

ERP-2921: DDFS - TEC - Technical Objects

Document Links

 [ERP-2921](#) - Jira project doesn't exist or you don't have permission to view it.

Introduction

This document describes the data flow for objects in the technical space.

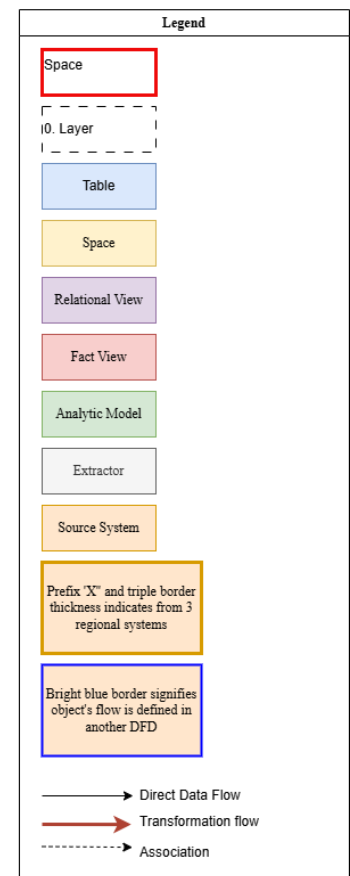
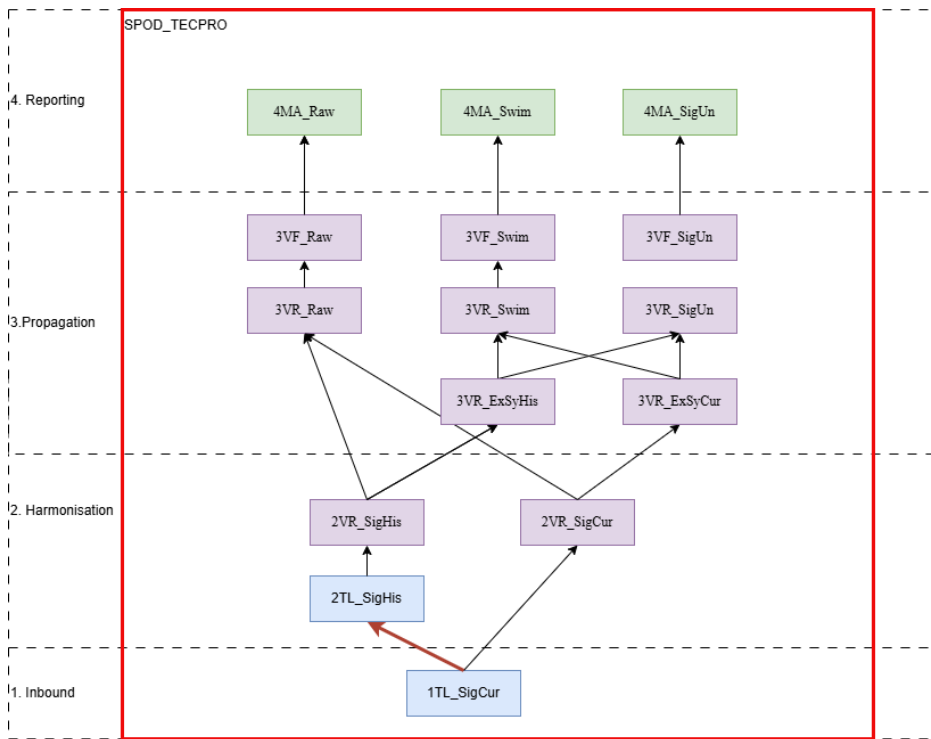
Sub-Area	Details	Example KPIs	Comments
TECPRO - Signavio Process Manager	Signavio is the source of truth for which task is performed by which process role using which executable (e.g. Fiori app, transaction, report, etc.). However Signavio does not provide sufficient reporting capability to meet the needs of various downstream consumers of this information, who need to use information from the process models to answer various questions in order to perform subsequent work. Examples include: • Show me all of the executables assigned to a process role (i.e. swimlane) across all of the L4 models, so that system authorizations can be created accordingly. • Show me all of the process roles which contain a particular executable • Show me what has changed between two revisions of a process model • Show me what has changed across all process models between two different dates • Show me what tasks and executables have been added and removed from a particular swimlane (process role) across all process models in a particular POD, between two given dates.	N/A The reporting is focused on comparing versions of data	

Jira Request Coverage

The models covered under this DDFS will cater for the requirements raised though the following Jira Requests:

 [ERP-1107](#) - Jira project doesn't exist or you don't have permission to view it.

