SAP Cloud Platform Integration for Data Services

Use Cases, Best Practices and Lessons Learned

Venkat Madireddi - SAP Product Management: Big Data, EIM, SAP VORA
Krishna Mamidipaka - Bizbrain Technologies, Co-Founder and Principal Consultant
Ilya Barabanov - Bizbrain Technologies, Integration Architect

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Speakers

Venkat Madireddi
Sr. Product Manager
SAP
20+ years of experience in development and product management in Enterprise Information Management, Big Data and Analytics.

Ilya Barabanov
Integration Architect
bizbrain technologies
20+ years experience in SAP Implementations with solid background in logistic processes. 4 years experience in IBP with 5 Full Cycle IBP Implementations.

Krishna Mamidipaka
Co-Founder and Principal Consultant
bizbrain technologies
25+ years SAP experience in small and large enterprises. Led the SAP the global product launch of several SAP products, including the latest SAP® HANA solutions. SVP at Freshdirect (New York City).
Agenda

- SAP Cloud Platform Integration for Data Services Overview
- Positioning – Data integration solutions in the cloud
- Use Cases in Details
- Best Practices
- Lessons Learned
SAP Cloud Platform Integration for IBP
Use case #1: Loading data to HANA in the cloud

Integrated Business Planning (IBP) is an SAP HANA based cloud application that bundles CPI-DS as data integration tool for integration with on-premise applications.

• CPI-DS is used for time series and master data integration for IBP.
• Access on premise SAP ECC, S/4 HANA and APO data sources or 3rd party databases through an on-premise agent.
• CPI server co-located with HANA database in the cloud for direct data loads at HANA database level.
• Bi-directional data transfer.
• Batch loads with built-in scheduler for ETL jobs.
• Out-of-the-box content + flexible web-based UI to customize dataflows
SAP Cloud Platform Integration for IBP: Time Series Based Integration

Setup and Data Flow

SAP CPI-DS:
SAP Cloud Platform Integration for data services, formerly known as:
SAP HANA Cloud Platform, integration service for data services (HCI-DS)

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Other usecases for CPI-DS
Data Integration with SuccessFactors, Cloud for customer or other applications

Other integration scenarios include SuccessFactors, Cloud for Customer or other cloud applications with OData, SOAP or REST APIs that need to exchange data with an on-premise database.

- Extract data from SuccessFactors applications to load into an on-premise datamart of data warehouse (SAP BW).
- Mass data uploads to Cloud for Customer or data extracts for reporting purposes.
- CPI-DS provides a flexible tool to create custom dataflows, there is no out-of-the-box content available for these applications.

Customer environment
SAP cloud environment

Sources / Targets
- BW
- Databases
- Files

CPI-DS Agent
HTTPS
SAP Cloud Platform
Data Load
Extract
SF API

Performance & Goals
- Recruiting
- Compensation

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SAP Cloud Platform Integration for data services

Current capabilities

SAP Cloud Platform Integration for data services (CPI-DS) is part of the overall CPI solution, together with CPI-PI (for process integration). CPI is now rebranded to “SAP Cloud Platform Integration” from “SAP HANA Cloud Platform, integration service”

### Key Capabilities

- **Direct secure access** to multiple ECC sources to extract, transform and load to targeted cloud applications.
- Read and write from **heterogeneous sources** – databases (HANA, DB2, Oracle, SQL Server) and files (XML or delimited).
- Support for standards like **OData**, **SOAP** and **REST** as well as **SFTP** for files.
- **End to end visibility** for data loads into the S&OP and **configurable e-mail notifications** to alert on integration flow operations.
- Built-in **scheduler** or invoke integration flow from 3rd party applications through a webservice call.

