

PayFac™ API Reference Guide

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ABOUT THIS GUIDE

This manual serves as a reference to the PayFac Merchant Provisioner API. The guide provides information about the transaction formats used to create, update, and retrieve (information about) Legal Entities and Sub-Merchants. It also explains how to perform PayFac API certification testing with us.

Intended Audience

This document is intended for technical personnel creating code to interface with the Vantiv eCommerce Merchant Provisioner API.

Revision History

This document has been revised as follows:

TABLE 1 Document Revision History

Doc. Version	Description	Location(s)
1.0	Initial Release of Document Note: This guide replaces the PSP On-boarding API Quick Reference Guide and the PSP On-boarding API Certification Tests Guide.	N/A
1.1	Updated for schema version 3.0. Added text to clarify some points raised by merchants and fixed errors in version 1.0. Added info about new pspMerchantId element.	All
1.2	Added / to calls in Table 1-1 and added section/flow chart about Legal Entity processing. Fixed typos in examples.	Chapter 1 Chapter 3

Document Version: 2.0

 TABLE 1
 Document Revision History

Doc. Version	Description	Location(s)
1.3	Book name change - Merchant Provisioner to PayFac.	All
	Added information about behavior when duplicate Create Legal Entity and Create Sub-merchant transactions are submitted. Also added information about new elements added for duplicate behavior.	All
1.4	Added note about error in schema - username vs. userName	Chapters 3 & 4
1.5	Updated document to reflect Version 5 of the schema.	All
1.6	Changed Flow charts in section 1.1.	Chapter 1
	Minor corrections in various locations.	All
1.7	Updated for Schema Version 6.0	Chapters 2, 3 and 4
1.8	Added Note/text to hardCodedBillingDescriptor and amount element definition to provide additional details.	Chapter 4.
	Also, fixed missing cross-reference for purchaseCurrency from subMerchantretrievalResponse.	
1.9	Updated document for schema V7.0 - Removed PCI element and children; added eCheck element.	Chapters 3 & 4
1.10	Updated document for schema V8.0 - Added elements to designate the Fee Profile for PayFacs that use Sub-merchant Funding feature.	Chapter 4
1.11	Removed <pci> section from one updateLegalEntity example.</pci>	Chapter 3
1.12	Removed reference to using DELETE method (to disable a Sub-merchant) from Table 1-1	Chapter 1
	Corrected definition of primaryContact element and its child elements.	Chapter 4
1.13	Updated document to reflect schema V9.0 changes.	All
1.14	Updated document to reflect schema V10.0 changes.	All
	Added Canadian PayFac Cert test information.	Chapter 2
1.15	Removed all references to the legalEntityPrincipalUpdatable transaction type. This should have been removed in V1.13. Removed erroneous steps shown for testing retrieving Legal Entity Cert tests.	Chapters 1, 2, 3, and 4 Chapter 2

TABLE 1 Document Revision History

Doc. Version	Description	Location(s)
1.16	Updated doc for V10.1.	Chapters 3 & 4
	Replaced Update Sub-merchant Response example.	Chapter 3
	Fixed error in Update Legal Entity Request example.	Chapter 3
	Fixed error in when taxId element is required.	Chapters 3 & 4
	Re-branded document.	All
1.17	Added text to clarify use of taxld and ssn elements.	Chapter3 & 4
1.18	Corrected note on use of fundingSubmerchantId element.	Chapter 4
1.19	Updated doc for schema V11.	Chapters 3 & 4
1.20	Miscellaneous updates and corrections.	Chapters 3 & 4
1.21	Added information about 2 new transaction types.	Chapters 3 & 4
	Corrected LE updatable items list.	Chapter 2
	Corrected an XML tag in the Update Legal Entity Response example.	Chapter 3
1.22	Removed references to Funds In/Out report	All
	Renamed Instruction-Based Dynamic Payout to Dynamic Payout and Profile-Based Dynamic Payout to Managed Payout.	All
1.23	Clarified use/origin of fundingSubmerchantId element.	Chapter 4
	Corrected errors (missing elements) in subMerchantRetrievalResponse structure and examples.	Chapters 3 & 4
1.24	Added Note about the minimum wait time (two minutes) between creating a Sub-merchant and the ability for that Sub-merchant to process transactions.	Chapters 3 & 4
1.25	Miscellaneous corrections to text and examples.	All
1.26	Added element to support use of AmEx Opt Blue.	Chapters 3 & 4
1.27	Corrected structure/example of createLegalEntityRequest	Chapter 3
1.28	Added information and elements associated with V12 of the API. This version allows provisioning of multiple principals for a Legal Entity.	All
1.29	Fixed an error in the Notes about Required Fields section of Chapter 3.	Chapter 3
1.30	Fixed error in legalEntityRetrievalResponse example.	Chapter 3

