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# DF126 - Best practices for Web services integrations

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# Presenters



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**Product Manager,  
Dayforce Architecture**

Chris Schwarz is the Product Manager for Dayforce Architecture. He joined Ceridian 20 years ago as a self-service Implementation Consultant and continued in lead implementation roles focusing on data integration, data compliance, application security and organizational readiness. Chris joined the Dayforce Research and Development team in 2011.




**Thibaut Etiembre**

**Product owner,  
Dayforce Architecture**

Thibaut joined Ceridian in 2012 as an Implementation Consultant and has been part of the Research and Development organization since 2017. As Product Owner, Thibaut has responsibility for integration features including Web Services and Import/Export framework.

# Agenda

1. Review considerations when starting a web services project
  2. Discuss components of a common web service integration
  3. Review upcoming features
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Start a web services project

# Start with the Developer Network

- Use the Dayforce Developer Network to:
  - Determine if a partner integration is available
  - Download the documentation
  - Browse and try the different calls
  - Learn how to configure access to web services
  - Download sample applications that demonstrate using the requests
- Access the DDN at <https://developers.dayforce.com>
  - Registration is required during the first visit

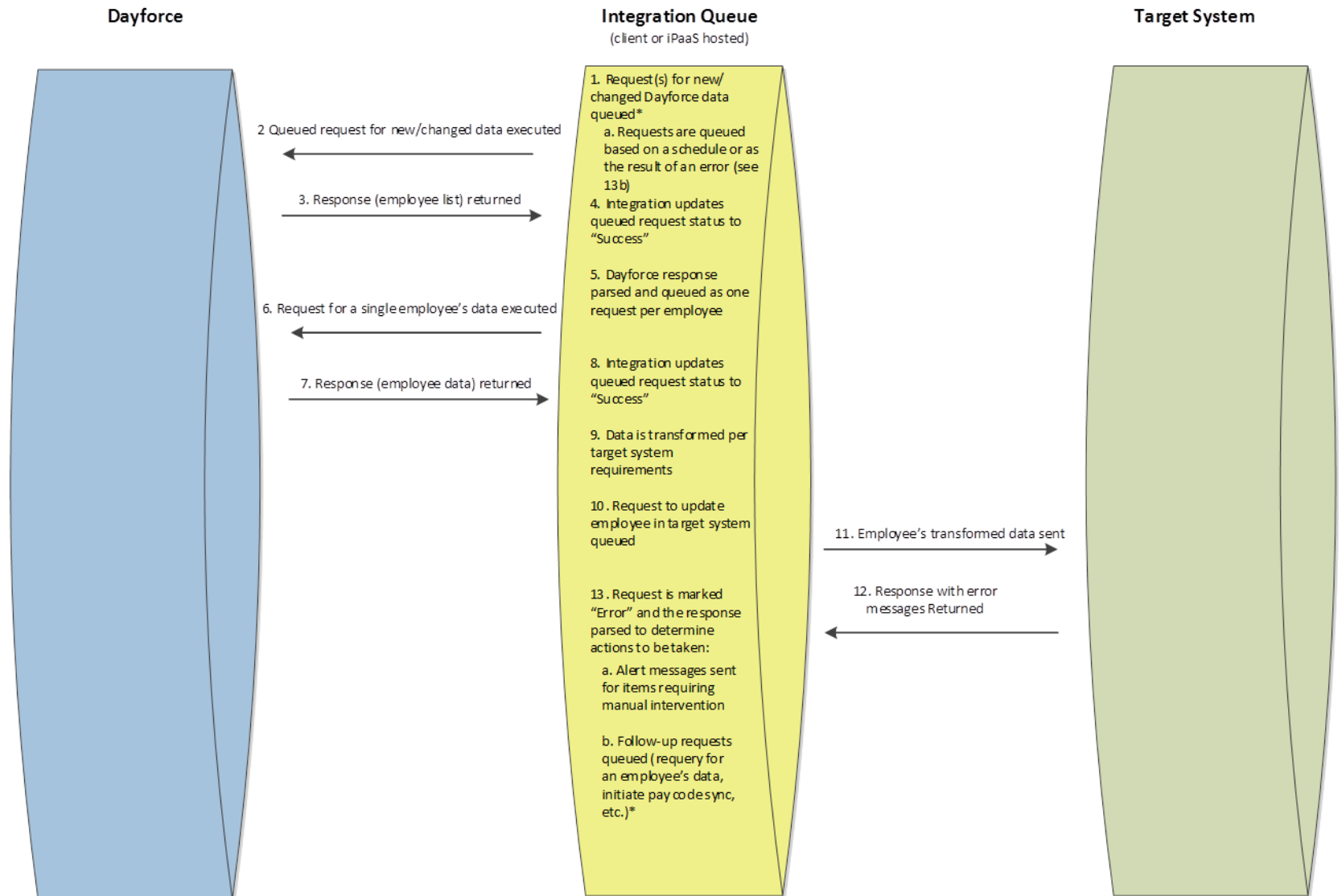
# Partner integrations

Dayforce partners with many vendors to offer prebuilt integrations with their software. Before beginning an integration development project, be sure to review the list of partners and available integrations in the Dayforce Developer Network.

# Queuing requests

Leveraging a transaction queue is recommended to make integrations more robust, especially where:

- static reference numbers are not available
- a failed transaction in a downstream system needs to be requeued
- a dependent record type is required from Dayforce



\* Assumes an appropriate web services operation that supports change detection is available for the target data subject.



