

SAP S/4HANA Integration with Oracle Primavera

June 2020

Short presentations of Commondo ePPM solutions based on CPI which supports two type of workflows:

- **SAP PPM to Oracle Primavera**
- **Oracle Primavera to SAP PPM**





SAP PPM to Oracle Primavera

- Updates project data from SAP to Primavera. It creates project on Primavera system and maintains it based on the changes on the SAP side. It also creates a new WBS object on Primavera side based on a Task from SAP PPM system.
- Steps needed to transfer task data from SAP to Primavera via “SAP PPM to Oracle Primavera Task” (workflow will create Primavera project with structure):
 1. Create new task on S/HANA or choose an existing one.
 2. Set project and task status to “Released”.
 3. Initiate transfer
 1. Using REST client (Postman in this document) or
 2. Commondo My Tasks Fiori app extension
 4. Check changes on Primavera project.

IFlow response message (3.1)

Untitled Request

POST https://[redacted]-ifimap.hcisbp.eu2.hana.ondemand.com/http/PPMtoPrimaveraTaskTest

Params Authorization Headers (12) **Body** Pre-request Script Tests Settings

none form-data x-www-form-urlencoded raw binary GraphQL XML

1 <ObjectId>00000000000000000423</ObjectId>
2

Body Cookies (4) Headers (16) Test Results Status: 200 OK Time: 6.77 s Size: 886 B Save Response

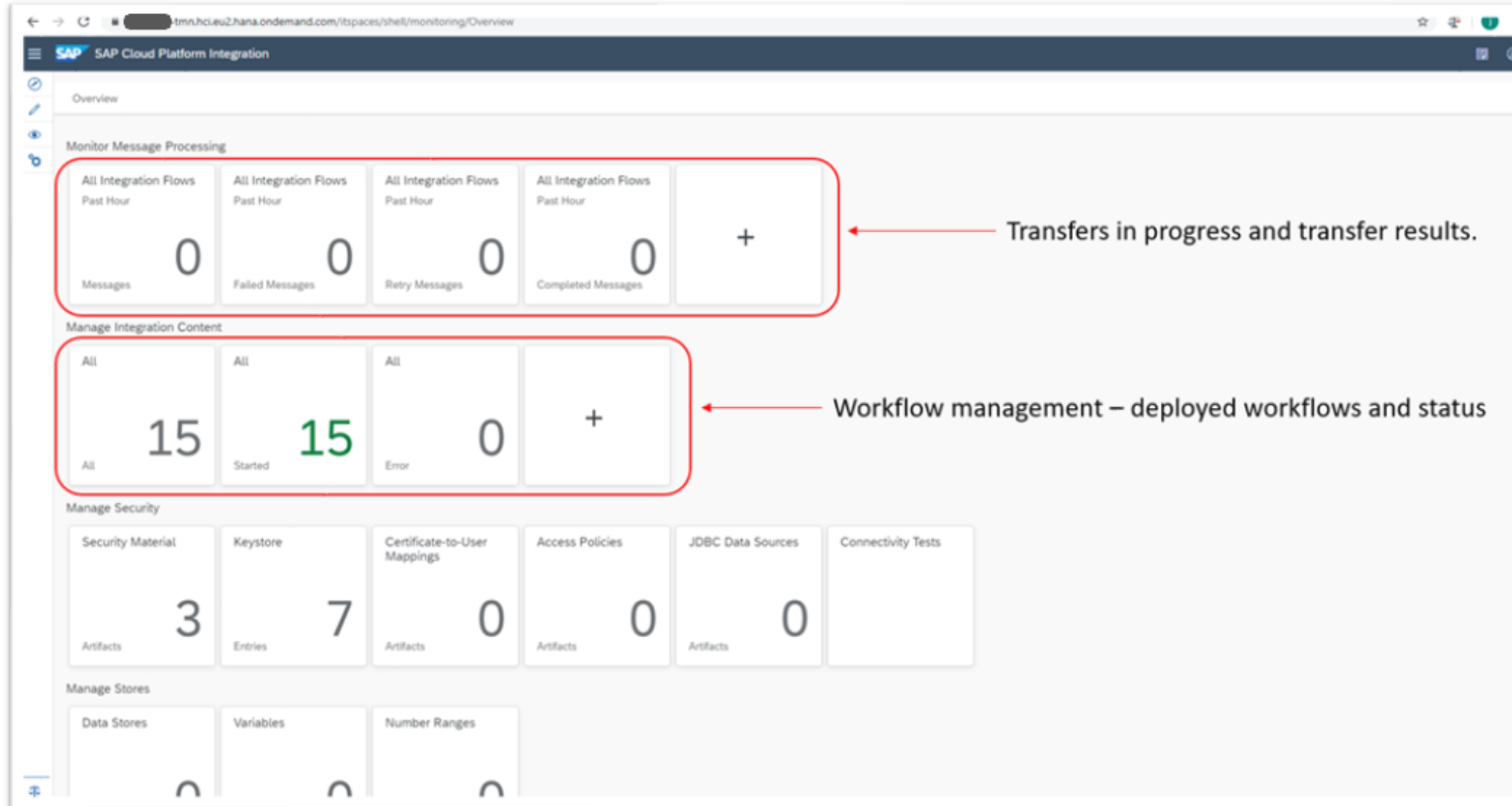
Pretty Raw Preview Visualize XML

```
1 <CreateWBSResponse xmlns="http://xmlns.oracle.com/Primavera/P6/WBS/WBS/V2" xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
2   <ObjectId>5301</ObjectId>
3 </CreateWBSResponse>
```

