

Project Management (PS)

This case study explains the project management process in detail and thus fosters a thorough understanding of each process step and underlying SAP functionality.

Product

SAP S/4HANA 2022
Global Bike

Fiori 3.0

Level

Beginner

Focus

Project Management

Authors

Martin Wassmann
Bret Wagner
Stefan Weidner

Version

4.2

Last Update

August 2023

MOTIVATION

In Project Management, a simple cost project will be created, which will be used to plan and control the development of an ultra-light racing bike.

The project will be structured using a work breakdown structure (WBS) and network activities. In the Execution phase we will post actual dates and actual costs on activities and WBS elements.

PREREQUISITES

Before you use this case study, you should be familiar with navigation in the SAP system.

NOTES

This case study uses the Global Bike data set, which has exclusively been created for SAP UA global curricula.



Process Overview

Learning Objective Understand and execute an integrated project planning. **Time** 140 Min.

Scenario To edit a complete project planning process, you will take different roles in Global Bike, e.g. Production Supervisor and Cost Accountant. Overall, you will be working in the Project Management (PS) and Financial Accounting (FI) departments.

Employees involved
 Jun Lee (Production Manager)
 Jermain Kumins (Shop Floor Worker)
 Silvia Cassano (Controller)
 Jamie Shamblin (AR Accountant)

At the beginning of your project you assign WBS elements, activities and milestones at Project Builder. Also, you assign milestones to your project.

In the last few steps, you create a creditor invoice for your business partner, who acts as an intermediary for the test driver and you have to pay for the entire project.

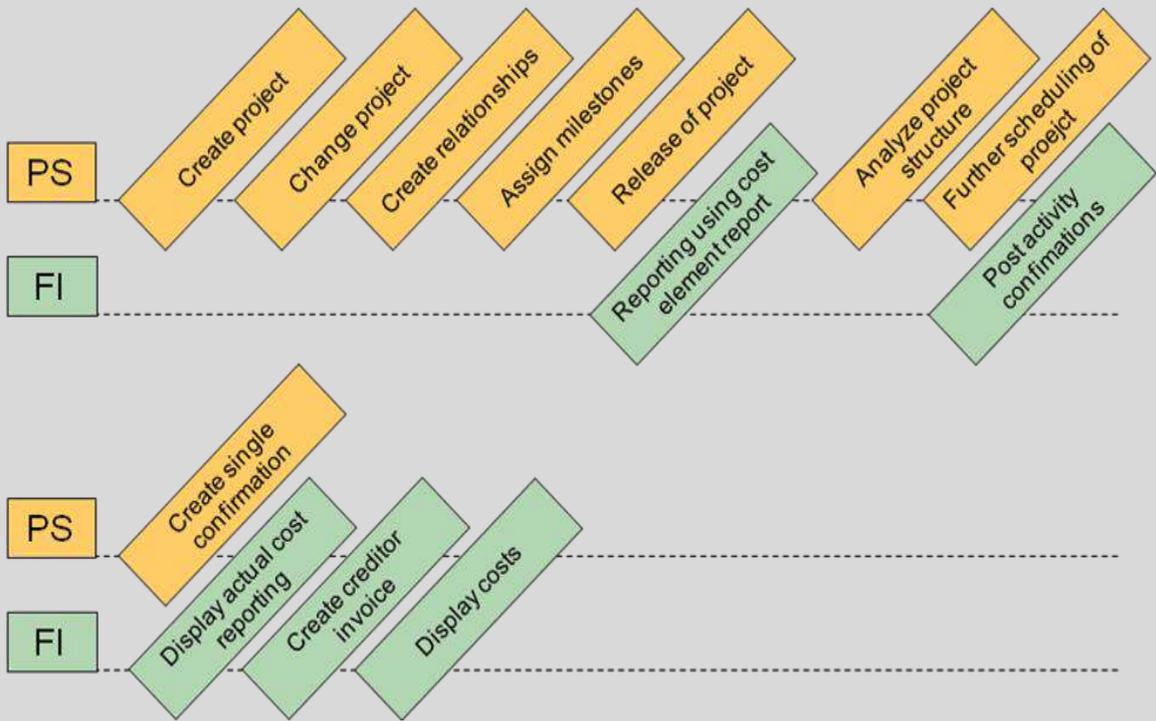


Table of Contents

Step 1: Create Project.....	4
Step 2: Change Project.....	9
Step 3: Display project network graph.....	13
Step 4: Create Relationships.....	15
Step 5: Display project network graph.....	18
Step 6: Assign milestones.....	20
Step 7: Release of Project.....	24
Step 8: Reporting using cost element report.....	26
Step 9: Analyze Project Structure.....	29
Step 10: Further scheduling of Project.....	31
Step 11: Post activity confirmations.....	33
Step 12: Display actual cost reporting.....	36
Step 13: Create creditor invoice.....	38
Step 14: Display actual cost reporting.....	41

Step 1: Create Project

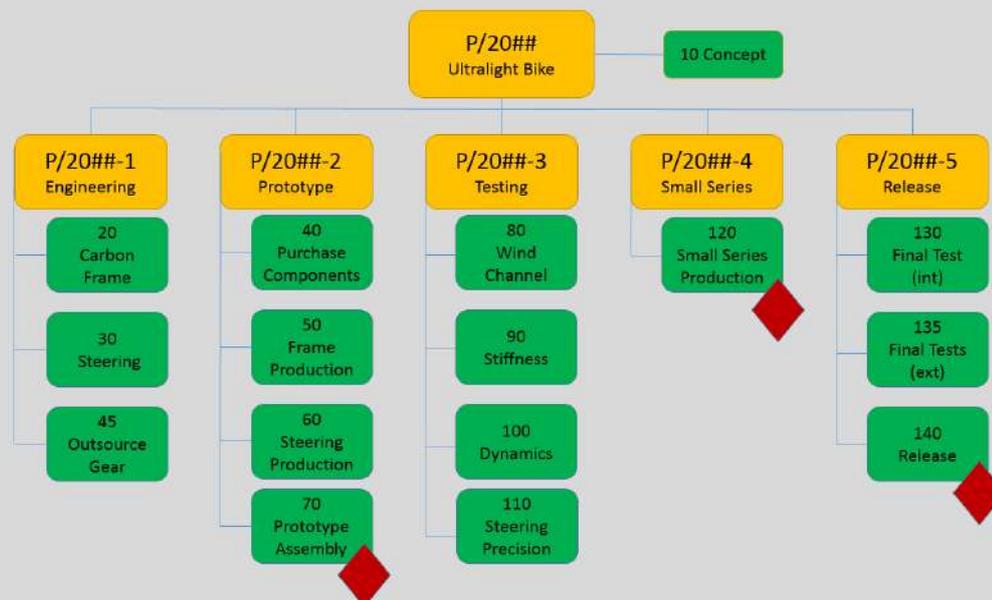
Task Create a new project.

Time 15 min

Short Description Use the SAP Fiori Launchpad to create a new project.

Name (Position) Jun Lee (Production Manager)

This is the Project structure of cost project P/20##, which consists of WBS elements, activities, and milestones.



We will use the project builder to create a project “Development of Ultralight Bike”. The project consists of a work breakdown structure and network activities.

