	As Primary incl. Su
3	1		AI-7077	Instructor	1.00	Full Time		Additional	EUR	Days	400.00	As Primary incl. Su
4	1								EUR			

**Exhibit 3**

**Invoice basis section of the Manage Flight Contract UI in the Flight Contract business component under the Fight Operations business process**

**Provision to filter Contract & Line level definitions**

**Provision to define billing head at both Contract and Line level**

**Ability to specify the line # on defining the billing head**

#	Defn. at	Line #	Billing Head	Billing Category	Inv. Milestone	Pay Term	Status	Charge for	Charge Type	Unit	Min. Usa
1	Line Level	1	Accommodation		End of Billing ...	NET45	Active		Std. Rate	No. of Days	
2	Line Level	2	Accommodation		As Required	NET45	Active		Std. Rate	No. of Days	
3	Line Level	3	Accommodation		As Required	NET45	Active		Std. Rate	No. of Days	
4	Line Level	4	Accommodation		As Required	NET45	Active		Std. Rate	No. of Days	
5	Line Level	5	Accommodation		As Required	NET45	Active		Std. Rate	No. of Days	
6	Line Level	6	Accommodation		As Required	NET45	Active		Std. Rate	No. of Days	
7	Line Level	7	Accommodation		As Required	NET45	Active		Std. Rate	No. of Days	
8	Line Level	6	Adhoc Flying Hours		End of Billing ...	NET45	Active	Usage	Std. Rate	Per Flight Hour	
9	Line L	7	Adhoc Flying Hours		End of Billing ...	NET45	Active	Usage	Std. Rate	Per Flight Hour	
10	Line L	8	Adhoc Flying Hours		End of Billing ...	NET45	Active	Usage	Std. Rate	Per Flight Hour	

**Exhibit 4**

**Invoice rates section of the Manage Flight Contract UI in the Flight Contract business component under the Fight Operations business process**

**Provision to filter Contract & Line level definitions**

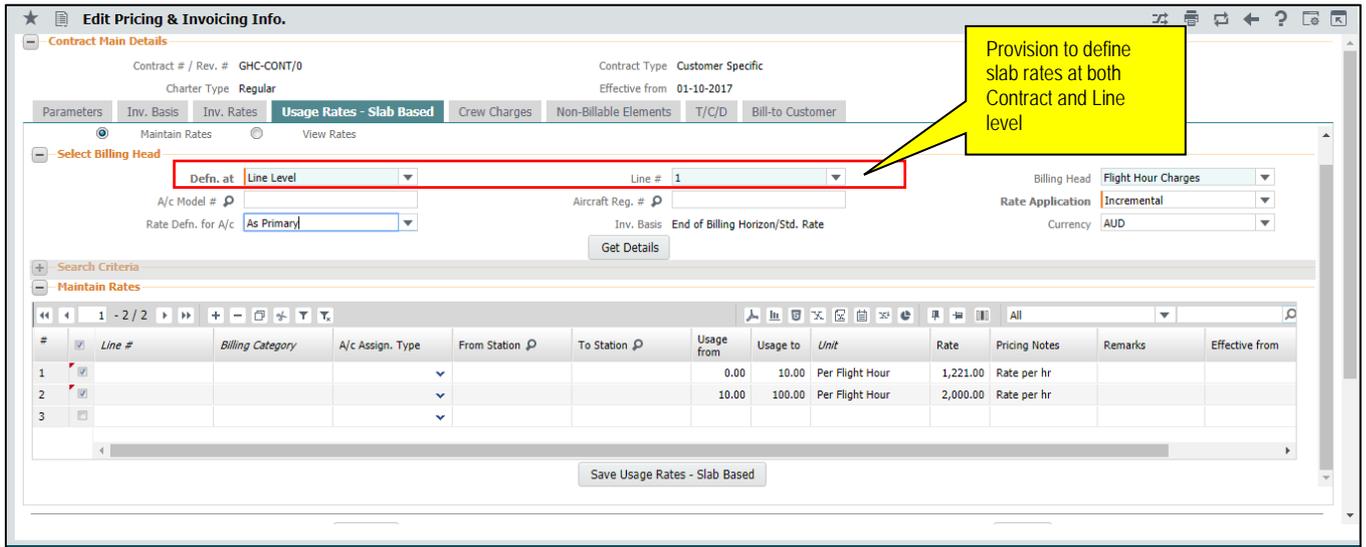
**Provision to define rates at both Contract and Line level**

**Ability to specify the line # on defining the billing head**

#	Defn. at / Line #	Line #	Aircraft Model #	Aircraft Reg. #	Defn. for A/c	Billing Head	Billing Category	Inv. Element	Inv. Basis	A/c As
1	Line Level	1			As Primary	Demobilization Fee		Fixed Charges	End of Contract/Fixed	
2	Line Level	1			As Primary	Mobilization Fee		Fixed Charges	Begin. of	
3	Line Level	1	737-200	AI-7077	As Primary	Standing Fee		Fixed Charges	Begin. of Billing	
4	Line Level	1	737-200	AI-7077	As Primary	Fuel - Consumpt...		Operating Charges	As Required/Std. Rate	

**Exhibit 5**

**Usage rates - Slab based section** of the **Manage Flight Contract UI** in the **Flight Contract** business component under the **Fight Operations** business process



**Exhibit 6**

**Crew Charges section** of the **Manage Flight Contract UI** in the **Flight Contract** business component under the **Fight Operations** business process

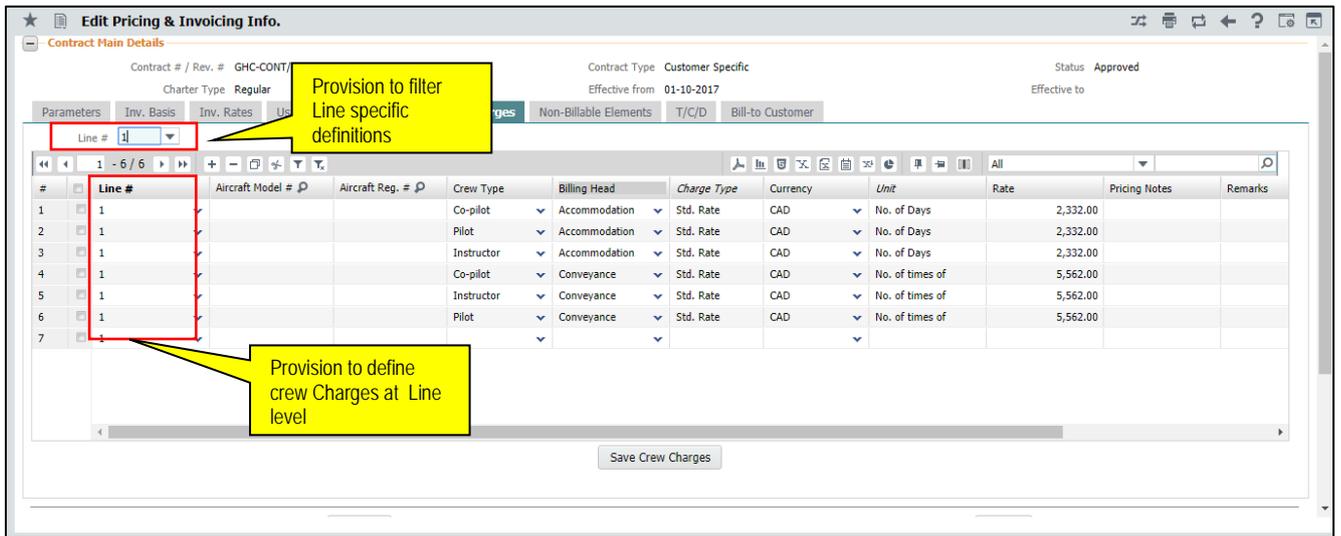


Exhibit 7

Manage Aircraft Assignments activity in the Flight Log business component under the Fight Operations business process

The screenshot shows the 'Manage Aircraft Assignments' interface. At the top, there are search criteria for Aircraft, Assign. valid from/to, and Status (Active). Below this is a table titled 'Aircraft Call Sign Assignments'. A red box highlights a new column labeled 'Line #' in the table header. A yellow callout bubble points to this column with the text 'Newly added 'Line #' column'. The table contains six rows of data with columns for #, Usage Type, Customer Call Sign, Contract #, Line #, Charter Type, Customer #, Customer Name, Status, and A/C Assign. Type. A 'Save' button is located at the bottom of the table.

#	Usage Type	Customer Call Sign	Contract #	Line #	Charter Type	Customer #	Customer Name	Status	A/C Assign. Type
1	External	Ac	CSC01		Regul	400007	Customer 8	Active	Shared
2	External	AC	CSC01		Regul	400007	Customer 8	Active	Shared
3	External	AC	SFS		EMS	400007	Customer 8	Active	Exclusive
4	External							Active	
5	External	AC	CSC01		Regul	400007	Customer 8	Active	Shared
6	External							Active	

Exhibit 8

Select Documents page in the Flight Sheet business component under the Fight Operations business process

The screenshot shows the 'Select Documents' interface. It includes search criteria for Aircraft, Source Ref., Date from/to (01-11-2017 to 25-11-2017), Document, and Customer. Below the search criteria is a table titled 'Search Results'. A red box highlights a new column labeled 'Line #' in the table header. A yellow callout bubble points to this column with the text 'Newly added 'Line #' column'. The table has one row with the following columns: #, A/C Reg. #, Customer Call Sign, Replaced A/C #, Customer #, Contract #, Line #, Charter Type, Error Log, Customer Name, and A/C Model #. At the bottom, there are buttons for 'Get Contract', 'Confirm', 'Cancel', 'Generate Flight Sheet', and 'Generate'.

