Controlling Cost Center Acc. (CO-CCA)

This document is intended to help instructors understand the case study process and manage the learning process in and outside the classroom. The main focus lies on prerequisites and common tasks such as testing and trouble-shooting.

Product

SAP S/4HANA 2022
Global Bike

Fiori 3.0

Level

Instructor

Focus

Controlling

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Version

4.2

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MOTIVATION

Theoretical lectures explain concepts, principles, and theories through reading and discussion. Therefore, they enable students to acquire knowledge and gain theoretical insights.
In contrast, case studies allow them to develop their abilities to analyze enterprise problems, learn and develop possible solutions, and make sound decisions.

The main objective of the Global Bike case studies in general is for students to understand the concept of integration. These descriptive and explanatory case studies will allow students to understand the importance and the advantages of integrating enterprise areas using an S/4HANA system.

The main goal of this document is to help instructors prepare the SAP system for the case study process and to support them trouble-shoot problems that might occur during the course.

Beside technical and didactic prerequisites, the lecturer notes list SAP transactions for testing and correcting student results in the SAP system. In addition, this document describes common problems and explains their reason and solution.

SAP University Alliances

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Prerequisites

Note Before using this case study in your classroom please make sure that all technical (month-end closing, user management etc.) and didactic prerequisites are fulfilled. Such prerequisites are briefly pointed out below. Detailed documentation can be displayed at and downloaded from the *Learning Hub of SAP UA* or the *UCC websites*.

Technical Prerequisites

The Controlling case study CCA is based on a standard SAP S/4HANA client with the current Global Bike dataset. Before processing the case study on your own or with your students all general setting should be checked.

Note With the current version of the Global Bike client a **year-end closing** is not necessary, because it has already been automated or because it is not needed for the process described in the curriculum material.

~~Year-end closing~~

User accounts in the SAP system need to be created or unlocked.

User management

These student user accounts should end with a three-digit numeric number (e.g. LEARN-001, LEARN-002 etc.). This number will be represented by ### in the case study and helps differentiate customer accounts, products etc.

In an SAP S/4HANA Global Bike client, 1000 user accounts from **LEARN-000** to **LEARN-999** already exist. These users need to be unlocked. The initial password for each LEARN-### account is set to **tlestart**.

LEARN-000 to LEARN-999

tlestart

Transaction ZUSR (app User Maintenance) was developed in the Global Bike client in order to mass maintain SAP user accounts. For a detailed description of this and SAP standard transactions for user management (**SU01** and **SU10**) please refer to the lecturer notes „User Management“ (see: current Global Bike curriculum → chapter 99 – Instructor Tools).

SU01
SU10

All LEARN-### user accounts have been assigned to the role *Z_UCC_GBI_SCC* and have authorizations to use all applicative transactions in the SAP S/4HANA system. The role allows access to all transactions necessary for Global Bike exercises and case studies. If you need access to system-critical transactions, i.e. for development purposes, you may assign the composite profile *SAP_ALL* to your student accounts.

It is useful for the instructor to have a user account available for testing that has the same authorizations as the student accounts. You may use the predefined instructor account **LEARN-000** for this purpose.

Instructor account LEARN-000

Didactic Prerequisites

Navigation

In order to successfully process this case study, students should be familiar with the **navigation** in SAP systems, especially the SAP Fiori Launchpad, the SAP transaction concept as well as possible documentation and help options. We highly recommend using the *navigation slides* and the *navigation course* (see: current Global Bike curriculum → chapter 2 – Navigation).

Company background

In addition, it has been proven beneficial that students have a thorough understanding of the **historic background** and the enterprise structure of the Global Bike concern before they start working on the SAP system. For this purpose we recommend the *case study „Global Bike Inc."* (see: current Global Bike curriculum → chapter 3 – Global Bike).

Because the case study is not based on the exercises, it is not necessary to have processed the CO exercises before you start with the case study. However, it is recommended.

Global Bike client version

In order to function properly this case study needs a **Global Bike client version** that is equal to or higher than the case study version (see cover page). Please check. If you do not know the client version please use the app **Global Bike Version** within your SAP S/4HANA system or contact your UCC team.

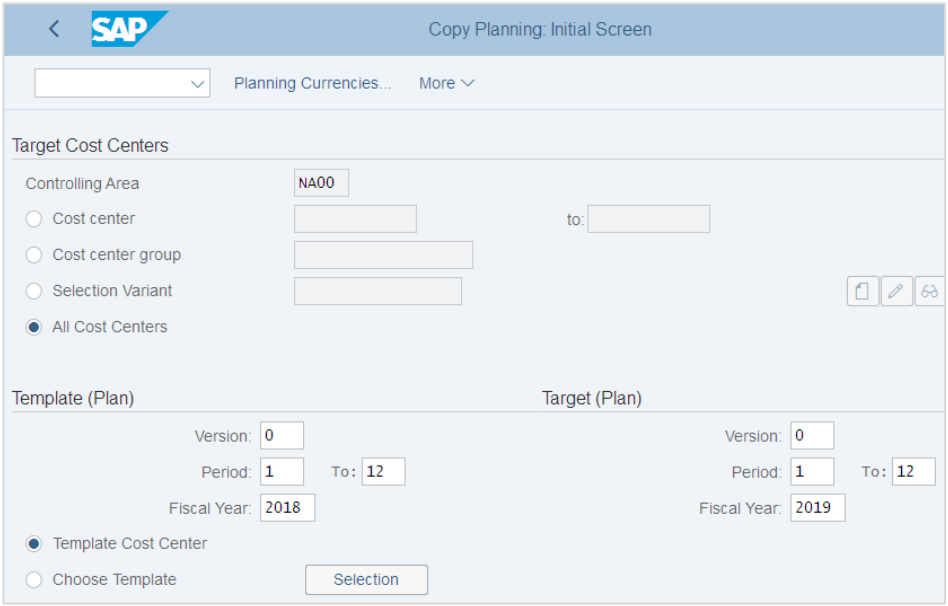
Since Cost Center planning is done for the current fiscal year copying planning data into the next fiscal year is necessary if the case study is processed over the year change.

KP97

Copying can be done in transaction **KP97** in SAP GUI which will produce the following screen:

NA00

Enter **NA00** as Controlling Area if necessary.



All Cost Centers
0
1-12

Select the radio button **All Cost Centers**, use version **0** with periods **1** to **12** and enter the years accordingly, i.e. if you taught a winter term 2021/2022 use 2021 in Template (Plan) and 2022 in Target (Plan).

Make sure too uncheck the Test Run field and click on Execute.

Leave the transaction by clicking Exit and Yes in the following window.

Locking mechanism

Problems with the locking mechanism in the SAP system (due to master data being processed simultaneously by different participants) occur in this case study when:

- Saving the cost center (short-term lock of the standard hierarchy)
- Assessing canteen costs
- Automatically calculating the prices of activity types

You must emphasize to the students that this behavior does not represent an error in the system, but is a sensible automatic measure to prevent inconsistencies in the database. The authors of the case study have tried to prevent lock situations by allowing participants to maintain only their own master data as much as possible.

As a lecturer, you should ensure that students return to the SAP Fiori Launchpad during long breaks in ALL MODES to prevent other participants from being locked.

If the lock situation gets out of control, for example, if several users reach the same step in the case study at the same time, the lecturer should coordinate the processing of the app, that is, allow one student after another complete the step.

NOTE You can double-click the red warning message to determine which participant is currently preventing others from processing the transaction.