Note A Work Breakdown Structure (WBS) is a model of a project and shows the required project activities in a hierarchical form. The WBS forms the basis for all subsequent planning tasks in the project. Emphasis is placed on planning, analysis, description, control, monitoring of costs, basic dates, and the budget. Costs, dates, resources, and payments are planned using the activities extrapolated to specific WBS elements.

To create a new project, use in the *Project System* area in the role *Production Manager* the app *Project Builder*.



If the following pop up occurs *Project Builder: Options*, choose .

Project Builder: Options ✕

Welcome to the Project Builder!

Before you start work you can make the basic settings for working with the Project Builder. You can decide:

- Which objects you want to work with
- The templates that you want to use
- How projects appear when you call up the Project Builder
- How the preview appears
- How many hierarchy levels are displayed in your projects
- Which mode (change/display) is used when you call up the Project Builder

If you do not change the settings now, the system uses the standard settings. However, you can change the settings at any time by choosing Settings -> Options.

In the popup *Project Builder: User-specific options* enter for Hierarchy levels **99** and select **Preview last project**. Leave other fields as they are.

99
Preview last project

Project Builder: User-specific options ✕

General	Processable objects
Open project with <input type="text" value="1 Structural display"/>	<input type="checkbox"/> Simulation
Editing mode <input type="text" value="C Change"/>	<input checked="" type="checkbox"/> Project definition
Hierarchy levels <input type="text" value="99"/>	<input checked="" type="checkbox"/> WBS element
<input checked="" type="checkbox"/> Preview last project	<input checked="" type="checkbox"/> Network
<input type="checkbox"/> Display deleted objects	<input checked="" type="checkbox"/> Network activity
	<input checked="" type="checkbox"/> Activity element
	<input checked="" type="checkbox"/> Material Component
Templates	<input checked="" type="checkbox"/> Milestone
<input checked="" type="checkbox"/> Individual objects	<input checked="" type="checkbox"/> Relationships
<input checked="" type="checkbox"/> Projects	<input checked="" type="checkbox"/> PS text
<input checked="" type="checkbox"/> Standard templates	<input checked="" type="checkbox"/> Document
<input type="checkbox"/> Simulations	

Confirm your entries by using the  button.

To create the project P/2###, select  and choose *Project*.

Note Projects are tasks that have the following characteristics. Projects are usually complex and unique and involve a high degree of risk. They have precise targets that are agreed on between the contractor and the sold-to party. Projects are limited in duration, are cost and capacity intensive and involve several departments. They are subject to specific quality requirements and are of strategic significance for the business carrying them out. Projects are an integral part of the commercial processes of a business. Before you can control all the tasks that occur as part of project execution, you need a project-specific organizational form that should be in a position central to the user departments involved.

In the screen *Project Builder* enter in the field Project def. **P/2###**. Remember to replace ### with your three-digit number, e.g. 003 if your number is 003. For Text (unlabeled) enter **Development of Ultralight Bike ### (I)** and select in Project Profile **DE01000 Cost projects (Europe)**.

P/2###

Development of
Ultralight Bike ###(I)

Cost projects (Europe)

Identification and view selection

Project def.: P/2400 Development of Ultralight Bike 400 (I) 

Detail: 

Overview(s):  

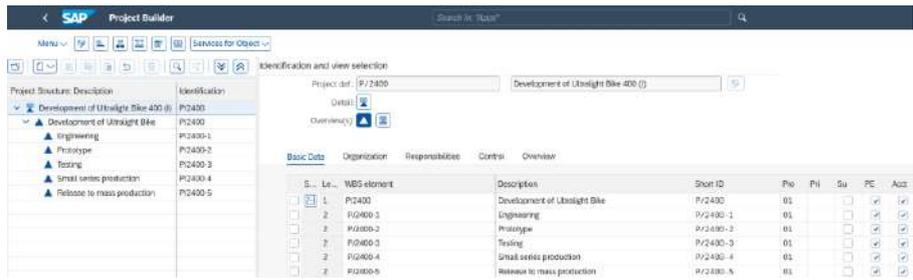
Basic Data **Control** Administration Long Text Collect. PR Indicators User Fields

* Project Profile: DE01000 Cost projects (Europe)  Transfer to proj.def

Confirm your entries by pressing Enter. Click on the  WBS Element Overview icon to create new WBS elements. Fill in the following data in the Project Builder screen. Please notice that the system will deduce the project number from the entry. Special characters such as double quotes can be configured in the SAP customizing menu.

WBS element	Description	PE	Acct
P/2###	Development of Ultralight Bike	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
P/2###-1	Engineering	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
P/2###-2	Prototype	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
P/2###-3	Testing	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
P/2###-4	Small series production	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
P/2###-5	Release to mass production	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Again, confirm your entries by pressing Enter, additional fields are automatically added by the system and a project structure is created in the left pane.



Note Operative indicators such as the above ("PE" and "Acct") control whether the WBS elements can be used for cost planning (Planning Element) and cost account (Account Assignment possible) purposes.

The hierarchy graphic can be used to edit the project as well. Please note, that the derivation of WBS element structure has determined the hierarchy from the number of the WBS elements. Naturally, this works only for numbers, which reflect a hierarchical order and are customized by a so-called number mask.

To derive the WBS structure the number of the WBS elements choose in the pull-down menu Menu ► Project ► Derive structure ► Execute. Go to the tab Responsibilities to assign responsible cost centers to all WBS elements.

To assign responsible cost centers to the WBS elements, select the *Responsibilities* tab. Enter the following data in the Responsible cost center column.

WBS element	Resp.cost cntr
P/2###	EURD1000
P/2###-1	EURD1000
P/2###-2	EURD1000
P/2###-3	EUQM1000
P/2###-4	EUPR1000
P/2###-5	EUQM1000

Confirm your entries with enter. The system automatically adds the associated controlling area EU00.



Save your project with Save.

Click on the home icon  to return to the Fiori Launchpad Overview.



Step 2: Change Project

Task Change the project.

Time 10 min

Short Description Use the SAP Fiori Launchpad to change the project form the task above.

Name (Position) Jun Lee (Production Manager)

The project P/20## will be enhanced by network activities to detail the tasks of the WBS elements). Activities describe the process flow of the project. You can plan dates, resources and costs through network activities as well.

To change a project, use in the *Project System* area in the role *Production Manager* the app *Project Builder*.

Fiori App



Under *Worklist: Description* you will find your project **P/2###** under *Last Projects Processed*. Double-click on the project to open it.

P/2###

Worklist: Description		Project object
> ★	Projects	
∨	Last Projects Processed	
📄	Development of Ultralight Bike 400 (1)	P/2400

Note Alternatively, you can also reopen the project via .

In the *Project Structure: Description* area, select the WBS element Development of Ultralight Bike.

Project Structure: Description	Identification
Development of Ultralight Bike 400 (I)	P/2400
Development of Ultralight Bike	P/2400
Engineering	P/2400-1
Prototype	P/2400-2
Testing	P/2400-3
Small series production	P/2400-4
Release to mass production	P/2400-5

Choose the  Activity Overview icon. Enter the following data:

Activity	Description	Normal duration in days	Work in hours	Work center
0010	General concept	10	80	DVLP1000
0020	Engineering of carbon frame	5	40	DVLP1000
0030	Engineering of steering fork	2	20	DVLP1000
0040	Purchasing of components	1	5	PROC1000
0050	Production of carbon frame	2	30	ASSY1000
0060	Production of steering fork	1	10	ASSY1000
0070	Prototype assembly	8	60	ASSY1000
0080	Wind channel test	1	8	INSP1000
0090	Stiffness test	1	6	INSP1000
0100	Testing acceleration dynamics	1	5	INSP1000
0110	Testing steering precision	1	8	INSP1000
0120	Small series production	10	100	ASSY1000
0130	Final test (internal)	5	50	INSP1000
0140	Release to mass production	1	3	INSP1000

Confirm your entries by pressing Enter.

