IAC 01.01. Costing model validation

Process: Product Costing

Responsibility area: Internal Control Monitor

Risk

Wrong fixed cost absorption in inventory, plant costing model do not comply with group rules

Objective

Service Unit Management accounting control plant costing model yearly update

Process description

Costing model is the document which explains the way fixed costs and depreciations are allocated to product costing in order to determine the cost of sales and inventory valuation. FRA are in charge of preparing the costing model based on the budget using the respective template of WP2 or provided by SU MAC (e.g. extract of the cycle structure for PF2).

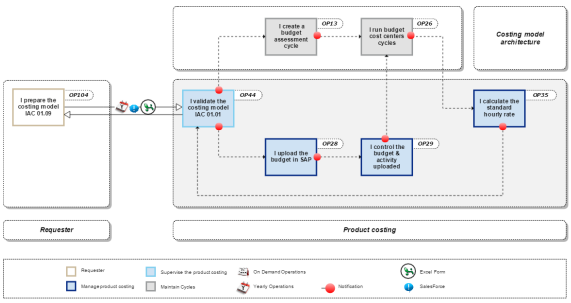
The instruction notes to complete the template of WP2, **under FRA responsibility**, are below:

Costing Model - FRA preparation

FRA asks for the validation of the GCCO.

Control description

Service Unit Management Accounting reviews through a checklist, costing models prepared by each Finance responsible assigned (FRA) of his/her zone and the respective update in SAP done by Service Unit Management accounting. SU MAC is making sure that costing model has been reviewed and validated by the GCCO for each plant in the scope of internal control



Scope

WP2 / PF2

Frequency

Due date : January

Control owner

Service Unit Management accounting - Costing user by region

References

Error rendering macro 'contentbylabel'

parameters should not be empty

Content by label

There is no content with the specified labels

Control evidences

IAC 01.01 Validation of costing model by SU MAC.xlsx

- Checklist
- Costing model - Provided by FRA
- Validation from GCCO - Provided by FRA

Costing Model - FRA preparation **<<**
IAC 01.01. Costing model validation
>> OP.013 & OP.028

Guideline

Download the file IAC 01.01 Costing Model

The check list refers to the template that must be completed by the FRA of each production site - IAC 01.01. Costing model

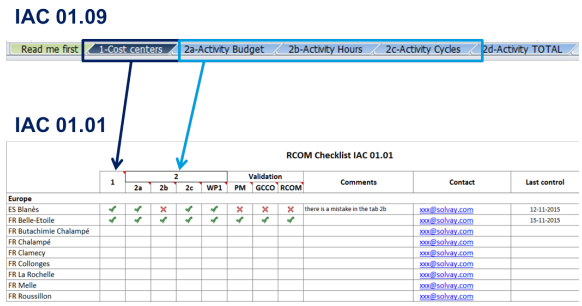
There is a link between Costing Model file & IAC 01.01

-

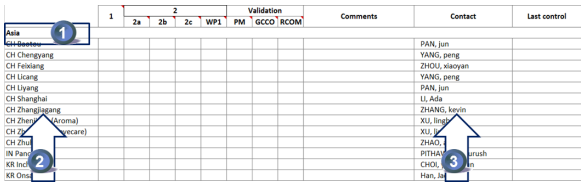
Costing Model file	IAC 01.01
Tab 1-Cost centers	Column B
Tab 2a-Activity Budget	Column C
Tab 2a-Activity Hours	Column D
Tab 2a-Activity Cycles	Column E

-

-



Make sure all production sites (2) in your scope (1) are listed with its contact (3)



Make sure you received all Costing Model file templates in your scope by November D10

Do not hesitate to send reminders in advance or/and plan meetings and calls with each FRA when you feel it is necessary

Once you receive the file IAC 01.01. Costing model sent by a FRA, you must perform several controls

READ ME FIRST

1. Check that all fields highlighted in yellow are completed
2. Check that you have the approval of the the plant manager & the GCCO to get their approval (3)

IAC.01.09 - Costing Model

Check list - Yellow fields must be completed before submission to the RCOM

Plant code	7605	Save the file with the name
Plant name	Incheon	2015_IAC 01.09_7605 Incheon SILICA
Year	2015	
Currency	KRW	
GBU	SILICA	⇐ *Compulsory for multi GBUs plants*
1-Cost centers	OK	
2-Activity rates		
2a-Budget	OK	
2b-Hours	OK	
2c-Cycles	OK	
3-Validation	OK	

Read me first | 1-Cost centers | 2a-Activity Budget | 2b-Activity Hours | 2c-Activity Cycles

1-COST CENTERS

1. Check that all fields are completed

CoCod	Cost C	Description	First	Last	Statu	Profit cent	Responsib	Group
7525	7603-1001	EPO Compounding	Johan	CHOI	Active	Correct	Correct	EPRDOX WORKSHOP
7525	7603-1021	AAO AA Semi Production 1	Johan	CHOI	Active	Correct	Correct	EPRDOX WORKSHOP
7525	7603-1051	PYO AH Salt Production	Johan	CHOI	Active	Correct	Correct	EPRDOX WORKSHOP
7525	7603-1052	PYO Polymerization	Johan	CHOI	Active	Correct	Correct	EPRDOX WORKSHOP
7525	7603-1101	EPO Blending	Johan	CHOI	Active	Correct	Correct	EPRDOX WORKSHOP
7525	7603-1201	EPO Packing	Johan	CHOI	Active	Correct	Correct	EPRDOX WORKSHOP
7525	7603-1221	AAO AA Packing	Johan	CHOI	Active	Correct	Correct	EPRDOX WORKSHOP
7525	7603-1252	PYO Packing CNP & AMO	Johan	CHOI	Active	Correct	Correct	EPRDOX WORKSHOP
7525	7603-1400	EPO Utility	Johan	CHOI	Active	Correct	Correct	ECPXX VARIABLE COSTS
7525	7603-1402	EPO CP Production/Packing	Johan	CHOI	Active	Correct	Correct	ECPXX VARIABLE COSTS
7525	7603-1421	AAO STEAM	Johan	CHOI	Active	Correct	Correct	ECPXX VARIABLE COSTS
7525	7603-1422	AAO Compressed air	Johan	CHOI	Active	Correct	Correct	ECPXX VARIABLE COSTS
7525	7603-1423	AAO Water	Johan	CHOI	Active	Correct	Correct	ECPXX VARIABLE COSTS
7525	7603-1424	AAO Electricity	Johan	CHOI	Active	Correct	Correct	ECPXX VARIABLE COSTS
7525	7603-1425	AAO Waste Water Treatment	Johan	CHOI	Active	Correct	Correct	ECPXX VARIABLE COSTS
7525	7603-1426	AAO Incenerator	Johan	CHOI	Active	Correct	Correct	ECPXX VARIABLE COSTS

Read me first | 1-Cost centers | 2a-Activity Budget | 2b-Activity Hours | 2c-Activity Cycles | 2d-Activity TOTAL