### Key Customer Benefits

- Seamless and secure integration of on-premise to SAP Cloud **eliminating need to open firewall to inbound traffic**
- Data never persists in SAP HANA Cloud Integration, but is piped from on-premise source to target data-store in SAP cloud.
- **Role-based, wizard driven web UI** for designing, executing and monitoring ETL jobs.
- Guided user experience for creating and editing ETL jobs **without coding**
- “Set it and forget it “ **automated with scheduling**, no manual work

### Key Considerations

- Minimal on premise footprint (~100Mb) with software “agent” for secure connectivity
- Supports ABAP dataflows and Extractors for extracting from SAP Business Suite
- Automatic provisioning of sandbox and production **repositories; 1-click promotion of jobs to production**
SAP Cloud Platform Integration – Web-based UI
Design, Execute and Monitor from anywhere

- Web-based
- Easy-to-use (citizen developer), no coding
- Role based:
  - Designers
  - Operators
  - Administrators

Operator Dashboard

Designer’s dataflow editor
SAP Cloud Platform Integration - Agent
The key to successful deployment

Lightweight installation inside the customer's firewall
- ~ 100MB to download
- Installation is one screen, less than ten minutes
- Runs on Windows or Linux (SuSE/RedHat)

Securely transfers data from on-premise to cloud
- Communicates with SAP apps through RFC (encryptable via SNC)
- Data sent over the cloud via HTTPS
- Data are streamed from source to target and never persisted

Operates without firewall exceptions
- Communication is always from the agent to the cloud
- No need for VPN, reverse proxy, or other firewall exceptions
- Agent uses long polling: places request to server and waits for response when a task is ready to execute
SAP Cloud Platform Integration
Built-in sandbox and production environment with multiple agents

- Built in sandbox and production environment – one click promotion from sandbox to production
- Different connection information to source and target for sandbox and production tasks
- Option to install separate agents for test and productive loads. Load balancing/fail over via agent groups.
# SAP Cloud Platform Integration (DS) – Connectivity

Wide range of supported sources and targets

<table>
<thead>
<tr>
<th>SAP Business Suite Applications (ERP, SCM/APO, …)</th>
<th>Databases</th>
<th>HANA Applications in the cloud</th>
<th>Other cloud applications</th>
<th>Files</th>
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<tr>
<td><strong>Business Content Extractors</strong>&lt;br&gt;Standard and custom extractors, including delta queues – through ODP</td>
<td>SAP HANA</td>
<td>SAP IBP (Integrated Business Planning)</td>
<td>SuccessFactors applications</td>
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<tr>
<td><strong>ABAP tables</strong>&lt;br&gt;Cluster, transparent, pool, Z-tables</td>
<td>SAP (Sybase) ASE</td>
<td>SAP Lumira</td>
<td>oData (v2 &amp; v4)</td>
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<tr>
<td><strong>Custom ABAP programs</strong>&lt;br&gt;Generated on the fly – no ABAP coding needed.</td>
<td>SAP (Sybase) IQ</td>
<td>SAP HANA database-as-a-service on HANA Cloud Platform</td>
<td>Web Services (SOAP and REST)</td>
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<td>mySQL</td>
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<td>Template file</td>
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<td></td>
<td>Oracle</td>
<td></td>
<td></td>
<td>(***) Not Generally Available – used in co-innovation with selected customers</td>
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<td></td>
<td>Teradata</td>
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<td>** Teradata **</td>
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Positioning – Data integration solutions in the cloud
Positioning: SAP HANA smart data integration & SAP Cloud Platform Integration for data services

1. For all integration with SAP Integrated Business Planning
   - Recommendation (only possible option): use CPI-DS
   - Exception: IBP Response, here SDI is embedded through the IBP UI

2. For all data integration with a HANA database (in the cloud or onPremise):
   - Recommendation: use HANA smart data integration
     - Native service in HANA database
     - Provides real-time and batch (plus federation), more adapters, more transformations, …

3. For (data) integration with other cloud applications:
   - Check if CPI-PI isn’t the right solution.
   - If not, CPI-DS is ready for custom dataflows and integration with databases/DWH.

Use Cases, Best Practices and Lessons Learned
Use Cases, Best Practices and Lessons Learned

Bizbrain background
- Bizbrain focused on IBP with Global Presence
- IBP Implementation experience in Chemical, High Tech, CPG, Building Materials, Pharma / Life Sciences
- IBP Deployed in
  - ECC and IBP
  - ECC, APO, BW and SFDC
  - ECC, APO, BW, DW, BPC, CSV and SFDC
  - S4 and Ariba Direct Material Procurement
  - S4