Int. Processing Ext. Processing Prim. Costs Total



Acti...	Description	Norma...	No...	Work	Un...	Work Ce...	Plant
<input type="checkbox"/>	0010 General concept	10	DAY	80.0	HR	DVLP1000	HD00
<input type="checkbox"/>	0020 Engineering of carbon frame	5	DAY	40.0	HR	DVLP1000	HD00
<input type="checkbox"/>	0030 Engineering of steering fork	2	DAY	20.0	HR	DVLP1000	HD00
<input type="checkbox"/>	0040 Purchasing of components	1	DAY	5.0	HR	PROC1000	HD00
<input type="checkbox"/>	0050 Production of carbon frame	2	DAY	30.0	HR	ASSY1000	HD00
<input type="checkbox"/>	0060 Production of steering fork	1	DAY	10.0	HR	ASSY1000	HD00
<input type="checkbox"/>	0070 Prototype assembly	8	DAY	60.0	HR	ASSY1000	HD00
<input type="checkbox"/>	0080 Wind channel test	1	DAY	8.0	HR	INSP1000	HD00
<input type="checkbox"/>	0090 Stiffness test	1	DAY	6.0	HR	INSP1000	HD00
<input type="checkbox"/>	0100 Testing acceleration dynamics	1	DAY	5.0	HR	INSP1000	HD00
<input type="checkbox"/>	0110 Testing steering precision	1	DAY	8.0	HR	INSP1000	HD00
<input type="checkbox"/>	0120 Small series production	10	DAY	100.0	HR	ASSY1000	HD00
<input type="checkbox"/>	0130 Final test (internal)	5	DAY	50.0	HR	INSP1000	HD00
<input type="checkbox"/>	0140 Release to mass production	1	DAY	3.0	HR	INSP1000	HD00

Scroll to the right in the table to the WBS element column. All activities up to now have been assigned to the WBS element P/2###, since this WBS element was selected at the beginning.

Enter the following values to distribute the activities to the corresponding WBS elements. Be sure to replace ### with your three-digit number.

Activity	WBS element
0010	P/2###
0020	P/2###-1
0030	P/2###-1
0040	P/2###-2
0050	P/2###-2
0060	P/2###-2
0070	P/2###-2
0080	P/2###-3
0090	P/2###-3
0100	P/2###-3
0110	P/2###-3
0120	P/2###-4
0130	P/2###-5
0140	P/2###-5

Confirm your entries with Enter. The project structure updates and the network activities can be seen under the associated WBS elements.

The screenshot displays the SAP Project Builder interface for Project P/2400. The left pane shows the project structure with a tree view of WBS elements. The right pane shows the 'Identification and view selection' for the selected WBS element, with a table of activities and their descriptions.

Acti...	Description	WBS Element
<input type="checkbox"/>	0010 General concept	P/2400
<input type="checkbox"/>	0020 Engineering of carbon frame	P/2400-1
<input type="checkbox"/>	0030 Engineering of steering fork	P/2400-1
<input type="checkbox"/>	0040 Purchasing of components	P/2400-2
<input type="checkbox"/>	0050 Production of carbon frame	P/2400-2
<input type="checkbox"/>	0060 Production of steering fork	P/2400-2
<input type="checkbox"/>	0070 Prototype assembly	P/2400-2
<input type="checkbox"/>	0080 Wind channel test	P/2400-3
<input type="checkbox"/>	0090 Stiffness test	P/2400-3
<input type="checkbox"/>	0100 Testing acceleration dynamics	P/2400-3
<input type="checkbox"/>	0110 Testing steering precision	P/2400-3
<input type="checkbox"/>	0120 Small series production	P/2400-4
<input type="checkbox"/>	0130 Final test (internal)	P/2400-5
<input type="checkbox"/>	0140 Release to mass production	P/2400-5

Navigate to the *External Processing* tab to create external processing operations. Maintain a service operation with the following data:

Note You use external processing operations to determine which services are required from other companies for the execution. External processing operations are handled by the purchasing department.

In-house processing operations, on the other hand, determine the output of machines and/or people to be performed. You can evaluate the capacity

utilisation at the workplaces, schedule capacities differently if necessary and distribute work among the employees.

In the Activity field enter **0045** and activate the **Service** Field and enter **Outsourcing gear** in Description.

0045
Service
Outsourcing gear

Int. Processing		Ext. Processing	Prim. Costs	Total
<input type="checkbox"/>	0045	<input checked="" type="checkbox"/>		
			Outsourcing gear	
<input type="checkbox"/>	0160	<input type="checkbox"/>		
				DE00
				DE00

Confirm your entries by pressing Enter. In the *Service Specification: Ext. Specs f. Task List Maintain* screen enter in the first line 10, in the field short text **Engineering**, choose for Quant. **1**, for Unit **EA** and in Gross price **2000**.

Engineering
1 EA
2000

In the second line 20 enter for the short text enter **Ext. production**, choose **1** for Quant., **EA** for Unit and enter Gross price **3000**.

Ext. production
1 EA
3000

Line	Del...	Service No.	Short Text	Quantity	Un	Gross Price	Crcy
<input type="checkbox"/> 10	<input type="checkbox"/>		Engineering	1	EA	2000	EUR
<input type="checkbox"/> 20	<input type="checkbox"/>		Ext. production	1	EA	3000	EUR

Confirm your entries with Enter. Go back to the *Project Builder: Project P/2###* screen by pressing once

On the *Prim. Costs* Tab enter for Activity **0135**, enter **Performance test by professional drivers** in Description, for Amount **10000** and **6300000** for Cost Elem.

0135
Performance test by
professional drivers
10000
6300000

Int. Processing		Ext. Processing	Prim. Costs	Total
<input type="checkbox"/>	0135		Performance test by professional drivers	10000 EUR 6300000
<input type="checkbox"/>	0160			EUR 6300000

Confirm your entries, by pressing Enter. Use the Save icon to save your entries, confirm any messages.

Project P/2400 is being changed

Click on the home icon to return to the Fiori Launchpad Overview.



Step 3: Display project network graph

Task Display the project network graph.

Time 5 min

Short Description Use the SAP Fiori Launchpad to display the project network graph.