2A-ACTIVITY BUDGET

1. Check that all fields are completed

Cost centers	Description	Cost elements	CNP Budget CNY	Additional CNP CNY	Normal capacity CNY
7897-1101	Synth. Purif CF1-CF2	Labor costs dir	98320100	3.242.623	3.242.623
7897-1101	Synth. Purif CF1-CF2	Other CNP	98300041	7.390.789	7.390.789
7897-1101	Synth. Purif CF1-CF2	Maintenance	98300207	4.663.271	4.663.271
7897-1302	GUAIACOL PRODUCTION	Labor costs dir	98320100	794.470	794.470
7897-1302	GUAIACOL PRODUCTION	Other CNP	98300041	1.567.523	1.567.523
7897-1302	GUAIACOL PRODUCTION	Maintenance	98300207	709.584	709.584
7897-1401	IBCH	Labor costs dir	98320100	808.826	808.826
7897-1401	IBCH	Other CNP	98300041	1.382.610	1.382.610
7897-1401	IBCH	Maintenance	98300207	393.145	393.145
7897-1501	Flavor	Labor costs dir	98320100	1.007.498	1.007.498
7897-1501	Flavor	Other CNP	98300041	1.813.631	1.813.631
7897-1501	Flavor	Depreciation	98340100	7.244.222	7.244.222
7897-1501	Flavor	Maintenance	98300207	775.000	775.000

Read me first | 1-Cost centers | 2a-Activity Budget | 2b-Activity Hours | 2c-Activity Cycles | 2d-Activity TOTAL

2B-ACTIVITY HOURS

1. Check that all fields are completed
2. Control the calculation of the normal capacity
   a. Other constraints must be explained : it can only be technical constraints (usually bottlenecks)
   b. Number of hours for planned

Cost centers	Activities	Hours					
		t2	t3				
		Planned maintenance	Intercampaign changeovers	included in recipe 0yes / 1no	(*)Other constraints	Number of production lines	Normal capacity (h)
7603-1021 AAO AA Semi Production 1	MANHO	480		1		1	8.280
	MACHI	480	-	1		1	8.280
	AMO	480	-	1		1	8.280
7603-1221 AAO AA Packing	MANHO	480		1		1	8.280
	MACHI	480	-	1		1	8.280
	AMO	480	-	1		1	8.280
7603-1051 PYO AH Salt Production	MANHO	420		1		1	8.340
	MACHI	420		1		1	8.340
	AMO	420		1		1	8.340
7603-1052 PYO Polymerization	MANHO	420		1		2	16.680
	MACHI	420		1		2	16.680
	AMO	420		1		2	16.680

Read me first | 1-Cost centers | 2a-Activity Budget | 2b-Activity Hours | 2c-Activity Cycles | 2d-Activity TOTAL

maintenance should be reasonable

c. Compare with the previous year

> In case of doubt, do not hesitate to ask the FRA for more details. If the calculation of the normal capacity doesn't follow the standard, you can ask the FRA to change the calculation. If you need help you can contact a process expert.

2C-ACTIVITY CYCLES

1. Check that all fields are completed
2. Make sure that it is simple (= significant & rounded figures)

Cost centers		7603-1021	7603-1221	7603-1051	7603-1052	7603-1252	7603-1001	7603-1201
7603-1001	EPO Compounding						100	
7603-1021	AAO AA Semi Production 1	100						
7603-1051	PYO AH Salt Production			100				
7603-1052	PYO Polymerization				100			
7603-1101	EPO Blending						100	
7603-1201	EPO Packing							100
7603-1221	AAO AA Packing		100					
7603-1252	PYO Packing CNP & AMO					100		
7603-1400	EPO Utility						100	
7603-1402	EPO CP Production/Packing						100	
7603-1421	AAO STEAM	100						
7603-1422	AAO Compressed air	100						

Read me first | 1-Cost centers | 2a-Activity Budget | 2b-Activity Hours | 2c-Activity Cycles | 2d-Activity TOTAL

STEP 1

Once a file is completed you send it to group email for each region : GBS_Finance_Management_Acc_Bangkok@syensqo.com

GBS_Finance_Management_Acc_Curitiba@syensqo.com

GBS_Finance_Management_Acc_Lisbon@syensqo.com

They will :

- Upload the budget in the system
- Create the assessment cycle
- Calculate the standard rates

STEP 2

You can also update the check list for the IAC 01.01

Just update the columns with "Y" if the information is correctly completed or "N" if it is not.

RCOM Checklist IAC 01.01

	1	2				Validation			Comments	Contact	Last control
		2a	2b	2c	WP1	PM	GCCO	RCOM			
Asia											
CH Baotou	✓	✓	✓	✓	✗	✓	✓	✗	File sent to the BO	xxx@solvay.com	15-11-2015

> When there are changes in the cost centers structure, you must inform the person in charge
>
> Request the modification of a cost center

I am informed once the standard rates are calculated in the system

You must compare the activity rates calculated in the system with what is in the file sent by the FRA

In SAP, you must use the transaction KSBT

In the file IAC 01.01, use the tab : 2b-Activity TOTAL

When the model is too complex, the simulation made in the excel file doesn't work then you have to make further investigation

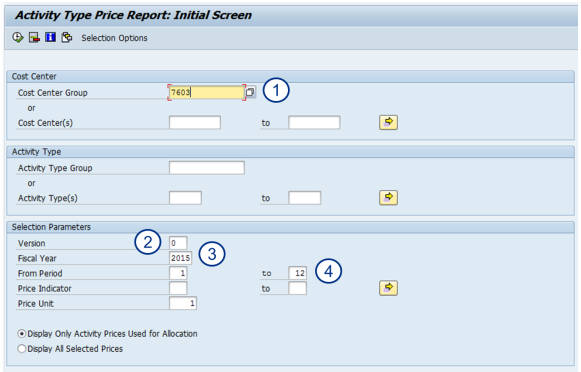
STEP 1

Open the transaction KSBT

Enter :

1. The group of cost centers (usually the plant code)
2. Version = **0**
3. Enter the fiscal year
4. From Period **1** to **12**

Execute



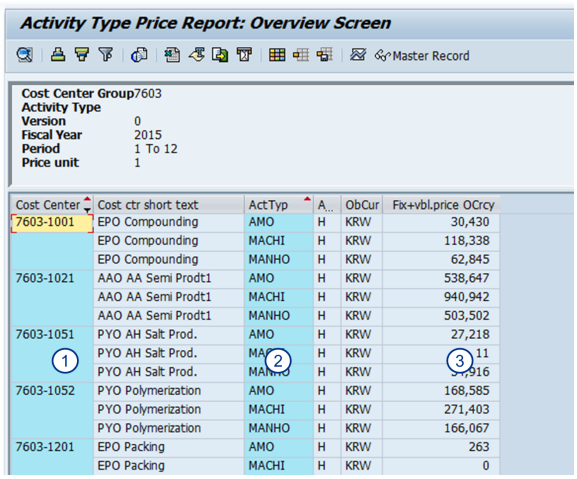
STEP 2

Activity Type Price Report

1. List of cost centers
2. Activity types
3. Price per hour

Make sure you selected the activity price in **object currency** otherwise you must change the layout

