



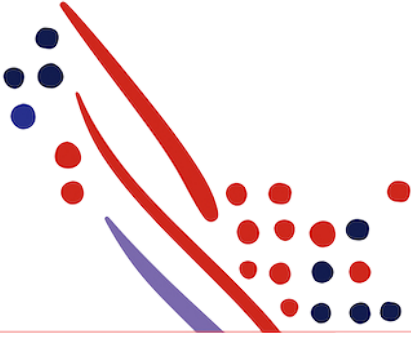
Guide

# Direct Deposit API Guide for ADP Vantage HCM

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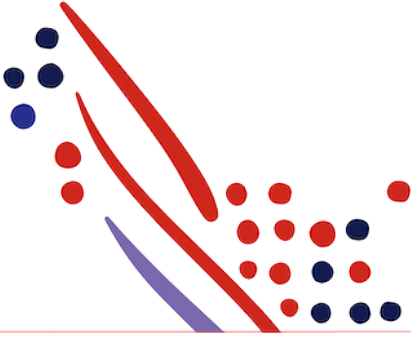
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# Table of Contents

## Chapter 1

### About this API

Summary

What's New in this Guide

Jan 2021

Dec 2020

Supported Product Version and Customer Base

Process Overview

Typical B2C Application Integration Flow

Required Setup Steps

More about Direct Deposit

About Prenote

## Chapter 2

### Use Case : Retrieving an Employee's Direct Deposit

Use Case Description

API Usage

Application Scope

Supported Actors

Request Header Parameters

Revealing Masked Data

Sequence of Interactions

Data Dictionary

Responses

## Chapter 3

### Use Case: Updating an Employee's Direct Deposit

Updating Direct Deposit in ADP Vantage HCM

API Usage

Application Scope

Supported Actors

Request Header Parameters

Instructions on Add and Update Direct Deposit

Sequence of Interactions

Data Dictionary

Responses

## Chapter 4

### Use Case: Retrieving Code Lists

- Use Case Description
- API Usage
- Application Scope

## Chapter 5

### Use Case: Synchronizing Employee Direct deposit details Using Notifications

- Use Case Description
- Supported Event Notifications

## Chapter 6

### Known Issues and Limitations

Issue #1: Meta call is not returning a Code list for Bank Transit Number

- Impacted APIs
- Issue Description
- Suggested Workaround

Issue #2: Masking and unmasking Account Number and Bank Transit Number using the Accept:application/json;masked=false header

- Impacted APIs
- Issue Description
- Suggested Workaround

## Chapter 7

### Appendix: Update the Security Profile to Retrieve Unmasked Bank Routing Numbers and Account Numbers

# About this API

## Summary

The Direct Deposit API allows your application to manage an employee's Direct Deposit setup.

## What's New in this Guide

### May 2023

- Updated API endpoints and samples to link to API explorer.

### March 2022

- Updated the text to include percentage deposits

## Jan 2021

- **Removed** codelist URI from API Usage Section in [Chapter 2-Use Case 1: Retrieving an Employee's Direct Deposit](#)
- **Added** the **meta URI**( /payroll/v2/workers/G3R9MDBS40828RS9/pay-distributions/meta ) under API Usage section in [Chapter 2-Use Case 1: Retrieving an Employee's Direct Deposit](#)
- **Added** a new Chapter with codelist details in [Chapter 4-Use Case: Retrieving Code Lists](#)
- **Added** a new chapter with event notification details in [Chapter 5-Use Case: Synchronizing Employee Direct deposit details using notifications](#)

## Dec 2020

- Converted from prior PDF based format to HTML format

## Supported Product Version and Customer Base

The Direct Deposit API is available for ADP Vantage HCM clients with the Payroll features.

## Process Overview

### Typical B2B Application Integration Flow

#	Actor	Task Description
1	Payroll Practitioner	Sets up Direct Deposit accounts in ADP Vantage HCM.
2	Your Application	Uses the Direct Deposit API to synchronize employee data between ADP Vantage and your application.