Data Flow Diagram



Code	Tech Name	Code	Tech Name
1TL_SigCur	1TL_TECPRO_SIGNAVIOPROCESSCHANGES_01	3VR_SigUn	3VR_TECPRO_SignavioProcessUnion_01
2TL_SigHis	2TL_TECPRO_SignavioProcessChanges_01	3VR_SigApSy	3VR_TECPRO_SignavioProcessLinkAppToSys_01
2VR_SigHis	2VR_TECPRO_SignavioProcessHistory_01	3VF_SigUn	3VF_TECPRO_SignavioProcessUnion_01
2VR_SigCur	2VR_TECPRO_SignavioProcessMostRecent_01	4MA_Swim	4MA_TECPRO_SignavioProcessUnion_01
3VR_Swim	3VR_TECPRO_SignavioSwimLaneChanges_02		
3VF_Swim	3VF_TECPRO_SignavioSwimLaneChanges_02		
4MA_Swim	4MA_TECPRO_SignavioSwimLaneChanges_02		

- Source System Extractors
- Inbound Layer
 - 1TL_TECPRO_SIGNAVIOPROCESSCHANGES_01
- Harmonisation Layer
 - 2TL_TECPRO_SignavioProcessChanges_01
 - 2VR_TECPRO_SignavioProcessHistory_01
 - 2VR_TECPRO_SignavioProcessMostRecent_01
- Propagation Layer
 - 3VR_TECPRO_SignavioSwimLaneChanges_02
 - 3VR_TECPRO_SignavioProcessUnion_01
 - 3VR_TECPRO_SignavioProcessLinkAppToSys_01
 - 3VF_TECPRO_SignavioProcessUnion_01
 - 3VF_TECPRO_SignavioSwimLaneChanges_02
- Reporting Layer
 - 4MA_TECPRO_SignavioProcessUnion_01
 - 4MA_TECPRO_SignavioSwimLaneChanges_02
- Outbound Layer

Source System Extractors

Extractor Name	Build Jira Ref For Extension Information	Comment
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TBC Signavio Report	 ERP-2408 - Jira project doesn't exist or you don't have permission to view it.	Data is extracted from Signavio using a report written by SAP. It will post data to CPI which, in turn, will make this data available to via a REST API. The functionality to extract data from REST APIs is not available till the Q2 2026 release which (at time of writing) has not yet been delivered.
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N.B. The file extract is a shared program which produces the data for multiple use cases, including stand alone CSV/Excel files. It was requested to have normalised files separating process and master data but this was rejected.

Inbound Layer

1TL_TECPRO_SIGNAVIOPROCESSCHANGES_01

 This table will contain data from the most recent file load ONLY!

Prior to each new load of data, the existing data in this table will be moved to 2TL_TECPRO_SignavioProcessChanges_01 using transformation flow 2FT_TECPRO_SignavioProcessChanges_01 and then the contents of 1TL_TECPRO_SIGNAVIOPROCESSCHANGES_01 will be deleted. This is required to support the swimlane comparison reporting.

The table will receive fields delivered by the SAP report:

- Process ID
- Process name
- Revision number
- L1-L4 decomposition
- Process Owner
- Last change date
- Last changed by
- POD
- Release
- Sub-Function
- Task name
- Task type
- Task ID
- Pool name
- Lane name
- IT System title
- IT System category name
- LeanIX Link
- Executable name
- Executable category name
- App ID
- App name
- App type
- UI technology
- Application component
- Dictionary Link

An additional column 'export timestamp' is appended to the data. This is added to the file header by the Signavio report and applied by CPI.

Harmonisation Layer

2TL_TECPRO_SignavioProcessChanges_01

This table will store historical snapshots of data loaded from 1TL_TECPRO_SIGNAVIOPROCESSCHANGES_01. It should never contain the most recent data. The process for the population of this table is described under 1TL_TECPRO_SIGNAVIOPROCESSCHANGES_01.