Global Feedback

Do you have any suggestions or feedback about Global Bike? Please send it to our new email-address **gbi@ucc.ovgu.de** which is used to gather feedback globally. All emails will be evaluated by the persons responsible for the curriculum bi-weekly. This way your feedback might influence future releases directly.

Please note that any support requests send to this email-address will be ignored. Please keep using the common support channels for your support requests.

Student Assessment

Note With the App below you can check and correct master and transactional data that your students have created during your course.

Global Bike Monitoring Tool (beta)

We are developing a Global Bike Monitor, which is available for the CO-CCA case study.

A detailed tutorial for this tool is available in the module *99 Instructor Tools* of the current Global Bike curriculum.

Please keep in mind that this transaction is an additional functionality designed by the UCC Magdeburg and still in development. Therefore, we kindly ask you to send any feedback or detailed error descriptions to the following address: **gbi@ucc.ovgu.de**

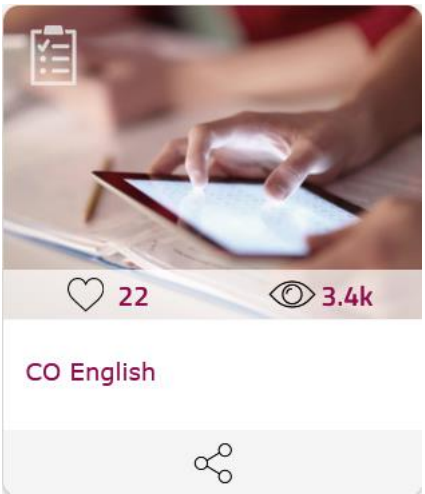
Learning Snacks CO

Note With the Learning Snacks CO you can check your learning success in the module CO.

What is Learning Snacks ?

Learning Snacks offers the possibility to check the knowledge gained during the case studies and exercises by means of small single-choice questions. Depending on the selected module, you can play through a Learning Snacks (CO here). Learning Snacks can be used with or without prior registration. By having your own account, you can create snacks yourself, like other snacks and receive some kind of points for each question you answer correctly.

You can find detailed instructions on Learning Snacks in the module "98 Cross-Module".



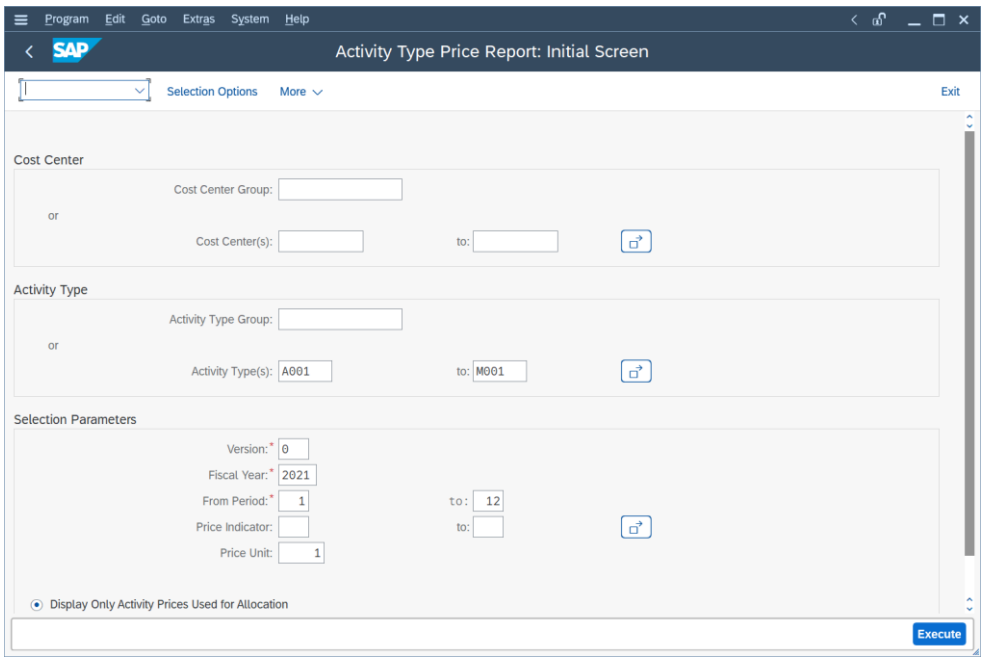
Result Verification

Note SAP offers several methods of verifying planned values within Controlling. Two transactions are suitable for controlling if the class is finished and if so that they have the proper values. These two transactions also offer a good starting point for error tracing.

Activity Prices Given the values in the case study the activity prices should be 45.00 USD for A### and 50.00 USD for W###.

Open transaction **KSBT** in SAP GUI which will produce the following screen.

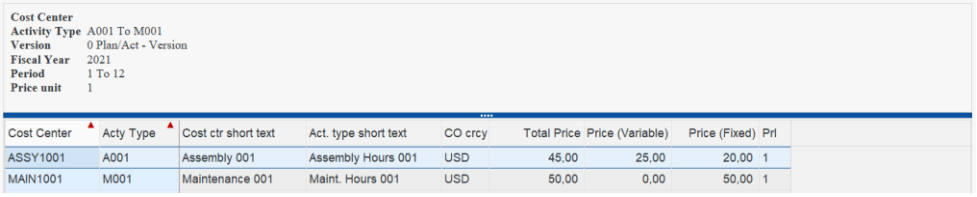
KSBT



Select the cost activity types as shown in the picture above (A### to M###). If the *Selection Parameters* area is not filled out yet, enter **0** as version, the **current fiscal year**, period **1** to **12** and price unit **1**.

A### to M###
0
current year, 1, 12, 1

Hit F8 or click on Execute which will produce the following screen.



Cost Center
Activity Type A001 To M001
Version 0 Plan/Act - Version
Fiscal Year 2021
Period 1 To 12
Price unit 1

Cost Center	Acty Type	Cost ctr short text	Act. type short text	CO crcy	Total Price	Price (Variable)	Price (Fixed)	Prl
ASSY1001	A001	Assembly 001	Assembly Hours 001	USD	45,00	25,00	20,00	1
MAIN1001	M001	Maintenance 001	Maint. Hours 001	USD	50,00	0,00	50,00	1

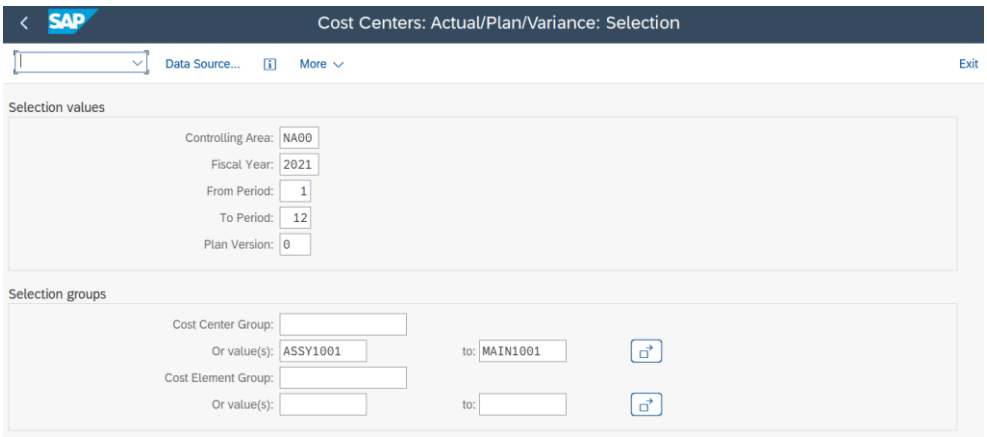
Activity Types that underwent price planning (second last step of the case study) will be listed here.