3	Payroll Practitioner	In your application, a Payroll Practitioner selects an employee and initiates an action to view Direct Deposits.
4	Your Application	Uses the Direct Deposit API to retrieve Direct Deposit setup data for the selected employee.
5	Payroll Practitioner	In your application, a Payroll Practitioner views an employee's Direct Deposit data.
6	Payroll Practitioner	In your application, a Payroll Practitioner updates an employee's Direct Deposit data.
7	Your Application	Uses the Direct Deposit API to replace Direct Deposit setup data for the selected employee.
8	ADP Vantage HCM	Upon successful payroll processing, ADP automatically distributes funds from the employee's pay to their Direct Deposit account per the Direct Deposit configuration.

## Typical B2C Application Integration Flow

#	Actor	Task Description
1	User	Logs in to your application.
2	Your Application	Authenticates using the employer-issued ADP credentials and consents to allow your application to retrieve the individual's ADP-managed Direct Deposit data for that employer.
3	Your Application	Uses the Direct Deposit API to retrieve the individual's Direct Deposit setup data.
4	User	In your application, the user views Direct Deposit setup data.
5	User	In your application, the user updates Direct Deposit setup data.
6	Your Application	Uses the Direct Deposit API to replace Direct Deposit setup data for the user under the employer.
7	ADP Vantage HCM	Upon successful payroll processing, ADP automatically distributes funds from the employee's pay to their Direct Deposit account per the Direct Deposit configuration.

## Required Setup Steps

Clients need to make sure the codes used by your application are added and configured in ADP Vantage HCM. Refer to the following table on setup pages.

<b>Records</b>	<b>ADP Vantage HCM</b>
----------------	------------------------

Account Type	Setup > Field Definitions & Mappings > Setup Information > Payroll > Deductions
Bank Transit number	Setup > Field Definitions & Mappings > Setup Information > Payroll > Banks

## More about Direct Deposit

Direct deposit allows your pay to be transferred automatically to one or more bank accounts on pay day. The following table lists the different types of Direct Deposit allocations.

Types of Direct Deposit	Description
Full Deposit	Deposits 100% of your pay to a single account.
Specific Amounts	Deposits a specific dollar amount into each account.
Specific Percentages	Deposits a specific percentage into each account
Specific Amounts/Percents + Full Net Deposit	Deposits the specified amounts/percents for each account and deposits the balance of your pay in the account marked <b>Full Net Deposit</b> .

## About Prenote

When you set up an employee's Direct Deposit information, you choose whether to use prenotes. Prenotes verify the routing information before a live transaction occurs. The prenote period varies by bank. After the initial prenote period, future deposits to that account are made automatically. Using prenotes is recommended when you set up new Direct Deposit accounts, or if you change a routing or account number. If you only change the amounts for accounts you have already set up, prenotes are not necessary.

### Chapter 2

## Use Case : Retrieving an Employee's Direct Deposit

### Use Case Description

Returns the list of all available Direct Deposits the requestor is authorized to view for a given worker. The Direct Deposit API exposes values found in the People > Pay & Taxes > Direct Deposit area of ADP Vantage HCM. You must provide the Associate Organization ID (AOID) of the desired worker in the AOID Uniform Resource Identifier (URI) parameter.

### API Usage

For more information refer [Worker Pay Distributions](#) under API Explorer.

Method	URI	Description
GET	<a href="#">/payroll/v2/workers/{aoid}/pay-distributions</a>	Returns the list of all active Deposits (until current effective date) for an employee.
GET	<a href="#">/payroll/v2/workers/G3R9MDBS40828RS9/pay-distributions/meta</a>	Returns the meta information
GET	<a href="#">/payroll/v2/workers/{aoid}/pay-distributions?effectiveDate={effectiveDate}</a> <b>Example:</b> <a href="#">/payroll/v2/workers/{aoid}/pay-distributions?effectiveDate=2020-02-14</a>	Returns the list of all active deposits of an employee (until the effective date provided in the parameter).

## Application Scope

The canonical URI corresponding to the API needs to be added in the Consumer Application Registry (CAR) for the subscription following which a user can access this API and make successful API calls.