2VR_TECPRO_SignavioProcessHistory_01

Purpose

Prepare table data for use.

Source

2TL_TECPRO_SignavioProcessChanges_01

Calculation

Fields used in comparison logic in subsequent views will be checked to ensure that they are not null. If they are null then the null value will be replaced by space. These fields are: Process ID, Task ID, Lane Name, App ID, Dictionary Link, ExportTimestamp.

2VR_TECPRO_SignavioProcessMostRecent_01

Purpose

Prepare table data for use.

Source

1TL_TECPRO_SIGNAVIOPROCESSCHANGES_01

Calculation

Fields used in comparison logic in subsequent views will be checked to ensure that they are not null. If they are null then the null value will be replaced by space. These fields are: Process ID, Task ID, Lane Name, App ID, Dictionary Link, ExportTimestamp.

Propagation Layer

3VR_TECPRO_SignavioSwimLaneChanges_02

Source 1

3VR_TECPRO_SigProHistoryLinkAppToSys_01

Filter

"Dictionary Link" IS NOT NULL - this restricts the results to only those lines where an executable has been found (i.e. removing lines where only the system has been found).

Calculation

Map fields to equivalent DCD name to allow them to be identifiable as being from a different source post full join.

Tt DCD_ProcessID
Tt DCD_LaneName
Tt DCD_TaskID
Tt DCD_DictionaryLink
Tt DCD_AppID
🗄 DCD_LastChangedDate
🗄 DCD_ExportTimeStamp
Tt DCD_LastChangedBy
Tt DCD_AppName
Tt DCD_TaskName
Tt DCD_ProcessName
Tt DCD_ExecutableName

Projection

Restrict field list to just the new DCD fields.

Source 2

3VR_TECPRO_SigProMostRecentLinkAppToSys_01

Filter

"Dictionary Link" IS NOT NULL - this restricts the results to only those lines where an executable has been found (i.e. removing lines where only the system has been found).

Projection

Restrict to equivalent fields as seen in projection from source 1.

Join

Full join of data from Source 1 and Source 2 as Many:Many

Key fields are: Process ID, Task ID, Lane Name, Dictionary Link (which represents the executable), IT System Title (which has been found when linking the executable lines to the system lines in the previous view).

This key will generate the correct cartesian product for comparison of lines between snapshots, taking the blended executable / system lines into consideration.

Calculation

3VR_TECPRO_SignavioProcessUnion_01

Join

Purpose: etc

3VR_TECPRO_SignavioProcessLinkAppToSys_01

Join

Purpose: etc

3VF_TECPRO_SignavioProcessUnion_01

Union

Purpose: To bring in values from PO level alongside lower level granularity documents

Target Field	Source1-Field	Source2-Field
PO	PO	PO
POItem	POItem	POItem
MaterialDocument	-	MaterialDocument

Associations to master data

List objects where material master associations are to be made.

Calculated Measures (Pre-Aggregation Calculations)

3VF_TECPRO_SignavioSwimLaneChanges_02

Source Current data

Filter

IT System Category is Null - Only steps executed by humans

Projection

Remove all fields not relevant to swimlanes

Source Previous Snapshot

Filter

IT System Category is Null - Only steps executed by humans

Calculation

Rename all fields relevant to Swimlanes to DCD_ to identify separately in join

Projection

Remove all fields not relevant to swimlanes

Union

Fields

Calculation

Reorder fields such that field equivalents are alongside each other.

Reporting Layer

4MA_TECPRO_SignavioProcessUnion_01

Link to FSD (Each Analytic model should have its own FSD).

Include technical details for:

Calculated Measures (Post Aggregation Calculations / exception aggregation etc)

Restricted Measures

Detail restrictions

Currency Conversions

Detail rate type, from currency

Variables

Data access controls

4MA_TECPRO_SignavioSwimLaneChanges_02

Link to FSD (Each Analytic model should have its own FSD).

Include technical details for:

Calculated Measures (Post Aggregation Calculations / exception aggregation etc)

Restricted Measures

Detail restrictions

Currency Conversions

Detail rate type, from currency

Variables

Data access controls

Outbound Layer