The correct total prices for the Activity Types strongly indicate that the case study was processed properly.

Cost Center Planning Similar to the Activity Prices, planned cost for cost centers will show specific results if everything was entered correct.

Open transaction **S_ALR_87013611** in SAP GUI which will produce the following screen.

S_ALR_87013611



Select the cost center range as shown in the picture above (ASSY1### to MAIN1###). If the Selection Parameters area is not filled out yet, enter **0** as version, the **current fiscal year** and period **1** to **12**.

ASSY1### to MAIN1###
0
current year, 1,12

Hit F8 or click on **Execute** which will produce the following screen.

You can select a specific cost center on the left side by clicking on it. The values should show as follows.

Assembly:

```
Cost Centers: Actual/Plan/Variance       Date: 04.01.2022            Page:     2 /   4

                                                                     Column:   1 /   2
Cost Center/Group           ASSY1001              Assembly 001
Person responsible:         Tony Stark
Reporting period:             1  to    12  2021
```

Cost Elements	Act. Costs	Plan Costs	Var.(Abs.)	Var.(%)
6991000 Cost of Labor		150.000,00	150.000,00-	100,00-
8030011 Plan Asm. CAFE1001		90.000,00	90.000,00-	100,00-
8030012 Allocation MAIN100		30.000,00	30.000,00-	100,00-
* Debit		270.000,00	270.000,00-	100,00-
8030013 Allocation ASSY100		270.000,00-	270.000,00	100,00-
* Credit		270.000,00-	270.000,00	100,00-
** Over/Underabsorption				

Cost Centers: Actual/Plan/Variance Date: 04.01.2022 Page: 3 / 4

Column: 1 / 2

Cost Center/Group ASSY1001 Assembly 001
Person responsible: Tony Stark
Reporting period: 1 to 12 2021

Activity Types	Act. Acty	Plan Acty	Var.(Abs.)	Var.(%)
A001 Assembly Hours 001		6.000 H	6.000- H	100,00-

Cost Centers: Actual/Plan/Variance Date: 04.01.2022 Page: 4 / 4

Column: 1 / 2

Cost Center/Group ASSY1001 Assembly 001
Person responsible: Tony Stark
Reporting period: 1 to 12 2021

Statistical Key Figures	Actual	Plan	Var.(Abs.)	Var.(%)
EMP001 Number of employees		15 PRS	15- PRS	100,00-
SM001 Area in square metres		2.250 M2	2.250- M2	100,00-

You can verify the following:

- Number of employees (15 for Assembly)
- Expenses (150,000 for Assembly)
- Assessed cost (90,000 for Assembly)
- Allocated cost (30,000 for Assembly)
- Planned activity (6,000 for Assembly)

Cafeteria:

Cost Centers: Actual/Plan/Variance Date: 04.01.2022 Page: 2 / 3

Column: 1 / 2

Cost Center/Group CAFE1001 Cafeteria 001
Person responsible: Tony Stark
Reporting period: 1 to 12 2021

Cost Elements	Act. Costs	Plan Costs	Var.(Abs.)	Var.(%)
5900000 Purchased services		90.000,00	90.000,00-	100,00-
6991000 Cost of Labor		60.000,00	60.000,00-	100,00-
8030011 Plan Asm. CAFE1001		30.000,00	30.000,00-	100,00-
* Debit		180.000,00	180.000,00-	100,00-
8030011 Plan Asm. CAFE1001		150.000,00-	150.000,00	100,00-
* Credit		150.000,00-	150.000,00	100,00-
** Over/Underabsorption		30.000,00	30.000,00-	100,00-

Cost Centers: Actual/Plan/Variance Date: 04.01.2022 Page: 3 / 3

Column: 1 / 2

Cost Center/Group CAFE1001 Cafeteria 001
Person responsible: Tony Stark
Reporting period: 1 to 12 2021

Statistical Key Figures	Actual	Plan	Var.(Abs.)	Var.(%)
EMP001 Number of employees		5 PRS	5- PRS	100,00-

You can verify the following:

- Number of employees (5 for Cafeteria)
- Expenses (60,000 and 90,000 for Cafeteria)
- Assessed cost (30,0000 for Cafeteria)
- Credited cost (150,000 for Cafeteria)

Maintenance:

Cost Centers: Actual/Plan/Variance Date: 04.01.2022 Page: 2 / 4

Column: 1 / 2

Cost Center/Group MAIN1001 Maintenance 001
Person responsible: Tony Stark
Reporting period: 1 to 12 2021

Cost Elements	Act. Costs	Plan Costs	Var.(Abs.)	Var.(%)
6991000 Cost of Labor		60.000,00	60.000,00-	100,00-
8030011 Plan Asm. CAFE1001		30.000,00	30.000,00-	100,00-
* Debit		90.000,00	90.000,00-	100,00-
8030012 Allocation MAIN100		90.000,00-	90.000,00	100,00-
* Credit		90.000,00-	90.000,00	100,00-
** Over/Underabsorption				

Cost Centers: Actual/Plan/Variance Date: 04.01.2022 Page: 3 / 4

Column: 1 / 2

Cost Center/Group MAIN1001 Maintenance 001
Person responsible: Tony Stark
Reporting period: 1 to 12 2021

Activity Types	Act. Acty	Plan Acty	Var.(Abs.)	Var.(%)
M001 Maint. Hours 001		1.800 H	1.800- H	100,00-

Cost Centers: Actual/Plan/Variance	Date: 04.01.2022	Page:	4 / 4
		Column:	1 / 2
Cost Center/Group	MAIN1001	Maintenance 001	
Person responsible:	Tony Stark		
Reporting period:	1 to 12 2021		

Statistical Key Figures	Actual	Plan	Var.(Abs.)	Var.(%)
EMP001 Number of employees		5 PRS	5- PRS	100,00-

You can verify the following:

- Number of employees (5 for Maintenance)
- Expenses (60,000 for Maintenance)
- Assessed cost (30,0000 for Maintenance)
- Allocated cost (90,000 for Maintenance)
- Maintenance hours (1800 for Maintenance)

If the values do not match please refer to the solutions described below.

Problem: Statistical Key Figure deviating

Symptom The Statistical Key Figure value deviates.

Reason The Statistical Key Figure was not planned properly.

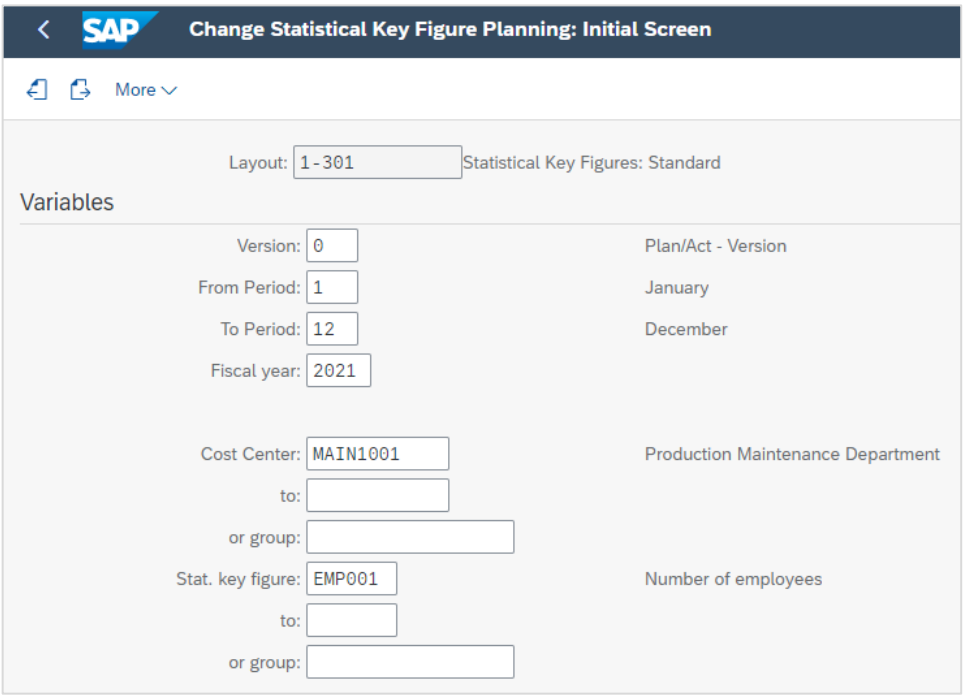
Solution Change the planning in the app transaction Change Statistical Key Figure Planning.