#	A/C Reg. #	Customer Call Sign	Replaced A/C #	Customer #	Contract #	Line #	Charter Type	Error Log	Customer Name	A/C Model #
1										

**Exhibit 9**

Manage Flight Sheet activity in the **Flight Sheet** business component under the **Fight Operations** business process

**Select Documents**

Search Criteria: Display Option: Pending Setup, Exceptions: , Document: Contract #, GHC-CONT, Customer: , Billing Rep.: , Date: , Addtl. Search: .

Search Results:

#	Customer #	Customer Name	Contract #	Line #	Head	Billing Currency	Inv. Milestone	Inv. Milestone Date	Event Type	Flight Sheet Exceptions
1	400016	Customer 10	GHC-CONT	1	Standing Fee	EUR	Begn. of Billing	01-10-2017	Regular	Flight Sheet not available for "01 Oct 201
2	400016	Customer 10	GHC-CONT	2	Standing Fee	EUR	Begn. of Billing	01-10-2017	Regular	Flight Sheet not available for "01 Oct 201
3	400016	Customer 10	GHC-CONT	4	Standing Fee	EUR	Begn. of Billing	01-10-2017	Regular	Flight Sheet not available for "01 Oct 201
4	400016	Customer 10	GHC-CONT	5	Standing Fee	EUR	Begn. of Billing	01-10-2017	Regular	Flight Sheet not available for "01 Oct 201
5	400016	Customer 10	GHC-CONT	1	Standing Fee	EUR	Begn. of Billing	01-11-2017	Regular	Flight Sheet not available for "01 Nov 20:
6	400016	Customer 10	GHC-CONT	2	Standing Fee	EUR	Begn. of Billing	01-11-2017	Regular	Flight Sheet not available for "01 Nov 20:
7	400016	Customer 10	GHC-CONT	3	Standing Fee	EUR	Begn. of Billing	01-11-2017	Regular	Flight Sheet not available for "01 Nov 20:
8	400016	Customer 10	GHC-CONT	4	Standing Fee	EUR	Begn. of Billing	01-11-2017	Regular	Flight Sheet not available for "01 Nov 20:

Generate Flight Billing: Group by: [Contract, Inv. Milestone Date, Contract Line #]

**Exhibit 10**

Manage Flight Invoice Release activity in the **Flight Billing** business component under the **Fight Operations** business process

**Manage Flight Invoice Release**

Release Main Info: Inv. Release # FIR-000016-2013, Customer # 400007, Charter Type EMS, Rel. Value (Billing Curr.) 200.00, Billing Horizon Multiple, Customer Name Customer 8, Release Status Fresh, Contract # SFS, Charter Category Wet, Exchange Rate 1.00, Billing Currency CAD, Rel. Value (Base Curr.) 200.00.

Release Info: Inv. Rel. Date 03/Feb/2017, Inv. Category INV01, Rev. Assign. Unit AVEOS1, Billing Rep. 00001718, Release Remarks, Pay Term N030D000\_00.0.

Billing Summary:

#	Billing Head	Billing Category	Inv. Element	Pricing Currency	Amount	Amount (Billing Curr.)	Avg. Exch. Rate
1	Charge Back		Operating Charges	CAD	0.00	200.00	
2							

# Ability to define aircraft level billing heads and ability to reset the incremental slabs on Billing Horizon

Reference: AHBG-20499, AHBG-20501

## Background

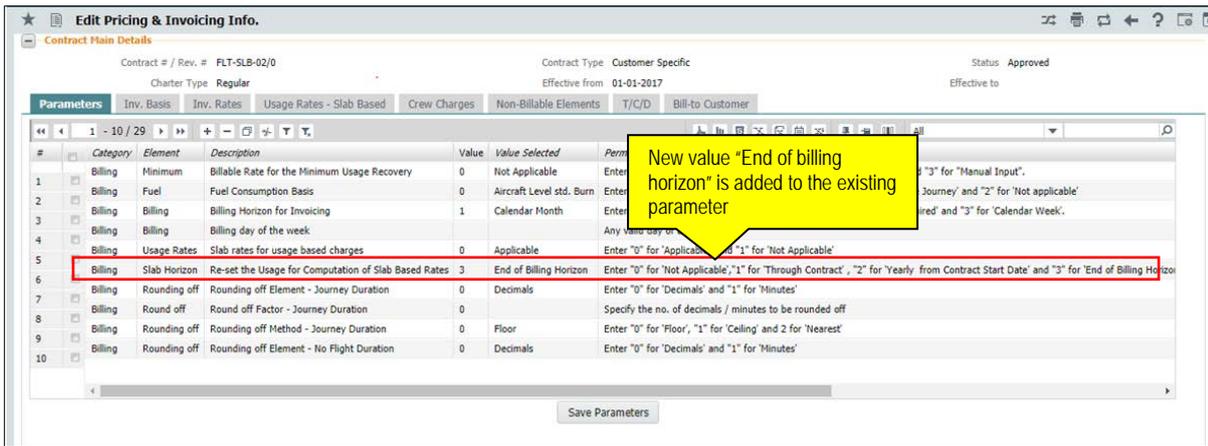
This feature has been included in the **Manage Flight Contract** activity in order to facilitate the definition of multiple usage based billing heads at aircraft level and enable the user to reset the incremental slabs on every billing Horizon.

## Change Details

The existing parameter have been enhanced to include the reset of incremental slab rates on every billing horizon and the existing validation has been relaxed to allow multiple usage based billing heads.

### Exhibit 1:

Parameters tab in the **Edit Pricing & Invoicing Info.** activity in the **Flight Contract** business component



### Example:

The Slab rates can be defined as follows:

Billing head	Rate Slab	Rates
Block hour charges	0-100	1000
Block hour charges	100-200	1250
Block hour charges	200-300	1500

If the billing horizon is calendar month, rate slab will be reset at the end of every calendar month.

### Example:

The Reset Slab Based Rates can be defined as follows:

#### For the Month of August:

If the journey log for the Aircraft is for 180 hours, the rates will be calculated as below:  
100 hours will be taken in 0-100 slab and remaining 80 hours will be taken in 100-200 slab

#### For the Month of September'17:

If the journey log for the Aircraft is for 200 hours, the rates will be calculated as below:  
100 hours will be taken in 0-100 slab and remaining 100 hours will be taken in 100-200 slab

## Ability to bill all the operating charges based on no of trip

Reference: AHBG-20905

### Background

Rate Heads like Passenger/Terminal Fee, Landing Fee are computed based on "Per Flight" basis which is a fixed fee per Journey Log. Currently, the trip based billing is enabled only for the Operating Charges (Usage). The requirement is to make Trip based billing available for all the Billing Elements under the Operating Charges.

### Change Details

#### Flight Operations Setup

Provision has been made to define all the Billing Elements under the Operation Charges with the unit ' Per Trip'. The rates can be defined and the customer charged at Fixed Price per Trip (Journey Log)

#### Flight Contract

In the **Manage Flight Contract** activity, the user will be able to define the Operating Charges Billing heads with 'Per Trip' as a unit, and rates to be charged per trip, so that during the invoice generation the prices will be retrieved based on the definitions in the contract for each of the Journey Logs.

Also, if the unit for a particular billing head is "Per Trip" the user will not be able to provide station (From and To Stations must not be provided) based rates for the same.

#### Flight Sheet/ Flight Billing

For a Billing Head with Per Trip as the Unit, on Invoice Release generation, the rate from the Contract and quantity (that is) number of trips is derived from the Flight Sheet generated for the respective Billing Head for that milestone as per the parameters set.

The No. of trips is displayed as billable quantity for all the Billing heads in the contract for which the unit is 'Per Trip'.

#### **Example:**

Billing Head in Contract: Passenger Terminal Fee

Unit: Per Trip

Parameter set: One journey log is one trip

Journey Logs created for a Billing Horizon: 4

One Flight Sheet has been generated for all the 4 Journey Logs

The Flight Sheet will have No. of Trips = 4

This quantity is used for billing the Billing Head : Passenger Terminal Fee

**Exhibit 1:**

**Manage Billing Heads activity in the Flight Operations Setup business component**

The screenshot shows the 'Manage Billing Heads' window. At the top, 'Invoicing Element' is set to 'Operating Charges' and 'Charge for' is set to 'Usage'. Below this is a table of billing heads. The 'Unit' column for the first row is highlighted with a red box, and a yellow callout bubble points to it with the text 'Unit "Per Trip" added'.

#	Billing Head	Description	Flight Category	Flight Ops. Type	Charge Type	Unit	Status	Created by	Created Date	Last Modified by	Last Modified Date
1	Adhoc Flying Hours	Adhoc Flying Hours			Std. Rate	Per Trip	Active	DMUSER	22-12-2013		
2	Block Hour Charges	Block Hour Charges			Std. Rate	Per Block H...	Active	DMUSER	29-09-2014		
3	Flight Hour Charges	Flight Hour Charges			Std. Rate	Per Flight H...	Active	DMUSER	22-12-2013	DMUSER	31-01-2014
4	TripBased	TripBased			Std. Rate	Per Trip	Active	DMUSER	06-12-2017		
5	Usage Based charge	Usage Based Charges			Std. Rate	Per Flight H...	Active	DMUSER	23-12-2013		
6	Usage Based Charges-	Usage Based Charges-			Std. Rate	Per Flight H...	Active	DMUSER	13-04-2017		
7	Usage Based Charges-	Usage Based Charges-			Std. Rate	Per Block H...	Active	DMUSER	13-04-2017	DMUSER	13-04-2017
8							Active				

**Exhibit 2:**

**Manage Flight Sheet activity in the Flight Sheet business component**

The screenshot shows the 'Manage Flight Sheet' window. At the top, flight details are displayed: Flight Sheet # FS-000022-2013, Date 01/Feb/2017, Customer Name Customer 8, Contract # / Rev. # TESTFL/0, Status Confirmed, and Charter Type Regular. Below this are several tabs: Main Info, JL Usage Info, Parameter Info, No Flight Info, Duty Info, A/C Activity Info, Emp. Activity Info, Crew Charges, Other Charges, and Additional Info. The 'Usage Parameter Info' tab is active, showing 'Billing Parameter Per Flight Hour' and a 'No. of Trips' field highlighted with a red box and a yellow callout bubble that says 'No. of Trips'.