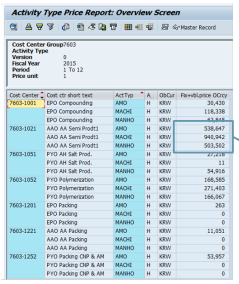
You can export the file in excel

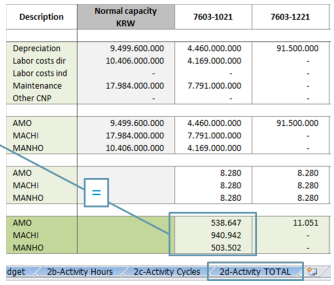


STEP 3

Compare the activity rates with the tab : 2b-Activity TOTAL

If there are discrepancies, you must make further investigations

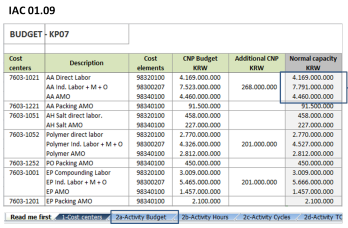


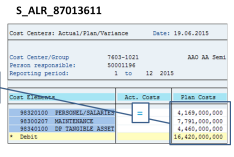


STEP 4

2A-ACTIVITY BUDGET

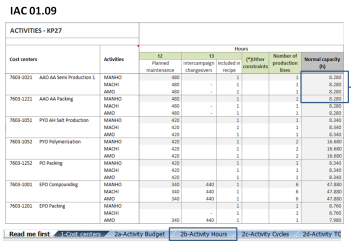
Compare the budget loaded in the system (you can use the t-code S_ALR_87013611) with the budget sent by the FRA

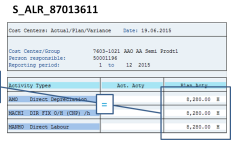




2B-ACTIVITY HOURS

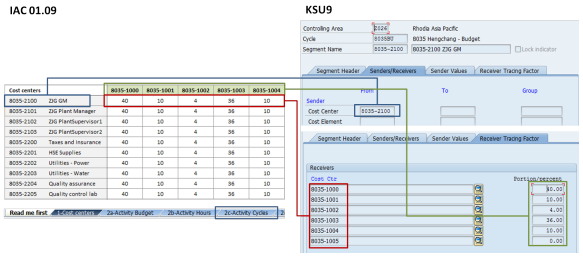
Compare the hours loaded in the system (you can use the t-code S_ALR_87013611) with the hours sent by the FRA





2C-ACTIVITY CYCLES

Compare the cycle created in the system (code = *PPPP*BU => *PPPP* = plant code) with the t-code KSU9



STEP 5

Inform the person who calculated the standard in the system if there is a mistake in the system

I inform the requester that the standard rates are in the system

STEP 1

Once the standard rates of a plant are loaded in WP2 and approved you must update the check list

RCOM Checklist IAC 01.01

	1	2				Validation			Comments	Contact	Last control
		2a	2b	2c	WP1	PM	GCCO	RCOM			
Asia											
CH Baotou	✓	✓	✓	✓	✓	✓	✓	✓	Fully completed	xxx@solvay.com	05-12-2015

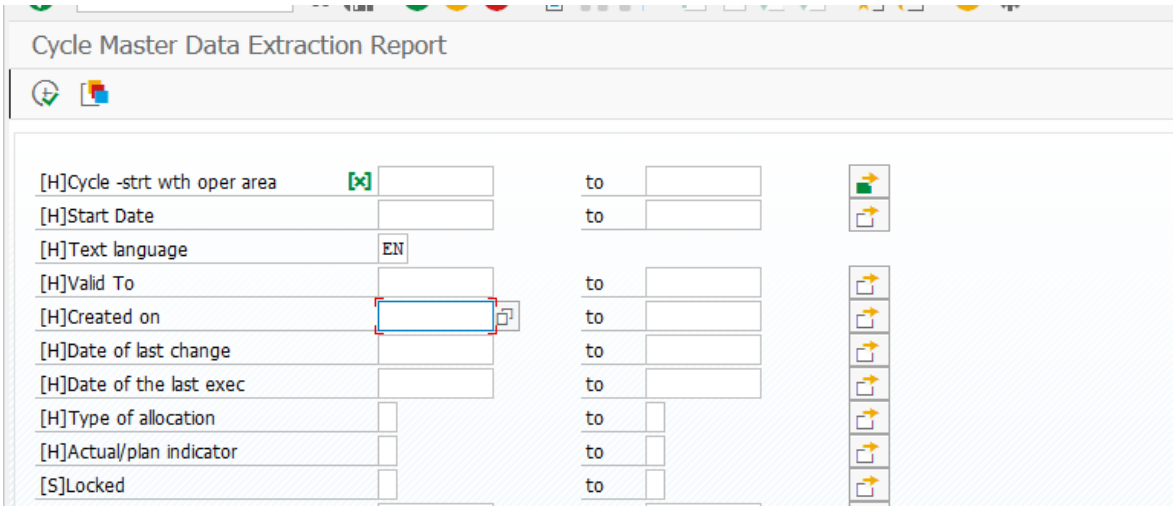
STEP 2

Once the check list is fully completed for your scope, you must uploaded in the dedicated folder in the IAC controls repository

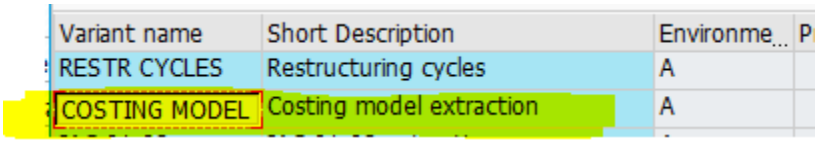
RCOM Checklist IAC 01.01

	1	2				Validation			Comments	Contact	Last control
		2a	2b	2c	WP1	PM	GCCO	RCOM			
China											
CH Baotou	✓	✓	✓	✓	✓	✓	✓	✓	Fully completed	xxx@solvay.com	05-12-2015
CH Chengyang	✓	✓	✓	✓	✓	✓	✓	✓	Fully completed	xxx@solvay.com	06-12-2015
CH Feixiang	✓	✓	✓	✓	✓	✓	✓	✓	Fully completed	xxx@solvay.com	07-12-2015
CH Licang	✓	✓	✓	✓	✓	✓	✓	✓	Fully completed	xxx@solvay.com	08-12-2015
CH Liyang	✓	✓	✓	✓	✓	✓	✓	✓	Fully completed	xxx@solvay.com	09-12-2015
CH Shanghai	✓	✓	✓	✓	✓	✓	✓	✓	Fully completed	xxx@solvay.com	10-12-2015
CH Zhangjiagang	✓	✓	✓	✓	✓	✓	✓	✓	Fully completed	xxx@solvay.com	11-12-2015
CH Zhenjiang (Aroma)	✓	✓	✓	✓	✓	✓	✓	✓	Fully completed	xxx@solvay.com	12-12-2015
CH Zhenjiang (Novecare)	✓	✓	✓	✓	✓	✓	✓	✓	Fully completed	xxx@solvay.com	13-12-2015
CH Zhuhai	✓	✓	✓	✓	✓	✓	✓	✓	Fully completed	xxx@solvay.com	13-12-2015

