ERP-1039: DDFS - I2M - PPM Project Portfolio Management

Document Links

ERP-1039 - Jira project doesn't exist or you don't have permission to view it.

ERP-1038 - Jira project doesn't exist or you don't have permission to view it.

Introduction

This Detailed Data Flow Specification (DDFS) defines the end-to-end data flow required to meet the following requirements.
Note: the Jira links will be replaced with the Functional Specifications (FS) when available. The FS, in turn, contain the link to the Jira Requests.

Sub Area	Process	Description	Story FS	Model FS	Migration	Details
Bucket	Bucket Planning	Top-down and Bottom-up planning	ERP-124	ERP-672	CNV-9036	4 views, year, category
Item	Item Planning	Plan Project Cost (FEC) & FY Budget Request	ERP-669	ERP-2665	CNV-9035 CNV-1022	2 views, month, category
	Business Case	Calculate Return on Investment Only Financial relevant projects Commentary	ERP-263	• ERP-2822 • ERP-2823 • ERP-2824 • ERP-2825 • ERP-2826 • ERP-2827 • ERP-2828	CNV-9105	• Portfolio MD (defaults) • Item MD • Costs • P&L • Cash Impacts • Subsidies • Calculations
	Scoring	Make comparable	ERP-669 - Jira project doesn't exist or you don't have permission to view it.	ERP-2875 - Jira project doesn't exist or you don't have permission to view it.	n/a	Probably just a view in the DDFS rather than an AM Separate model (persist data for snapshots)
	Prioritisation	Priority	ERP-519 - Jira project doesn't exist or you don't have permission to view it.	n/a	n/a	
	Item Retraction	Export to S/4	ERP-671	n/a	n/a	System interface document

	Item Snapshots	Change of Gate or variation		ERP-2964 - Jira project doesn't exist or you don't have permission to view it.	n/a	Quarterly, Variation, Gates, Adhoc
	Item Automation	Quarterly or adhoc snapshot accuracy calc	ERP-759 - Jira project doesn't exist or you don't have permission to view it.		n/a	Overwrite plan with actuals (business need, not reporting solution). Mass update of scoring, update accuracy
Project	WBS Planning	Plan costs	ERP-670 - Jira project doesn't exist or you don't have permission to view it.	ERP-2664 - Jira project doesn't exist or you don't have permission to view it.	CNV-1026	Extracting WBS from RPSCO
Portfolio Reporting	Bucket and Item	Reporting on the Plan data against the Actuals	ERP-152 - Jira project doesn't exist or you don't have permission to view it.		n/a	Analytic Model design TBC
Project Reporting	WBS	Reporting on the Plan data against the Actuals	ERP-760 - Jira project doesn't exist or you don't have permission to view it.		n/a	Analytic Model design TBC

SyWay have decided to perform planning for PPM in SAC rather than in S/4. The requirements above reflect the planning models and related stories for planning. The flows for each process are described with the separate functional specifications linked above.

The Item planning is retracted back into S/4 to enable availability control. The master data is created in S/4 which forms the backbone for the planning models.

There is no business content in Datasphere for this area, however, all of the CDS views are extraction enabled.

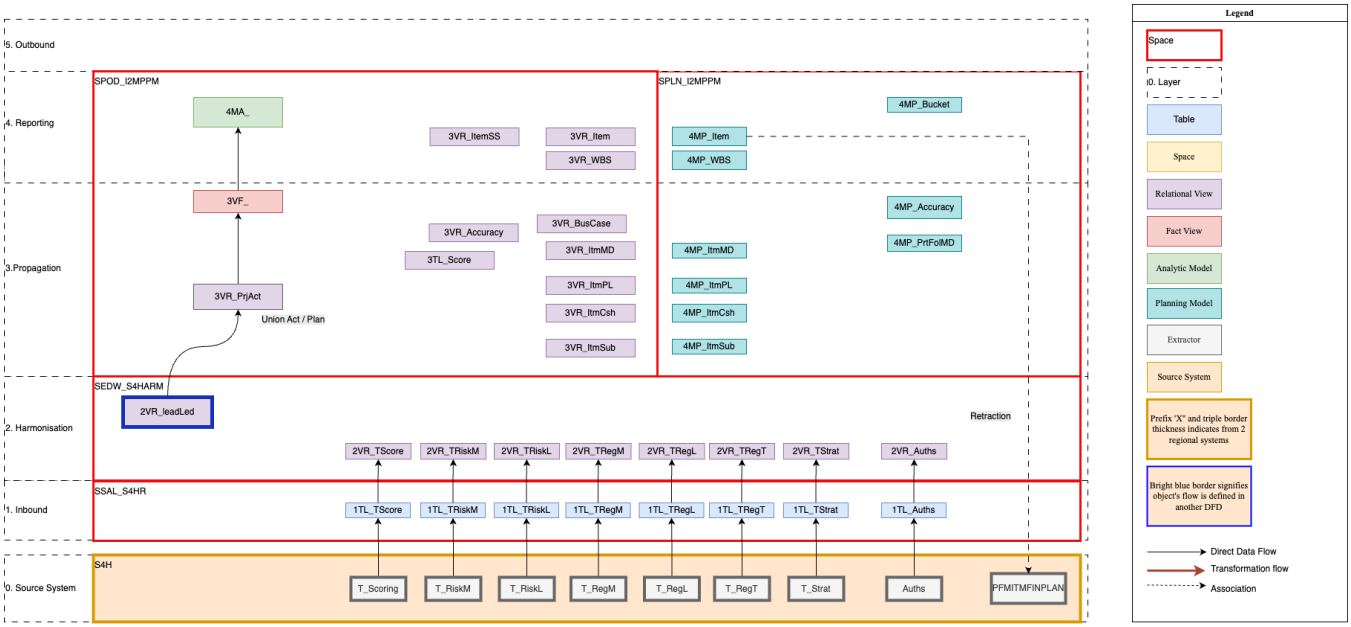
The business content in SAC has been recently been re-created. The modelling will reflect the concepts in this latest version, eg using the UUID's.