#	J.	Dir.?	Journey Log #	Amd. #	Journey Leg #	Start Time Ref.	From Date - UTC	From Time - UTC	End Time Ref.	To Date - UTC	To Time - UTC	Value (In Hours)	Value (In Decim)
1			JL-0001252013	1	1	Take Off Time	01/Feb/2017	12:00:00	Landing Time	01/Feb/2017	23:00:00	11:00	11
2													

# Ability to manage contract milestones at Item # level instead of the contract effectivity period

Reference: AHBG-23029

## Background

Flight Operators sometimes agree with their customers to operate multiple aircrafts (Line # in Flight Contract) at different periods of time. There are some cases where such contract is revised in which the effective period of some of the aircrafts (Line #) needs to be extended or reduced. Based on the revised effective period, billing milestone of the respective aircrafts is also required to be revised.

Currently, however, modifying the effectivity of an existing Line # with revision effective from a date later than the "effective from" of the Line # is not allowed.

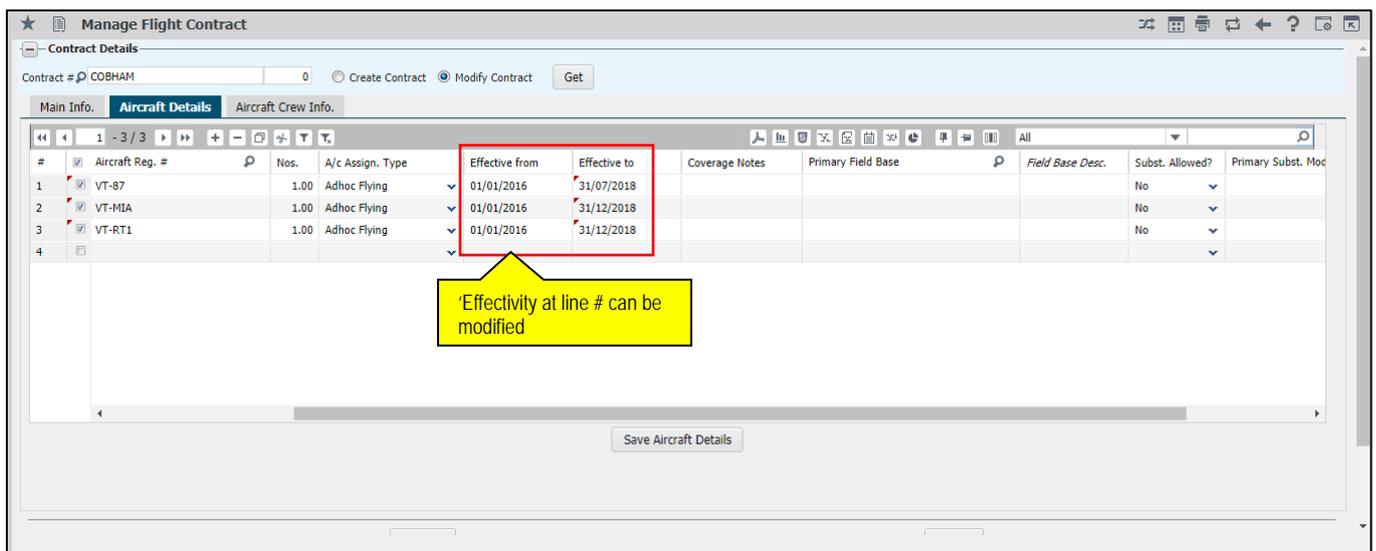
Therefore the requirement is to provide flexibility to adjust the effective period of aircrafts (Line #) in contract and modify the billing milestone based on the new effective period.

## Change Details

Provision has been given so that the Effectivity at Line # can be modified provided the modified date be within the Contract Effective period

### Exhibit 1:

Aircraft Details tab page in the **Manage Flight Contract** activity of the **Flight Contract** business component



*Note: The effectivity at Line # can be modified in the later revisions irrespective of the Revision effectivity period provided it is within the contract period.*

# Ability to bulk confirm Flight Sheet and view the Journey Log reference in the Flight Sheet entry screen

Reference: AHBG-20284

## Background

When it comes to billing, for some customers, billing is done on a monthly basis after verification and confirmation of the billable journey hours in the Flight Sheet. In such cases, confirming one Flight Sheet at a time is a time consuming process. Therefore to ease this process, the requirement is to enable confirmation of Flight Sheets in bulk after it has been reviewed.

## Change Details

For enabling bulk confirmation of Flight Sheets and view Journey Log details in the entry screen, the following provisions have been made:

- Provision to view the Journey Log details from the entry screen of the Flight Sheet
- The existing journey log reference field in the 'Create' mode of the Flight sheet screen has been made available in the 'Modify' mode also.
- Provision has been given in the entry screen of the Flight Sheet business component to 'Confirm' or 'Delete' multiple Flight Sheets at the same time.

### Exhibit 1:

Select Documents entry screen in the **Flight Sheet** business component of the **Flight Operations** business process

The screenshot shows the 'Select Documents' window in 'Modify' mode. It includes search criteria for Aircraft, Date from/to (01-Nov-2016 to 02-Nov-2017), Customer, and Source Ref. Below the search criteria is a table with the following columns: #, A/C Reg. #, Flight Sheet #, Journey Log #, Billable Usage Hrs., Customer Call Sign, Customer #, Contract #, Charter Type, Customer Name, and Flight Shee. The 'Journey Log #' column contains values like 'JL-00029267' and 'Multiple'. At the bottom of the window, there are 'Confirm' and 'Cancel' buttons. Two yellow callouts provide additional context: one points to the 'Journey Log #' column, and another points to the 'Confirm' and 'Cancel' buttons.

#	A/C Reg. #	Flight Sheet #	Journey Log #	Billable Usage Hrs.	Customer Call Sign	Customer #	Contract #	Charter Type	Customer Name	Flight Shee
1	6Y-JMR-1	FS-000021-2013	JL-00029267	0:00	AC	400007	SFS	Regular	Customer 8	01-Feb-201
2	101	FS-000022-2013	Multiple	11:00	AC	400007	TESTFL	Regular	Customer 8	01-Feb-201
3	101	FS-000023-2013		97:00	AC	400007	Testfl2	Regular	Customer 8	02-Jan-201
4	101	FS-000026-2013		59:00	AC	400007	TESTCONT-02	Regular	Customer 8	02-Feb-201
5	VT-MIA	FS-000027-2013		59:00	AC	400007	Testfl2	Regular	Customer 8	01-Feb-201
6	101	FS-000029-2013		33:24	AC	400007	TESTCONT-02	Regular	Customer 8	14-Feb-201
7	101	FS-000030-2013		35:00	AC	400007	TESTCONT-02	Regular	Customer 8	06-Feb-201

## Ability to add per day fixed charges in Flight Contract

Reference: AHBG-23225

### Background

Sometimes, Heli Charter operators may have some adhoc customers for specific periods of time for whom the aircrafts would be operated for a shorter span of time (Less than a month). In such case, Heli operators charge a fixed rate for each aircraft on a per day basis. These fixed charges are billed to the customer either in the beginning/end of the effectivity of each Line #.

Hence the requirement is to be able to add fixed per day charges in the contract and also to bill respective fixed charges either in the beginning of the effectivity of the particular Line #.

### Change Details

Currently, though, the system supports the definition of different aircrafts in single contracts as Line #, the Billing Heads are charged with respect to the effectivity of the Contract and not that of Line #. So in case the Line # is applicable only for shorter period (say less than a month), the billing heads to be calculated and charged based on the period for which the aircraft is effective.

The proposed approach is to introduce a value to identify the Line # effectivity as the Billing Horizon. Invoicing milestones to be defined at the beginning of Contract/Line #.

1. A new unit 'Per Day' has been added under the 'Unit' column in the Billing Heads Info. multiline of the **Manage Billing Heads** activity, so that fixed charges can be created with unit as per day.
2. Addition of new value 'Line # Effectivity' against the parameter 'Billing horizon for Invoicing' under the 'Parameter' tab which facilitates to identify the effectivity of Line # as Billing Horizon and in the downstream, this definition would facilitate to generate bill either in the beginning or end of effectivity of each Line #.
3. The option 'Begn. Of Contract" has been renamed as "Begn. of Contract/Line #" in the 'Inv. Milestone' column in the **Invoice Basis** tab in the **Edit Pricing & Invoicing** link page of the **Manage Flight Contract** activity. Similarly, End of Contract has been renamed to "End of Contract/Line #"

**Exhibit 1:**

**Manage Billing Heads** activity of the **Flight Operations Setup** business component.

#	Billing Head	Description	Charge Type	Unit	Status	Created by	Created Date	Last Modified by	Last Modified Date
1	Demob Fee	Demobilization Fee	Fixed Amount	One Time	Active	DMUSER	22/12/2013		
2	Exclusive Fee	Exclusive Fee	Std. Rate	Per Month	Active	DMUSER	03/06/2014		
3	Fixed Monthly	Fixed Monthly Charges	Std. Rate	Per Month	Active	DMUSER	27/09/2017		
4	Mob Fee	Mobilization Fee	Fixed Amount	One Time	Active	DMUSER	22/12/2013	DMUSER	22/12/2013
5	Mobili Fees	M Fees	Fixed Amount	One Time	Active	DMUSER	19/06/2018		
6	Mobilization fee	Mobilization fee	Fixed Amount	One Time	Active				
7	Per day charges	per day charges	Std. Rate	Per Day	Active				25/07/2018

**Exhibit 2:**

**Edit Pricing and Invoicing Info.** link in the **Manage Flight Contract** activity of the **Flight Contract** business component

#	Defn. at	Line #	Billing Head	Billing Category	Inv. Milestone	Pay Term	Status	Charge for	Charge Type	Unit
1			Adhoc Flying Hours		End of Billing Horizon	MONTHLY	Active	Usage	Std. Rate	Per Flight Hour
2			Mobilization Fee		Begn. of Contract/Line#	MONTHLY	Active		Fixed Amount	One Time
3							Active			

## WHAT'S NEW IN FLIGHT BILLING?

### Provision to retain Flight Sheet in confirmed status on release cancellation

*Reference: AHBG-23009*

#### **Background**

During Flight Billing process, some MROs follow a method eliminating manual intervention, in which the Flight Sheets is generated automatically from the EFB. Currently, however, on cancellation of Invoice Release, the Flight Sheet will get to 'Fresh' status in order to enable the user to make the required changes as a result of which the Flight Invoice release has been cancelled.