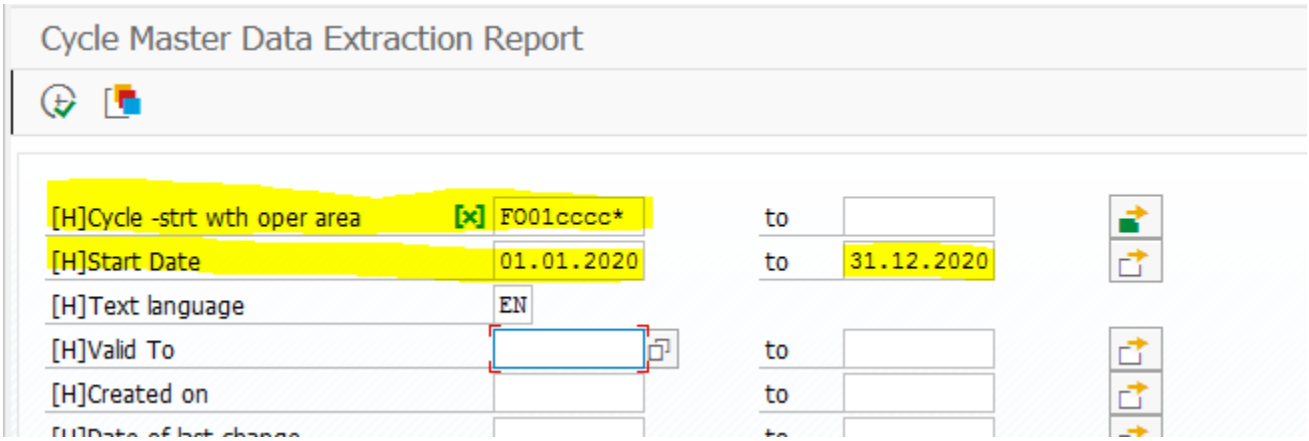
Use transaction ZWFAR600 to extract the cycles for the year that is ending.



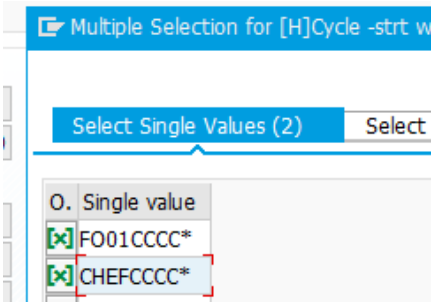
Choose the following variant "COSTING MODEL"



Updating the **cycles** and **start date**



Cycle should be completed like this:



- **FO01CCCC***: for COPA cycles
- **CHEFCCCC***: for Assessment cycles

Start date, to be completed with the full year that is just ending

And now, transaction can be executed to get the following view

Cycle Master Data Extraction Report

[H]Cycle	Valid From	[H]Cycle text	L...	[H]Valid To	S	Created on	[H]Entered by	Changed On	Changed by	Seg...	Segment	[S]Segment text	L	Sender %	Assess. CE
CHEF4056BN	01.01.2020	Bonus accrual - Social Charges	EN	31.12.2020	3	11.11.2019	PT400078	06.03.2020	PT400078	1	4056BONUS	alloc social charges R33310		3,00	9629200201
CHEF4056BN	01.01.2020	Bonus accrual - Social Charges	EN	31.12.2020	3	11.11.2019	PT400078	06.03.2020	PT400078	1	4056BONUS	alloc social charges R33310		3,00	9629200201
CHEF4056BN	01.01.2020	Bonus accrual - Social Charges	EN	31.12.2020	3	11.11.2019	PT400078	06.03.2020	PT400078	2	4056BONU...	alloc social charges R33310		3,00	9629200201
CHEF4056BN	01.01.2020	Bonus accrual - Social Charges	EN	31.12.2020	3	11.11.2019	PT400078	06.03.2020	PT400078	2	4056BONU...	alloc social charges R33310		3,00	9629200201

-

Below see the details of this report:

The report is designed in PF2 & WP2 to extract CO cycle master data with standard ALV layout, which is compatible for kinds of cycles, including:

- COPA Actual assessment cycle
- COPA Plan assessment cycle (not used in RCS)
- Cost center Actual Assessment cycle
- Cost center Plan Assessment cycle
- Cost center Actual Distribution cycle
- Cost center Plan Distribution cycle

Column label in report output

As a cycle consists of kinds of information at header / segment level, and in each segment, there are fields for sender / receiver respectively, and even for receiver side, the percentage split can be applied for multi-receiver objects.

So, to facilitate identifying the column nature and improve the report understandability, a prefix is assigned for each column label:

- '[H]' stands for header level data, for example '[H]Cycle'.
- '[S]' stands for segment general data, for example '[S]Segment Name'.
- '[S-S]' stands for segment sender data, for example '[S-S]Sender Cost Center / grp'
- '[S-R]' stands for segment receiver data, for example '[S-R]IECRA'
- '[S-T]' stands for segment receiver (or sender) multi objects split data, for example '[S-T] Factor Value'.

Cycle master data extraction report

[H]Table	[H]Cycle	[H]Start Date	[H]Cycle text	[H]Text language	[S]Segment number	[S]Segment Name	[S]Segment text
CCSS	Z0010228MA	01.01.2005	test maintenance externe	EN	1	MAINTFOR	external maintenance gorzow
CCSS	Z001BEPI01	01.01.2002			1	WATER1	
CCSS	Z001BEPI01	01.01.2002			2		
CCSS	Z001BEP				3		
CCSS	Z001BEP				4		
CCSS	Z001BEPI01	01.01.2002			5	USTEAM1	
CCSS	Z001BEPI01	01.01.2002			6	UOTHER1	

[H] column

[S] column

Two options available in output

As a cycle allows for the percentage split in the case of multi receiver objects, it makes difficult to show all information in a single output with good understandability.

With this consideration, 2 output options are designed:

Output Options

Output options

- Standard output
- Extended output with multi-object split

- Standard output
  - Each row represents a unique segment in a cycle, showing cycle header data / segment general data / sender data / receiver data.

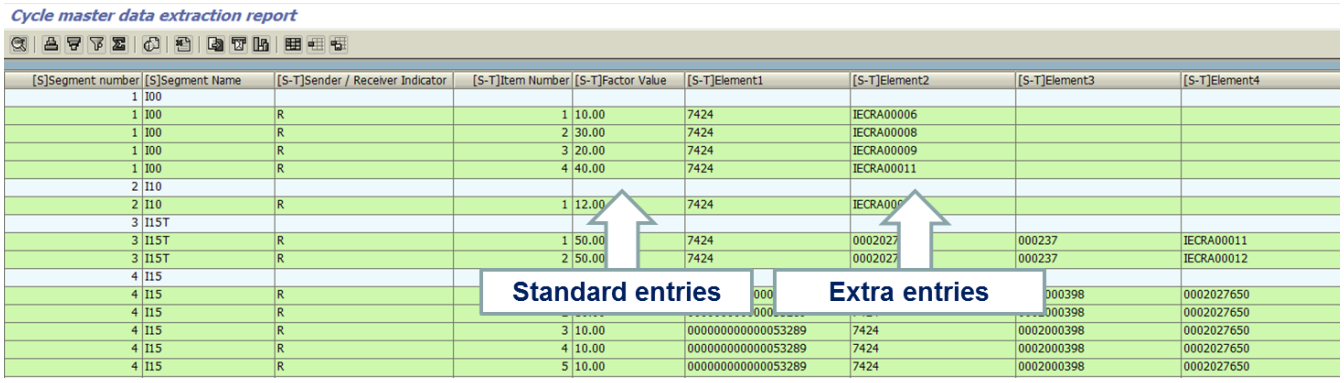
    - But multi-object split info is excluded here.
    - Column with '[S-T]' prefix in label is not available in the option.