Use Cases
- Case 1. Integrating SAP IBP with multiple SAP ECC via on-premise SAP BI
- Case 2. Using external scheduling tool to coordinate CPI-DS and SAP IBP background processing
- Case 3. Direct extraction from SAP S4 with lookups
- Case 4. Sending data to SAP IBP from Excel workbook with VBA
Use Cases in Details
Case 1. Integrating SAP IBP with multiple SAP ECC via on-premise SAP BI
Case 1. Integrating SAP IBP with multiple SAP ECC via on-premise SAP BI

Extract

Pre-process

Store

Trigger CPI-DS Load

Check Load Status

SAP ECC

SAP ECC

SAP ECC

SAP CPI-DS

SAP IBP

DSO Customers

DSO Products

DSO Locations

DSO Orders

DSO Shipments

Consumer Proxy for CPI-DS SOAP API

SOAP API

Loader Tasks

Master Data

Time Series Data

SAP BI
Case 1. Integrating SAP IBP with multiple SAP ECC via on-premise SAP BI

Solution Details

- SAP BI system is used to extract master data and transactional data from the source SAP ECC systems at a time that is most acceptable for each region (ex., during off hours)
- All the extracted data is stored centrally in DSOs
- Key figures pre-calculation (ex., aggregation) is done by SAP BI during the extraction process
- Extraction is orchestrated by process chains, therefore SAP BI can determine if it is time for CPI DS to start pulling data from DSOs to push to SAP IBP
- A sequence of CPI-DS Tasks is managed by process chain
- Each Task is kicked off by the ABAP program that makes a call to CPI-DS via SOAP API interface
- Task execution status is evaluated then by the program until it gets its final status (and logs also)
- The process chain is configured in such a way to prevent inconsistent data to be sent to SAP IBP
- The whole integration process is managed and operated from a single point
Case 2. Using external scheduling tool to coordinate CPI-DS and SAP IBP background processing
Case 2. Using external scheduling tool to coordinate CPI-DS and SAP IBP background processing

Case Definition

- A global company wants to extract master data and transactional data from the centralized SAP APO to SAP IBP
- For data preparation, certain ABAP reports need to be executed before CPI-DS can take data
- After the successful data load to SAP IBP, some IBP-specific Application Jobs are to be executed
- Integration cycle is to be performed nightly without human assistance
- To avoid data damage, in case of errors, integration cycle is to be suspended and continued manually in the morning time at the point where the interruption happened to prevent repetition of steps that were completed
- Centralized orchestration and scheduling is needed to ensure all the pre-processing, load and post-processing jobs are done in the right sequence
Case 2. Using external scheduling tool to coordinate CPI-DS and SAP IBP background processing

SAP APO

Table Z_MD1
Table Z_MD2
Table Z_MD3
...
Z_program_1
Z_program_2
Z_program_N
RFC

SAP CPI-DS

Loader
Tasks
SOAP
API

SAP IBP

Master Data
KF Data

OData
API

External Scheduler

Step 1
Step 2
Step 3
Step 4
...
Step K

External Scheduler

SAP Connector

CPI-DS Connector

IBP Connector

SOAP API

External Scheduler

External Scheduler

External Scheduler
Case 2. Using external scheduling tool to coordinate CPI-DS and SAP IBP background processing

Solution Details

- In the source SAP APO master data and key figures are extracted and staged by the ABAP Z-reports. Their execution results are saved to Z-tables
- CPI-DS then extracts prepared data from Z-tables and pushes to SAP IBP
- In SAP IBP there are Application Job Templates, that are created and configured to execute certain data post-processing jobs (ex., copy operator)
- A third party background job scheduler is supplied with the connectors to SAP APO (RFC), CPI-DS (SOAP API) and to SAP IBP (OData API)
- Integration cycle is fully managed by the external scheduler. It first starts Z-reports to fill Z-tables with the respective master data and key figures.
- After successful data preparation, CPI-DS Tasks are executed (by groups)
- In case of the successful integration, external scheduler executes Application Jobs on IBP side
- A single point of corporate background processing management
Case 3. **Direct extraction from SAP S4 with lookups**
Case 3. Direct extraction from SAP S4 with lookups

Case Definition

- A company wants to extract master data and transactional data from their SAP S4 system directly
- The scope and volume of integration should be based on the content of CSV files, stored locally on the host of CPI-DS Agent
- Files are created and maintained manually (but could also be created by another CPI DS Task)
- The scope and volume of integration should also be based on the parameter values that are to be defined on the SAP IBP side
- Data transformations need to be designed in CPI-DS and applied during ABAP phase and in CPI-DS
- Integration execution is to be based on SAP IBP scheduler
Case 3. Direct extraction from SAP S4 with lookups