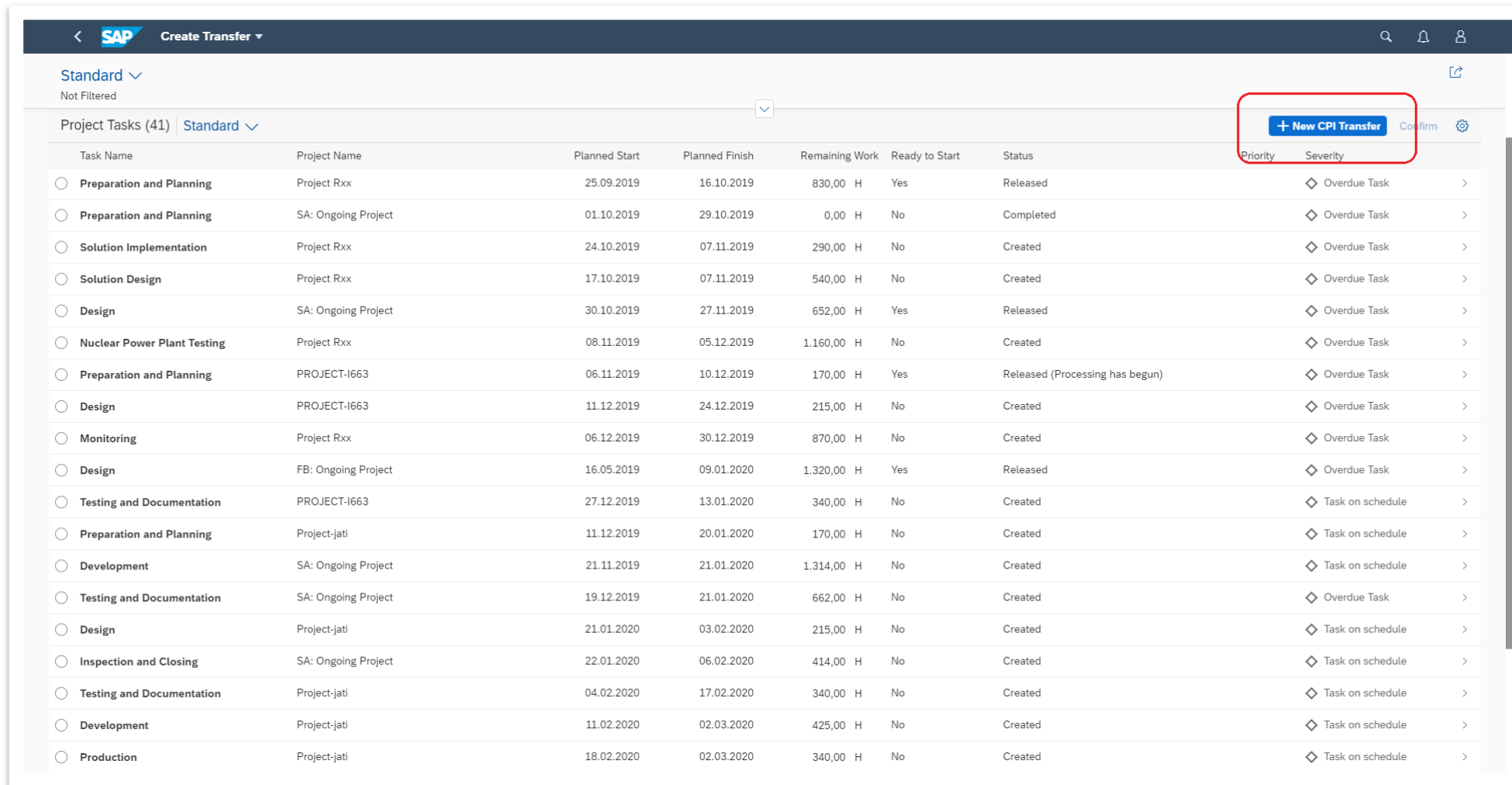
Expected response:
Identification key of a WBS created on Primavera.