- Extended output with multi-object split

    - This layout is recommended ONLY when user needs to check the multi-object split percentage.
    - Column with '[S-T]' prefix in label is feed in the option.
    - All multi-object split info is showed as extra rows, means, all rows showed in Standard layout will be showed here as well exactly, but append some extra rows which are dedicated to show the multi-object split info. In other words, Extended output = Standard output + extra entries for multi-object split info.

Coloring the entries for multi-object split info

- In Extended output with multi-object split, the extra entries for split info is highlighted in light green color. See below picture for example.
- PS: Another way to differentiate the extra entries is to use one of below 2 columns:
- [S-T] Sender / Receiver Indicator. When it is not Null, it's the extra entries.
- [S-T] Item Number. When it is not Null, it's the extra entries.



[S]Segment number	[S]Segment Name	[S-T]Sender / Receiver Indicator	[S-T]Item Number	[S-T]Factor Value	[S-T]Element1	[S-T]Element2	[S-T]Element3	[S-T]Element4
1	I00							
1	I00	R	1	10.00	7424	IECRA00006		
1	I00	R	2	30.00	7424	IECRA00008		
1	I00	R	3	20.00	7424	IECRA00009		
1	I00	R	4	40.00	7424	IECRA00011		
2	I10							
2	I10	R	1	12.00	7424	IECRA00[illegible]		
3	I15T							
3	I15T	R	1	50.00	7424	0002027[illegible]	000237	IECRA00011
3	I15T	R	2	50.00	7424	0002027[illegible]	000237	IECRA00012
4	I15							
4	I15	R	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]000398	0002027650
4	I15	R	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]000398	0002027650
4	I15	R	3	10.00	000000000000053289	7424	0002000398	0002027650
4	I15	R	4	10.00	000000000000053289	7424	0002000398	0002027650
4	I15	R	5	10.00	000000000000053289	7424	0002000398	0002027650

Tips to know the cycle category

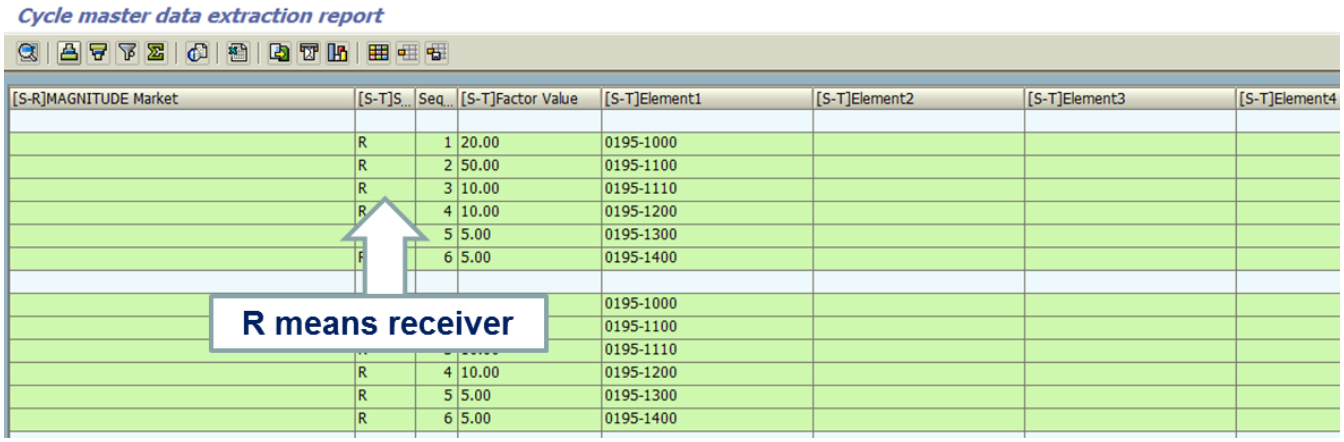
Below 3 columns can be used to understand the feature of certain cycle.

- [H]Table, to know it's cost center or COPA cycle
    - CCSS -- Cost center cycle
    - CE7Z0xx -- COPA cycle (Z0xx is the operation concern code)
- [H]Actual/plan indicator, to know it's Actual or Plan cycle.
    - I -- Actual
    - P -- Plan
- [H]Type of allocation, to know it's Assessment or Distribution cycle.
    - U -- Assessment
    - V -- Distribution
    - L -- Indirect activity allocation
    - … etc.

Receiver / Sender multi-objects split

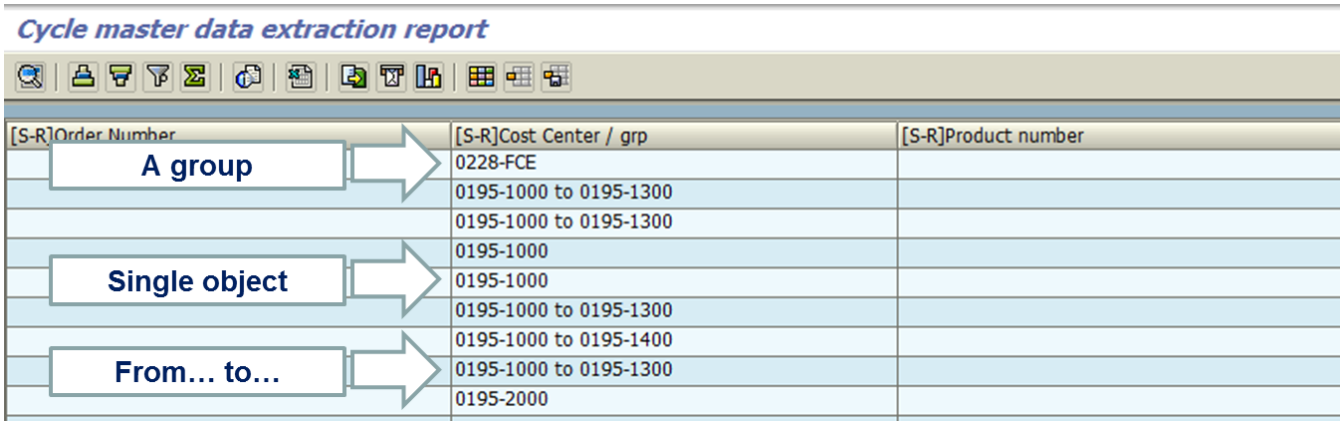
- In WP1, the percentage split is widely used at receiver side for multi-object case. But in some limited case, a specific amount is given to individual cost elements to restrict the allocation at sender side. For the both cases, in the report output, the information will be showed in the same columns with prefix '[S-T]'.
- For users, to know the split information is for receiver or sender, column '[S-F]Sender / Receiver Indicator' can answer,

    - when the value is 'R', the entry is for receiver factor,
    - when the value is 'S', the entry is for sender factor.