Solution

Open the app *Change Statistical Key Figure Planning* in the section *Controlling*.

Fiori App

This will produce the following screen.



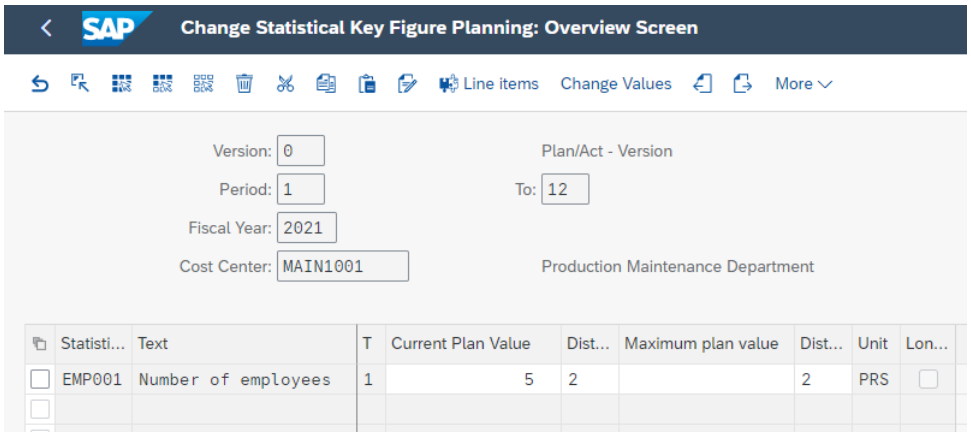
Enter **0** as version, the **current fiscal year**, period **1** to **12**. The cost center in question and the corresponding statistical key figure **EMP###**.

0, current year, 1,12
Cost center
EMP###

Press **Overview Screen**.

The assembly cost center should have 15 employees, maintenance and canteen 5 employees each.

Change the value in the Current Plan Value column to the one given by the case study.



Click on Post. Repeat the steps if necessary.

Problem: Activity Output deviating

Symptom The planned activity output for the assembly or maintenance deviates.

Reason The output was not planned correct.

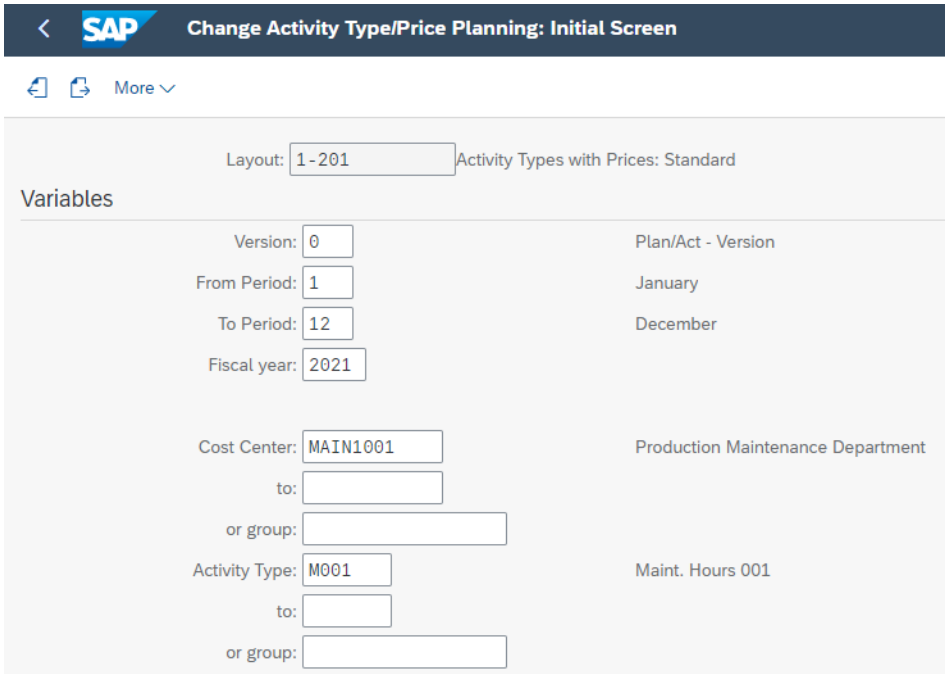
Solution Change the planning in app Edit Prices for Activity Types – Cost Centers.

Solution

Open the app *Edit Prices for Activity Types – Cost Centers* in the section Controlling.

Fiori App

This will produce the following screen.



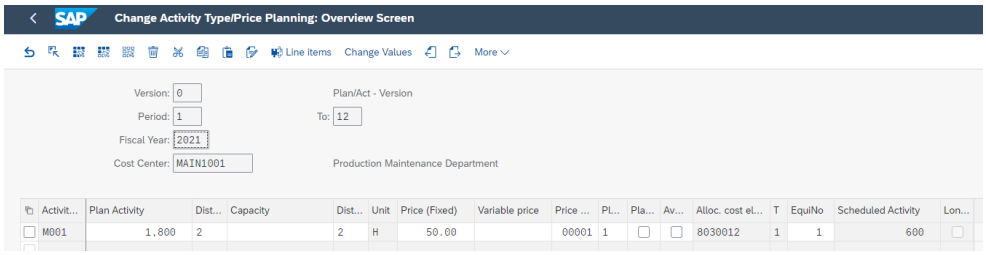
Enter **0** as version, the **current fiscal year**, period **1** to **12**.

0, current year, 1,12

Enter Cost Center **MAIN1###** and Activity Type **M###** or **ASSY1###** and **A###** respectively. Press **Overview Screen**.

MAIN1### and M### or ASSY1### and A###

Change the value in the Plan Activity column accordingly. The maintenance hours are 1800 in total the assembly hours are 6000 in total.



Click on Post. Repeat the steps if necessary.

Problem: Expenses deviating

Symptom The planned cost input deviates from the values given in the case study.

Reason Planning was not done correct.