Name (Position) Jun Lee (Production Manager)

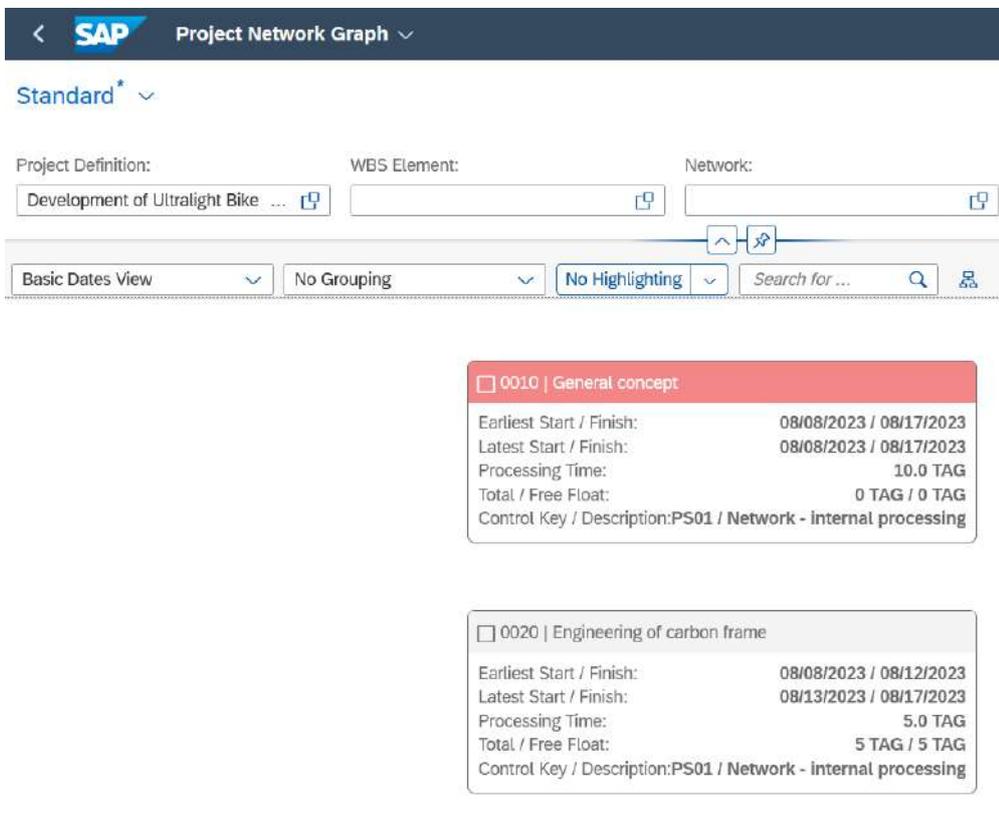
To display a project network graph, use in the *Project System* area in the role *Production Manager* the app *Project Network Graph*.

Fiori App



Enter **P/2####** in the *Project Definition* search field. The corresponding network is automatically loaded by the system.

P/2####



The screenshot shows the SAP Fiori Project Network Graph application. At the top, there is a navigation bar with the SAP logo and the title 'Project Network Graph'. Below this, the 'Standard' view is selected. The main interface features three search fields: 'Project Definition' (containing 'Development of Ultralight Bike ...'), 'WBS Element', and 'Network'. Below the search fields, there are several filters: 'Basic Dates View', 'No Grouping', and 'No Highlighting'. A search bar with a magnifying glass icon is also present. The main content area displays a list of project network elements. Two elements are visible:

- 0010 | General concept**
Earliest Start / Finish: 08/08/2023 / 08/17/2023
Latest Start / Finish: 08/08/2023 / 08/17/2023
Processing Time: 10.0 TAG
Total / Free Float: 0 TAG / 0 TAG
Control Key / Description: PS01 / Network - internal processing
- 0020 | Engineering of carbon frame**
Earliest Start / Finish: 08/08/2023 / 08/12/2023
Latest Start / Finish: 08/13/2023 / 08/17/2023
Processing Time: 5.0 TAG
Total / Free Float: 5 TAG / 5 TAG
Control Key / Description: PS01 / Network - internal processing

The interface offers several ways to interact with the network. For example, you can identify loops that have not been noticed in the Project Builder and look at the critical path of the project. Activities of the critical path are highlighted with orange color  Basic Critical .

Further explanations of the graphic can be found in the legend .

You can see that several tasks were created in the previous step, but they do not yet have any relationships to each other. As a result, all operations currently start at the same time.

Click on the home icon  to return to the Fiori Launchpad Overview.



Step 4: Create Relationships

Task Create the relationship structure.

Time 15 min

Short Description Use the SAP Fiori Launchpad to create the relationship structure.

Name (Position) Jun Lee (Production Manager)

So far, the activities are all assigned to the top WBS element. In addition, there are no relationships between activities, i.e. activities so far begin all to the same time. This will be changed now.

To create the relationships, use in the *Project System* area in the role *Production Manager* the app *Project Builder*.



Fiori App

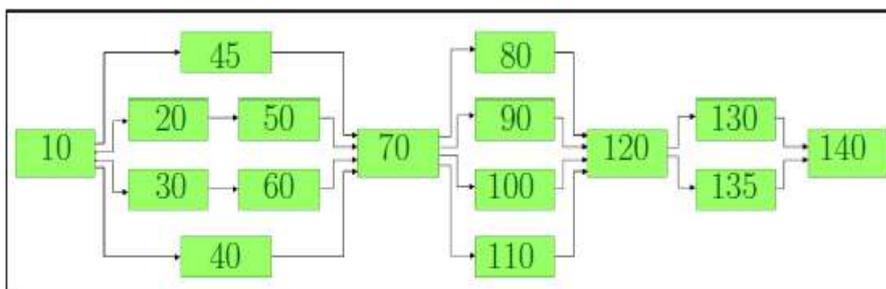
Under *Worklist: Description* you will find your project **P/2###** under Last Projects Processed. Double-click on the project to open it.

P/2###

Note Alternatively, you can also reopen the project via .

Activities are linked by relationships to establish a chronological order.

In the following, we create the relationship structure as shown in the screen below. The graphic shows schematically the network plan for the development of the ultra-light racing bike. It is intended to serve as a template for the next step when you assign the activities.



The following example will show to enter the relationships between activities 10, 20 and 50. Please use the same procedure to create all relationships of the image above.

As you can see in the image above as well as in the snippet below, activity number 20 is the successor of activity number 10. In addition, activity number 50 is the successor of number 20. Please keep in mind that only direct relationships between two activities will be created. For example, no relationship between activity 10 and 50 will be entered.



In the *Project Structure: Description* area, select the General Concept activity.

Project Structure: Description	Identification
Development of Ultralight Bike 400 (I)	P/2400
Development of Ultralight Bike	P/2400
Development of Ultralight Bike	4000028
General concept	4000028 0010
Outsourcing gear	4000028 0045

Use the  Relationship Overview button.

Since we only care about the activities 10, 20 and 50, we will only enter **20** in activity and mark it as successor by selecting the **Scs** flag.

20
Scs

Note However, keep in mind that later the relationships to operations 30, 40 and 45 will also be maintained in the same way for operation 10.

Identification and view selection

Activity: 4000028 0010 General concept

Detail: 

Overview(s): 

Mixed Predecessor Successor

Relationships

Act.	Network	Scs	* Ty.	Intervl	Un.	Ti...	T...	Operation Short Text
<input type="checkbox"/> 20		<input checked="" type="checkbox"/>	FS					

Confirm your entries by pressing enter.

In the *Project Structure: Description* area, select the *Engineering of carbon frame* operation and switch to the relationship overview  again.

In this screen you can see that activity 10 was automatically added as a predecessor (flag **Scs** isn't selected).

Please enter activity **50** and mark it as successor of activity 20 by selecting the **Scs** flag and confirm your entries by pressing enter.