Gaps

Item	Detail	Status
Bucket snapshot	No formal requirement yet. Potentially just a version copy?	Open
Retraction	Issues regarding a dynamic filter (or delta) and locking the Item MD in S/4	Open

Timesheets	Assumed to be CATS from S/4	Open
Commitments	Not yet finally decided that the Predictive Ledger will replace the legacy Commitment approach (COOI) This would mean sharing 2VR_GLActItem rather than the restricted Leading Ledger	Open

Data Flow Diagram



- Harmonisation Layer
  - 2VR_Auths 2VR_S4HARM_SYQI_AuthorizationUser
  - 2VR_TScore 2VR_S4HARM_SYQI_Scoring
  - 2VR_TStrat 2VR_S4HARM_SYQI_Strategic
  - 2VR_TRiskM 2VR_S4HARM_SYQI_Risk_Mag
  - 2VR_TRiskL 2VR_S4HARM_SYQI_Risk_Lkd
  - 2VR_TRegM 2VR_S4HARM_SYQI_Reg_Mag
  - 2VR_TRegL 2VR_S4HARM_SYQI_Reg_Lkd
  - 2VR_TRegT 2VR_S4HARM_SYQI_RegTimeHz
  - 2VR_LeadLed 3VR_PrjAct
- Propagation Layer
  - 3VR_Bucket - 2VR_SPOD_I2MPPM_I_ProjectPortfolioBucket
  - 3VR_Item - 3VR_SPOD_I2MPPM_ProjectPortfolioItem
  - Item master data
  - 3VR_ItemSS -> 3TL_SPOD_I2MPPM_ItemSS
  - 3VR_Score -> 3TL_SPOD_I2MPPM_Score
- Reporting Layer
  - 4MP_Item
- Outbound Layer

Source System Extractors

System	Code	Extractor Name	Purpose	Delta	Build Jira Ref For Extension Information
S4HR	Auths	/SYQ /I_PPM_AUTHORIZATIONBYUSER	Maps users to Items	no	TBC
S4HR	T_Scoring	/SYQ/I_SCORING	Global parameters to be used for scoring	no	ERP-2388 PPM Item Custom Application
S4HR	T_RiskM	/SYQ/I_RISK_MAG	Starting Risk Magnitude, Residual Risk Magnitude (code to value mapping)	no	ERP-2388 PPM Item Custom Application

S4HR	T_RiskL	/SYQ/I_RISK_LKD	Starting Risk Likelihood, Residual Risk Likelihood (code to value mapping)	no	ERP-2388 PPM Item Custom Application
S4HR	T_RegM	/SYQ/I_REG_MAG	Regulatory Risk Magnitude (code to value mapping)	no	ERP-2388 PPM Item Custom Application
S4HR	T_RegL	/SYQ/I_REG_LKD	Regulatory Risk Likelihood (code to value mapping)	no	ERP-2388 PPM Item Custom Application
S4HR	T_RegT	/SYQ/I_REGTIMEHZ	Regulatory Mandated Time Horizon (code to value mapping)	no	ERP-2388 PPM Item Custom Application
S4HR	T_Strat	/SYQ/I_STRATEGIC	Strategic Weighting (code to value mapping)	no	ERP-2388 PPM Item Custom Application

The Item and Bucket hierarchy will not be extracted but rather built in DSP via the Parent UUID. This will work perfectly for the SAC planning component but the DSP reporting component will need to be tested.

All of the above are considered as Tier 1 and only maintained in RoW.

