Overview of Webinar Series

SAP IBP Integration using CPI-DS (1/4): SAP ERP - April 2nd

SAP IBP Integration using CPI-DS (2/4): SAP BW Integration - April 8th

SAP IBP Integration using CPI-DS (3/4): Back integration from SAP IBP to SAP ERP using RFC Enabled Function Modules - April 14th

SAP IBP Integration using CPI-DS (4/4): Microsoft Azure Data Lake & Microsoft Azure Cloud Storage Integration - April 29th

Roadmap session: Meet the Expert: SAP IBP External Integration – Capabilities and Roadmap - April 16th
Goals

In this webinar you will learn:

▪ How to setup the master data transfer from SAP S/4 to IBP
▪ How to setup the transactional data transfer from SAP S/4 to IBP
Use Cases

Example 1: Customer likes to implement best practice setup for S&OP planning with Supply Planning. Customer is running on one SAP ERP or S/4.

Example 2: Customer likes to run IBP Demand Planning or Inventory Optimization and likes to integrate master and transactional data from central SAP ERP instance.

Example…
SAP IBP Time series Integration to SAP S/4HANA/SAP ERP using CPI-DS

1. Add-on
   - SAP S/4HANA or SAP ERP
     - Standard ERP Tables/Function Modules
     - EXT Tables
     - Extractors

2. Master Data
   - CPI-DS
   - Firewall & Internet

3. Transactional Data
   - Staging Tables
   - Planning Area
Initial steps

After Installation of Add-on on SAP S/4 or SAP ECC & setup the CPI DS Agent. (more details here)

Following steps are necessary to make the Add-on ready (details):

1. What plants are IBP relevant?
2. What MRP types are IBP relevant?
3. Initial Load of Data to Staging Tables
   Check results in staging tables e.g. Materials in /IBP/MARA_EXT
4. Download Time profile used in IBP Planning Area
5. Upload Time profile in SAP ERP via Transaction /IBP/ETSTP - Maintain IBP Time Profiles for Aggregation (details)
6. Activate the Extractors (details)
Data flow overview for Master Data

SAP ECC or SAP S/4
- Supply Chain Integration Add-On for SAP Integrated Business Planning
  - Material Master
  - Plant, Customer & Supplier
  - Location Material
  - Work Center
  - Production Master Data (BoM, Routing)
  - Sourcing relationship
  - UoM, Currency, Conversion Factor

CPI-DS Agent

SAP CPI-DS

SAP IBP
- Product MDT
- Customer MDT
- Location MDT
- Location Material MDT
- Resource MDT
- Resource Location MDT
- Resource Product MDT
- Production Source MDT
- Production Source Item MDT
- Location Source MDT
- Customer Source MDT
- Production Source MDT
- UoM
- Currency
- UoM Conversion Factors
- Exchange rates
Steps for Master Data

1. Connect ERP system to CPI
2. Import ERP Extractors to CPI
3. Import IBP data stores
4. Create data flow from Template
   - “Copy to Target”
   - Delete template data flows & targets from Task
   - Change default values for global variables
5. run task
6. see results in IBP
Task with Data Flows

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WRT1_Inventory</td>
<td>Read key figures: inventory with aggregation from excel.</td>
</tr>
<tr>
<td>WRT1_MinReceipt</td>
<td>Read key figures: MinReceipt with aggregation from excel.</td>
</tr>
<tr>
<td>WRT1_MaxReceipt</td>
<td>Read key figures: MaxReceipt with aggregation from excel.</td>
</tr>
<tr>
<td>WRT1_Capacity</td>
<td>Read master data: Capacity Supply of Resources with aggregation.</td>
</tr>
<tr>
<td>WRT1_MinProd</td>
<td>Read key figures: Minimum Production with aggregation.</td>
</tr>
</tbody>
</table>

**Supply Chain Integration Add-On for SAP Integrated Business Planning**
- Exchange Rates (time dep.)
- Available Capacity
- Stock
- Orders

**SAP ECC or SAP S/4**

**CPI-DS Agent**

**SAP CPI-DS**

**SAP IBP**
- Exchange Rates KF
- Capacity Supply KF
- Stock on Hand KF
- Minimum Receipt KF
- Minimum Production KF

**Data flow overview for Transactional Data**

- **SAP ECC or SAP S/4**
  - Supply Chain Integration Add-On for SAP Integrated Business Planning
    - Exchange Rates (time dep.)
    - Available Capacity
    - Stock
    - Orders

- **CPI-DS Agent**

- **SAP CPI-DS**

- **SAP IBP**
  - Exchange Rates KF
  - Capacity Supply KF
  - Stock on Hand KF
  - Minimum Receipt KF
  - Minimum Production KF
Demo
Steps for transactional Data