50

Scs

Identification and view selection

Activity: 4000028 0020 Engineering of carbon frame  

Detail: 

Overview(s):      

Mixed Predecessor Successor

Relationships

	Act.	Network	Scs	* Ty.	Intervl	Un.	Ti...	T...	Operation Short Text
<input type="checkbox"/>	0010	4000028	<input type="checkbox"/>	FS					General concept
<input type="checkbox"/>	0050		<input checked="" type="checkbox"/>	FS					

In the *Project Structure: Description* area, select the activity *Production of carbon frame* and switch to the Relationship Overview  again.

Here, you will notice that activity 20 has automatically been entered as the predecessor.

Now maintain the successor activities for all the remaining activities, as indicated in the illustration above with green activities. Do not forget to also select **Scs** for these activities if they are successor activities.

Use the Save icon  to save your entries.

 Project P/2400 is being changed

Click on the home icon  to return to the Fiori Launchpad Overview.



Step 5: Display project network graph

Task Display the project network graph.

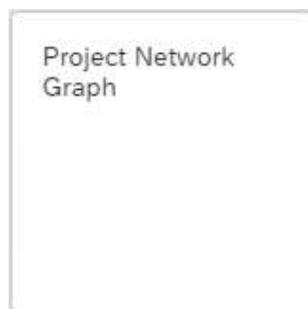
Time 5 min

Short Description Use the SAP Fiori Launchpad to display the project network graph.

Name (Position) Jun Lee (Production Manager)

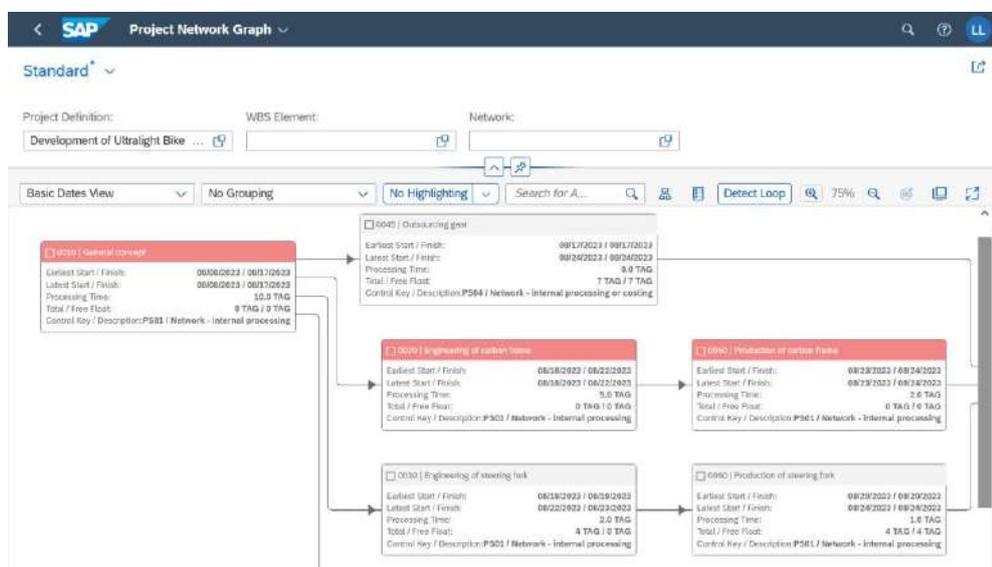
To display a project network graph, use in the *Project System* area in the role *Production Manager* the app *Project Network Graph*.

Fiori App



Enter **P/2####** in the *Project Definition* search field. The corresponding network is automatically loaded by the system.

P/2####



Due to the maintenance of the relationships, the project network graph has now changed accordingly. Activity 0010 | General Design now has four successor activities linked by arrows.

Click on  to adjust the project network to your window size or use  to reduce the view.



The project network now contains the same arrangement structure as the graphic in the previous step. Only the arrangement of individual connections can vary. Furthermore, you can see the critical path of the project

■ Basic Critical

Click on the home icon  to return to the Fiori Launchpad Overview.



Step 6: Assign milestones

Task Assign milestones to activities.

Time 10 min

Short Description Use the SAP Fiori Launchpad to assign milestones to activities.

Name (Position) Jun Lee (Production Manager)

In the following step, we assign texts (e.g. a functional specification) to the project. We assign milestones to activities, in order to indicate important project stages.

To assign milestones to activities, use in the *Project System* area in the role *Production Manager* the app *Project Builder*.

Fiori App



Under *Worklist: Description* you will find your project **P/2###** under Last Projects Processed. Double-click on the project to open it.

P/2###

Note Alternatively, you can also reopen the project via .

In the *Project Structure: Description* area, select the WBS element Development Ultralight Bike.



Select  to switch to the PS Text Overview.

Enter **01** for ST (first column), **PH-###-1** for the description and **DE** as the language key (TT).

01
PH-###-1
DE

Identification and view selection

WBS Element: P/2400

Detail: 

Overview(s):     

PS texts

	* ST	Text typ	* Description	T	TT
<input type="checkbox"/>	01		PH-400-1		DE

Confirm the entry with Enter, you can now enter a PS text. Click on  to return to the Project Builder main screen.

Note Important project stages can be indicated and described by project milestones. Milestones are assigned either to WBS elements or to activities of the project and fulfill information and documentation purposes but can trigger business processes such as progress reporting or milestone billing in the case of sales projects. In the following, we create three milestones, assigned to activities 0070, 0120, and 0140.

In the *Project Structure: Description* area, select the activity *Prototype assembly*.

Use the  Milestone Overview icon. For Usage please enter **00004** and by Description enter **Completion: prototype**.

00004
Completion: prototype

Identification and view selection

Activity: 4000028 | 0070 | Prototype assembly  

Detail: 

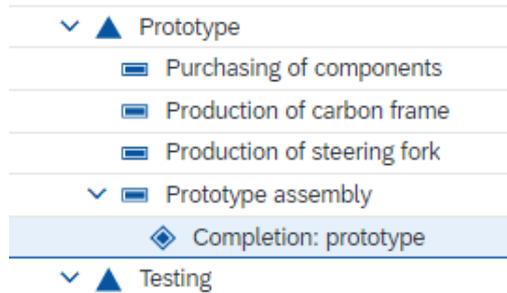
Overview(s):      

Milestones

Usage	Description	AGrp	Scheduled	Actl. date	POC	Fct	Fix. date
<input type="checkbox"/> 00004	Fertigstellung: Prototyp					<input type="checkbox"/>	

Confirm your entries with Enter. In the *Project Structure: Description* area, the milestone is added below the activity. Select the entry in the project structure to open the details of the milestone.



Complete the milestone data there. Select **Trend analysis, Progress analysis** and **Offset to fin.** Leave other fields as they are and confirm your entries with Enter.

Trend analysis
Progress analysis
Offset to fin

Identification

Milestone: 10 Fertigstellung: Prototyp

Basic Data Functions Administr.

Usage: 00004 Start execution

Activity: 0070 Prototype assembly

Usage **Progress analysis**

Milestone functions Progress analysis Perc of compl.: %

Release stop ind. Sales document date

Trend analysis

Billing plan

InvoicePercentg: %

Dates **Offset to activity**

Fixed date: 00:00:00 Latest dates

Actual date: 00:00:00 Offset to fin.

Scheduled date: 08/25/2023 08:00:00 Offset: / %

Now assign two other milestones to activities 0120 and 0140 analogously. Make sure not to assign these milestones to the same activity 0070 or, worse, to change the milestone, which you just created. Finally, you should be able to display three milestones in the structure tree on the left side.

