


# 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.

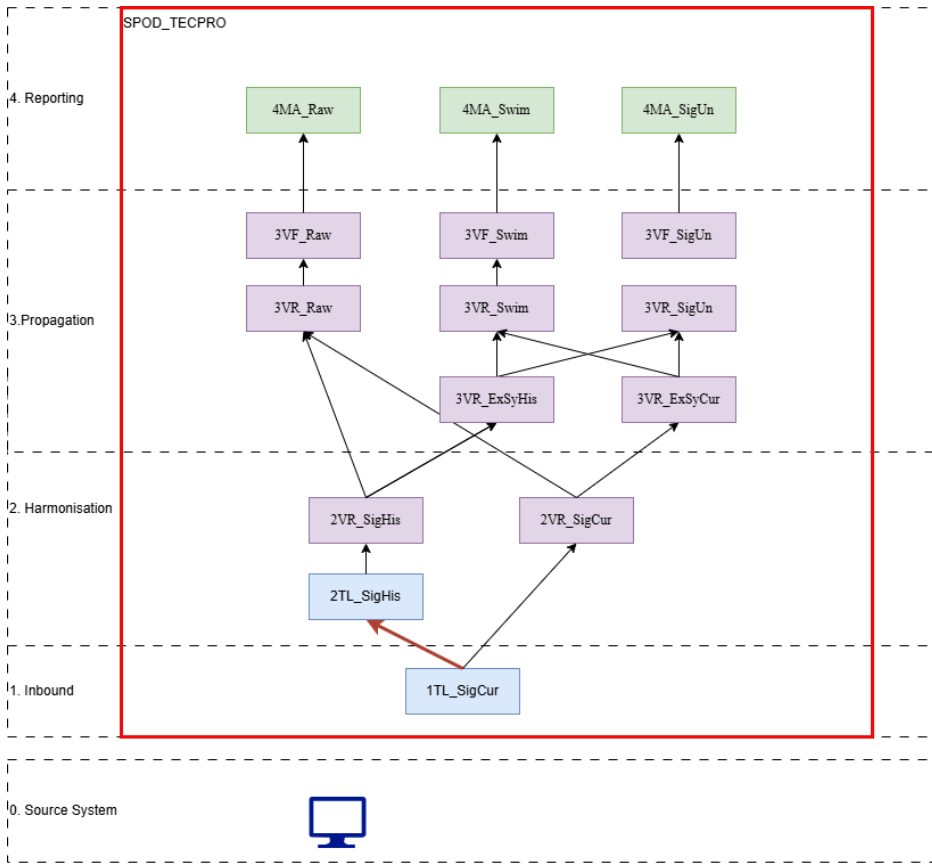
Sub-Area	Details	Example KPIs	Comments
TECPRO - Signavio Process Manager	<p>Signavio is the source of truth for which task is performed by which process role using which executable (e.g. Fiori app, transaction, report, etc.). However Signavio does not provide sufficient reporting capability to meet the 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:</p> <ul style="list-style-type: none"><li>• 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.</li><li>• Show me all of the process roles which contain a particular executable</li><li>• Show me what has changed between two revisions of a process model</li><li>• Show me what has changed across all process models between two different dates</li><li>• 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.</li></ul>	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
1TL_SigCur	1TL_TECPRO_SIGNAVIOPROCESSCHANGES_01
2TL_SigHis	2TL_TECPRO_SignavioProcessChanges_01
2VR_SigHis	2VR_TECPRO_SignavioProcessHistory_01
2VR_SigCur	2VR_TECPRO_SignavioProcessMostRecent_01
3VR_Swim	3VR_TECPRO_SignavioSwimLaneChanges_02
3VF_Swim	3VF_TECPRO_SignavioSwimLaneChanges_02
4MA_Swim	4MA_TECPRO_SignavioSwimLaneChanges_02

Code	Tech Name
3VR_SigUn	3VR_TECPRO_SignavioProcessUnion_01
3VR_SigAppSy	3VR_TECPRO_SignavioProcessLinkAppToSys_01
3VF_SigUn	3VF_TECPRO_SignavioProcessUnion_01
4MA_Swim	4MA_TECPRO_SignavioProcessUnion_01

- 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

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