SAP S4

- Auto-generated ABAP report
- SAP-table
- SAP-table

Parameter values used in ABAP transformation

SAP CPI-DS

- CPI-DS Task
- ABAP transformation
- CPI-DS transformation
- Lookup Files

Parameter values

SAP IBP

- SOAP API
- Data Integration Job
- App Job
- Master Data
- KF Data
Case 3. Direct extraction from SAP S4 with lookups

Solution Details

- CPI-DS Task is designed for data transformations that are to be done on both ABAP and CPI-DS sides
- Once the Task is executed, a dynamic ABAP program is generated and started in SAP S4
- ABAP transformation reads data directly from SAP tables (ex., MARA, MARC) and
- CPI-DS transformations are executed by CPI-DS agent itself after ABAP program is executed
- Global Variables are declared in Task and are used in filters, mappings, expressions of both ABAP and CPI-DS transformations
- Global Variable values could be set by default, but overridden when the Task is started via CPI-DS API
- Lookup files here are used to put additional filtering during CPI-DS transformation. Each can contain a list of allowed or disallowed values, or a kind of classification. Lookups could be done by one or many attributes.
- To enable SAP IBP to trigger CPI-DS Task, Communication Arrangement SAP_COM_0035 is to be set up
- When starting CPI-DS Task, SAP IBP can pass Global Variable values to the Task
Case 4. Sending data to SAP IBP from Excel workbook with VBA
Case 4. Sending data to SAP IBP from Excel workbook with VBA

Case Definition

- A company maintains master data and key figures in Excel workbook and wants to use them as input for SAP IBP.
- At this moment, they do not want to switch to another tool for initial data preparation and would like to have an automated process that will grab data from Excel spreadsheets directly.
- They would like to have also the actual status of the integration execution in the form of the table on the workbook.
- Parametrization is also required to manage certain constant values to be sent to IBP while data load (like fixed location, planning unit).
- A company wants to have a control on which version of the Planning Area is to be used as a target while loading data into SAP IBP via parameter value.
Case 4. Sending data to SAP IBP from Excel workbook with VBA
Case 4. Sending data to SAP IBP from Excel workbook with VBA

Solution Details

- Solution is based on custom VBA modules, created in the workbook.
- Once the user activates export process by pressing a button, custom VBA code grabs data from multiple spreadsheets and creates CSV files on the remote FTP server.
- While rendering files, configuration parameters are used.
- CPI-DS Tasks are configured to get CSV files from the FTP server, that is reachable for the agent.
- VBA code starts CPI-DS Tasks one-by-one passing Global Variable values and checks their status.
- Each CPI-DS Tasks is designed to process as much source files as possible – one Task processes all the master data files, and all the key figures are processed by only two Tasks.
- In the process of execution VBA code produces log by appending lines to the log spreadsheet. Execution is going in the background to allow the user work with Excel without losing a control over workbook.
- Log spreadsheet contains number of records extracted and processed by VBA part, as long as the status for each CPI-DS Task execution.
- When loading master data to IBP, target version is to be specified by the value of $G_SCENARIO variable.
- When loading key figures, a dedicated KFTAB table is created for each version, therefore it is required to have a dedicated CPI-DS task for each version. Task name is calculated by VBA code.
Best Practices
Best Practices

- Building efficient landscape. Use of multiple Agents
- When and why to Add an additional Sub Org
- Designing CPI-DS Tasks efficiently
  - Task Structure
  - Global Variables
  - Preload and Postload scripts
  - Useful functions
  - Data Flows
  - Recommendations on efficient design
Building efficient landscape. Basic installation

Mandatory components and prerequisites:

- At least one CPI-DS agent is to be installed for CPI-DS Org
- Installation is recommended to be done on a separate physical (or virtual) machine
- CPI-DS Agent is to be able to establish (and keep) a stable connection to CPI-DS Cloud
- CPI-DS Agent is to be able to connect to any of the source and target systems and services either on-premise or external
- Any CPI-DS Agent can be used to execute Task from both Sandbox and Production Environment
Building efficient landscape. Multiple agents, single group

Why to create a group of agents?
- A group of agents is an active-active cluster of runtime environments for Tasks
- Group of agents is a way to scale up runtime performance horizontally
- Agents maintenance becomes easier as switching off any of the agents in a group does not affect system as whole as other agents are still up and running
Building efficient landscape. Multiple agents, multiple groups

Why to create multiple groups?