To do so, use the following data:

For the activities 0120 enter for Usage **00005** and in Description enter **Completion: small series**. Select **Trend analysis, Progress analysis** and **Offset to fin**.

00005
Completion: small series
Trend analysis
Progress analysis
Offset to fin

For the activity 0140 (Release to mass production) enter for Usage **00006** and in Description enter **Completion: release**. Select **Trend analysis, Progress analysis** and **Offset to fin**.

00006
Completion: release
Trend analysis
Progress analysis
Offset to fin

Project Structure: Description	Identification
▼ Development of Ultralight Bike 400 (I)	P/2400
▼ ▲ Development of Ultralight Bike	P/2400
▼ Development of Ultralight Bike	4000028
General concept	4000028 0010
Outsourcing gear	4000028 0045
Performance test by professional drivers	4000028 0135
▼ ▲ Engineering	P/2400-1
▼ Engineering of carbon frame	4000028 0020
◆ Completion: small series	11
Engineering of steering fork	4000028 0030
▼ ▲ Prototype	P/2400-2
▼ Purchasing of components	4000028 0040
◆ Completion: release	12
Production of carbon frame	4000028 0050
Production of steering fork	4000028 0060
▼ Prototype assembly	4000028 0070
◆ Fertigstellung: Prototyp	10
▼ ▲ Testing	P/2400-3
Wind channel test	4000028 0080
Stiffness test	4000028 0090
Testing acceleration dynamics	4000028 0100

Use the icon  to save your entries.

 Project P/2400 is being changed

Click on the home icon  to return to the Fiori Launchpad Overview.



Step 7: Release of Project

Task Release of the Project.

Time 5 min

Short Description Use the SAP Fiori Launchpad to release the project.

Name (Position) Jun Lee (Production Manager)

The project will be released. The release of the WBS elements and / or activities of the project are a precondition for the posting of actuals, in the execution phase of the project. In productive environments and for large projects, only those elements will be released which are to be executed in the near future. The release of higher-level WBS elements will also release subordinate WBS elements and / or assigned activities. In the exercises, we release the project definition, thereby releasing all WBS elements and activities of the project.

To release the project, use in the *Project System* area in the role *Production Manager* the app *Project Builder*.

Fiori App



Under *Worklist: Description* you will find your project **P/2####** under Last Projects Processed. Double-click on the project to open it.

P/2####

Note Alternatively, you can also reopen the project via .

Choose Menu **Menu** ► **Edit** ► **Status** ► **Release** to release your project.

Menu bar

The system displays a message that the status for the project has been set.

 Status was set

Use the Save icon  to save your entries.

 Project P/2400 is being changed

Click on the home icon  to return to the Fiori Launchpad Overview.



Step 8: Reporting using cost element report

Task Reporting using cost element report.

Time 10 min

Short Description Use the SAP Fiori Launchpad to report by using cost element report.

Name (Position) Silvia Cassano (Controller)

By structuring the project using network activities, you have built a quantity structure with internal and external services, which can be totaled as planned costs. When releasing the activities, they are automatically calculated. From now on, planned costs can be evaluated specific to controlling periods (normally months) and specific to calculate elements. The evaluation can be done on a specific activity, but also aggregated to WBS elements and the whole project.

To report, use in the *Project System* area in the role *Controller* the app *Project Costs – Actual/Commitment/Total/Planned in CO Area Currency*.

Fiori App



If required, enter in database **GL01000** and confirm with .

GL01000

Enter in the selection screen for Project **P/2###**, in the Controlling Area choose **EU00**, for Plan Version **0**. Enter the **current year** for From fiscal year and in To fiscal year enter the **next year**. By From period enter **1** and in to period enter **12**. Please delete all other field entries.

P/2###
EU00
0
current year
next year
1
12

SAP Actual/Comm/Total/Plan in COAr CrCY: Selection Search in: "Apps"

Menu

Project Management Selections (Other DB profile: GL01000)

Project: P/2400 to:

Sales document: to:

WBS Element: to:

Network/order: to:

Activity: to:

Materials in network: to:

Selection values

Controlling Area: EU00

Plan Version: 0

From Fiscal Year: 2023

To Fiscal Year: 2024

From Period: 1

To Period: 12

Selection groups

Cost Element Group:

Or value(s): to:

Note The project will usually last until the next year (corresponding to the network activity durations and their relationships). Since a part of planned costs will be assigned to the next year, you would only show a part of the costs when selecting only the current year.

Click on **Execute** to get an overview of the cost types used. These are divided into actual, commitment, total and planned costs.

Act/Com/Total/Plan As of: 08/08/2023 Page: 2 / 6

Column 1 / 4

Object PRJ P/2400 Development of Ultra
 Name of Person Resp.

From Fiscal Year 2023 To Fiscal Year 2024
 From Period 1 To Period 12

Cost Elements	Actual	Commitments	Total	Plan
6300000 Other operating expenses				10,000.00
6991000 Cost of Labor		5,000.00	5,000.00	5,000.00
8000000 Labor				21,250.00
8012000 Prod. Wages Overhead				5,737.50
8013000 Admin. Overhead				4,048.14
8014000 Sales Overhead				5,397.50
* All Cost Elements		5,000.00	5,000.00	51,433.14

Note For the network activities, you specified work centers and the amount of work (in units of hours). As for the primary cost activities, you entered the costs directly. These costs are determined by network costing and will be displayed as aggregated costs for WBS elements and for the project definition. The servicing activity resulted in a purchase requisition for the purchasing department, which is displayed as commitment (value type, which displays a future obligation)

Click on the home icon  to return to the Fiori Launchpad Overview.



Step 9: Analyze Project Structure

Task Analyze the project structure.

Time 5 min

Short Description Use the SAP Fiori Launchpad to analyze the project structure.

Name (Position) Jermain Kumins (Shop Floor Worker)

Using the structure information system, you can analyze the project structure as well as dates, costs and revenues (plan and actuals) of one or many projects. The structure information system does not only display data, but you can edit the project from there or post activity confirmations.

To analyze the project structure, use in the *Project System* area in the role *Shop Floor Worker* the app *Structure Overview*.

Fiori App



If required, enter in the PS Info Profile filed **GL01000** and confirm with .

GL01000

In the selection screen enter for Project **P/2####** and leave the other fields as they are.

P/2####

Use **Execute** for the report.

Project Structure Overview		Title	BasicStartD...	Basic finish	Actual start	Actual finish
<input type="checkbox"/>	Development of Ultralight Bike 400 (I)	P/2400	08/08/2023			
<input type="checkbox"/>	Development of Ultralight Bike	P/2400	08/08/2023			
<input type="checkbox"/>	PH-400-1	FuncDesc				
<input type="checkbox"/>	Development of Ultralight Bike	4000028	08/08/2023			
<input type="checkbox"/>	Engineering	P/2400-1				
<input type="checkbox"/>	Engineering of carbon frame	4000028 0020				
<input type="checkbox"/>	Engineering of steering fork	4000028 0030				
<input type="checkbox"/>	Prototype	P/2400-2				

The standard layout shows the project structure overview, the corresponding title texts and the basic and actual dates. However, additional columns can be displayed, e.g. to evaluate the current costs. Furthermore, the structure overview can be updated at any time by clicking on .