The requirement is for a provision in case of such cancellation of Invoice Release, wherein the Flight Sheet must be retained in "Confirmed" status instead of "Fresh" status.

#### **Change Details**

All the Flight sheets related to the Invoices Releases that are cancelled will be retained in 'Confirmed ' status and the related milestones automatically populated. Thus the user can generate a new Invoice Release as required.

## Ability to view the FH and No. of trips in the invoice release search page

Reference: AGHX-230

### Background

The **Flight Billing** activity facilitates an organization in generating bills to the customer for the flights operated as per customer request according to the agreed Contract. Also this screen categorizes and represents the billing information of each milestone like for example, Fixed Monthly Charges, Flying Hourly Charges etc., into different buckets such as Pending Setup, Under Processing, Pending Confirmation, Pending Invoicing, Invoiced Releases and Cancelled Releases. This information facilitates the commercial user to understand the billing status of each billing element that is due for billing.

### Change Details

Currently, Billing Elements that are operational in nature, that is, elements that are billed based on the input from Flight Sheet such as Flight Hours, No. of trips etc., does not have visibility to the information like, Billable / Non-billable quantity from Flight Sheet pertaining to the respective Billing Element for the particular billing period before release generation.

In order to provide visibility about the Billable / Non-billable quantity corresponding to the respective Billing Elements that are basis for the billing generation, new columns like Qty - Billable, Qty- Non billable and Unit have been added in the entry screen of Flight Billing which would be reviewed before generation of billing for the Billing Element. This information would be visible only before release generation, that is, when the Billing Element is eligible for billing and falls under the 'Pending Setup' category.



*Note: The new column added would be visible only for the Billing Elements that depend on the input from Flight Sheet to proceed with billing. For other Billing Elements that are not dependent on the usage like for example., Mobilization Fee, Monthly Fixed Charges and so on, the details will not be available and the respective columns will be displayed as 'blank'.*

Exhibit 1:

Flight Billing entry screen in the Flight Operations business process

**Select Documents**

Search Criteria

Display Option: Pending Setup  
 Customer:   
 Addtl. Search:

Exceptions:   
 Billing Rep.:

Document:   
 Date:

Search

**Search Results**

#	Billing Head	Billing Currency	Inv. Milestone	Inv. Milestone Date	Event Type	Unit	Qty-Billable	Qty-Non Billable	Flight Sheet Exceptions	Pay Term	Processing Status
9	Adhoc Flying Hours	USD	Begn. of Billing	17/03/2018	Regular	Per Flight Hour	7.00	0.00		N15	
10	Adhoc Flying Hours	USD	Begn. of Billing	08/05/2018	Regular	Per Flight Hour	2.00	0.00		N15	
11	Landing Fee	USD	Begn. of Billing	08/05/2018	Regular	Per Trip	1.00	0.00		N15	
12	Passenger / Terminal Fee	USD	Begn. of Billing	08/05/2018	Regular	Per Trip	1.00	0.00		N15	
13	Adhoc Flying Hours	USD	Begn. of Billing	17/05/2018	Regular	Per Flight Hour	2.40	0.00		N15	
14	Landing Fee	USD	Begn. of Billing	17/05/2018	Regular	Per Trip	2.00	0.00		N15	
15	Passenger / Terminal Fee	USD	Begn. of Billing	17/05/2018	Regular	Per Trip	2.00	0.00		N15	
16	Additional Flying Crew	USD	Begn. of Billing	01/06/2018	Regular				Flight Sheet not available	N45	

Generate Flight Billing

Group by:  Generate Release

View Flight Sheet Review Flight Sheet Details

Visibility to Billable / Non Billable Quantity and its unit in Flight Billing

## Provision to view summary of Billable/Non-Billable quantity

Reference: AHBG-23197

### Background

Currently in Flight Billing, the Billable and Non-billable quantities can be viewed before the generation of the Invoice Release under each of the billing heads. However, once an Invoice Release is generated, there is no provision to view the entire Billable/Non-billable quantity against each billing head, therefore the user has to visit the Flight Sheet Reference export and calculate manually.

The requirement is to create a provision to view the summary of the Billable and Non-billable quantities against each billing head.

### Change Details

Three new columns, 'Unit', 'Quantity-Billable', and 'Quantity- Non Billable' have been introduced in the multiline of the **Main Info.** tab in the **Manage Flight Invoice Release** activity under the **Flight Billing** business component to display the details of the quantity and unit against the respective Billing Heads.

#### Exhibit 1:

**Main Info.** tab in the **Manage Flight Invoice Release** activity of the **Flight Billing** business component

The screenshot displays the 'Manage Flight Invoice Release' interface. The 'Main Info.' tab is active, showing various invoice details. Below the main info, the 'Billing Summary' table is visible. A red box highlights the columns 'Unit', 'Qty-Billable', and 'Qty-Non Billable' in the table. A yellow callout box points to these columns with the text: 'Three new columns 'Unit', Qty-Billable', and 'Qty-Non Billable'.

#	Inv. Element	Pricing Currency	Unit	Qty-Billable	Qty-Non Billable	Amount	Amount (Billing Curr.)	Avg. Exch. Rate
1	Fixed Charges	USD	One Time	0.00	0.00	2,000.00	2,000.00	1.00
2	Fixed Charges	USD	One Time	0.00	0.00	3,000.00	3,000.00	1.00
3								

## WHAT'S NEW IN PART SALE ORDER?

### Provision to modify Ship To Customer and Bill To Customer in PSO and addition to User Defined fields

Reference: AHBG-20486

#### Background

During a part sale transaction, once an order is generated and confirmed, there is a possibility that The Bill To Customer, Ship To Customer and the corresponding address IDs are subject to changes. Therefore the requirement is that these details be modifiable at any point without affecting the part sale transactions.

#### Change Details

This change is to enable the user to modify the Ship to Customer #, Bill To Customer # and Bill To and Ship To Customer Addresses in Part Sale Order.

In the **Edit Terms and Conditions** activity, the Bill To Customer PSO will list all the mapped Customer IDs with the corresponding Address IDs listed in the Address ID field.

A new field in the Shipment Info tab has been added to select the Ship To Customer ID and their corresponding address IDs will be listed in the current Ship To Address ID field. These fields are editable and can be modified at any point. The same will be reflected in the Shipping Note and invoices.



*Note: In the Shipping Note, upon its generation, (**Record Shipping Note** activity of the **Stock Issue** business component) the modified and saved values on Part Sale Order of the Ship to/Bill to Customer information is defaulted*



*Note: In the Invoice, upon its generation, the Bill to / Ship to Customer Info modified and saved in Part Sale Order is defaulted.*



*The modified Bill to/Ship to Customer will be applicable only for the Invoices being raised from the current revision number of PSO..*

Exhibit 1:

Shipment Info tab in the **Manage Part Sale Order** activity in the **Part Sale Order** business component

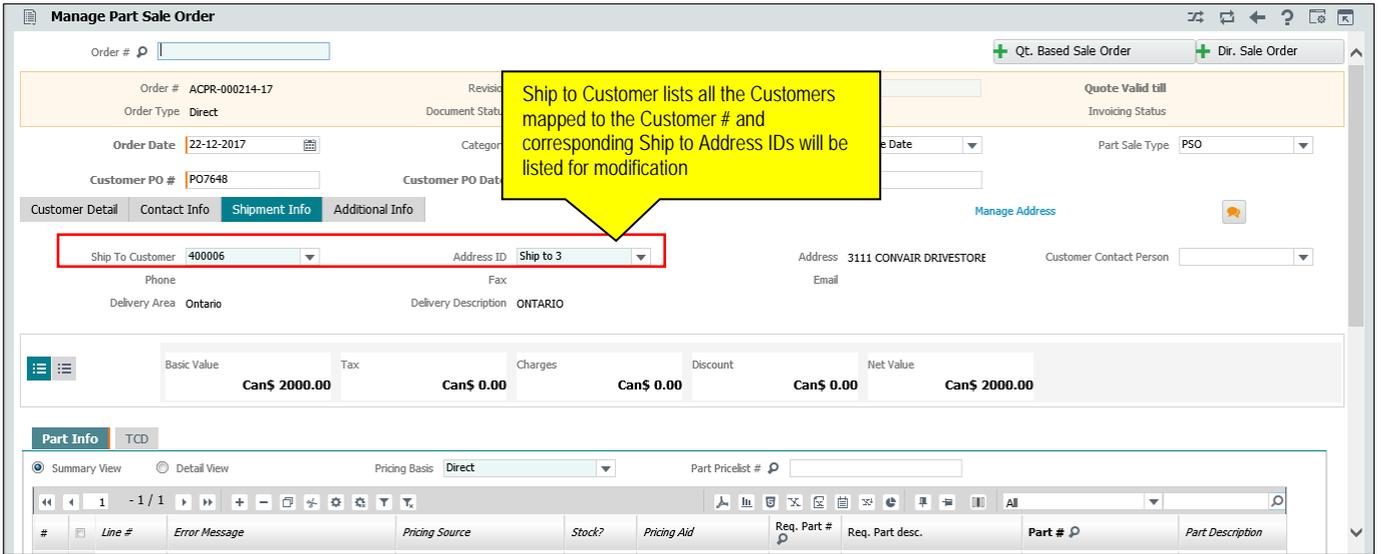


Exhibit 2:

Edit Terms and Conditions activity in the **Part Sale Order** business component

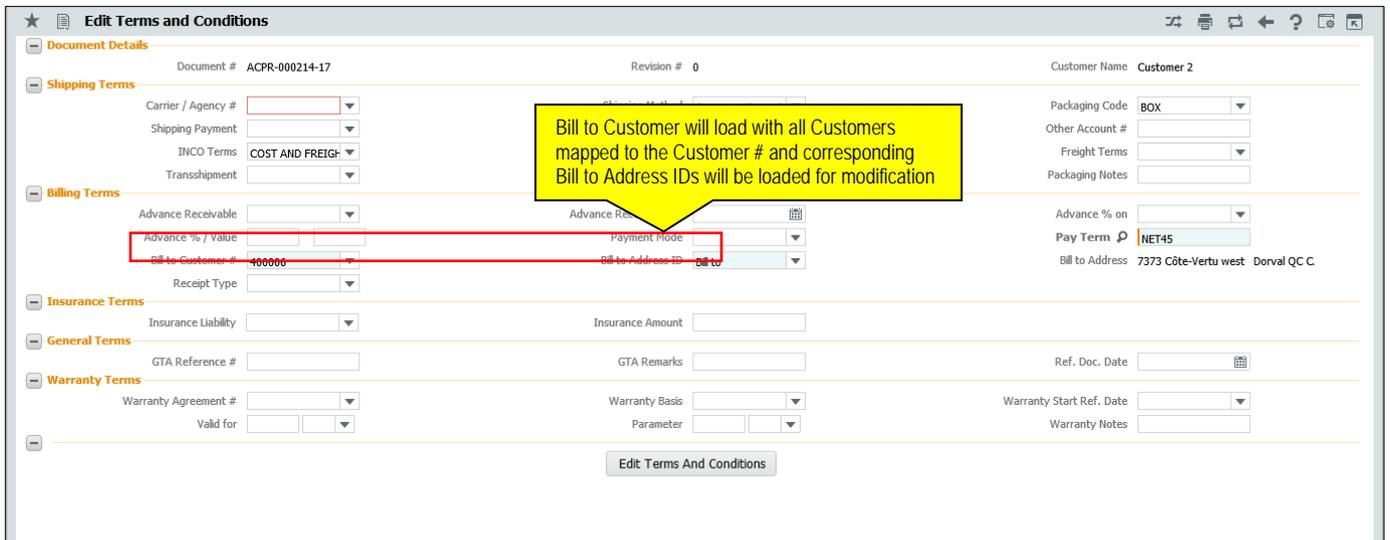


Exhibit 3:

Manage Part Sale Order page in the Part Sale Order business component

The screenshot displays the 'Manage Part Sale Order' interface. At the top, there are summary fields for 'Basic Value' (Can\$ 2000.00), 'Tax' (Can\$ 0.00), 'Charges' (Can\$ 0.00), 'Discount' (Can\$ 0.00), and 'Net Value' (Can\$ 2000.00). Below this is the 'Part Info' tab, which includes a 'Summary View' and 'Detail View' toggle, a 'Pricing Basis' dropdown set to 'Direct', and a 'Part Pricelist #' field. A table with two rows is shown, with columns for '#', 'Issued Qty', 'Issued UOM', 'Invoiced Qty', 'Shipping Qty', and 'Status'. The first row has a status of 'Ordered'. A red box highlights two dropdown menus in the table, labeled 'User Defined-1' and 'User Defined-2'. A yellow callout box with a pointer to these dropdowns contains the text: '2 User defined fields have been added in multiline under Part Info tab'. At the bottom of the page, there are several buttons: 'Get Storage / Pricing Ref.', 'Save', 'Release For Shipping', 'Short Close', 'Upload Documents', 'Specific Serial #/Lot # Info.', and 'Part Inquiry'. The footer includes 'Record Statistics', 'Edit Terms and Conditions', and 'View Associated Doc. Attachments'.

## Ability to modify the Part # with its alternate in Sale Order

Reference: APHE-599

### Background

With respect to Sale Orders, PO is placed to the vendor, in turn the vendor verifies the PO availability for delivery.

However when a requested Part # is not available, the vendor delivers an alternate Part.

The requirement therefore for such cases, is a provision to amend the sale order with the alternate Part # even after the Part Sale Order is processed.

### Change Details

#### Manage Part Sale Order activity > Part Sale Order business component

- Provision has been made to allow modification of the Part # with its alternate Part # in the processed Sale Order with 'Regular Purchase' or 'Dropship' as the sourcing type.
- The alternate part provided in sale order will be validated with the Alternate Part definitions in the Part Master.
- On creation, the system displays the modified Part # in the Part Sale Invoice



*Note: The demand documents such as MR, PR, PO generated for the original Part # will remain unaffected even after the modification of Part # in Sale order.*

#### Record Shipping Note activity > Stock Issue business component

Part Sale Invoice generation on Issue / Shipping note Confirmation

- On generation of a Part Sale Invoice, the system retrieves the Part # from the Part Sale Order
- The system displays the Part # modified in the Part Sale Order in the Part Sale Invoice.

# Ability to generate Consignment Part Sale Order, Consumption Reporting and manual invoice generation

Reference: AHBG-20892

## Background

In certain business scenarios, MRO keeps their stock in customer’s location / warehouse and on consumption of the respective parts, bill is raised to the customer based on the consumption report shared by them. Provision is required to generate Consignment Sale Order and record invoice against respective Sale Order. This enhancement facilitates the user to maintain separate Part Pricelist # for consignment sales at each customer level and allows generating sale order. Also, provision is given to generate invoice manually based on Part Sale Order along with reference of Consignment Report. The enhancement supports the following features:

- Ability to maintain separate Part Pricelist # for consignment sales at each customer level.
- Ability to generate Consignment Part Sale Order.
- Ability to record the consumption report against the Consignment Sale Order based on customer input.
- Provision to generate invoice manually based on Part Sale Order along with reference of Consignment Report.

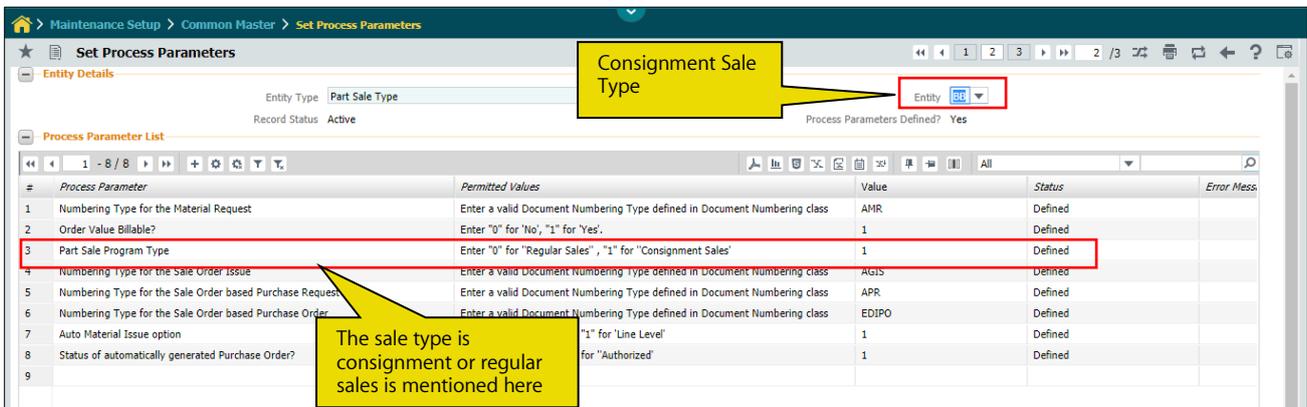
## Change Details

### 1. MANAGING CUSTOMER PART SALE PROGRAMS FOR CONSIGNMENT SALES

#### Common Master

A new option ‘Part Sale Program Type’ is added under the Entity Type ‘Part Sale Type’ in the **Set Process Parameters** screen of the **Common Master** business component. The value of the parameter can set as either ‘0’ or ‘1’ to set the Part Sale Type as ‘Regular Sales’ or ‘Consignment Sales’ respectively.