Error response:
505 internal server error.
For more info check monitoring.
More info on next slide.

Operations flow - Monitorig



Commodo My Tasks extension (3.2)



The screenshot displays the SAP Fiori 'Create Transfer' application interface. At the top, there is a navigation bar with the SAP logo and the text 'Create Transfer'. Below this, a filter section shows 'Standard' and 'Not Filtered'. The main content area features a table titled 'Project Tasks (41)' with a 'Standard' filter. The table has columns for Task Name, Project Name, Planned Start, Planned Finish, Remaining Work, Ready to Start, Status, Priority, and Severity. A red box highlights a '+ New CPI Transfer' button located in the top right corner of the table area, next to a 'Confirm' button and a settings icon. The table lists various tasks such as 'Preparation and Planning', 'Solution Implementation', 'Design', 'Nuclear Power Plant Testing', 'Monitoring', 'Testing and Documentation', and 'Production' across different projects.

Task Name	Project Name	Planned Start	Planned Finish	Remaining Work	Ready to Start	Status	Priority	Severity
Preparation and Planning	Project Rxx	25.09.2019	16.10.2019	830,00 H	Yes	Released	Overdue Task	>
Preparation and Planning	SA: Ongoing Project	01.10.2019	29.10.2019	0,00 H	No	Completed	Overdue Task	>
Solution Implementation	Project Rxx	24.10.2019	07.11.2019	290,00 H	No	Created	Overdue Task	>
Solution Design	Project Rxx	17.10.2019	07.11.2019	540,00 H	No	Created	Overdue Task	>
Design	SA: Ongoing Project	30.10.2019	27.11.2019	652,00 H	Yes	Released	Overdue Task	>
Nuclear Power Plant Testing	Project Rxx	08.11.2019	05.12.2019	1.160,00 H	No	Created	Overdue Task	>
Preparation and Planning	PROJECT-I663	06.11.2019	10.12.2019	170,00 H	Yes	Released (Processing has begun)	Overdue Task	>
Design	PROJECT-I663	11.12.2019	24.12.2019	215,00 H	No	Created	Overdue Task	>
Monitoring	Project Rxx	06.12.2019	30.12.2019	870,00 H	No	Created	Overdue Task	>
Design	FB: Ongoing Project	16.05.2019	09.01.2020	1.320,00 H	Yes	Released	Overdue Task	>
Testing and Documentation	PROJECT-I663	27.12.2019	13.01.2020	340,00 H	No	Created	Task on schedule	>
Preparation and Planning	Project-jati	11.12.2019	20.01.2020	170,00 H	No	Created	Task on schedule	>
Development	SA: Ongoing Project	21.11.2019	21.01.2020	1.314,00 H	No	Created	Task on schedule	>
Testing and Documentation	SA: Ongoing Project	19.12.2019	21.01.2020	662,00 H	No	Created	Overdue Task	>
Design	Project-jati	21.01.2020	03.02.2020	215,00 H	No	Created	Task on schedule	>
Inspection and Closing	SA: Ongoing Project	22.01.2020	06.02.2020	414,00 H	No	Created	Task on schedule	>
Testing and Documentation	Project-jati	04.02.2020	17.02.2020	340,00 H	No	Created	Task on schedule	>
Development	Project-jati	11.02.2020	02.03.2020	425,00 H	No	Created	Task on schedule	>
Production	Project-jati	18.02.2020	02.03.2020	340,00 H	No	Created	Task on schedule	>

Commodo has extend standard my tasks Fiori app to enable transfers trigger from user environment.

Primavera project – after Transfer (4)

The screenshot displays the Primavera WBS (Work Breakdown Structure) interface. The main window shows a table of WBS elements with columns for WBS Code, Forecast Start Date, Forecast Finish Date, Anticipated Start, Anticipated Finish, WBS Name, Total Activities, and SAP ID. A single WBS element is highlighted in blue, with the following details:

WBS Code	Forecast Start Date	Forecast Finish Date	Anticipated Start	Anticipated Finish	WBS Name	Total Activities	SAP ID
I_00002			20-Aug-20	02-Sep-20	Preparation and Planning Changed	0	