The following canonical needs to be added to your application scope to enable this use case:

**[/payroll/payrollManagement/payrollInstructionManagement/payDistributionManagement/worker.payDistribution.read](#)**

## Supported Actors

Request Parameter roleCode Value	Usage
Practitioner	Retrieves an employee's Direct Deposits as a practitioner. A system user is considered a practitioner.
Employee	Retrieves your Direct Deposits as an employee. This is typically used to view your own Direct Deposits.

## Request Header Parameters

Parameter Name	Required (Y/N)	Usage	Value	Sample
Accept	Y	To reveal masked data.	application/json;masked=false	Accept:application/json;masked=false
Accept	Y	To get the records.	application/json	Accept:application/json

## Revealing Masked Data



To address privacy concerns, clients can configure to allow a user access bank account number and routing numbers. As part of your client onboarding process, you need to make sure clients confirm security settings for your connector user security profile by following the steps in Appendix: Update the Security Profile to Retrieve Unmasked Bank Routing Numbers and Account Numbers on page . By default, Account Number and Bank Transit Number are masked in the Direct Deposit API response. To reveal masked data, simply add the following header to your HTTP request: **Accept:application/json;masked=false**.

## Sequence of Interactions

1. Your consumer application makes a request to the ADP API endpoint to GET Pay Distributions for a worker.
2. The ADP API endpoint responds to your consumer application with single worker Pay Distributions information.

## Data Dictionary

The Direct Deposit API manages the data displayed under **People > Pay & Taxes > Direct Deposit**.

Schema Location	Field Name in ADP Vantage HCM
/payDistributions/payrollRegionCode/codeValue	Not Displayed
/payDistributions/payrollRegionCode/longName	Not Displayed
/payDistributions/payrollGroupCode/codeValue	Not Displayed
/payDistributions/payrollGroupCode/shortName	Not Displayed
/payDistributions/payrollGroupCode/longName	Not Displayed
/payDistributions/payrollFileNumber	Not Displayed
/payDistributions/itemID	Not Displayed
/payDistributions/requestedStartDate	Effective Date
/payDistributions/distributionPurposeCode/codeValue	Not Displayed
/payDistributions/dist	Not Displayed

tributionPurposeCode/ longName	
/payDistributions/dist tributionInstructions/ paymentMethodCode /codeValue	Not Displayed
/payDistributions/dist tributionInstructions/ paymentMethodCode /longName	Not Displayed
/payDistributions/dist tributionInstructions/ depositAccount/finan cialParty/nameCode/ shortName	<b>Bank Transit Number</b>
/payDistributions/dist tributionInstructions/ depositAccount/finan cialParty/nameCode/ longName	Not Displayed
/payDistributions/dist tributionInstructions/ depositAccount/finan cialParty/routingTransi tID/ idValue	Not Displayed
/payDistributions/dist tributionInstructions/ depositAccount/finan cialAccount/accountN umber	<b>Account Number</b>
/payDistributions/dist tributionInstructions/ depositAccount/finan cialAccount/typeCode / codeValue	<b>Account Type</b>
/payDistributions/dist tributionInstructions/ depositAccount/finan cialAccount/typeCode / longName	Not Displayed
/payDistributions/dist tributionInstructions/ depositAccount/finan cialAccount/currencyC ode	Not Displayed
/payDistributions/dist tributionInstructions/ distributionAmount/a mountValue	<b>Deposit Amount</b>
/payDistributions/dist tributionInstructions/ distributionAmount/c urrencyCode	Not Displayed

/payDistributions/distributionInstructions/remainingBalanceIndicator	<b>Full Net Deposit</b>
/payDistributions/distributionInstructions/prenoteIndicator	<b>Prenote Required</b>

## Responses

You may encounter exceptions outside your common success scenarios. You must account for these exceptions during your initial development.

For more information, see [API Common Exceptions and Tips for Handling](#).

For more information refer [Worker Pay Distributions](#) under API Explorer.