Inbound Layer

No inbound field adjustments are applied. Standard technical fields (load date/time, source system) are retained as delivered.

/SYQ/ replaced by SYQ

Harmonisation Layer

2VR_Auths 2VR_S4HARM_SYQI_AuthorizationUser

Purpose:

Assigns Item UUID to authorised users where there is sensitive project. Will be read and added to ProjectPortfolioItem Read/Write fields

2VR_TScore 2VR_S4HARM_SYQI_Scoring

Purpose:

Global Parameter table used in scoring

2VR_TStrat 2VR_S4HARM_SYQI_Strategic

Purpose:

Parameter table used in scoring. Detail by GBU

2VR_TRiskM 2VR_S4HARM_SYQI_Risk_Mag

Purpose:

Master data table to map the key to a value

2VR_TRiskL 2VR_S4HARM_SYQI_Risk_Lkd

Purpose:

Master data table to map the key to a value

2VR_TRegM 2VR_S4HARM_SYQI_Reg_Mag

Purpose:

Master data table to map the key to a value

2VR_TRegL 2VR_S4HARM_SYQI_Reg_Lkd

Purpose:

Master data table to map the key to a value

2VR_TRegT 2VR_S4HARM_SYQI_RegTimeHz

Purpose:

Master data table to map the key to a value

2VR_LeadLed 3VR_PrjAct

Purpose:

Restrict to PPM relevant data

Filter:

where project <> ''

Comments:

Propagation Layer

Join with long texts (excluding Z07)

Add Long Text Field for Object Type

Object Type	Long Text Field ID	Long Text Field Name
IPO	Z01	Status
IPO	Z02	Next Steps
RIH	Z01	Key Assumptions
RIH	Z02	Variations
RIH	Z03	Subsidy Relevance
RIH	Z04	Export Control Justification
RIH	Z05	Other Information
RIH	Z07	Business Case Comments / Justification
RIH	Z08	Lessons Learned

IPO = Initiative and RIH = Item - these are the only 2 options
Z07 is only for SAC

Create Odata connection to fill the master data required by SAC planning

Data Migration approach:

Normally stored in a separate model, however, as this is seamless planning and the data will need to be amended along with new data, it will have to be loaded as normal data in the same model.

- Subject to change in planning process
- Needs to be displayed in the same version when planning
- potentially could identify using an audit trail

Comments:

Long texts are required from STXL

Types of projects:

Expenditure on capital (Capex), which always is managed via a project using PPM

Capital maintenance is assigned to a project

Operation expenditure (Opex) can be managed via PPM but does not have to be - eg finance only projects

Master data:

When attributes need to be planned, we will try and plan as measures rather than attributes

Scoring:

This is a separate model

- Financial driven projects read from the Business Case

3VR_Bucket - 2VR_SPOD_I2MPPM_I_ProjectPortfolioBucket

Purpose:

Read data from planning model to be used further in DSP

Project Score is calculated according to 3 methodologies, determined by ; Financial, Risk or Regulatory.

- Retrieve Item *Scoring Methodology* from *Investment Reason* on *PPM Item Planning Transaction Data*

How is this score used (attribute or measure) - prioritisation as a number to be sorted

Calculation - sac planning action vs DSP persisted vs on the fly

Include value in snapshot - read score when snapping (better to persist)

I have split this into 3 views for simplicity, but they could be combined

3VR_Item - 3VR_SPOD_I2MPPM_ProjectPortfolioItem

Purpose:

Planning model made available for reporting

Item master data

Purpose:

Read data from planning model to be used further in DSP

Scoring:

- Perform lookups from Scoring MD to values (the lookup function is more for fuzzy logic)
- Read accuracy % from Item MD Planning
- Derive current Phase, WBS Element Description linked to active Decision Point
- Derive in-flight, Set to 'X' if Item Status = Z002 Approved or Z003 TECO, else blank
- Derive current Decision Point, it is when the /RPM/DECISION-ACTIVE = X transitive attributes showing attributes like dates
- Restricted users for sensitive projects reading from P_PPM_AUTHORIZATIONBYUSER

Source Views:

I_ProjectPortfolioItem

4MP_item

2VR_TScore

2VR_TStra

2VR_TRiskL

2VR_TRiskM

2VR_TRegL

2VR_TRegM

2VR_TRegT

Join:

Using the attributes, read the master data scoring tables and update the value (attribute vs measure v matrix view)

Risk Drop-Down lists held in S4:

Code	Risk Likelihood	Likelihood Value
1	Rare	0.1
2	Unlikely	0.3
3	Possible	1
4	Likely	3
5	Almost Certain	10

Code	Magnitude	Magnitude Value
1	Minor	10
2	Moderate	30
3	Important	100
4	Significant	300
5	Critical	1000

Visualisation of Risk Matrix (not stored):