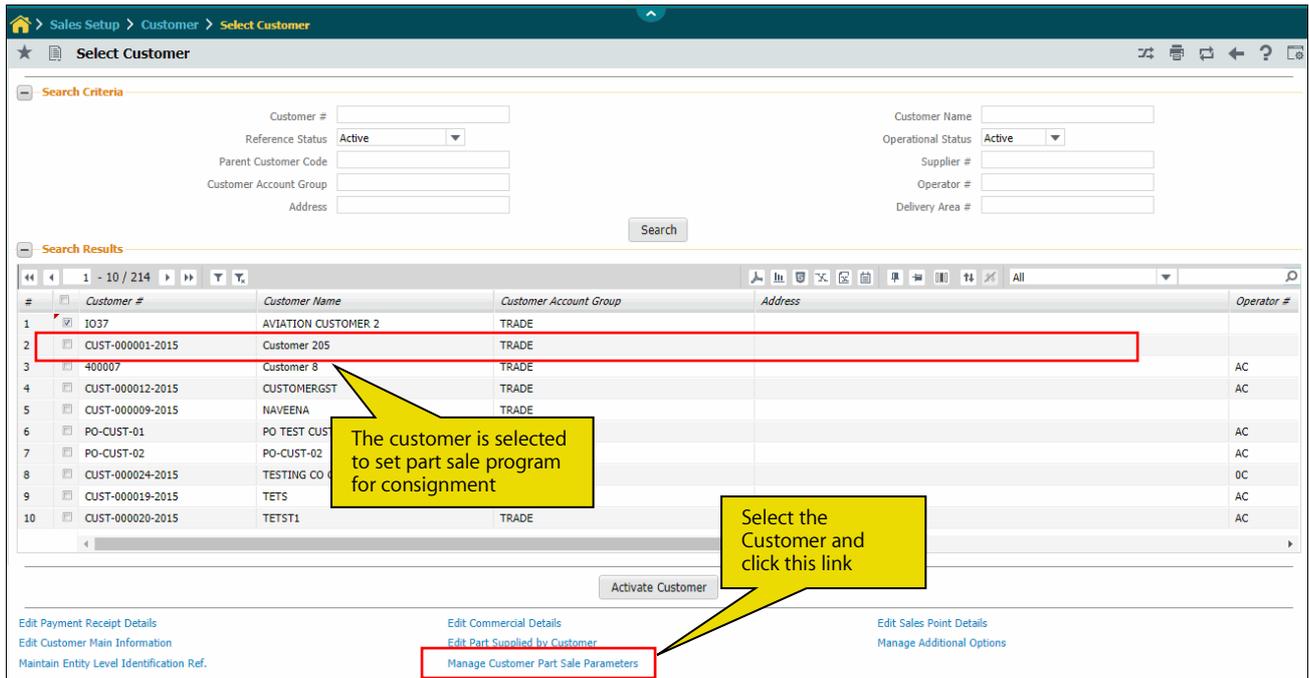
**Exhibit 1:** Identifies the set option in **Set Process Parameters** screen



#### Customer

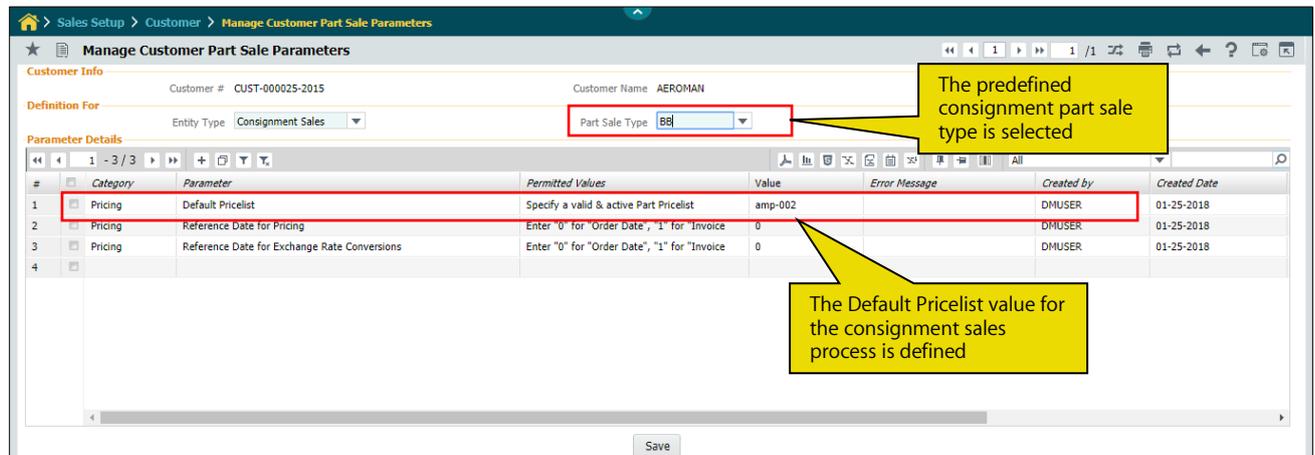
A new screen **Manage Customer Part Sale Parameters** is added as a link in the Select screen of the **Edit Customer Record** activity in the **Customer** business component. See **Exhibit 2**.

**Exhibit 2:** Identifies the link addition in **Select Customer** screen



- i. The **Manage Customer Part Sale Parameters** screen enables to map the Customer # to the consignment part sale type and the part price list. Refer **Exhibit 3**.
- ii. Entity Type is defined as 'Consignment Sales'.
- iii. The Part Sale Program Type defined as 'Consignment' in the **Set Process Parameters** screen is selected in the 'Part Sale Type' drop-down list box.
- iv. The part price list for the selected consignment sales process is entered against the parameter 'Default Pricelist' in the 'Parameter Details' multiline.

**Exhibit 3:** Identifies the **Manage Customer Part Sale Parameters** screen



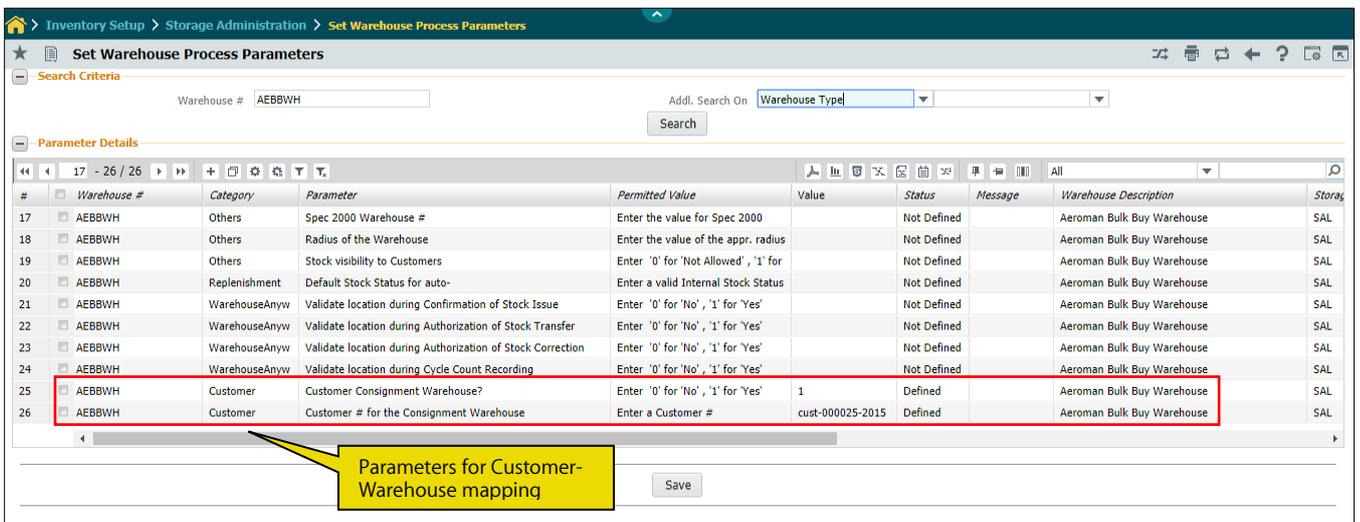
2. **CONSIGNMENT PART SALE ORDER GENERATION**

Storage Administration

When a consignment part sale order is created and processed there has to be some mapping done at the sale order level to make the process streamlined and linear. There is a mapping between the customer #, sale type and the part price list to fetch the part price list when the appropriate sale type and customer # is selected in the Part Sale Order screen. In the Part Sale Order, the value for the Source can only be selected as 'Regular Procurement' if the Part Sale Type selected is a Consignment sale. Also, the Warehouse # in the Part Sale Order is validated to be mapped to the Customer. The following parameters have been added to define the Warehouse # - Customer # mapping.

- i. The **Set Warehouse Process Parameters** screen in the **Storage Administration** business component, enables mapping customer to the Consignment Warehouse, with the following parameter settings (**Exhibit 4**):
  - o 'Customer consignment Warehouse' must be set as '1'.
  - o Customer # must be entered against the parameter 'Customer # for the consignment warehouse'.

**Exhibit 4:** Identifies the set option for mapping Customer to Consignment Warehouse in **Set Warehouse Process Parameters** screen



Manage Part Sale Order

- i. Part sale type for the Customer # must be selected and Default Pricelist must be specified in the **Manage Customer Part Sale Parameters** screen (**Exhibit 3**), to maintain the mapping between Customer #, Part Sale Type and Part Price List.
- ii. After the Customer # - Warehouse mapping and Customer # - Part Sale Type - Part Price List, in the Manage Part Sale Order screen, enter the Customer # and select the Part Sale Type. See Exhibit 5.
- iii. The pre-mapped part price list is fetched automatically.
- iv. When the warehouse is entered in the Warehouse # field, the system checks for the mapping present between the consignment warehouse and the customer and validates.

**Exhibit 5: Identifies the Manage Part Sale Order screen**

#	desc.	Part #	Part Description	Warehouse #	Source	Mfr. Part #	Mfr. #
1		AMP-1495X	DUCT COVER ASSY	AEBBWH	Regular Procurement		
2		AMP-0PV8550A03M03	BEARING	AEBBWH	Regular Procurement		
3		AMP-1495X	LAMP	AEBBWH	Regular Procurement		

**3. REPORTING CONSUMPTION AGAINST A CONSIGNMENT SALE ORDER**Stock Issue

A new screen **Manage Consignment Consumption Reporting** is introduced in **Stock Issue** business component to record the periodic consumption report against the Part Sale Order based on customer input. Once the consumption information is entered here and confirmed, issue is automatically generated in confirmed status. Therefore the Manage consignment consumption reporting screen is the launch screen for auto issue function.

- i. The **Manage Consignment Consumption Reporting** screen where the consumption data is recorded, has three modes of operation: 'Record', 'Modify' and 'View'.
 