- If you have Production and Non-production subnetworks and traffic exchange is restricted between them
- If you have more strict policies in your Production network zone
- If you need to separate Production and Non-production load
- **Important!** In CPI-DS there is no limitation on which group or agent to use to execute a Task irrespectively of the environment (Sandbox or Production). If you really need to prevent it, you have to look into creating an additional Sub Org
When and why to add and additional Sub Org

Why to add Sub Org?
- If you need to restrict developers to access Production systems by running their Tasks with Production Agents
- If you need a real 3-Tier landscape in CPI-DS to make development process more strict

More details:
- A Sub Org has a single Sandbox environment
- It cannot become a new Production
- Promotion is configured to the Sandbox of the next environment
- In the Sandbox environment of the Main Org objects are still editable, even if they are promoted from the Sub Org
Designing CPI-DS Tasks efficiently

Task structure
Designing CPI-DS Tasks efficiently

Global Variables

Global Variables are explicitly defined on a Task level

- Where the Global Variables could be used? (Almost everywhere, where expressions are allowed)
  - In Preload and Postload scripts (for reading or and writing values)
  - In Data Flow Transformations:
    - When calculating mapped fields
    - For filtering conditions
    - For join conditions
    - For both ABAP and CPI-DS transformation
    - When setting File Names
    - If interfacing with SAP IBP, Global Variables with fixed names are to be created. Some of them are mandatory

- Where the Global Variables could **NOT** be used?
  - For any `lookup()` function parameter
  - Value of a Global Variable cannot be set while Data Flow execution
  - When declaring and initializing other Global Variable
  - A Global Variable value is defined for each Task instance executed by CPI-DS Agent
Global Variables are extremely helpful when there is a need to manage Task behavior without redesigning it:

- Use Global Variables instead of hardcoded constants in Transformations for filtering conditions and mapping expressions for both ABAP and CPI-DS parts of a data flow
- Initialize Global Variables with their respective default values
- Any Task behavior variation? Use flags with 0-1 values. They could be then easily analyzed with `ifthenelse()` function
- A single Global Variable could be used for all the Data Flows of the Task
- Always start Global Variable name by `$G`. It is mandatory
Designing CPI-DS Tasks efficiently

Preload and Postload scripts

- Preload and Postload scripts are:
  - A Preload script is a small code, that is executed just after the Task has been started, but before any of the Data Flows.
  - On the opposite side, a Postload script is executed after the last Data Flow has been executed
  - Script language is well documented on help.sap.com and allows to create a simple Task initialization code
  - Global Variables values could be assigned only by Preload and Postload scripts

- You need a Preload or Postload logic if:
  - You need to work with files and calculate their names
  - You need to perform certain file operations before or after data processing
  - You need to execute any operating system command
  - You need to get a timestamp of Task execution
  - You need to check if correct values are assigned to Global Variables
  - You need to render something to the Task log
  - You need to evaluate some details from the runtime
  - You need to save to or read something from the CPI-DS cloud
  - And more…
Designing CPI-DS Tasks efficiently
Preload and Postload Useful Functions

- File operations: `file_exists()`, `file_copy()`, `file_move()`, `file_delete()`, `wait_for_file()`
- Execute OS command: `exec()`
- Current timestamp: `sysdate()`, `systime()`, `sysutctime()`
- Run details: `current_configuration()`, `current_system_configuration()`, `job_name()`
- Execution control: `sleep()`, `raise_exception()`, `raise_exception_ext()`
- Date calculations: `isweekend()`, `add_months()`, `last_date()`
- Output to the log: `print()`
- And many other…
Designing CPI-DS Tasks efficiently

Data Flows

Data Flow graphically specifies, how the data, stored in a set of Source tables is to be extracted, transformed and saved to a single Target table:
Designing CPI-DS Tasks efficiently
Data Flows in Details