TABLE 1 Document Revision History

Doc. Version	Description	Location(s)
1.31	Fixed error in the structure of <legalentityresponse>.</legalentityresponse>	Chapter 3
	Fixed error in the definition of <merchantidentstring>. It was defined as Type = Long, but should have been Type = String.</merchantidentstring>	Chapter 4
1.32	Fixed miscellaneous typos in examples and definitions.	Chapters 3 & 4
1.33	Fixed Create and Update Legal Entity examples, as well as Legal Entity Retrieval example. All errors associated with the yearsInBusiness element.	Chapter 3
1.34	Changed response message for Test #10.	Chapter 2
	Added Tests #2a and #2b	Chapter 2
	Added Create Sub-merchant examples for DP and MP.	Chapter 3
	Changed url element from required to optional.	Chapter 4
	Update for V12.1, including new elements for MCC 9311.	Chapters 3 & 4
1.35	Added Note to title element - required if using AmEx Opt Blue.	Chapter 4
1.36	Create Sub-merchant examples were missing closing tag for	Chapter 3
1.37	Replace LitleXML with cnpAPI.	All
2.0	Update for V13.0 of schema, which changes the namespace, as well as the Content-Type and Accept information in the HTTPS headers.	Chapters 1, 3, and 4

Document Structure

This manual contains the following sections:

Chapter 1, "Introduction"

This chapter provides an overview of PayFac Merchant Provisioner API functionality.

Chapter 2, "PayFac API Certification Tests"

This chapter guides you through testing and certification process required prior to using the PayFac Merchant Provisioner API in the production environment.

Chapter 3, "PayFac API Transaction Examples"

This chapter provides information concerning the required XML structure, as well as example of the available PayFac Merchant Provisioner API transaction messages.

Chapter 4, "PayFac API XML Elements"

The chapter provides definitions of each element available in the PayFac Merchant Provisioner API.

Documentation Set

Our documentation set also include the items listed below, as well as many other InfoSheets and FAQ documents. Please refer to the appropriate guide for information concerning other product offerings.

- Vantiv PayFacTM Portal User Guide
- Vantiv cnpAPI Reference Guide
- Vantiv iQ Reporting and Analytics User Guide
- Vantiv PayFacTM Integration Overview (eComm)
- Vantiv PayPal Integration Guide
- Vantiv Chargeback API Reference Guide
- Vantiv Chargeback Process Guide
- Vantiv eProtectTM Integration Guide
- Vantiv Enterprise eProtectTM Integration Guide
- Vantiv cnpAPI Differences Guide
- Vantiv Scheduled Secure Reports Reference Guide
- Vantiv Account Updater Implementation and Operations Guide (Legacy)

Typographical Conventions

Table 2 describes the conventions used in this guide.

TABLE 2 Typographical Conventions

Convention	Meaning
	Vertical ellipsis points in an example mean that information not directly related to the example has been omitted.
	Horizontal ellipsis points in statements or commands mean that parts of the statement or command not directly related to the example have been omitted.
<>	Angle brackets are used in the following situations:
	user-supplied values (variables)
	XML elements
[]	Brackets enclose optional clauses from which you can choose one or more option.
bold text	Bold text indicates emphasis.
Italicized text	Italic type in text indicates a term defined in the text, the glossary, or in both locations.
blue text	Blue text indicates a hypertext link.

Contact Information

This section provides contact information for organizations within Vantiv.

Implementation - For technical assistance to resolve issues encountered during the on-boarding process, including certification testing.

Implementation Contact Information

E-mail	implementation@vantiv.com
Hours Available	Monday - Friday, 8:30 A.M 5:30 P.M. EST

Chargebacks - For business-related issues and questions regarding financial transactions and documentation associated with chargeback cases, contact the Chargebacks Department.

Chargebacks Department Contact Information

Telephone	1-844-843-6111 (option 4)
E-mail	chargebacks@vantiv.com
Hours Available	Monday - Friday, 7:30 A.M 5:00 P.M. EST

Technical Support - For technical issues such as file transmission errors, email Technical Support. A Technical Support Representative will contact you within 15 minutes to resolve the problem.

Technical Support Contact Information

E-mail	eCommerceSupport@vantiv.com	
Hours Available	24/7 (seven days a week, 24 hours a day)	

Relationship Management/Customer Service - For non-technical issues, including questions concerning iQ Reporting and Analytics, help with passwords, modifying merchant details, and changes to user account permissions, contact the Relationship Management/Customer Service Department. If you are a Payment Facilitator (PayFac), refer to the second table.

