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**SAP Cloud Platform Integration  
Technical Specification**

Technical Specifications Document

## Document Release Note

Document Name:	WA Conflict Resolution - End to End
Version:	1.0.0
Description:	END-TO-END ORCHESTRATOR: Complete conflict resolution process from data retrieval to action execution. Fetches work assignments and timesheets from SuccessFactors, combines them, analyzes conflicts, and executes resolutions. This is the main entry point for automated conflict resolution jobs.
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## Revision History

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# 1. BUSINESS CONTEXT

## 1.1 Overview

END-TO-END ORCHESTRATOR: Complete conflict resolution process from data retrieval to action execution. Fetches work assignments and timesheets from SuccessFactors, combines them, analyzes conflicts, and executes resolutions. This is the main entry point for automated conflict resolution jobs.

## 1.2 Development Unit Information

Module	SAP Cloud Platform
Sub Module	Hana Cloud Integration
iFlow Title	WA Conflict Resolution - End to End
Processing Type	Background Online
Execution Frequency	Scheduled Daily / On-Demand

## 2. DETAILED DESIGN

### 2.1 Configuration Details

**Package Name:** SF-Nadec-WorkAssignment

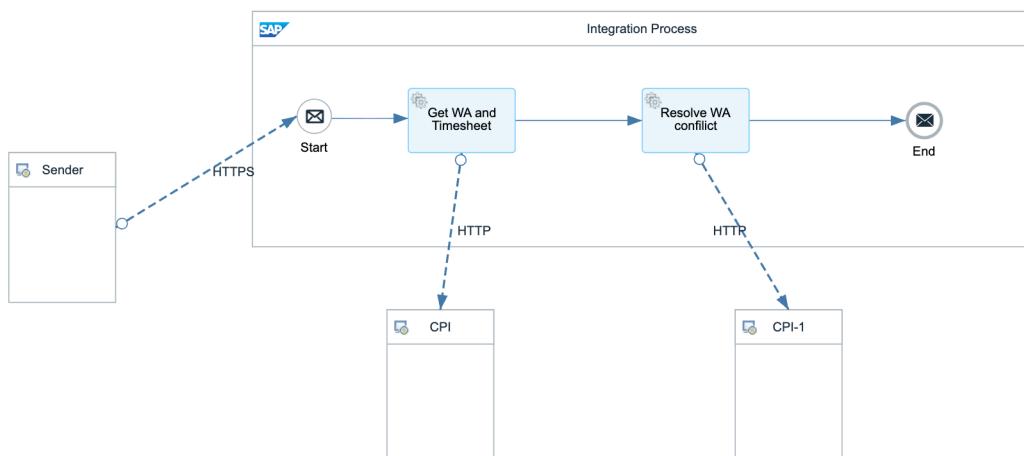
**iFlow Name:** WA Conflict Resolution - End to End

**Technical Name:** WA\_TS\_Conflict\_EndToEnd

**Endpoint:** /resolveWAMain

### 2.2 SAP CPI iFlow Design

This is a custom-designed SAP CPI Integration flow for work assignment and timesheet conflict resolution.



### Detailed Requirements:

1. Fetch work assignments for date range (calls Get Work Assignment List)
2. Fetch corresponding timesheets (calls Get Employee Timesheet List)
3. Combine WA and TS data (calls WA and TS Data Bulk Retrieval)
4. Analyze conflicts (calls WA Conflict Resolution - Analyze Logic)
5. Execute resolutions (calls WA Conflict Resolution - Execute Actions)
6. Return comprehensive results with statistics

### Groovy Scripts

Script Name	Description
Initiate Process	Sets up date range and initializes counters
Fetch WA Data	Calls external iFlow: WA and TS Data Bulk Retrieval
Orchestrate Resolution	Calls: WA Conflict Resolution - Core Orchestrator
Aggregate Statistics	Counts resolved items, deletions, trims, and errors

## **2.3 Adapter Configuration (Sender & Receiver)**

Orchestrates multiple flows: - Get Work Assignment List - WA and TS Data Bulk Retrieval - WA Conflict Resolution - Core Orchestrator

## **2.4 Error Handling**

Standard CPI error handling applies. Errors are logged to message processing log. Failed messages are stored in error queue for manual intervention. Retry mechanism is configured for transient failures (3 attempts with 5-second delay).

## 3. TESTING

### 3.1 Test Conditions and Expected Results

Test Condition	Expected Result
Scheduled daily execution	Processes all WA-TS pairs for configured date range
100 conflicts detected and resolved	All conflicts analyzed and actions executed successfully
SF API temporarily unavailable	Retry mechanism handles transient failures
Process exceeds 10-minute timeout	Chunks processing into smaller batches

### 3.2 Test Data Considerations

Test data should include: (1) Typical scenarios with standard work assignments and timesheets, (2) Edge cases with time zone boundaries, (3) Error scenarios with malformed data, (4) Load testing with bulk data volumes.

### 3.3 Performance Considerations

Expected processing time: <5 seconds for single record, <60 seconds for batch of 100 records. SF API rate limits: 5000 calls/hour. Memory usage: <500MB for typical batch operations.

## **4. APPENDIX**

Additional technical documentation, API specifications, and code samples are available in the project repository: <https://github.com/eco-nadec/SF-WA-CPI>