Response Code	Response Condition	Response payload messagetxt	Notes
200 OK	Retrieve the Direct Deposits.	NA	The GET <a href="#">/payroll/v2/workers{aoid}/pay-distributions</a> return the Direct Deposits until the current date.
	Retrieve the future dated Direct Deposits.	NA	The GET <a href="#">/payroll/v2/workers{aoid}/pay-distributions?effectiveDate={effectivedate}</a> returns the future dated Direct Deposits.
	The requester doesn't have access to reveal sensitive data such as Bank Transit Number and Account Number, make a GET call to get unmask data.	NA	
200 OK (cont.)	The requester does have access to reveal sensitive data such as Bank Transit Number and Account Number and make a GET call to get unmask data.	NA	In this case, the requester has the access to see the sensitive information like Account Number and Bank Transit number. Include the <b>"Accept:application/json; masked=false"</b> header in the Request headers of an API call.
204 No Content	Retrieve the Direct deposit of an employee when there are no deposits.	NA	
403 Forbidden	Retrieve the Direct Deposits with Invalid AOID.	<b>"userMessage": { "codeValue": "3-49", "messageTxt": "You do not have the authorization to access the server. Contact your system administrator. (3,49)\n" }</b>	

# Use Case: Updating an Employee's Direct Deposit

## Use Case Description

The Direct Deposit APIs can be used to update how a worker's pay is distributed. This API exposes values found in the **People > Pay & Taxes > Direct Deposit** areas of ADP Vantage HCM.

## Updating Direct Deposit in ADP Vantage HCM

Add or change Direct Deposit information by specifying the bank accounts to which all or a portion of pay is to be deposited. You only need to enter Deposit Amounts if you are not using **Full Net Deposit**. If you enter deposit amounts and then select **Full Net Deposit**, the deposit amount you entered will be cleared. If you select **Full Net Deposit** unintentionally, you can clear the selection by entering a **Deposit Amount**. If the Direct Deposit information needs to be validated by the financial institution, this process usually requires a ten banking-day period and it may take up to two pay periods for the new Direct Deposit account to take effect. During this time, live pay checks may be issued. Review the pay statement for updates.

## API Usage

For more information refer [Worker Pay Distributions](#) under API Explorer.

Method	URI	Description
GET	<a href="/events/payroll/v1/worker.pay-distribution.change/meta">/events/payroll/v1/worker.pay-distribution.change/meta</a>	Returns an event metadata.
POST	<a href="/events/payroll/v1/worker.pay-distribution.change">/events/payroll/v1/worker.pay-distribution.change</a>	Adds a new Direct Deposit or updates an existing Direct Deposit records with an updated set.

## Application Scope

The following canonical URI needs to be added to your application scope to enable this use case:

**</payroll/payrollManagement/payrollInstructionManagement/payDistributionManagement/worker.payDistribution.change>**

## Supported Actors

Request Parameter roleCode Value	Usage
practitioner	Adds or updates an employee's Direct Deposit as a practitioner. A system user is considered a practitioner.
Employee	Adds or Updates your Direct Deposit as an employee.

## Request Header Parameters

There are no Request Header Parameters, beyond the standard parameters.

## Instructions on Add and Update Direct Deposit

The [/events/payroll/v1/worker.pay-distribution.change](#) request adds or updates an employee's existing Direct Deposit records in the request payload.

- If no deposits exist for an employee, the Direct Deposit API acts as an ADD function and adds a new Direct deposit.
- If there is an existing Direct Deposit for an employee, API acts as an UPDATE function and updates the existing record.

There is no separate and explicit Add or Update. For example, if a new Direct Deposit needs to be added to an existing collection, your application needs to retrieve the existing collection, then build the request payload with the existing collection and insert the new Direct Deposit record in the array in the request payload.

## Sequence of Interactions

1. Your consumer application makes a request to the ADP API endpoint for **/events/payroll/v1/worker.pay-distribution.change meta**.
2. The ADP API endpoint responds to your consumer application with the meta payload. See the table in Responses on page . Your consumer application processes the meta payload to validate data included in the payload in step 3 and prompts the user to fix any validation issues. Otherwise, compose the payload for the [/events/payroll/v1/worker.pay-distribution.change](#) request.
3. Your consumer application makes an [/events/payroll/v1/worker.pay-distribution.change](#) request to the ADP API endpoint.
4. The ADP API endpoint responds to the consumer application concerning the details of [/events/payroll/v1/worker.pay-distribution.change](#) API.