Risk Likeihood	Magnitude	Minor	Moderate	Important	Significant	Crit
		10	30	100	300	10
Rare	0.1	1	3	10	30	
Unlikely	0.3	3	9	30	90	
Possible	1	10	30	100	300	
Likely	3	30	90	300	900	
Almost Certain	10	100	300	1,000	3,000	1

Formula:

Risk Matrix score = (Starting Risk = *RISK_MAGNITUDE_VALUE * RISK_LKLHD_VALUE) - (*Residual Risk = *RISK_MAGNITUDE_VALUE * RISK_LKLHD_VALUE)*

Reg Matrix Score = REG_MAGNITUDE_VALUE *REG_LKLHD_VALUE* * REG_TIME_HORIZON_FACTOR

3VR_ItemSS -> 3TL_SPOD_I2MPPM_ItemSS

Purpose:

Perform a snapshot of the data at a particular point in time.
To cater for attributes that can change over time, these attributes will be moved to dimensions.

Source:

3VR_Item

Transformation flow:

Graphical flow

Formula:

Add a timestamp and derive the SnapShot ID

Process:

Adhoc - scheduled via a task chain triggered by an API step in a SAC multi-action

Quarterly - scheduled via a task chain based on time

Stage gate - scheduled via a task chain based on a table extracted from S/4 - TBC

3VR_Score -> 3TL_SPOD_I2MPPM_Score

Purpose:

Project Score is calculated according to 3 methodologies, determined by ; Financial, Risk or Regulatory.

How is this score used (attribute or measure) - prioritisation as a number to be sorted

Include value in snapshot - read score when snapping (better to persist)

Source:

Item

Business case

Scoring

Strategy

Parameter:

Restricted to Items in the Item Planning form

Transformation flow:

Suggest using SQL as easy to perform complex calculations

Read above views and

Case itemtype when

- Fin: read 2VR_Score(blue) calculating Intensity Index = Initial Starting Point + NPV / Cost Weighting * (NPV / Project Cost (FEC)) * MIRR Weighting / MIRR Comparison Rate * MIRR^MIRR Exponent
- Risk: read 2VR_Score(blue) calculating Intensity Index = Initial Starting Point + Delta PL/Cost Weighting * (Risk Reduction / (Project Cost (FEC) * 10^6)) + Log(Cost) Weighting * (Log (Project Cost (FEC) * 10^6)) ^ Log(Cost) Exponent
- Reg: read 2VR_Score(blue) calculating Intensity Index = (Initial Starting Point + Delta PL/Cost Weighting * ((Matrix Score) / (Project Cost (FEC) * 10^6)) + Log(Cost) Weighting * (Log (Project Cost (FEC) * 10^6)) ^ Log(Cost) Exponent)

Read 2VR_Score where Project Score calculating Unweighted Project Score = 1 / (1 + EXP (-((Intensity Index + Index Offset) - Location Parameter) / Scale Parameter)) * PES Range + PES Minimum

Read 2VR_Strat where GBU = Item GBU, Buss Driver = Item Buss Driver calculating Score = Unweighted Project Score * WGHTG_FACTOR

Target:

3TL_Score with only ItemUUID and score

Trigger:

Can be initiated from the planning form for Item

However, if an ad-hoc request is required for all projects, then a identical Transformation Flow will be required without parameters

---

Reporting Layer

If you want to show the external format and text in SAP Analytic Cloud instead of the internal format the modelling in the Analytic Model needs to be done like this example:

4MP_Item

Purpose:

This is for planning

Functional Spec:

ERP-2665 Data Model - PPM Items (Req 57)

Comments:

Include live data 3VF_PrjAct (must be exposed for consumption)

Outbound Layer

When retracting, you cannot filter on the company code, even if in the model, as restricted to the fields in the API.

Options: play with having 2 fin view types which can be corrected on the API mapping.

Maybe the guids have a number range sequence

Workflow history

This view shows the 5 most recent entries. The complete workflow log is available from the 'Document Activity' menu item.

May 13, 2026	Actor	Type	Activity	Version
Approved	BARROW-ext, ian	Edit	updated the page at 8:32 am	
May 12, 2026				
	WENNINGER-ext, Sascha	State	changed state to Approved at 1:49 pm	v113
Lead Approval	WENNINGER-ext, Sascha	State	gave *POD Lead Review* approval at 1:49 pm	
		State	changed expiry date to '19 May, 2026 01:49 pm' at 1:49 pm	
		State	changed state to Lead Approval at 1:49 pm	v113
Tech Review of Updates	WENNINGER-ext, Sascha	State	gave *Minor change* approval at 1:49 pm	
		State	changed state to Tech Review of Updates at 1:49 pm	v113
Update in progress	WENNINGER-ext, Sascha	State	changed state to Update in progress at 1:49 pm	v113