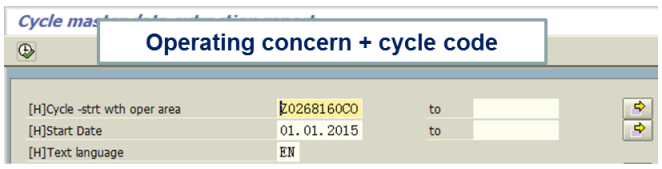
Combine ‘from’ ‘to’ ‘group’ into one field

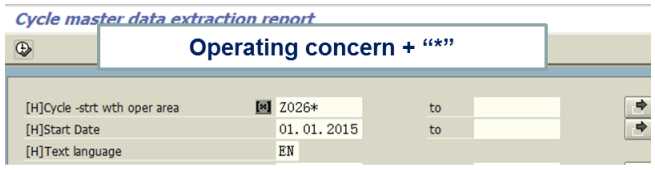
- When creating a cycle, to specify sender / receiver, user can input ‘from’ only to show a single object, or input ‘from’ and ‘to’ to show a range, or even use ‘group’ to show a collection list.
- In order to reduce the column quantity in the report output, the information in ’from’ ‘to’ ‘group’ is combined into one single column.

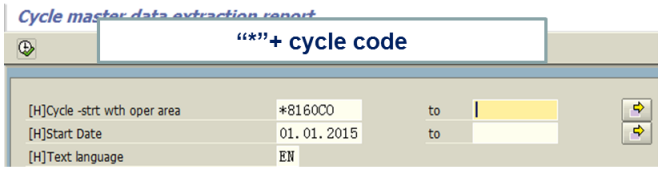


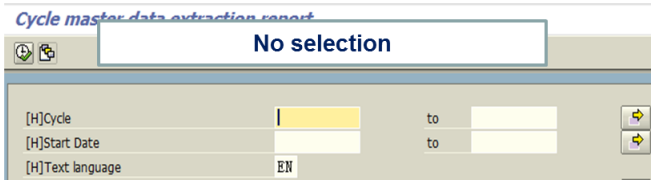
‘[H]Cycle’ code start with operation concern

- When put cycle code as selection criteria, please start with the operation concern code then follow by cycle code, as this is the way SAP store the cycle master data in tables.
- As a tip, all below options work



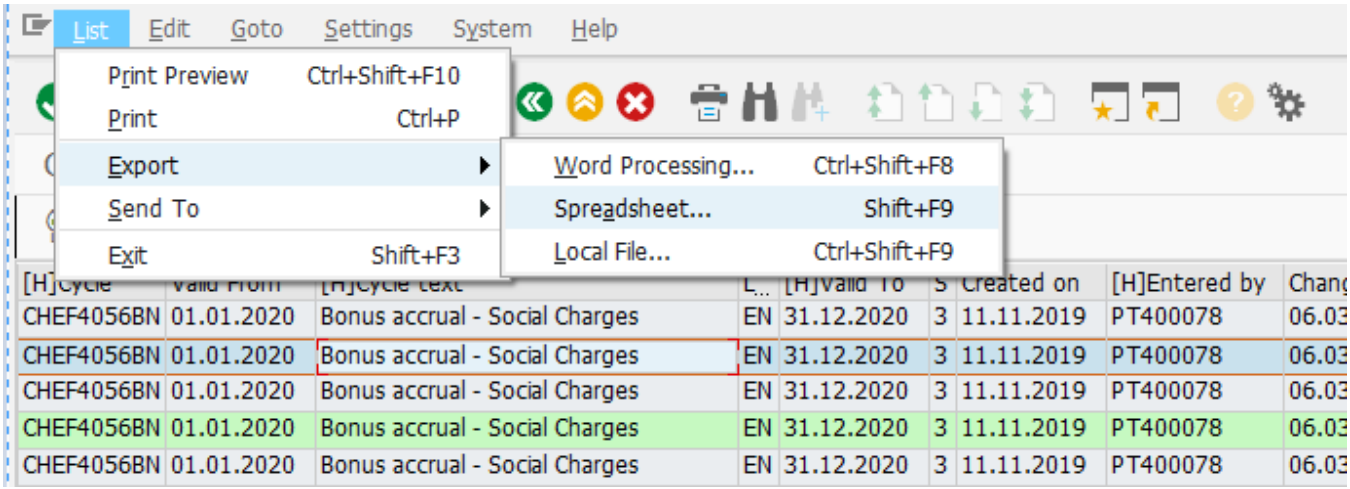






When transction ZWFAR600 is executed and you have the list of all cycles, it is time to extract to excel.

1) Go to List Export Spreadsheet



This excel document will be the COSTING MODEL of your company.
1) Send through Solvay One the COSTING MODEL extracted in previous step to the FRA/Controller to be used in the review of the cycles for the new year
After the review, I receive from FRA the cycle changes for the new year.

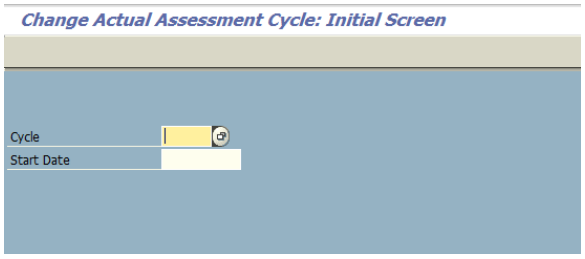
- With the changes highlighted in the COSTING MODEL
- Or, changes detailed in the freshdesk

Depending on the type of cycle, I use KSU2, KEU2, KSV2

STEP 1

Start the transaction using transaction code KSU2

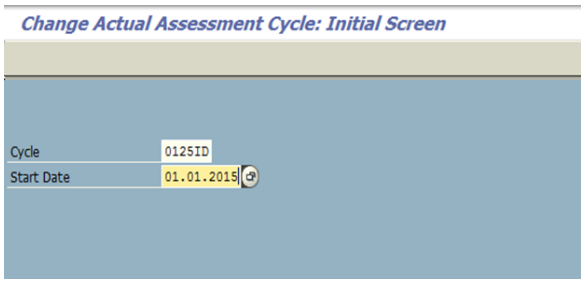
Change Actual Assessment Cycle: Initial Screen



STEP 2

Enter the cycle code and the starting date

and ENTER ↵

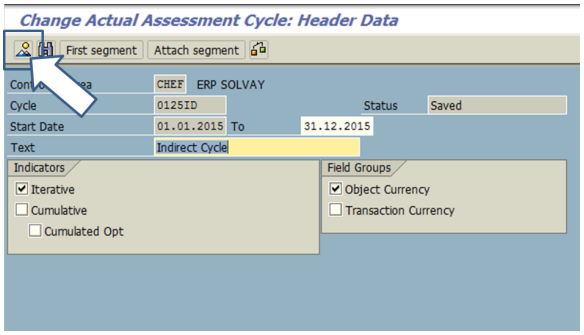


If you don't know the Starting Date, do not insert the date, ENTER ↵ and choose the most recent one.