Previously done:
- Connect ERP system to CPI
- Import ERP Extractors to CPI
- Import IBP data stores

1. Create data flow from Template
   - “Copy to Target”
   - Delete template data flow & target
   - Change default values for global variables

2. run task

3. see results in IBP
Further reads & troubleshooting


Pre-Packaged Content for Periodic Data Transfer of **Master Data** from Add-On for S/4 HANA On Premise and ERP to Unified Planning Area

<table>
<thead>
<tr>
<th>Object</th>
<th>Template</th>
<th>Data Flow</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning Unit</td>
<td>IBP_MD_S4_ERP_AddOn</td>
<td>IBP_MD_PlanningUnit_AddOn</td>
<td>Hard-Coded Best Practices Content</td>
</tr>
<tr>
<td>Customer</td>
<td>IBP_MD_Customer_AddOn</td>
<td>IBP_MD_Customer_AddOn</td>
<td>Extractor /IBP/LOCATION_ATTR</td>
</tr>
<tr>
<td>Location</td>
<td>IBP_MD_Location_AddOn</td>
<td>IBP_MD_Location_AddOn</td>
<td>Extractor /IBP/LOCATION_ATTR</td>
</tr>
<tr>
<td>Product</td>
<td>IBP_MD_Product_w_Text_AddOn</td>
<td>IBP_MD_Product_w_Text_AddOn</td>
<td>Extractor /IBP/PRODUCT_TEXT</td>
</tr>
<tr>
<td>Resource</td>
<td>IBP_MD_Resource_w_Text_AddOn</td>
<td>IBP_MD_Resource_w_Text_AddOn</td>
<td>Extractor /IBP/RESOURCE_TEXT</td>
</tr>
<tr>
<td>Unit of Measure</td>
<td>IBP_MD_UOM_w_Text_AddOn</td>
<td>IBP_MD_UOM_w_Text_AddOn</td>
<td>Extractor /IBP/UNIT_OF_MEASURE_TEXT</td>
</tr>
<tr>
<td>Unit of Measure Conversion Factor</td>
<td>IBP_MD_UOMConversionFactor_AddOn</td>
<td>IBP_MD_UOMConversionFactor_AddOn</td>
<td>Extractor /IBP/PRODUCT_UOM_ATTR</td>
</tr>
<tr>
<td>Location Product</td>
<td>IBP_MD_LocationProduct_AddOn</td>
<td>IBP_MD_LocationProduct_AddOn</td>
<td>Extractor /IBP/LOCATIONPRODUCT_ATTR</td>
</tr>
<tr>
<td>Location Source (Transportation Lane)</td>
<td>IBP_MD_SourceLocation_AddOn</td>
<td>IBP_MD_SourceLocation_AddOn</td>
<td>Extractor /IBP/SOURCELOCATION_ATTR</td>
</tr>
<tr>
<td>Customer Source</td>
<td>IBP_MD_SourceCustomer_AddOn</td>
<td>IBP_MD_SourceCustomer_AddOn</td>
<td>Extractor /IBP/SOURCECUSTOMER_CI_ATTR</td>
</tr>
<tr>
<td>Resource Location</td>
<td>IBP_MD_ResourceLocation_AddOn</td>
<td>IBP_MD_ResourceLocation_AddOn</td>
<td>Extractor /IBP/RESOURCESLOCATION_ATTR</td>
</tr>
<tr>
<td>Production Data Structure Header</td>
<td>IBP_MD_SourceProduction_Addon</td>
<td>IBP_MD_SourceProduction_Addon</td>
<td>Extractor /IBP/SOURCEPRODUCTION_ATTR</td>
</tr>
<tr>
<td>Production Data Structure Item</td>
<td>IBP_MD_SourceProductionSourceItem_Addon</td>
<td>IBP_MD_SourceProductionSourceItem_Addon</td>
<td>Extractor /IBP/PRODUCTIONSOURCEITEM_ATTR</td>
</tr>
<tr>
<td>Production Resource</td>
<td>IBP_MD_Currency_AddOn</td>
<td>IBP_MD_Currency_AddOn</td>
<td>Extractor /IBP/CURRENCY_TEXT</td>
</tr>
<tr>
<td>Currency</td>
<td>IBP_MD_ExchangeRate_Addon</td>
<td>IBP_MD_ExchangeRate_Addon</td>
<td>Extractor /IBP/EXCHANGE_RATES_ATTR</td>
</tr>
</tbody>
</table>
Pre-Packaged Content for Periodic Data Transfer of Key Figures from Add-On for S/4 HANA On Premise and ERP to Unified Planning Area