Click on the home icon  to return to the Fiori Launchpad Overview.



Step 10: Further scheduling of Project

Task Further scheduling of the Project.

Time 10 min

Short Description Use the SAP Fiori Launchpad for further scheduling of the project.

Name (Position) Jun Lee (Production Manager)

In our project, dates have been already planned by the scheduling of network activities. Network scheduling works in principle using the durations of the activities and their relationships. The scheduled dates of the activities are aggregated to the WBS elements (to which the activities are directly assigned). They can be further aggregated within the work breakdown structure (i.e. to the higher level / top-level WBS elements).

To change your project, use in the *Project System* area in the role *Production Manager* the app *Project Builder*.

Fiori App



Under *Worklist: Description* you will find your project **P/2####** under Last Projects Processed. Double-click on the project to open it.

P/2####

Note Alternatively, you can also reopen the project via .

In the *Project Structure: Description* area, select the activity *Performance test by professional drivers (0135)*.

Project Structure: Description	Identification
Development of Ultralight Bike 400 (I)	P/2400
Development of Ultralight Bike	P/2400
PH-400-1	PH-400-1
Development of Ultralight Bike	4000028
General concept	4000028 0010
Outsourcing gear	4000028 0045
Performance test by professional drivers	4000028 0135
Engineering	P/2400-1

8000 EUR
Flexible

Change the Amount in **8000 EUR** and select **Flexible**. Leave the other fields as they are.

Identification and view selection

Activity: 4000028 0135 Performance test by professional drivers

Detail: [icon]

Overview(s): [icon] [icon] [icon] [icon] [icon] [icon]

Costs Dates Assignments Long Text User fields Progress

Costs

System Status: REL SETC [icon] * Control Key: PS03 Subntwk exists

WBS Element: P/2400 Project Sum.

Company Code: DE00 Factory Cal. ID: 01

* Plant: HD00 Rqstg Cost Cntr: [input]

Amount: [input] 8000 EUR [icon] * Cost Element: 6300000

Distrib. costs: [input] Execution Fact: [input]

Normal duration: [input] Flexible

Note Because of the indicator "flexible" the duration of activity 0135 has been linked to the duration of activity 0130, since both activities are "parallel" and activity 0130 has a longer duration. The planned costs of activity 0135 have decreased to 8 000 and are equally distributed over the (flexible) duration of the activity.

Use the **Save** button.

 Project P/2400 is being changed

Click on the home icon  to return to the Fiori Launchpad Overview.



Step 11: Post activity confirmations

Task Post activity confirmations for your project.

Time 10 min

Short Description Use the SAP Fiori Launchpad to post activity confirmations for your project

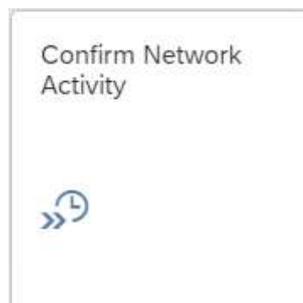
Name (Position) Jamie Shamblin (AR Accountant)

In the execution phase, we post actuals (actual dates, actual costs, material movements, capacity utilization) to the project. A prerequisite for the posting of actuals is always the release of the associated project object. We have already released the entire project.

To post activity confirmations, use in the *Project System* area in the role *AR Accountant* the app *Confirm Network Activity*.

Fiori App

Note If the app is not displayed, search for it by using the search bar .



In the *Network Activities* search, enter your project P/2### and press Enter. Now all the activities of your project are displayed.

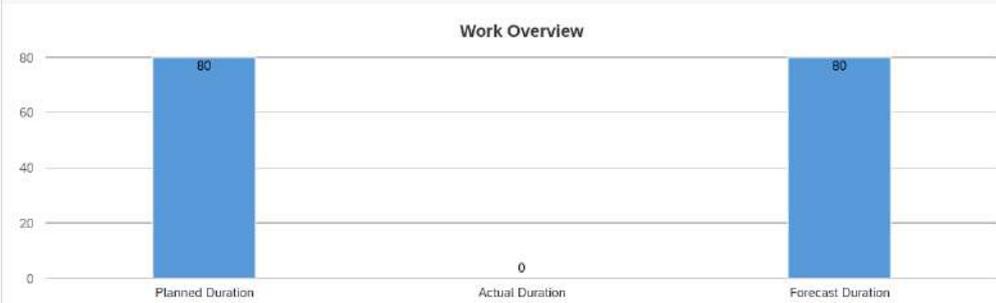
Network Activities	
P/2400	<input type="text"/>
Small series production	100.0 Hours
4000028 / 0120 Project P/2400	
General concept	80.0 Hours
4000028 / 0010 Project P/2400	
Prototype assembly	60.0 Hours
4000028 / 0070 Project P/2400	

Select the General concept operation from the list of activities.

In the details of the process, you will see that it is scheduled for 80 hours.

Confirm Network Activity

General concept	80.0 Hours
4000028 / 0010	Earliest Scheduled: 08/08/2023 - 08/17/2023
DVLP1000 / HD Development	Latest Scheduled: 08/08/2023 - 08/17/2023
Plant Heidelberg	Actual Confirmed:
Project P/2400	



The first part of the processing has taken 35 hours so far. Enter **35** as *actual*. Delete both the *actual start date* and the *actual finish date*.

35
Actual Start
Actual Finish

Report Processing	Report Date
Planned: 80.0 Hours	Actual Start: MM/dd/yyyy
Actual: <input type="text" value="35.0"/> Hours	Actual Finish: MM/dd/yyyy
Remaining: <input type="text" value="0.0"/> Hours	Forecast Finish: MM/dd/yyyy
Forecast: 80.0 Hours	

Report Processing Percentage

Processing: %

Select **Calculate** to determine the remainder and processing of the activity.

Report Processing	Report Date
Planned: 80.0 Hours	Actual Start: MM/dd/yyyy
Actual: <input type="text" value="35.0"/> Hours	Actual Finish: MM/dd/yyyy
Remaining: <input type="text" value="45"/> Hours	Forecast Finish: MM/dd/yyyy
Forecast: 80.0 Hours	

Report Processing Percentage

Processing: %

Press **Confirm** to report the effort.

Note The difference between a confirmation and a final confirmation is that after a confirmation the status of the operation is partially confirmed, whereas with a final confirmation the status is set to fully confirmed.

Confirm Network Activity

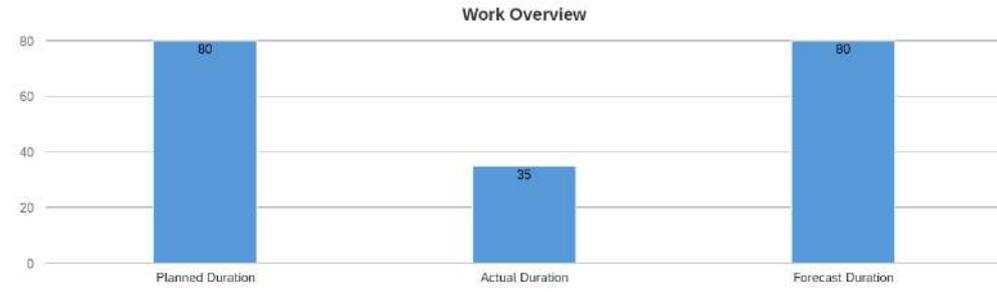
Confirm your entries?