*Record Mode:*

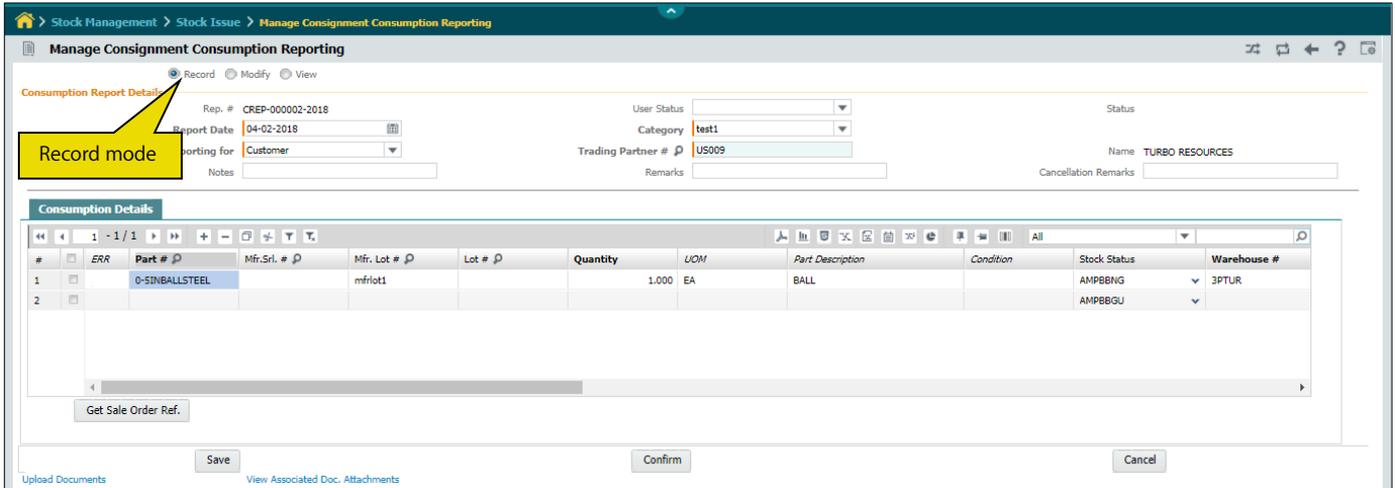
  - ii. In the 'Record' mode, enter the details such as Reporting Date, Category, Reporting for and Customer # fields at header level. See **Exhibit 6**.
  - iii. At multiline level, enter the details of the part which has been reported as consumed by the customer, such as Mft. Lot # / Mfr. Srl. #, consumed Quantity and the Warehouse from which the part was consumed.
  - iv. Click the **'Get part sale order ref.'** to view the part sale orders pegged against the part consumed, the pegging mechanism follows **FIFO** logic.
  - v. Click the **Save** button is clicked to create the consumption report. At this stage any errors such as part not available, part quantity not present, Mfr. # varying are displayed and the status is shown as error.
  - vi. Only on clearing all the validations, the consumption report status changes to 'Fresh' upon saving. Any valid changes can be made in the consumption report when it is in 'Fresh' status.
  - vii. Click the **Confirm** button to confirm the consignment consumption report. Upon confirmation, an Unplanned Issue will be generated in Confirmed status to issue the Parts out of Warehouse.
  - viii. Once the consignment consumption report is confirmed and issue is generated, no change can be done to revert any material issue or alter any quantity.

*Modify & View Mode:*

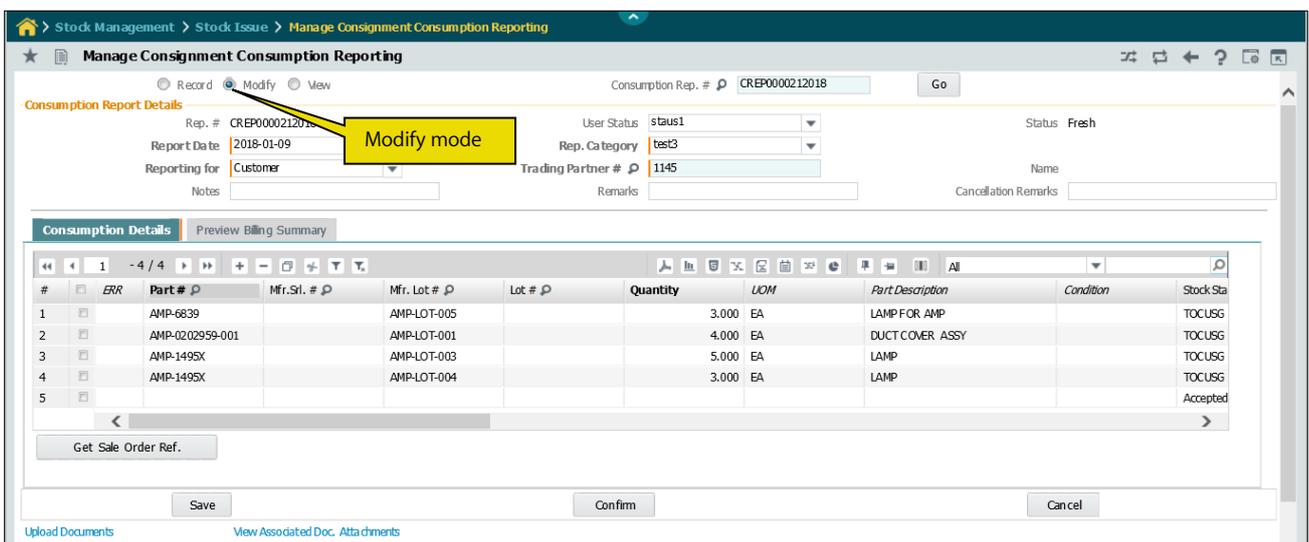
- ix. In 'Modify Mode', the consumption report in the 'Fresh' status can be modified. See **Exhibit 7**.

- x. In 'View Mode', the consignment consumption reports that are created and either in 'Fresh' or 'Confirmed' status can be viewed.
- xi. The part sale orders pegged against the part are displayed in Ref. Details field and the Unplanned issues created after confirmation of consumption report are displayed in the Addl. Ref. Doc. # field.

**Exhibit 6:** Identifies the **Manage Consignment Consumption Reporting** screen in 'Record' mode



**Exhibit 7:** Identifies the **Manage Consignment Consumption Reporting** screen in 'Modify' mode



**4. GENERATING PART SALE INVOICE AGAINST CONSIGNMENT**

Customer Direct Invoice

Once the parts in the part sale order are issued to the customer, the customer has to be invoiced for the parts issued against a consumption report. The part sale invoices are created in draft mode based on the consumption report number or part sale order number as reference. The invoices are grouped according to the consumption report numbers and then processed.

- i. In the select screen **Select Ref. Doc / Invoice** of the **Manage Pack slip / Bill back Invoice** activity under the **Customer Direct Invoice** business component, an Invoice Type 'Consignment Invoice' is added. See **Exhibit 8**.
- ii. The Ref. Document is selected as 'Part Sale Order' and the respective filters are applied.
- iii. On search, all the unprocessed invoices for a particular consumption report are displayed in the multiline.
- iv. Users can select the invoice generated in 'Draft' status against the part sale order number or the consumption report number and then select **Manage Invoice** link to launch the **Manage Pack slip / Bill back Invoice** screen to process the selected invoices.

**Exhibit 8:** Identifies the **Select Ref. Doc / Invoice** screen

**Select Ref. Doc/Invoice**

Search Criteria

Invoice Type: Consignment Sales Invt  
 Ref. Document: Part Sale Order  
 Addl. Reference: [ ]

Search on: [ ] [ ]  
 f. Doc. Date: [ ] [ ]  
 Addl. Ref. Date: [ ] [ ]

Customer #: [ ]  
 Sys. Billable?: [ ]

Search

Search Results

#	Customer #	Ref. Document	Ref. Doc #	Ref. Doc. Date	Addl. Reference	Addl. Ref #	Addl. Ref. Date	Addl. Ref. Currency
1	1145	Part Sale Order	ACPR-000241-18	01-10-2018		CREP0000272018	01-12-2018	CAD
2								

Save

Manage Invoice

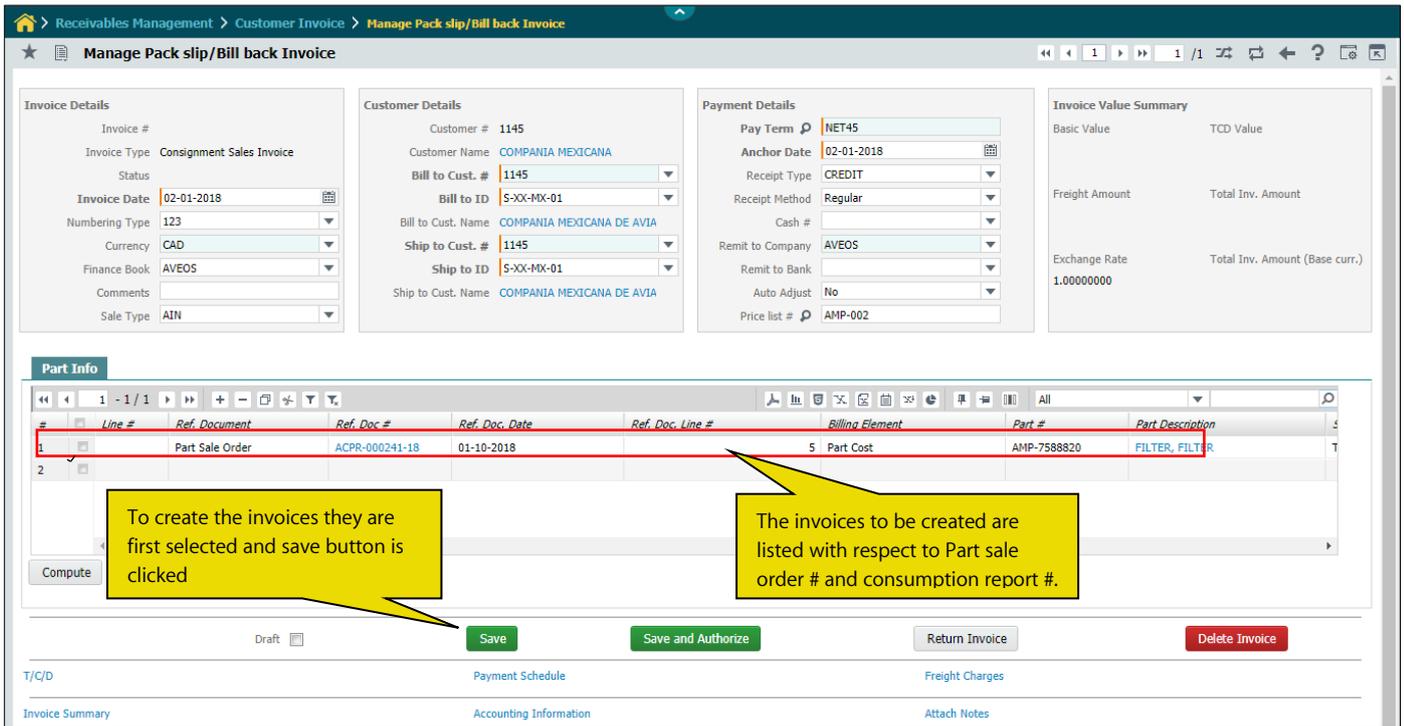
Callouts:

- Select Invoice Type and Ref. Document as mentioned
- Select Manage Invoice link to process selected invoices
- The invoices to be created are listed with respect to Part sale order # and consumption report #.