STEP 3

Open the Segment Overview dialog box

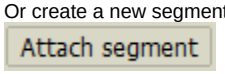
Click

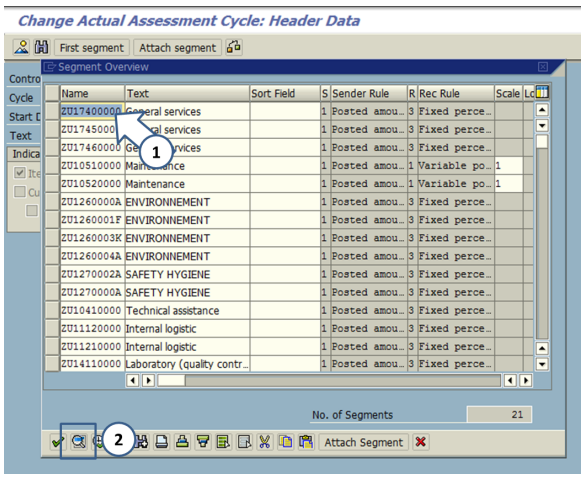


STEP 4

Select the segment to be updated and choose

Or create a new segment by clicking

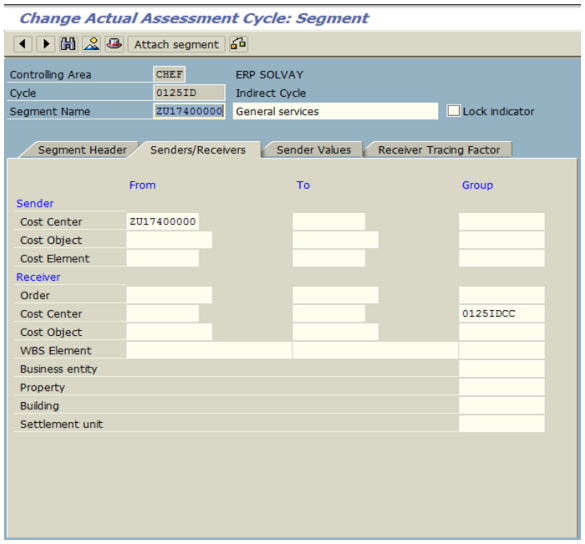




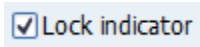
STEP 5

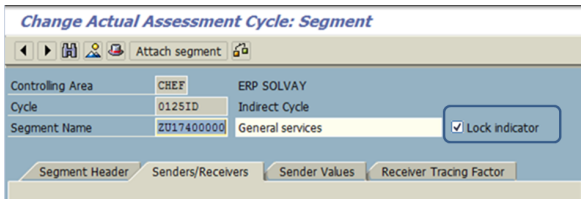
Make the appropriate changes to the segment as required

> Please see KSU1 - Create Actual Assessment Cycle to better understand the changes that can be performed.



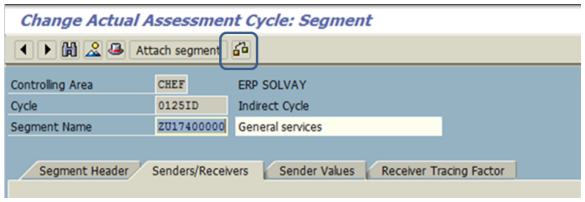
You can lock a segment, by checking the lock indicator box





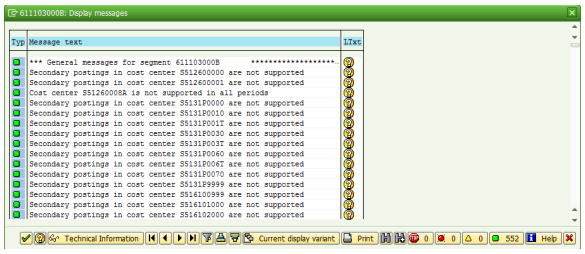
STEP 6

After the appropriate changes to the segment, click on , to do a Formal Check.



If there is any errors , you need to analyse and correct.

Disregard Warnings



STEP 7

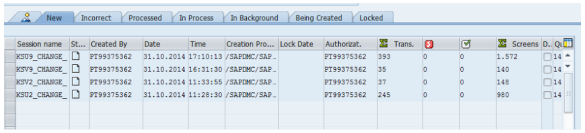
After the appropriate changes and the formal check Save .

STEP 8

It is also possible to perform mass changes on cycles in terms of dates.

To do so, please contact IS Team by the appropriate tool, requesting the creation of a LSWM and providing the respective list of the cycles to be changed.

Afterwards, IS Team will request to process the batches sessions created for this purpose.

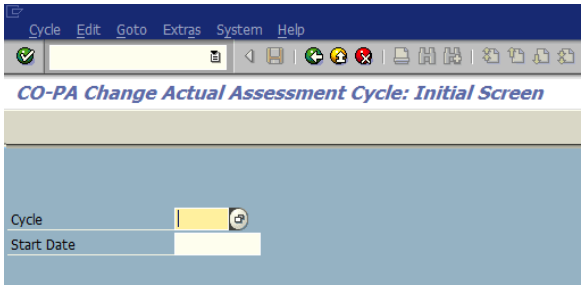


Before starting, make sure you are in the right operating concern with KEBC - Setting Operating concern. List of operating concern : Rules - CO structure

STEP 1

Start the transaction using transaction code KEU2

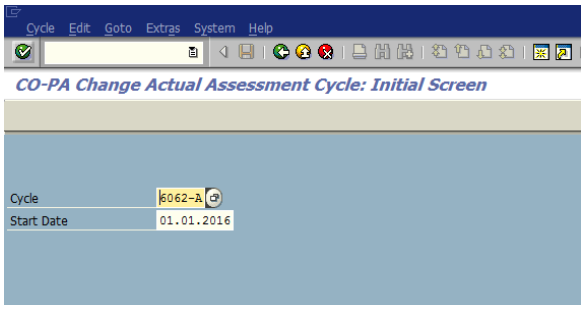
CO-PA Change Actual Assessment: Initial Screen