## Data Dictionary

Resources listed in the following table can be accessed through the **People > Pay & Taxes > Direct Deposit** area of ADP Vantage HCM.

Schema Location	Field Name	Is Required (Y/N)
/worker/associateOID	NA	Y
/effectiveDateTime	<b>Effective Date</b>	Y
/payDistribution/distributionInstructions	NA	
/payDistribution/distributionInstructions/depositAccount/financialAccount/typeCode	<b>Account Type</b>	Y
/payDistribution/distributionInstructions/depositAccount/financialAccount/typeCode/codeValue		Y
/payDistribution/distributionInstructions/	<b>Bank Transit Number</b>	Y

depositAccount/financialParty/routingTransitID/idValue		
/payDistribution/distributionInstructions/depositAccount/financialAccount/accountNumber	<b>Account Number</b>	Y
/payDistribution/distributionInstructions/remainingBalanceIndicator	<b>Full Net Deposit</b>	Y
/payDistribution/distributionInstructions/distributionAmount/amountValue	<b>Deposit Amount</b>	Y
/payDistribution/distributionInstructions/prenoteBypassIndicator	<b>Prenote Required</b>	Y

## Responses

You may encounter exceptions outside your common success scenarios. You must account for these exceptions during your initial development.

For more information, see [API Common Exceptions and Tips for Handling](#).

Response Code	Response Condition	message Txt	Tips to Handle
200 OK	Add a Direct Deposit with effective date as current Date.	NA	Effective dating is only available for practitioners.
	Add a Direct Deposit with effective date as future date.	NA	
	Add a FullNet Direct Deposit.	NA	
200 OK (cont.)	Add Direct Deposit with Deposit Amount	NA	Pre-Note is only available for practitioners. If we pass prenote Bypass Indicator:false then prenote option is enabled in the ADP Vantage HCM UI.
	Add Direct Deposit with Pre-note required	NA	
	Add Direct Deposit with one deposit as Full Net and Other Deposit as Deposit Amount.	NA	
	Add Direct Deposit with one deposit as Deposit Amount and Other Deposit as Full net.	NA	

200 OK (cont.)	Add Direct Deposit with existing deposit code.	NA	
	Update the Amount Of Direct deposit	NA	
	Update the Direct deposit with deposit amount to FullNet	NA	
	Update the Direct deposit with FullNet deposit to Deposit Amount	NA	
	Update the Bank Transit number of an existing Direct Deposit	NA	
	Update the Account number of an existing Direct Deposit	NA	
	User has a list of deposits, Update the amounts of deposits	NA	
	Replacing already present full net deposit with two different code value but with same routing number and financial account number	NA	Make sure that routing number you are using is present in the Db.
400 Bad Request	Add Direct Deposit with invalid AccountType	"userMessage": { "codeValue": "15-11", "messageTxt": "You have entered an invalid value for Direct Deposit Data-Deduction Code. Select a valid value from the list provided. (15,11)\n" }	
	Add Direct Deposit with invalid Bank Transit number	"userMessage": { "codeValue": "6000-22", "messageTxt": "The transit number you entered is invalid. Enter a valid nine-digit transit number. (6000,22)\n" }	
400 Bad Request (cont.)	Add Direct Deposit with invalid Deposit Amount	"userMessage": { "codeValue": "15-43", "messageTxt": "You must enter a number in this field. The correct format is 8.2. If the format is x.y, this indicates the maximum number of digits allowed before and after the decimal point (- Amount in Dollars). (15,43)\n" }	
	Update the Direct Deposit with invalid AccountType	"userMessage": { "codeValue": "15-11", "messageTxt": "You have entered an invalid value for Direct Deposit Data-Deduction Code. Select a valid value from the list provided. (15,11)\n" }	
400 Bad Request (cont.)	Update a Direct deposit with invalid Bank Transit number	"userMessage": { "codeValue": "6000-22", "messageTxt": "The transit number you entered is invalid. Enter a valid nine-digit transit number. (6000,22)\n" }	
	Update a Direct deposit with invalid Amount	"userMessage": { "codeValue": "15-43", "messageTxt": "You must enter a number in this field. The correct format is 8.2. If the format is x.y, this indicates	