- i. In the **Manage Pack slip / Bill back Invoice** screen, user can process the invoices selected in the select screen. See **Exhibit 9**.
- ii. The invoice lines in draft are selected, proposed invoice quantity is entered (partial invoicing allowed) and save button is clicked for the creation of the invoice.

**Exhibit 9:**

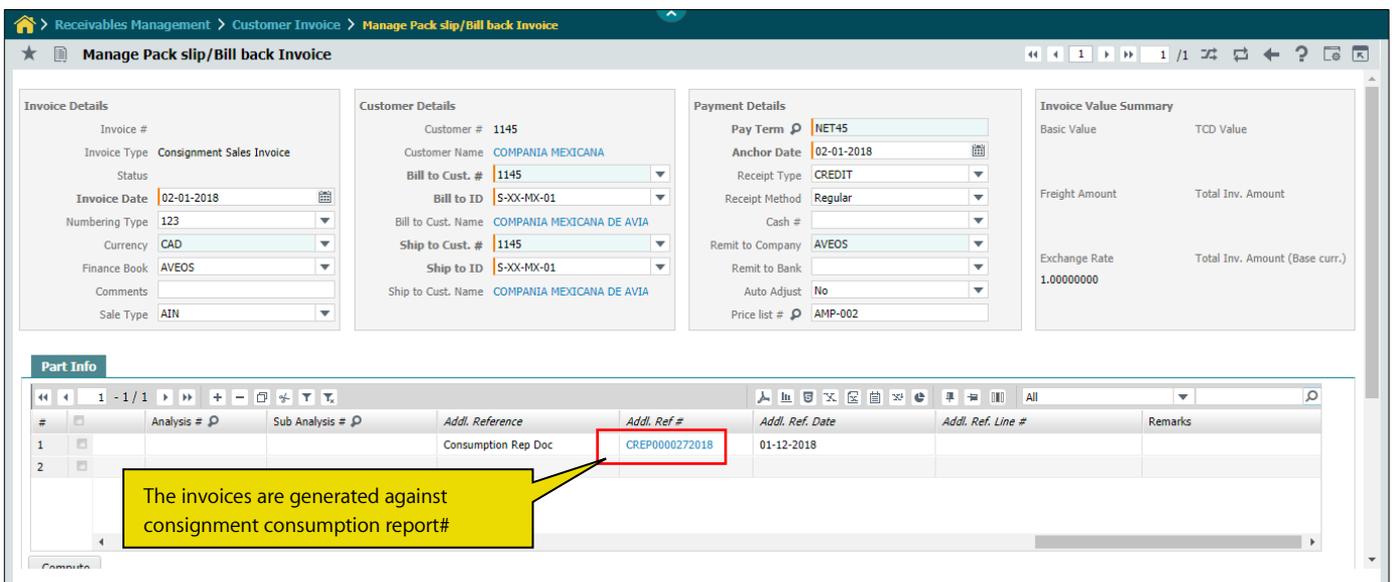
Identifies the **Manage Pack slip / Bill back Invoice** screen for processing the selected invoices



- i. The invoice line is fetched against consumption report number as shown below and is currently in draft mode. (Exhibit 10).

**Exhibit 10:**

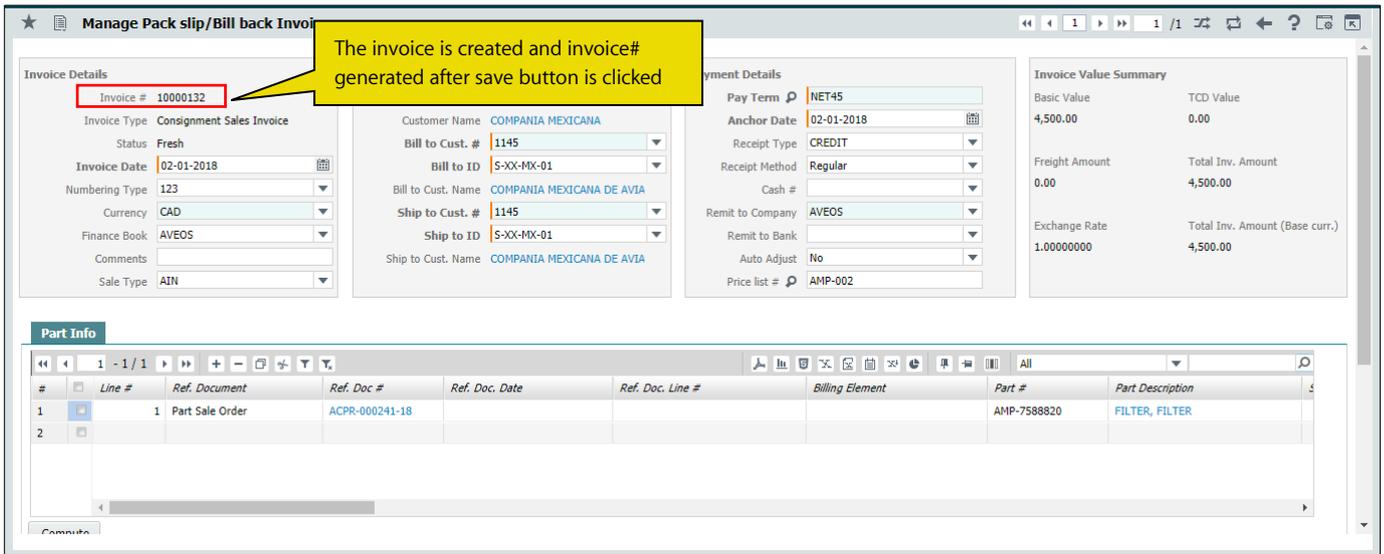
Identifies the invoice fetched against the consumption report number



- ii. Upon saving the invoice, the invoice number is generated as shown below in Exhibit 11.

**Exhibit 11:**

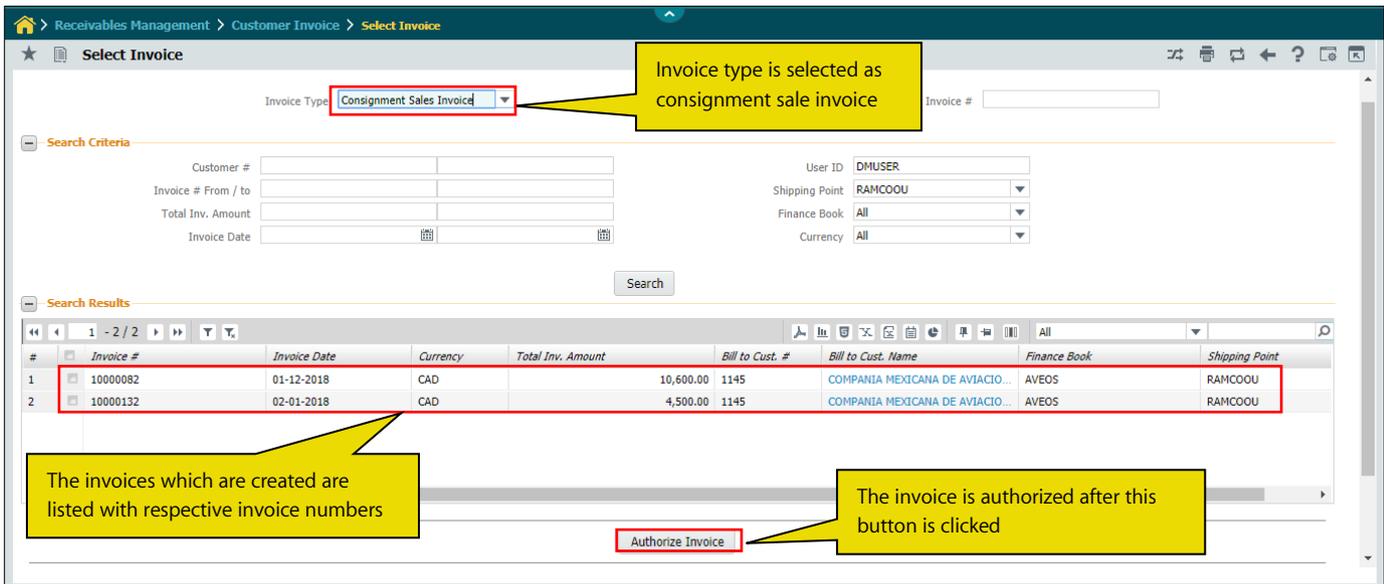
Invoice number generated upon saving of the selected invoices in draft



iii. Invoice is authorized in the screen Authorize invoice as show in **Exhibit 12**.

**Exhibit 12:**

Identifies the **Authorize Invoice** screen to authorize the consignment invoice



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