Components of a common integration

# Synchronize timesheets

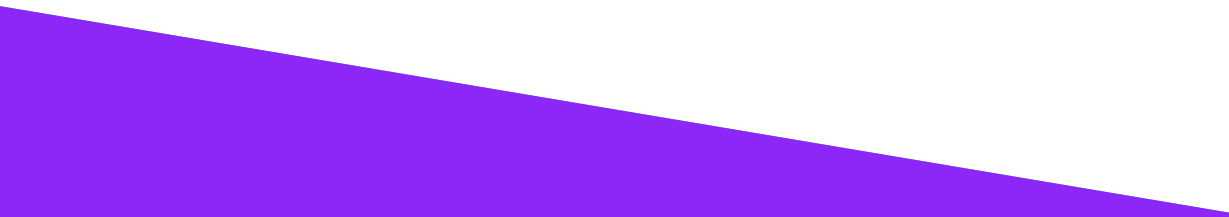
As a company tracking labor costs for time spent on specific projects, we need to extract timesheet data so we can update project costs in our internal system.

# Synchronize HR data first

Before synchronizing subordinate data (like timesheet information) we recommend updating employee HR details.

- Look for the reference codes of employees changed since the last successful request
- For each reference code returned, retrieve the details
- Depending on the way data is stored and updated in the target system, a data comparison between that system and Dayforce may be necessary to determine the specific changes

# Create a role and a user

- The Role should only have access to the relevant time and employee HR data
  - The User should only have access to the relevant employee locations
  - We recommend using the narrowest configuration possible, and then expanding it as needed. This approach will ensure only the employees, data entities and data elements required in the integration are included
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# Call the APIs

- Retrieve data changed since last successful call using transaction UTC time filters
- Use location, position, department or job filters if relevant
- Queue the calls to more easily handle errors and throttling
- Loop through pages for large responses
- Use the PunchXRefCode to identify the records to update or insert information into the target system
- If you are using a Release 56 Dayforce environment, you will need to use a Release 56 specific DDN page to test the employee punch call

# Retrieve report data

As a company tracking labor costs for time spent on specific projects, we need to extract company-level labor metrics details data so we can update project costs in our internal system.

# Create a report

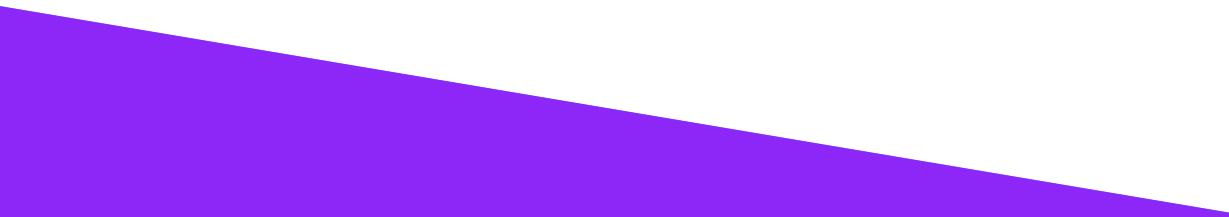
- Create a report with the required fields
- Create time filter parameters to only retrieve the items the new and changed items since the previous successful request
- Create labor metric filters to only retrieve projects
- Add a reference code to the report and ensure it is free of totals and grouping so it can be used with the Get Report operation
  - Note: Get Report requests require V2 reports

# Create a role and a user

- The Role should:
  - only have access to the relevant report(s)
  - have access to the report library feature and the relevant parent report category
- The User should not have access to employee information because only company-level data is being synchronized.



# Call the APIs

- Retrieve the report metadata to get the relevant filters identifiers
  - Retrieve the report data using filters
  - Queue the calls to handle errors and throttling
  - Loop through pages for large responses
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Upcoming web services features

# Disclaimer

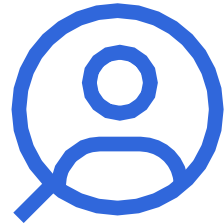
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# Roadmap themes



Manage the  
changing world  
of work



Get the right  
people for the  
right job



Retain top  
talent



Make people  
successful at  
their job



Reduce  
organizational  
risk



**Make  
people  
successful  
at their  
jobs**

**Reduce employee stress  
by eliminating  
distractions that take  
them away from their  
jobs**

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Train employees

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Offer more feedback  
to help people  
improve performance

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Put people in jobs where  
they can succeed,  
especially those aligned to  
their strengths

## **2019 H2**

- Employee HR Model Breakdown
  - Full Retrieve capability
  - Limited Insert and update capabilities
- Retrieve, Insert and Update Org Unit Details
- Insert Employee Raw Punch Information

## **2020 H1**

- Retrieve Benefit Data
- Retrieve Background Job Log Information
- Retrieve, Insert and Update Candidate Details
- Retrieve Job Posting Details
- Retrieve, Insert and Update Department Information
- Retrieve, Insert and Update Job Information
- Retrieve, Insert and Update Position Information
- Retrieve Pay Summary Details
- Insert and Update Employee Schedule Information
- Retrieve, Insert and Update Labor Metric Codes and Types
- Retrieval Labor Cost
  - Ability to determine labor costs for a given day, at a given point in time, through rule engine simulation.
- Ability to Update Employment Status Details with Minimum Set of Required Fields
- Support for Additional Filtering in Retrieve Employee HR Operation

# Conclusion

Dayforce provides an expanding RESTful Web service suite to extract and insert data into Dayforce.

In summary, we have:

- Used scenarios to illustrate integration guidelines and best practices
- Demonstrated how to use the Dayforce Developer Network (DDN) to browse and test Web services
- Presented upcoming Web service integration enhancements

A photograph of two women in a professional setting, looking at a laptop screen. The woman on the left has curly hair and is wearing a light-colored top. The woman on the right has dark hair pulled back and is wearing a dark top. The background is softly lit with warm, out-of-focus lights. A large blue diagonal shape is overlaid on the bottom left of the image.

# Questions?

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