		the maximum number of digits allowed before and after the decimal point (- Amount in Dollars). (15,43)\n" }	
403 Forbidden	Update a Direct deposit for an invalid employee	"userMessage": { "codeValue": "3-49", "messageTxt": "You do not have the authorization to access the server. Contact your system administrator. (3,49)\n" }	

## Chapter 4

# Use Case: Retrieving Code Lists

## Use Case Description

Codelists make up the selection lists for many of the fields in ADP Vantage HCM . The Codelist API allows your application to retrieve a list of codes for a specific field, so it can be used for insert and update operations.

## API Usage

For more information refer [Worker Pay Distributions](#) under API Explorer.

Method	URI	Description
GET	/codelists/payroll/v3/payroll-instruction-management/direct-deposit-deduction-code-values?payrollGroupCode={payrollGroupCode}&aoid={aoid}	Returns the code list for the Account types

## Application Scope

The following canonicals need to be added to your application scope to enable this use case:

**/payroll/payrollManagement/payrollInstructionManagement/codeListViewing/codelist.read**

## Chapter 5

# Use Case: Synchronizing Employee Direct deposit details Using Notifications

## Use Case Description

ADP applications trigger notifications when data is updated. Your application could subscribe interested notifications to synchronize up the data. See the [ADP Event APIs and Event Notification Guide](#) for more information about ADP Notifications.



## Supported Event Notifications

Your application should subscribe to and process the following event change notifications to synchronize data in the event of a data change in the ADP system. The changes described in the following table trigger event notification messages for Direct deposit changes.

For more information refer [Worker Pay Distributions](#) under API Explorer.

Field Name in ADP Vantage HCM UI	Application Scope
When an employee direct deposit details are updated or added	<code>/payroll/payrollManagement/payrollInstructionManagement/payDistributionManagement/worker.payDistribution.change.eventNotify.subscribe</code>



### Note

**Event notification** is supported when an employee direct deposit details are added or updated either through **API** or **ADP Vantage HCM UI**

## Chapter 6

# Known Issues and Limitations

Issue #1: Meta call is not returning a Code list for Bank Transit Number

## Impacted APIs

Method	URI	roleCode Value
GET	<a href="/events/payroll/v1/worker.pay-distribution.change/meta">/events/payroll/v1/worker.pay-distribution.change/meta</a>	practitioner

## Issue Description

Codelist for Bank Transit Number is not returned in the `/events/payroll/v1/worker.pay-distribution.change/meta` API call response.

## Suggested Workaround

There are no workarounds available.

Issue #2: Masking and unmasking Account Number and Bank Transit Number using the Accept:application/json;masked=false header

## Impacted APIs

Method	URI	roleCode Value
GET	<a href="#">/payroll/v2/workers/{aoid}/pay-distributions</a>	practitioner

## Issue Description

When the practitioner is not having required permissions for sensitive information like Account Number and Bank Transit Number in the ADP Vantage user interface (UI). The user can see the unmasked information when the header is included "Accept:application/json;masked=false" in the request URI of the get pay-distributions API call, which is not expected.

## Suggested Workaround

There are no workarounds available.

### Chapter 7

## Appendix: Update the Security Profile to Retrieve Unmasked Bank Routing Numbers and Account Numbers

Please advise the client practitioner during your client onboarding to enable your application access in ADP Vantage HCM using the following steps

1. Login to ADP Vantage HCM as a Practitioner.
2. Navigate to **Setup > Security > Access Permissions**.
3. Click **Manage Profiles** on the **Access Permissions** page.
4. Click the **Marketplace Data Connector Application** profile.
5. Navigate to **Universe** on the left side of the page.
6. Select **Unmask Sensitive Personal Information for Practitioner**



## Info

Without this setup step, Bank Account and Routing Number values in the response payload will be masked.