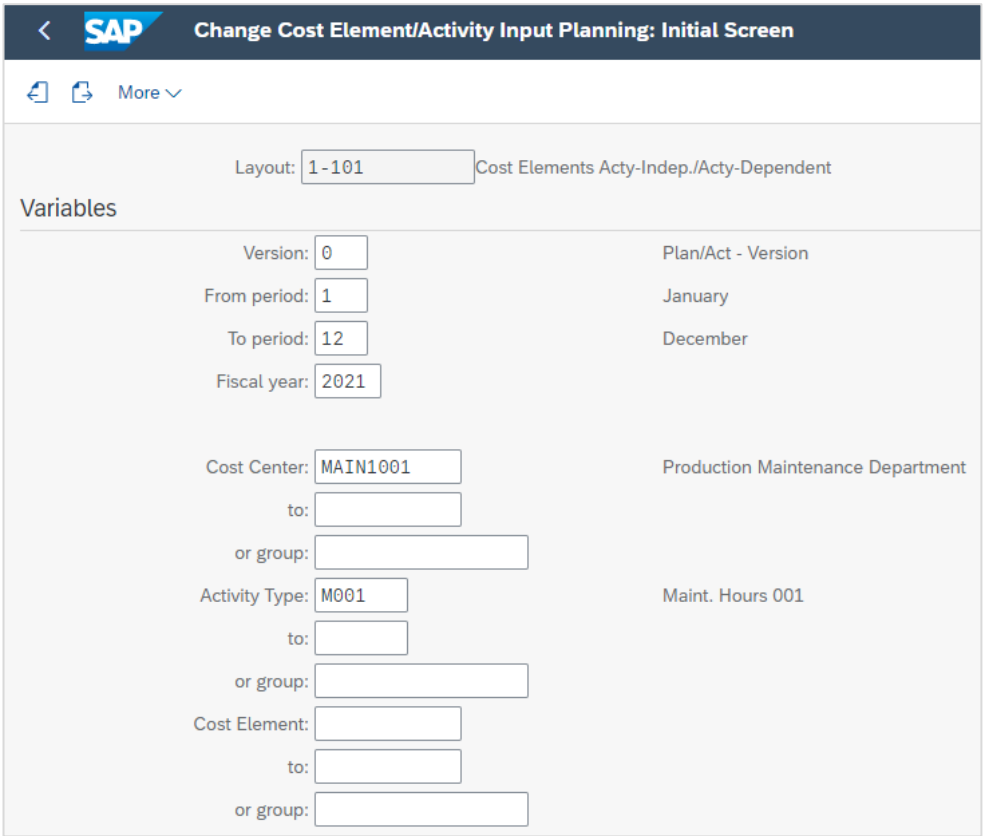
Solution Change the planning in the app Plan Primary Cost Input – Deprecation/Interest.

Solution

Open app *Plan Primary Cost Input – Deprecation/Interest* in the controlling section.

Fiori App

This will produce the following screen.



Enter **0** as version, the **current fiscal year**, period **1** to **12**.

0, current year, 1,12

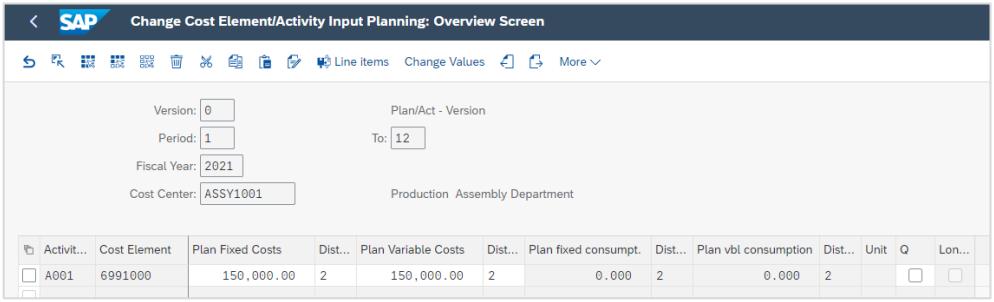
The following values should be planned:

Cost Center	Cost Element	Value
CAFE1###	6991000	60,000
CAFE1###	5900000	90,000
MAIN1###	6991000	60,000
ASSY1###	6991000	150,000

As **MAIN1**### uses activity specific planning activity type M### has to be entered as well. Refer to the case study for more information.

Enter the needed combination of data and press Overview Screen.

Change the value in the Plan Fixed Costs column accordingly.



Click on Post. Repeat the steps if necessary.

Solution: CO-CCA Challenge

Learning Objective Understand and perform a cost center accounting process.

Motivation After you have successfully worked through the *Cost Center Accounting* case study, you should be able to solve the following task on your own.

Scenario You have already allocated the canteen costs to the cost centers. You have to allocate the electricity costs to the cost centers assembly and maintenance now.

Both are situated in the same building with a total area of 3000 square meter. Therefore, they split the electricity costs based on the amount of square meters used by them respectively. Use a ratio of four (Assembly) to one (Maintenance) for your calculation.

Collect the accrued electricity costs of 45000 USD on a suitable new cost center (e.g. ENER1###) within hierarchy area N4000. Use the cost element 6325000 to do so. Afterwards allocate the cost to the receiving cost centers.

Task Information Since this task is based on the *Cost Center Accounting* case study you can use it as guidance. However, it is recommended that you solve it without any help in order to test your acquired knowledge.

At the respective tasks choose a fitting cost element and be aware of the difference between a distribution and an allocation when choosing a transaction.

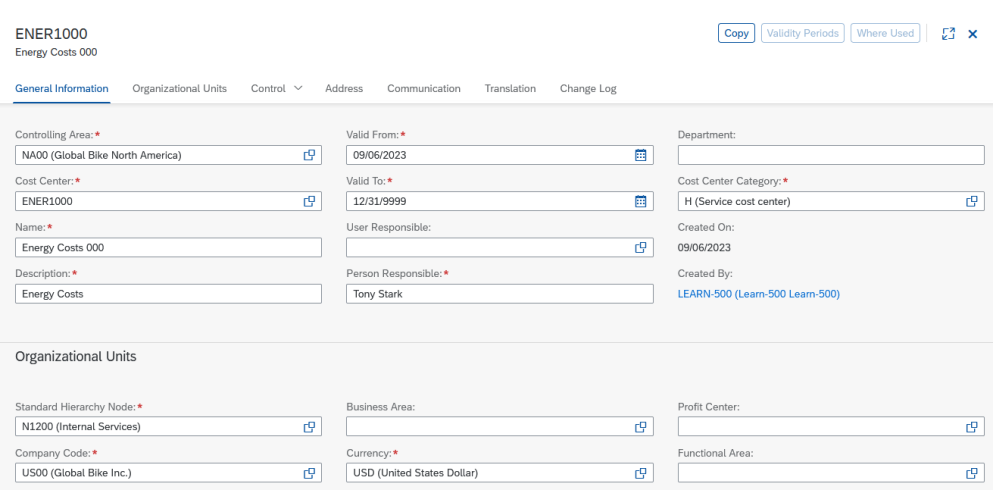
Create Cost Center

In the app *Manage Cost Centers* you can create a cost center as described in the case study. To start press Create.

Fiori App

Enter **ENER1###** and **Energy Costs ###** as Cost Center and Name.

ENER1###
Energy Costs ###



After comparing your entries with the screenshot above, save your cost center.

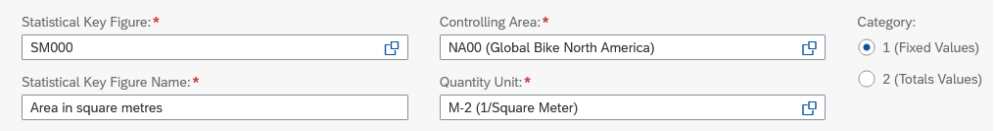
Create Statistical Key Figure

In the app *Manage Statistical Key Figures* you create a statistical key figure.

Fiori App

Press Create, enter **SM###** as statistical key figure, **Area in square metres** as name and choose Square meter (**M2**) as unit. Make sure **fixed val.** (1) is selected and save your entries.