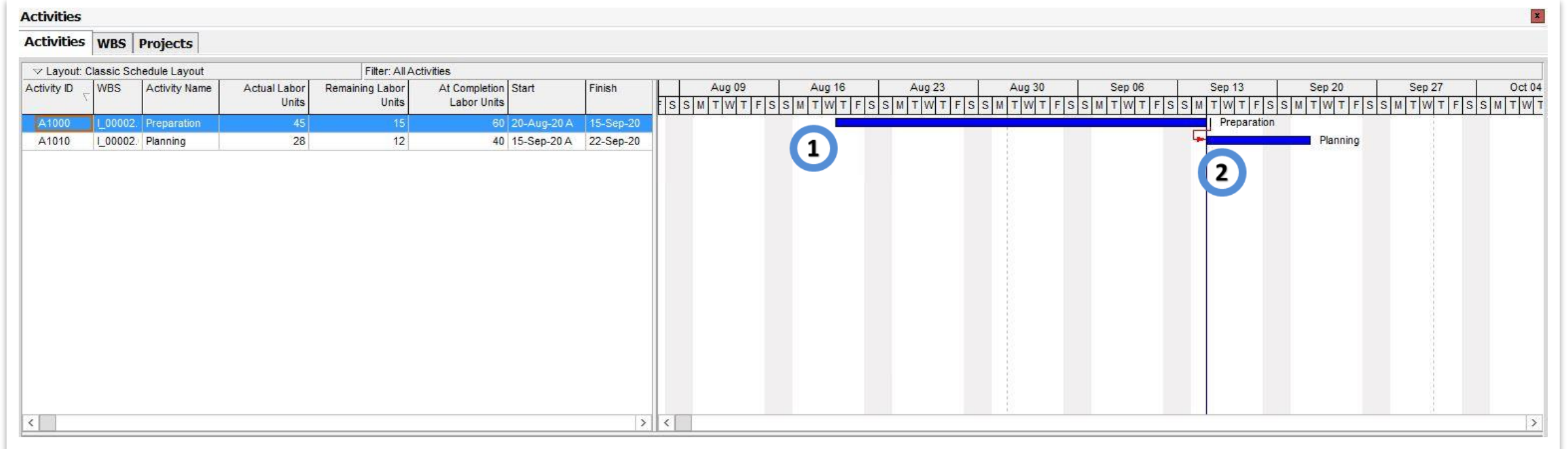
Below the table, the 'Anticipated Dates' section is visible, showing the Anticipated Start date as 20-Aug-20 and the Anticipated Finish date as 02-Sep-20. The 'General' section at the bottom left shows the WBS Code as 0000000000000000000423, the WBS Name as Preparation and Planning Changed, the Status as Active, and the Responsible Manager as Commodo.

- New **WBS** on Primavera.
- WBS is used as aggregation element for time logs from **all Activities that are linked to him.**

Oracle Primavera to SAP PPM

- Updates project data from Primavera to SAP. The main goal of the workflow is to update planned and actual data, as well as some important scheduling data, aggregated on Oracle Primavera and transfer it to SAP PPM Task.
- Steps needed to transfer task data from Oracle Primavera to PPM via “Primavera to PPM”:
 1. PPM project status needs to be “Released”.
 2. Primavera WBS created by PPM to Primavera transfer (this is required because of SAP metadata)
 1. Activities with logged time connected to this WBS
 3. Initiate transfer
 1. Using REST client (Postman in this document)
 2. Commondo My Tasks Fiori app extension
 4. Check new data in PPM project.

Primavera Project with new Activities



Here we can see two new **Activities** added to a “Preparation and Planning” **WBS**.

- 1** Logged, estimated and remaining time for a Preparation Activity.
 - Estimated: 60 hours
 - Confirmed time: 45 hours
- 2** Logged, estimated and remaining time for a Planning Activity.
 - Estimated: 40 hours
 - Confirmed time: 28 hours

PPM Project - after Transfer

The screenshot shows the SAP PPM Project interface for project I_00002. The 'Dates and Work' tab is selected, displaying the following data:

Field	Value
Duration	30 Days
Work	100 Hour
Actual Start	20.08.2020
Confirmed Work	73 Hour
Remaining Work	27 Hour

Red circles 1 and 2 highlight the 'Work' and 'Confirmation' sections respectively.

- 1 Planned work is changed. New value is **100h**.
- 2 Confirmed work is changed. New value is **73h**.

This value is **accumulated** from 2 Primavera Activities:

- Preparation Activity
 - At Completion Labor Units = **60** hours
- Planning Activity
 - At Completion Labor Units = **40** hours

This value is **accumulated** from 2 Primavera Activities:

- Preparation Activity
 - Actual Labor Units = **45** hours
- Planning Activity
 - Actual Labor Units = **28** hours

Remaining work can simply be checked as a subtract of Planned and Confirmed Work