<table>
<thead>
<tr>
<th>Object</th>
<th>Template</th>
<th>Data Flow</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource Capacity Supply</td>
<td>IBP_KF_S4_ERP_AddOn</td>
<td>IBP_KF_CapaSupply_AddOn</td>
<td>Extractor /IBP/CAPASUPPLY_KF</td>
</tr>
<tr>
<td>Initial Inventory</td>
<td>IBP_KF_InitialInventory_AddOn</td>
<td>IBP_KF_InitialInventory_AddOn</td>
<td>Extractor /IBP/STOCK_KF</td>
</tr>
<tr>
<td>Minimum Receipt</td>
<td>IBP_KF_MinReceipt_AddOn</td>
<td>IBP_KF_MinReceipt_AddOn</td>
<td>Extractor /IBP/ORDER_KF</td>
</tr>
<tr>
<td>Minimum Production</td>
<td>IBP_KF_MinProduction_AddOn</td>
<td>IBP_KF_MinProduction_AddOn</td>
<td>Extractor /IBP/ORDER_KF</td>
</tr>
<tr>
<td>Exchange Rate</td>
<td>IBP_KF_ExchangeRates_AddOn</td>
<td>IBP_KF_ExchangeRates_AddOn</td>
<td>Extractor /IBP/EXCHANGE_RATES_KF</td>
</tr>
</tbody>
</table>
Pre-Packaged Content for Periodic Data Transfer of **Master Data** from Add-On for ERP to IBP Demand Driven Replenishment Planning Area

<table>
<thead>
<tr>
<th>Object</th>
<th>Template</th>
<th>Data Flow</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning Unit</td>
<td>IBP_DDR_MD_ERP_AddOn</td>
<td>IBP_DDR_MD_PlanningUnit</td>
<td>Hard-Coded Entry</td>
</tr>
<tr>
<td>Currency</td>
<td></td>
<td>IBP_DDR_MD_Currency</td>
<td>Hard-Coded Entry</td>
</tr>
<tr>
<td>Customer</td>
<td></td>
<td>IBP_DDR_MD_Customer</td>
<td>Hard-Coded Entry</td>
</tr>
<tr>
<td>Buffer Profile</td>
<td></td>
<td>IBP_DDR_MD_BufferProfile</td>
<td>Hard-Coded Table</td>
</tr>
<tr>
<td>Product</td>
<td></td>
<td>IBP_DDR_MD_Product_w_Text</td>
<td>Extractor /IBP/PRODUCT_TEXT</td>
</tr>
<tr>
<td>Location</td>
<td></td>
<td>IBP_DDR_MD_Location</td>
<td>Extractor /IBP/LOCATION_ATTR</td>
</tr>
<tr>
<td>Location Product</td>
<td></td>
<td>IBP_DDR_MD_LocationProduct</td>
<td>Extractor /IBP/LOCATIONPRODUCT_ATTR</td>
</tr>
<tr>
<td>Cost per Unit</td>
<td></td>
<td>IBP_DDR_MD_LocationProductCurrency</td>
<td>Extractor /IBP/LOCATIONPRODUCT_ATTR</td>
</tr>
<tr>
<td>Production Data Structure Header</td>
<td></td>
<td>IBP_DDR_MD_SourceProduction</td>
<td>Extractor /IBP/SOURCEPRODUCTION_ATTR</td>
</tr>
<tr>
<td>Production Data Structure Item</td>
<td></td>
<td>IBP_DDR_MD_ProductionSourceItem</td>
<td>Extractor /IBP/PRODUCTIONSOURCEITEM_ATTR</td>
</tr>
<tr>
<td>Location Source (Transportation Lane)</td>
<td></td>
<td>IBP_DDR_MD_SourceLocation</td>
<td>Extractor /IBP/SOURCELOCATION_ATTR</td>
</tr>
<tr>
<td>Source Customer Group</td>
<td></td>
<td>IBP_DDR_MD_SourceCustomerGroup</td>
<td>Extractor /IBP/SOURCECUSTOMER_CI_ATTR</td>
</tr>
</tbody>
</table>
### Pre-Packaged Content for Periodic Data Transfer of Key Figures from Add-On for ERP to IBP Demand Driven Replenishment Planning Area