Confirm **Cancel**

Press **Confirm** again.

You can see that an actual duration of 35 hours has now been reported. Furthermore, the remaining processing time has been reduced from 80 to 45 hours.

General concept	45.0 Hours
4000028 / 0010	Earliest Scheduled: 08/08/2023 - 08/17/2023
DVLP1000 / HD Development	Latest Scheduled: 08/08/2023 - 08/17/2023
Plant Heidelberg	Actual Confirmed:
Project P/2400	



Click on the home icon  to return to the Fiori Launchpad Overview.



Step 12: Display actual cost reporting

Task Display the actual cost reporting.

Time 5 min

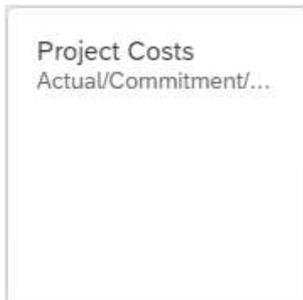
Short Description Use the SAP Fiori Launchpad to display the actual cost reporting.

Name (Position) Silvia Cassano (Controller)

The actual costs will be analyzed using the cost element report.

To display the actual cost reporting, use in the *Project System* area in the role *Controller* the app *Project Costs - Actual/Commitment/Total/Planned in CO Area Currency*.

Fiori App



If required, enter in database **GL01000** and confirm with .

GL01000



Enter in the selection screen for Project **P/2####**, in the Controlling Area choose **EU00**, for Plan Version **0**. Enter the **current year** for From fiscal year and in To fiscal year enter the **next year**. By From period enter **1** and in to period enter **12**. Please delete all other field entries.

P/2####
 EU00
 0
 current year
 next year
 1
 12

SAP Actual/Comm/Total/Plan in COAr Crc... Search In: "Apps"

Menu ▾

Project Management Selections (Other DB profile: GL01000)

Project: P/2400 to:

Sales document: to:

WBS Element: to:

Network/order: to:

Activity: to:

Materials in network: to:

Selection values

Controlling Area: EU00

Plan Version: 0

From Fiscal Year: 2023

To Fiscal Year: 2024

From Period: 1

To Period: 12

Click on **Execute**. You get an overview of the cost types used. These are divided into actual, commitment, total and planned costs.

Act/Com/Total/Plan As of: 08/09/2023 Page: 2 / 6

Column 1 / 4

Object PRJ P/2400 Development of Ultra

Name of Person Resp.

From Fiscal Year 2023 To Fiscal Year 2024

From Period 1 To Period 12

Cost Elements	Actual	Commitments	Total	Plan
6300000 Other operating expenses				8,000.00
6991000 Cost of Labor		5,000.00	5,000.00	5,000.00
8000000 Labor	1,750.00		1,750.00	21,250.00
8012000 Prod. Wages Overhead				5,737.50
8013000 Admin. Overhead				4,048.14
8014000 Sales Overhead				5,397.50
* All Cost Elements	1,750.00	5,000.00	6,750.00	49,433.14

Due to the confirmation of expenses, actual costs of EUR 1,750 are now reported.

Click on the home icon to return to the Fiori Launchpad Overview.



Step 13: Create creditor invoice

Task Create a creditor invoice.

Time 5 min

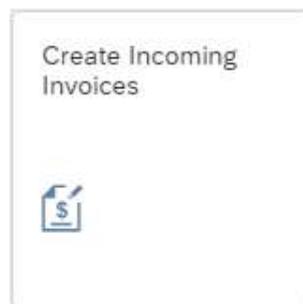
Short Description Use the SAP Fiori Launchpad to create a creditor invoice.

Name (Position) Jamie Shamblin (AR Accountant)

Before the general release for mass production, professional bikers are testing the ultralight racing bikes. After testing, the professionals send an invoice to the enterprise for their service. This leads to further actual costs in the project execution.

To create a creditor invoice, use in the *Project System* area in the role *AR Accountant* the app *Create Incoming Invoices*.

Fiori App



If required enter **DE00** for Company Code.

DE00

In the following screen, enter for Supplier **114###**, choose the **today's date** for the Invoice and enter for Amount **9700**. In the text field enter **Invoice for performance testing ###**. Press Enter.

114###
today's date
9700
Invoice for performance
testing ###

Enter **6300000** for G/L account and * for amount in document currency. Enter **A0** for tax code.

6300000
*
A0

Scroll right in the table to the *Network* column. Click in the associated field and select to access the value help. Select the *Networks for a Project Definition* tab and enter your project **P/2####** for *Project Definition*. Then press **Go**.

P/2###

Select your network and confirm the selection with **OK**.

Enter **0135** for *Transaction Number - Activity*.

0 Items (No entry variant selected)

St...	G/L acct	Short Text	D/C	Amount in doc.curr.	Cos Network	Transaction no
<input type="checkbox"/>	6300000		S D...	*	4000028	0135

Press Enter to confirm the entries. The system completes all further necessary data.

Post the invoice. Use the **Post** icon to post the invoice.

✔ Document 1900000003 was posted in company code DE00

Click on the home icon  to return to the Fiori Launchpad Overview.



Step 14: Display actual cost reporting

Task Display the actual cost reporting.

Time 5 min

Short Description Use the SAP Fiori Launchpad to display the actual cost reporting.

Name (Position) Silvia Cassano (Controller)

To display the actual cost reporting, use in the *Project System* area in the role *Controller* the app *Project Costs - Actual/Commitment/Total/Planned in CO Area Currency*.

Fiori App



If required, enter in database **GL01000** and confirm with .

GL01000



Enter in the selection screen for Project **P/2####**, in the Controlling Area choose **EU00**, for Plan Version **0**. Enter the **current year** for From fiscal year and in To fiscal year enter the **next year**. By From period enter **1** and in to period enter **12**. Please delete all other field entries.

P/2###
 EU00
 0
 current year
 next year
 1
 12

SAP Actual/Comm/Total/Plan in COAr Crc... Search In: "Apps"

Menu ▾ Data Source... Change DB profile Status

Project Management Selections (Other DB profile: GL01000)

Project: P/2400 to:

Sales document: to:

WBS Element: to:

Network/order: to:

Activity: to:

Materials in network: to:

Selection values

Controlling Area: EU00

Plan Version: 0

From Fiscal Year: 2023

To Fiscal Year: 2024

From Period: 1

To Period: 12

Click on **Execute**. You get an overview of the cost types used. These are divided into actual, commitment, total and planned costs.

Act/Com/Total/Plan As of: 08/09/2023 Page: 2 / 6

Column 1 / 4

Object PRJ P/2400 Development of Ultra

Name of Person Resp.

From Fiscal Year 2023 To Fiscal Year 2024

From Period 1 To Period 12

Cost Elements	Actual	Commitments	Total	Plan
6300000 Other operating expenses	9,700.00		9,700.00	8,000.00
6991000 Cost of Labor		5,000.00	5,000.00	5,000.00
8000000 Labor	1,750.00		1,750.00	21,250.00
8012000 Prod. Wages Overhead				5,737.50
8013000 Admin. Overhead				4,048.14
8014000 Sales Overhead				5,397.50
* All Cost Elements	11,450.00	5,000.00	16,450.00	49,433.14

Due to the receipt of the invoice, further actual costs of EUR 9,700 are now reported.

Click on the home icon to return to the Fiori Launchpad Overview.