SM###
Area in square meters
M2
Fixed values



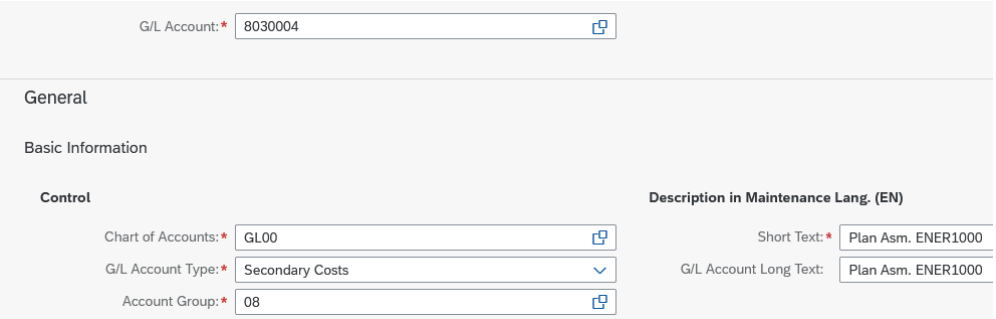
Create Secondary Cost Element

Open the Fiori app *Manage G/L Account Master Data* and create a secondary cost element for the assessment of energy costs.

Proceed as described in the case study for the assessment of the cafeteria costs to the receiver cost centers.

Use the number **803###4** for the new G/L account and the description short text **Plan Asm. ENER1###**. Under *Control*, select the Chart of Accounts **GL00**, the G/L Account Type **Secondary Costs** and the Account Group **08**. Do not forget to fill out the company code and controlling data.

803###4
Plan Asm. ENER1###
GL00
Secondary Costs
08



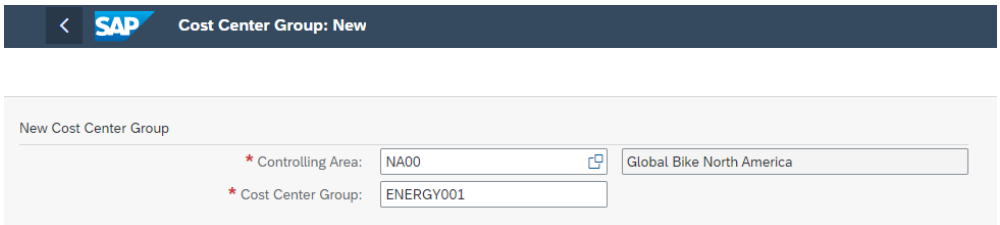
Create Cost Center Group

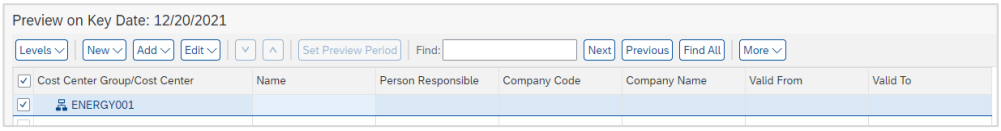
In the app *Manage Cost Center Groups* you create a cost center group.

Fiori App

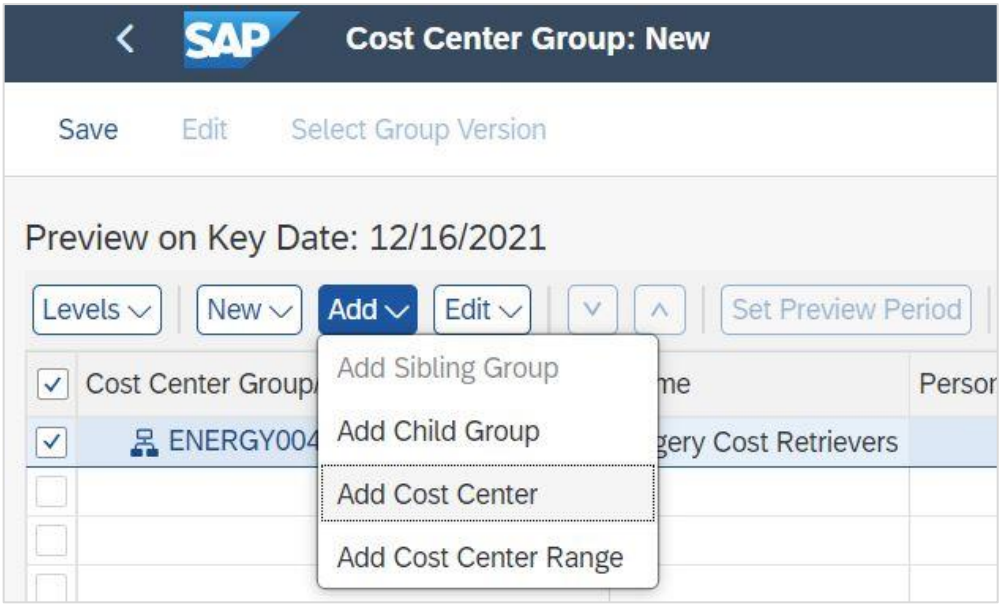
Click New and enter the Name for this group **ENERGY###**. In the next screen enter **Energy Cost Receivers** as name.

ENERGY###
Energy Cost Receivers



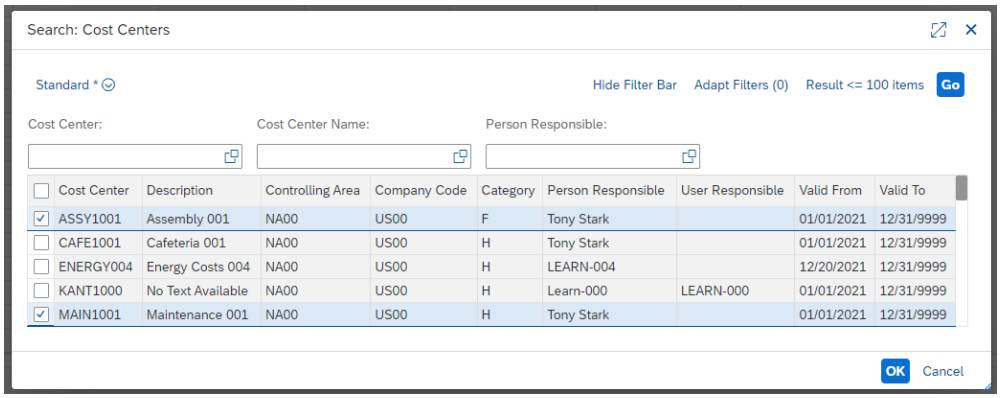


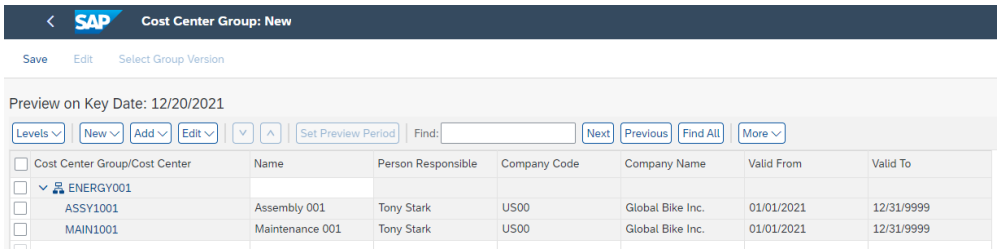
Then, press *Add* > *Add Cost Center*.



Select **MAIN1###** and **ASSY1###** and press OK.

MAIN1###
ASSY1###





Save by clicking on Save.