<table>
<thead>
<tr>
<th>Object</th>
<th>Template</th>
<th>Data Flow</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confirmed Supply Order</td>
<td>IBP_DDR_KF_ERP_AddOn</td>
<td>IBP_DDR_KF_SupplyOrderConfirmed</td>
<td>Extractor /IBP/ORDER_KF</td>
</tr>
<tr>
<td>On Hand Inventory</td>
<td></td>
<td>IBP_DDR_KF_OnHandInventory</td>
<td>Extractor /IBP/STOCK_KF</td>
</tr>
<tr>
<td>Actuals Quantity</td>
<td></td>
<td>IBP_DDR_KF_ActualsQuantity</td>
<td>Extractor /IBP/ACTUALS_QTY_CI_KF</td>
</tr>
<tr>
<td>Total Demand</td>
<td></td>
<td>IBP_DDR_KF_TotalDemand</td>
<td>Extractor /IBP/TOTAL_DEMAND_QTY_CI_KF</td>
</tr>
<tr>
<td>Confirmed Order</td>
<td></td>
<td>IBP_DDR_KF_ConfirmedOrder</td>
<td>Extractor /IBP/ORDER_KF</td>
</tr>
<tr>
<td>Non-Confirmed Supply Order</td>
<td></td>
<td>IBP_DDR_KF_SupplyOrderNonConf</td>
<td>Extractor /IBP/ORDER_KF</td>
</tr>
</tbody>
</table>
Pre-Packaged Content for Periodic Data Transfer of Key Figures from IBP Demand Driven Replenishment Planning Area to Add-On for ERP

<table>
<thead>
<tr>
<th>Object</th>
<th>Template</th>
<th>Data Flow</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demand Driven Product Location</td>
<td>IBP_DDR_KF_to_ERP_AddOn_via_WS</td>
<td>IBP_DDR_to_ERP_DDPrdLoc</td>
<td>Table /IBP/EDD_PL via FM IBP_EDD_PL_FILL</td>
</tr>
<tr>
<td>Time Dependent Buffer Level</td>
<td></td>
<td>IBP_DDR_to_ERP_BufferLvl</td>
<td>Table /IBP/EDD_BLT via FM IBP_EDD_BLT_FILL</td>
</tr>
<tr>
<td>Downstream Decoupling Points</td>
<td></td>
<td>IBP_DDR_to_ERP_DsDcpIngPnt</td>
<td>Table /IBP/EDD_DS_DCP via FM IBP_EDD_DS_DCP_FILL</td>
</tr>
<tr>
<td>Location Products w/o downstream decoupling points (for deletion)</td>
<td></td>
<td>IBP_DDR_to_ERP_DsDcpIngPntDelete</td>
<td>Table /IBP/EDD_DS_DCP via FM IBP_EDD_DS_DCP_FILL</td>
</tr>
<tr>
<td>Location Products w/o order corrections</td>
<td></td>
<td>IBP_DDR_to_ERP_OrderCorrDelete</td>
<td>Table /IBP/EDD_COR via FM IBP_EDD_COR_FILL</td>
</tr>
<tr>
<td>Time-dependent order corrections</td>
<td></td>
<td>IBP_DDR_to_ERP_OrderCorrections</td>
<td>Table /IBP/EDD_COR via FM IBP_EDD_COR_FILL</td>
</tr>
</tbody>
</table>
Links for Time Series Based Integration Getting Started

Onbording Document

Application Help for IBP Integration using SAP Cloud Platform Integration for data services
https://uacp2.hana.ondemand.com/viewer/feae3cea3cc549aaa9d9de7d363a83e6/1702/en-US/84c79657c82c6c10e10000000a441470.html

SAP S/4HANA, Supply Chain Integration Add-On for SAP Integrated Business Planning
http://help.sap.com/ibp_s4hana_addon

SAP ERP, Supply Chain Integration Add-On for SAP Integrated Business Planning
http://help.sap.com/ibp_erp_addon

Product Availability Matrix for source and target verification

Getting started on Integration for data services https://hcids.hana.ondemand.com/DSoD/help/index.html

Downloading Data Services Agent https://launchpad.support.sap.com/

Configure the Agent https://help.sap.com/viewer/7d9858e1309e459093ed397c6fc40f12/latest/en-US/ad9b6e8cc01a455c8c9800377f1f9477.html

Questions & Answers
Meet the Expert SAP IBP WEBINAR: CPI-DS Customer Use Cases
https://dam.sap.com/a/3aCfujF
Meet the Expert: SAP IBP Webinar: External Integration Capabilities and Roadmap
https://dam.sap.com/a/2HX9hxq


SAP IBP Data Extraction via CPI-DS: How to best filter data by time?

SAP IBP Data Extraction via CPI-DS: How to extract key figures on different planning levels?
https://blogs.sap.com/2019/09/09/sap-ibp-data-extraction-via-cpi-ds-how-to-extract-key-figures-on-different-planning-levels/

SAP IBP Data Extraction via CPI-DS: Are your Filters considered?

Troubleshooting Data Integration Tasks in SAP IBP

Use SAP S/4HANA core data services in CPI-DS
Thank you.

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