CASE STUDY: Lessons Learned from Integrating Multiple SAP HR Systems for a Multi-Entity Company

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Learning Points

- Understand how SAP enables integration across multiple company codes in multiple systems
- Gain insight into SAP delivered options for integration of multiple SAP HR systems
- Get expert advice on how to best implement each integration point between multiple SAP instances
- Walk away with tips to enable seamless payroll and finance integration across multiple company codes in SAP
What We’ll Cover…

- Overview
- Integration Design Options
- HR Data Integration
- Time Data Integration
- Payroll and FI Integration
- Key Learnings
- Wrap it up
Integrating Systems Between Companies

Vision:
- One Company serves as the HR/Payroll provider for all companies
- Process all HR/Payroll transactions for all employees in one SAP system

Business Values:
- Take advantage of the combined scale of the entire company to generate more efficient and effective programs, processes and procedures
- Uniformity across all companies in processes and programs
- Increase the efficiency and mobility between divisions through common processes and procedures
Integrating Systems Between Companies (Cont’d)

- Challenges:
  - Companies on separate SAP instances for Finance and/or EAM
  - In SAP, Cross Application Time Sheet (CATS) and other HR/non-HR modules are tightly integrated:
    - Time Entry and Costing (Cost Center, Internal Order)
    - Time Entry and Enterprise Asset Management (Work Order)
    - Time Entry and Procurement (Service Time Sheet)
    - Time Entry and Payroll Processing
Integration Design Considerations and Options

- **Scenario:**
  - "Company A" is providing payroll service to "Company B"
  - Companies are on different SAP systems, each one implementing their own Finance and Controlling modules.

- **Design Considerations:**
  - Where should "Company B" CATS be implemented?
  - If it’s on "Company A" System, how can we integrate CATS with "Company B" costing, EAM and procurement?
  - If it’s on "Company B" system, how can we integrate CATS with "Company A" HR and "Company A" Payroll?
Integration Design Considerations and Options (Cont’d)

- Design Options:
  - Option 1: Collect all time entries on "Company A" System
    - Leverage all SAP built-in integration between HR Data, CATS and Time and Payroll Processing
  
  - Option 2: Custom table to store "Company B" costing collection structures
    - Still collect all time entries on "Company A" System
    - Using a custom table to store "Company B" costing collection structures
  
  - Option 3: Split CATS implementation
    - "Company B" employees will enter time on "Company B" system
Integration Design Option 1 – Collect All Time Entries on "Company A" System

- **Pro’s:**
  - One system to enter Time for all EE’s
  - No customization required at "Company A" HR side

- **Con’s:**
  - All "Company B" costing collecting structure need to be built in "Company A"
  - Difficult to build detail costing reports on "Company B" system
Integration Design Option 2 – Custom Table to Store "Company B" Costing Collection Structures

- **Pro’s:**
  - One system to enter time entry for all EE’s
  - Do not need to build all "Company B" cost collecting structures in the "Company A" instance

- **Con’s:**
  - CATS needs to be customized to read "Company B" Costing Data from Custom Table
  - Time & Labor posting to Costing needs to be customized
Integration Design Option 3 – Split CATS Implementation

- **Pro’s:**
  - Do not need to build all "Company B" cost structures in the "Company A" instance
  - Minimal customization

- **Con’s:**
  - CATS configuration needs to be in both systems
  - Need to pass more HR Data such as Work Schedule to "Company B"
  - Need to send "Company B" CATS Time entries to "Company A" system
Integration Design Option Evaluation

- All three options were evaluated carefully

<table>
<thead>
<tr>
<th>Option</th>
<th>Risk</th>
<th>Stability</th>
<th>Level of Complexity</th>
<th>Cost to Implement</th>
<th>Cost to Maintain</th>
<th>Flexibility</th>
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<tbody>
<tr>
<td>Option 1</td>
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<td>Collect Time in SCE Instance</td>
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<td>Option 2</td>
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<td>Custom Table</td>
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<td>Option 3</td>
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<td>Split CATS Implementation</td>
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- Option Recommended & Implemented: **Option 3 – Split CATS Implementation**
HR Master Data Integration Recommendation

- Certain HR Data (infotypes) required to be sent to "Company B" system to support Time Entry at "Company B" system and Travel Expense Management:
  - Basic HR Data: IT0000, IT0001, IT0002, IT0006, IT0009
  - Org. Management Data: HRP 1000, HRP1001, HRP1002
  - Time Master Data: IT0007

- Solution: SAP HR Master Data ALE

- Benefits:
  - Leverage SAP standard HR Master Data synch. utility
  - Strong support from SAP
  - Flexible and Scalable (e.g. if need to add a new Infotype)
  - Minimal customization to reduce the maintenance cost
Time Data Integration-Recommendation

- "Company B" time entries to be validated and approved on their system and sent to "Company A" system

Solution: Time Data ALE
- Send approved time entries to PTEX2000 table on "Company A" system
- Add a RFC call in CATS user exit so that all the validations are against Data stored on "Company A" system