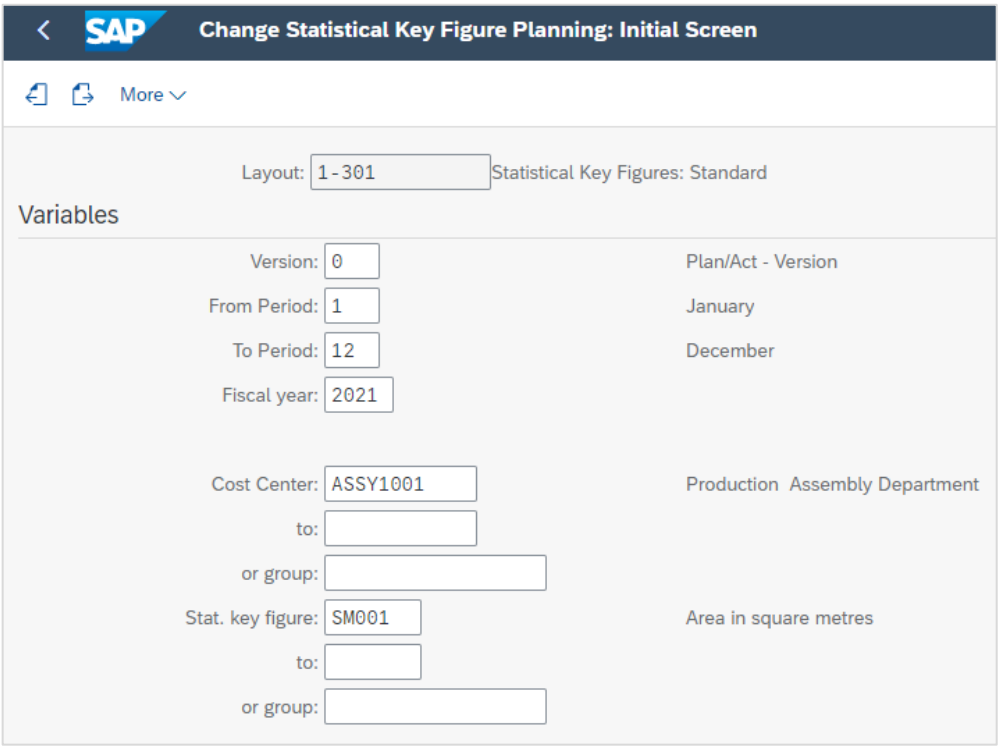
Plan the Areas

In the app *Change Statistical Key Figure Planning* you can plan the size of the areas for the respective department assembly and maintenance.

Fiori App

On the screen *Change Statistical Key Figure Planning: Initial Screen* enter the information as described in the case study. Enter **ASSY1###** as Cost Center and **SM###** as Stat. key figure.

ASSY1###
SM###



Click Overview Screen. Enter **2400** as current plan value and save your entry with Post.

2400

Repeat the process for cost center **MAIN1###** with **600** as current plan value.

MAIN1###
600

Plan Primary Cost Inputs

In the app *Plan Primary Cost Inputs – Depreciation/Interest* you have to enter the primary costs for the cost center **ENER1**###. Enter cost center **ENER1###** and choose Utilities (electricity & phone) **(6325000)** as cost element.

Fiori App

ENER1###
6325000

Layout:	1-101	Cost Elements Acty-Indep./Acty-Dependent

Variables

Version:	0	Plan/Act - Version
From period:	1	January
To period:	12	December
Fiscal year:	2021	
Cost Center:	ENER1000	Energy Costs
to:		
or group:		
Activity Type:		
to:		
or group:		
Cost Element:	6325000	Gas, electricity, water
to:		
or group:		

On the following screen enter the plan fixed costs of **45000** and save your entry by clicking on Post .

Create Assessment

In the app *Create Actual Assessment Cycle* you create the assessment.

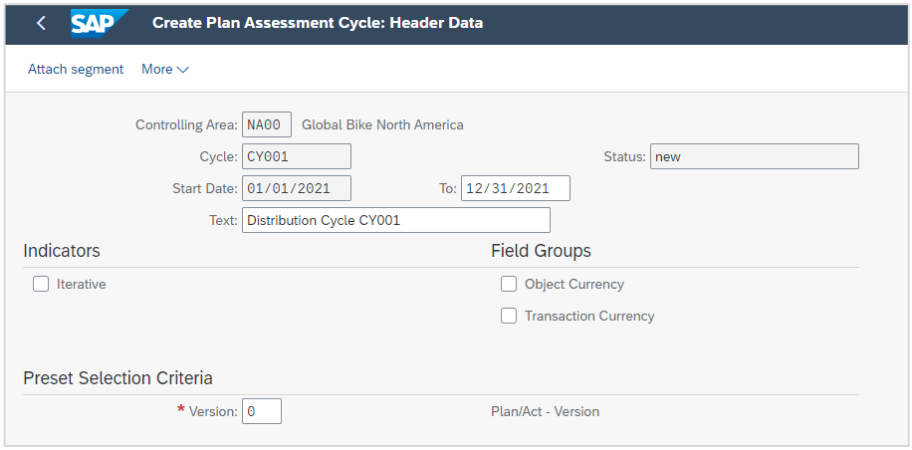
Fiori App

On the screen *Execute Plan Assessment: Initial Screen* choose from the menu **More ► Extras ► Cycle ► Create**. Name your cycle **CY###** and enter the **1st January of the current fiscal year** as valid from date. Confirm your entries with Enter.

CY###
01/01/current fiscal year

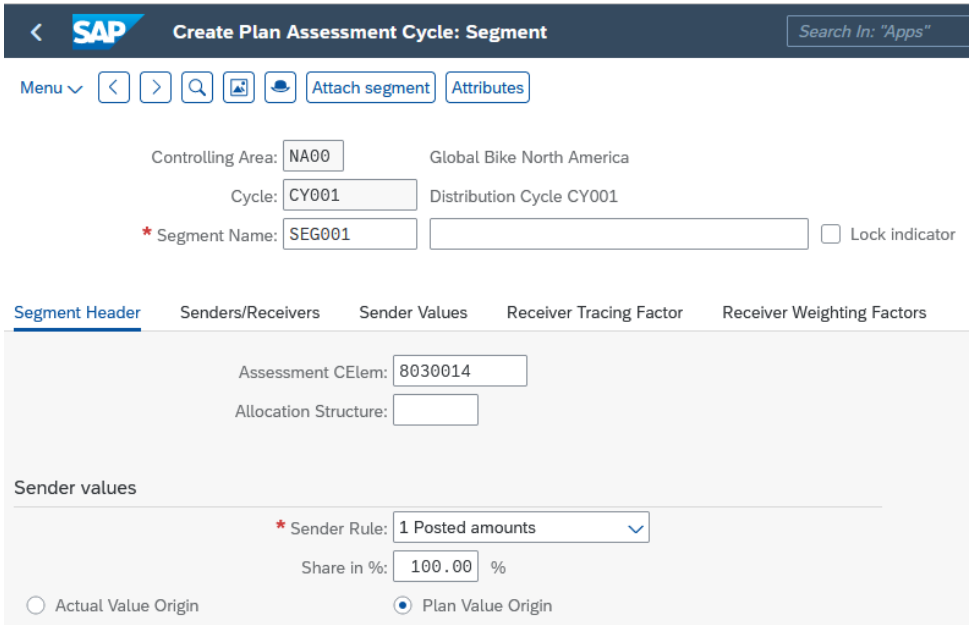
On the following screen enter **Distribution Cycle CY###** as text. Uncheck the **iterative** field and click on Attach segment .