STEP 2

Enter the cycle code and the starting date

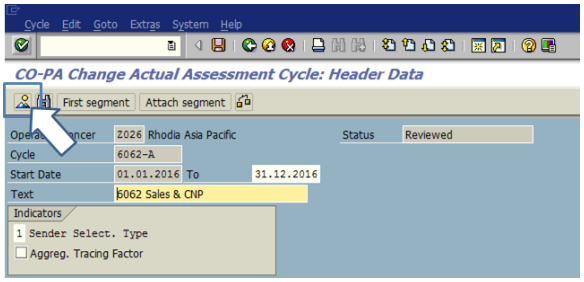
and ENTER ↵



STEP 3

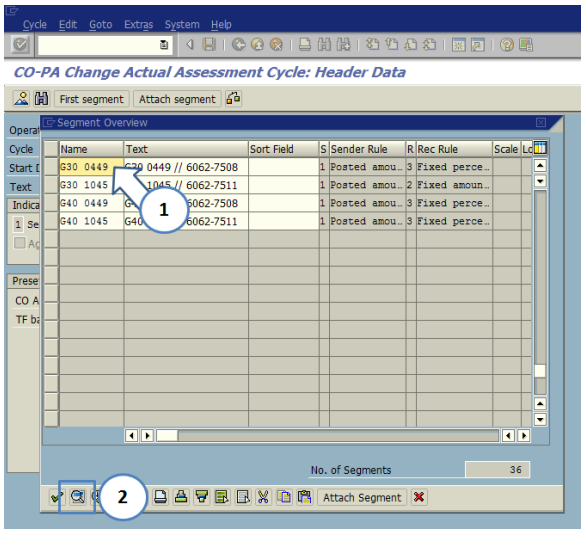
Open the Segment Overview dialog box

Click

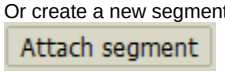


STEP 4

Select the segment to be updated and choose

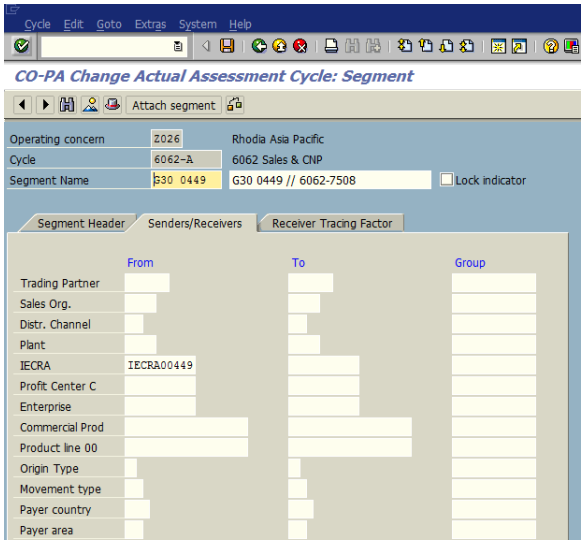


Or create a new segment by clicking



STEP 5

Make the appropriate changes to the segment as required and save



STEP 6

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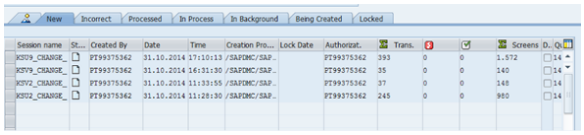
Afterwards, IS Team will request to process the batches sessions created for this purpose.



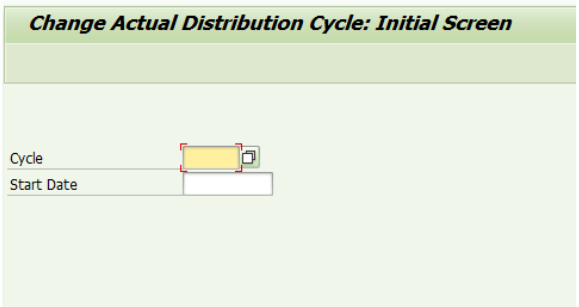
STEP 1

Start the transaction using transaction code KSV2

Change Actual Distribution Cycle: Initial Screen

Budget Distribution

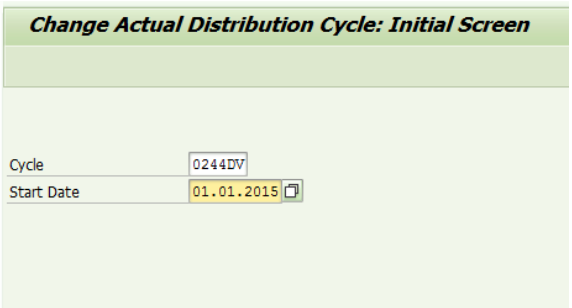
For budget distribution allocations insert KSV8.



STEP 2

Enter the cycle code and the starting date

and Enter ↵

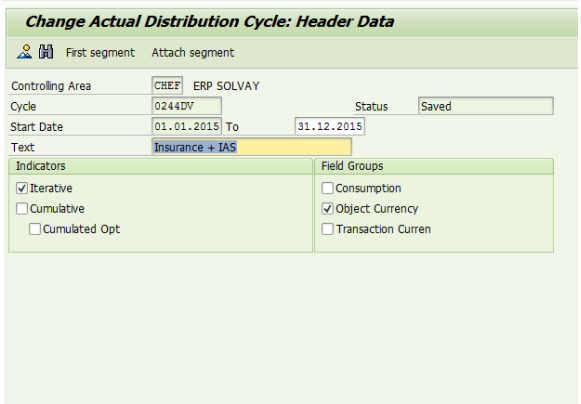


If you don't know the Starting Date, do not insert the date, Enter ↵ and choose the most recent one.

STEP 3

Open the Segment Overview dialog box

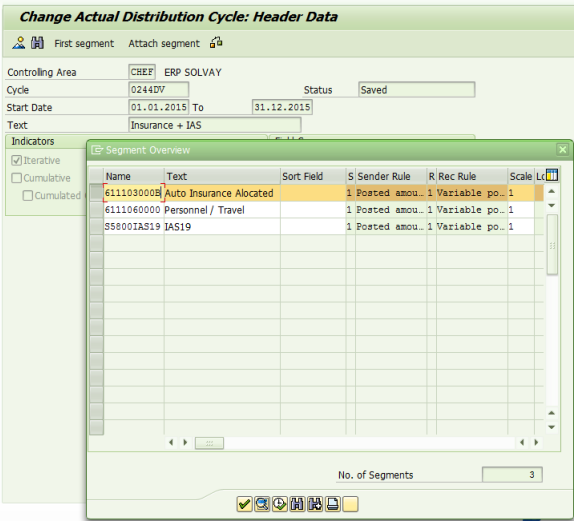
Click



STEP 4

Select the segment to be updated and choose

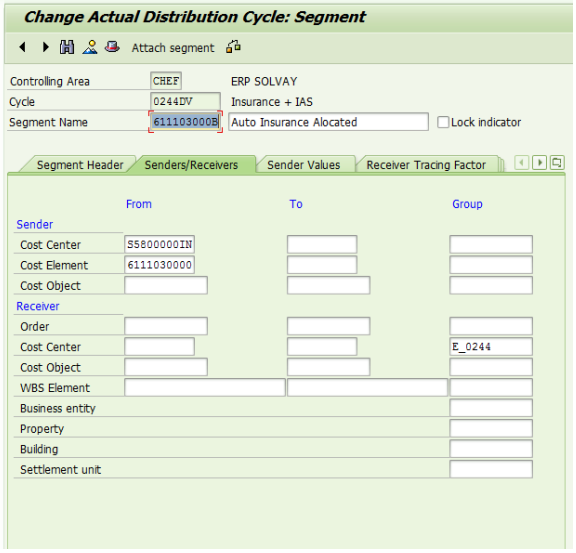
Or create a new segment by clicking Attach segment



STEP 5

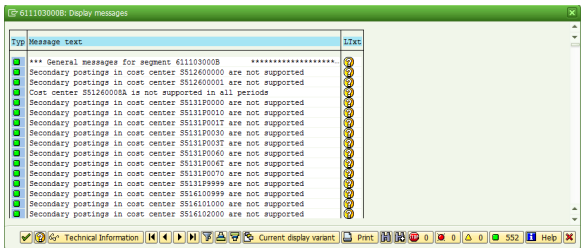
Make the appropriate changes to the segment as required

Please see KSV1 - Create Actual Distribution Cycle to better understand the changes that can be performed.



STEP 6

After the appropriate changes to the segment, click on , to do a Formal Check.



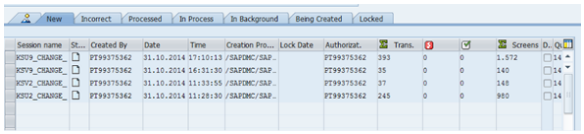
If there is any errors , you need to analyse and correct.

Disregard Warnings

STEP 7

After the appropriate changes and the formal check Save .

STEP 8



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Afterwards, IS Team will request to process the batches sessions created for this purpose

I inform FRA/Controller that the cycles are updated in SAP