- One CPI-DS Task can contain multiple Data Flows
- Within a Task Data Flows are executed sequentially
- One Data Flow can write to only one Target table
- But, one Target table could be filled with data by multiple Data Flows
- Data Flow produces a set of records to the Target table
- If SAP IBP is used as Target, Post-processing is triggered (configurable):
  - After all the Data Flows of the Task executed
  - After each Data Flow
- If ABAP system is used as a Source, some Data Flow transformation steps could be executed on ABAP side:
  - In a dialog mode
  - As a background job
Designing CPI-DS Tasks efficiently
Data Flows and Tasks Best Usage

- A Task should have at least one Data Flow
- Keep Data Flow logic as simple, as possible and avoid functional (business-level) transformations
- Keep a balance between transformations done by ABAP and by CPI-DS itself
- Decide on Task granularity – it is better sometimes to combine all the Targets (ex., for master data) in only one Task, but in case of error, Task re-execution will take longer
- The more granular level you choose, the more orchestration will be required
- If SAP IBP is a target, when writing Key Figures on the same Planning Level, you can combine multiple Key Figures in a single Data Flow, but do not create multiple Data Flows
- For every Planning Level, use a separate Task
- Avoid creating Tasks that write to multiple Planning Areas
- If you decide to write to SAP IBP version, for master data you can use $G_SCENARIO Global variable, that will make your Task compatible with any version of the Planning Area
- In complex cases, when the whole transformation is to be splitted on a sequence of Tasks, you will have to have a staging area used by multiple Tasks. CSV files and local Database are both good for that
Lessons Learned
Lessons Learned
Data Preprocessing

- Data coming from multiple source systems is better to consolidate before CPI-DS reads it.
- There is no need to send extra data volume to CPI-DS. If possible, pre-filtering and staging in the source system is to be implemented. IBP add-on for ECC/S4 is good for that.
- When extracting data from ABAP system, try to predict future changes on filter requirements and make Global Variables as selection parameters. It is always easier to change the value rather then regenerate ABAP code.
- Select which strategy of handling dirty data is better in your case. In general, you have two options – to let it come into SAP IBP or to filter it out by ABAP or CPI-DS transformation. Each option has its pros and cons.
Lessons Learned
Functional Transformations

- Keep your Data Flows design simple to let support people understand, what exactly is implemented.
- Functional transformations are those, which are requested directly by business (ex., complex attribute calculations with many conditional logic). Even thought, it is possible to implement by CPI-DS, it is better to be done in the business system itself. When the complexity increases, support becomes a nightmare.
- CPI-DS is better, if is used as a technical integration instrument, rather then functional.
- Design your transformations to be used like ‘implement and forget’.
Lessons Learned
Parametrization by Global Variables

- Any hardcoded value you use, irrespectively for what exactly – to assign its value to the attribute, as a filtering condition or for anything else – it is better to have a Global Variable to hold that value
- Default Global Variable value should (or could) be assigned, that will be used when running Task
- You can explicitly set the value of any Global Variable when starting your Task from the CPI-DS interface
- You can set Global Variable value when the Task is scheduled in HCI
- If you use SAP IBP as a scheduler, you also have an option to set Global Variable value
- Via CPI-DS API setting Global Variable value is also supported
- The logic of the Task becomes easy customizable if you use Global Variables as flags
- The values you have in Production may be different from the ones you have in the Sandbox. The only option to support it is to use Global Variables as in Production a Task could not be changed
Thank you.

Contact information:
Venkat Madireddi, venkat.madireddi@sap.com
Ilya Barabanov, ilya.barabanov@bizbraintech.com
Krishna Mamidipaka, Krishna.Mamidipaka@bizbraintech.com
Links for CPI-DS Resources

PAM

Help Portal
https://help.sap.com/viewer/p/SAP_CLOUD_PLATFORM_INTEGRATION_FOR_DATA_SERVICES

Agent Guide for installation and Configuration

Youtube Demo videos:
https://www.youtube.com/playlist?list=PLkzo92owKnVyHVtrzyF4KSQL0mTuKRg0q

CPI-DS community
https://answers.sap.com/tags/67838200100800005117

Quick Start Guide for IBP time series data integration
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 -

Integration guide https://uacp2.hana.ondemand.com/viewer/eab8fd1726934516a89eabcd318b210/1702/en-US -