Benefits:
- Leverage SAP standard Time Data ALE utility
- SAP uses PTEX2000 table to store approved time entries even for time entries on the same SAP system
- Minimize the data required for validation to be sent "Company B" system
- Minimal customization and lower maintenance cost
Payroll and FI Integration - Vision

- One Paying Company for All Company Codes Across multiple SAP Systems
  - One company distributes payroll net pay to all employees in all company codes
    - All payroll net pay from the same house bank
    - Payment program run only once for the same payment method for all company codes
  - One company processes payments to all payroll 3\textsuperscript{rd} party vendors for all company codes
    - For example, one company remits all credit union deduction amount to different payees for all company codes
  - The paying company serves as the vendor for all other companies and inter company billing should be automated
Payroll & FI Integration Vision - Illustration

- Example: "Company A" is the paying company for "Company B". An employee from "Company B" has a gross earning of $2,000, after taxes and voluntary deductions, he gets net pay of $1,200.

<table>
<thead>
<tr>
<th>One EE's Check from Company B</th>
<th>What Happens?</th>
</tr>
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<tbody>
<tr>
<td>Gross Earning</td>
<td>Company A Bills Company B $2000 as intercom billing</td>
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<tr>
<td>Payroll Tax - FED</td>
<td>Company A Remits $500 to IRS for Company B</td>
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<tr>
<td>Payroll Tax - CA</td>
<td>Company A Remits $500 to CA FTB for Company B</td>
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<tr>
<td>Credit Union Deduction</td>
<td>Company A Remits $300 to Credit Union for Company B</td>
</tr>
<tr>
<td>Empolyee's Net Pay</td>
<td>Company A issues $1,200 to the Employee</td>
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Payroll & FI Integration Solution – Same System

- Scenario 1: More than one Company Code on the same SAP system using "Company A" as their paying company
- Solution: Standard SAP.
  - Payroll Net Pay payment
    - Use Feature DTAKT to specify paying company code.
  - Solution for Payroll 3rd party vendor payment
    - When you are in General Company Code Specifications screen, in the control data section, you can specify its paying company code
- Intercompany Clearing
  - Set up intercompany clearing pairs between paying company and all other companies (T-Code: OBYA)
  - Establish cross company clearing vendor/customer accounts
Scenario 2: Companies on multiple SAP systems use "Company A" as their paying company

Solution: Standard SAP with a smart design and a couple of interfaces.

- Establish “Shadow” Chart of Accounts for All "Company B" company codes on "Company A" system
- Set up DTAKT feature, paying company code relation, and intercompany transfer as if "Company B" companies are on the same SAP system
- FI/CO Master data ALE interface from "Company B" SAP system to "Company A" SAP System
  - Chart of Accounts, Cost Centers
- GL Posting Interface from “Company A” to “Company B”
Special Notes on “Shadow” Chart of Accounts

- Shadow Chart of Accounts on "Company A" system only used for "Company A" to perform Payroll Posting for "Company B" employees
- Shadow Chart of Accounts on "Company A" system are not used for financial consolidation purpose
- Shadow Chart of Accounts on "Company A" system are not used by any other modules on "Company A" system
- It serves only as the vehicle for cross-company code posting to minimize the customization
- "Company B" employees/financial department doesn’t have access to GL posting info on "Company A" system
  - "Company A" to "Company B" FI GL posting interface sends payroll posting line items to "Company B"
Payroll to FI Integration Illustration (Simplified)

“Company B” SAP

Chart of Accounts for Company B

Payroll to FI Posting Results Interface

FI/CO Master Data Interface

“Shadow” Chart of Accounts for Company B

Chart of Accounts for Company A

“Company A” SAP

Payroll for Company B

Payroll For Company A
Benefits of Using “Shadow” Chart of Accounts

- Minimize the ongoing system maintenance cost by eliminating unnecessary customization
- Virtually, from payroll posting’s perspective, it is consistent with all other cross company posting on the same system:
  - Easier initial implementation
  - Easier for functional/technical support organization for future issue troubleshooting in production
  - Easier for payroll operational staff to understand and reconcile the finance posting results
- Additional GL Posting interface allows flexibility should "Company B" choose to use slightly different GL accounts for payroll posting
Business Values Delivered

- Leveraging integration and in compliance with legal and regulatory guidelines
- Centralized processing of HR/Payroll
- Standardized and consistent HR/Payroll procedures
- Seamless integration with non-HR function areas across multiple SAP systems
Key Learnings

- With proper design, you can leverage SAP to integrate multiple companies in multiple SAP instances to deliver consistent HR/Payroll procedures.
- PTEX2000 table is the standard SAP time data interface table even for the same instance, using it for multiple instance scenario can minimize customization.
- Implementing a “shadow” Chart of Accounts in main instance will allow seamless payroll posting and third party remittance payment processing across different SAP systems.
Wrap it up

- Questions? It’s Your Turn! 😊

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Thank you for participating.

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