Distribution Cycle
CY###
~~iterative~~



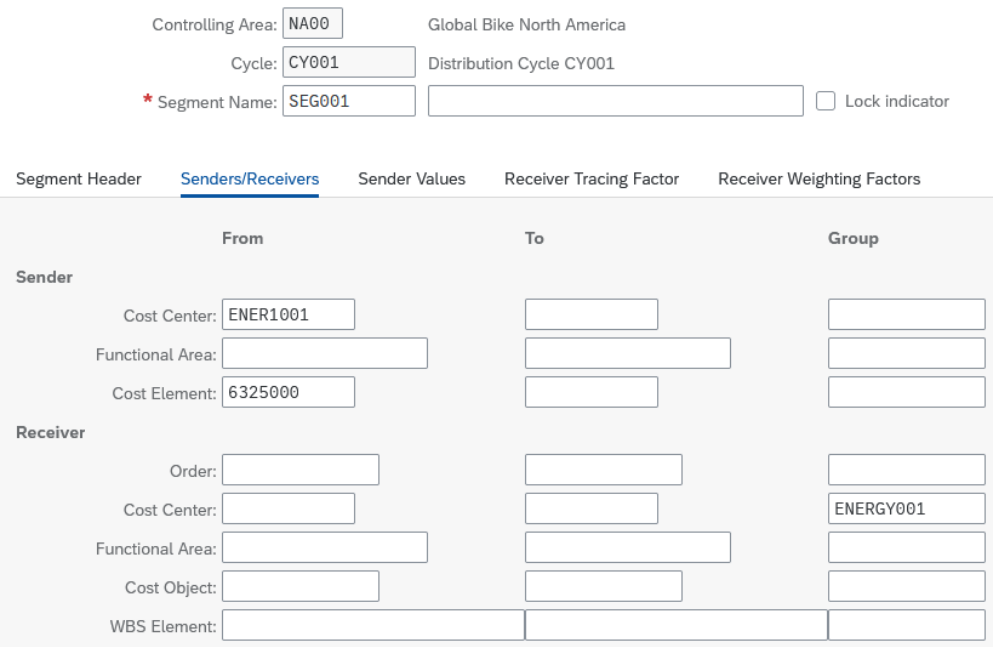
Enter **SEG###** as the Segment Name. In the Segment Header tab, enter **803###4** as the Assessment CElement.

SEG###
803###4



On the *Senders/Receivers* tab enter **ENER1###** as sender cost center (from), the cost element **6325000** and as receiver enter cost center group **ENERGY###**. Compare your entries with the following screen.

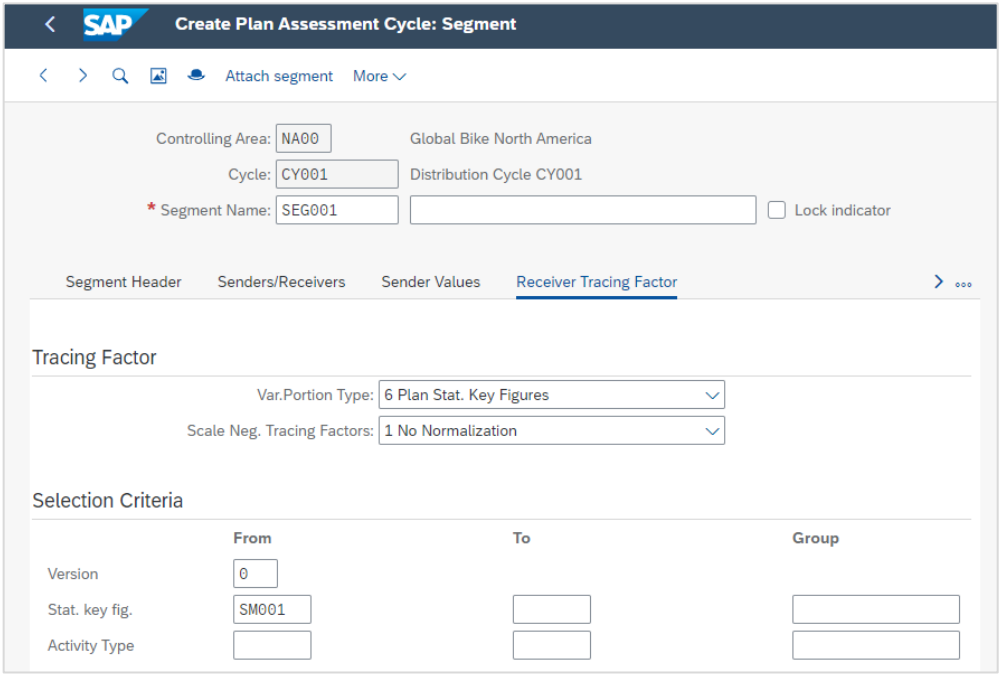
ENER1###
6325000
ENERGY###



On the *Receiver Tracing Factor* tab choose the value **Plan Stat. Key Figures** in the Var. portion type field. The following information popup indicates that new fields are displayed. In the Selection Criteria section choose *Version* **0** and statistical key figure **SM###**.

Plan Stat. Key Figures

0
SM###

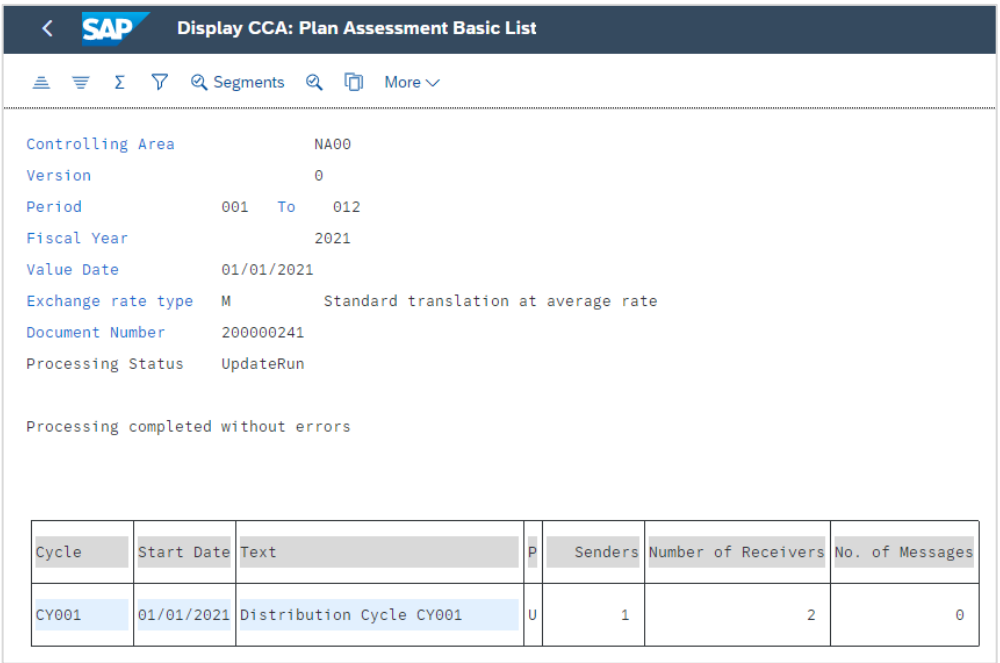


Click **Save Without Check** to Save, click < three times to go back, and confirm the subsequent confirmation Yes .

In the *Execute Plan Assessment: Initial Screen* enter **CY###** in the cycle field and click Enter. Uncheck *Test Run* and press Execute.

CY###

The system should notify you that processing was completed without errors. The number of senders should be 1 and the number of receivers 2.



Cycle	Start Date	Text	P	Senders	Number of Receivers	No. of Messages
CY001	01/01/2021	Distribution Cycle CY001	U	1	2	0

Price Calculation of Activity Types

Use the Fiori app *Price Calculation of Activity Types* to redetermine the costs for the entire cost center group **ENERGY###**.

ENERGY###