Relationship Management/Customer Service Contact Information - Merchants

Telephone	1-844-843-6111 (Option 3)
E-mail ecc@vantiv.com	
Hours Available	Monday - Friday, 8:00 A.M 6:00 P.M. EST

Relationship Management/Customer Service Contact Information - Payment Facilitators

Telephone 1-844-843-6111 (Option 5)	
E-mail PayFacEComm@vantiv.com	
Hours Available	Monday - Friday, 8:00 A.M 5:00 P.M. EST

Technical Publications - For questions or comments about this document, please address your feedback to the Technical Publications Department. All comments are welcome.

Technical Publications Contact Information

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1

INTRODUCTION

This document provides an overview of the PayFac API. This is an XML based, RESTful API that allows you to create and update Legal Entities and Sub-merchants, as well as retrieve information about existing Legal Entities and Sub-merchants in near real-time. Additionally, you can disable Sub-merchants should the need arise.

As shown in Figure 1-1, before you can begin processing payment transactions for a Sub-merchant, you must first create the Legal Entity. A Legal Entity describes the parent of one or more Sub-merchants. After the successful creation of a Legal Entity, you create Sub-merchants under that Legal Entity.

Declined PayFac submits Legal entity Information (via legalEntityCreateRequest) The PayFac should resubmit transactions returned with a Retry code using additional information as required. In some cases, transaction returned as Declined can also be re-submitted with new information. Declined Manual review Vantiv performs background and MATCH Vantiv performs manual checks Retry Approved Approved PayFac submits Sub-Merchant information (via PayFac retrieves results of subMerchantCreateRequest) manual review process after 48 hours (via HTTP GET) to create Sub-merchants under approved Legal Entities Vantiv creates Submerchant(s) PayFac can begin to submit payment transactions for Sub-merchant

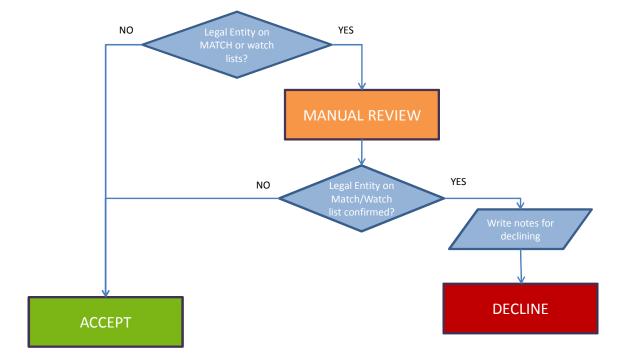
FIGURE 1-1 Legal Entity and Sub-merchant Creation Flow

1.1 Legal Entity Processing

When you use the PayFac API to create a Legal Entity, add a Principal to a Legal Entity, and/or create a Sub-merchant, the system performs a series of background checks. The extent and type of check performed depend upon your needs and contract. There are three levels of service available: Basic, Premium, and Premium Plus.

As illustrated in Figure 1-2 and Figure 1-3, depending upon your service level, the result of the background checks, and subsequent analysis if necessary, there are three possible outcomes: Accept, Decline, or Soft Decline/Retry

FIGURE 1-2 Legal Entity Acceptance Flow - Basic and Premium



NO
Legal Entity on
MATCH or watch
lists?

Verified?

NO
Legal Entity on
MANUAL REVIEW

MANUAL REVIEW

Verified?

FIGURE 1-3 Legal Entity Acceptance Flow - Premium Plus

1.2 API Summary

You use the following methods to create, retrieve, update, or disable Sub-merchants, as well as list Merchant Category Codes (MCC). The associated data is submitted in various XML messages, the structure of which is defined in the other sections of this document.

NOTE:

When creating a URI for a particular method, replace any ld object with the value returned in the create response XML message. For example, if you were updating a Legal Entity and the legalEntityId = 3 (from the legalEntityCreateResponse message), the update call would be: PUT /legalentity/3

TABLE 1-1 API Methods Summary (replace **bold** items with values)

Resource	Description
POST /legalentity/legalEntityId/agreement	Request to designate the version of the agreement along with information about the agreeing party. (See Create Legal Entity Agreement on page 28)
GET /legalentity/legalEntityId/agreement	Request to retrieve all agreements associated with a specified Legal Entity. (See Legal Entity Agreement Retrieval Request on page 30)
POST /legalentity	Request to create a new Legal Entity. (See Create Legal Entity on page 33)
PUT /legalentity/legalEntityId	Request to update data associated with the designated Legal Entity. (See Update Legal Entity on page 43)
GET /legalentity/legalEntityId	Request for information and/or status of the designated Legal Entity. Typically this is use to check status of a Legal Entity in Manual Review. (See Retrieve Legal Entity on page 49)
POST /legalentity/legalEntityId/principal	Request to create a new Principal associated with a Legal Entity. (See Create a Principal on page 54)
DELETE /legalentity/legalEntityId/principal/principalId	Request to delete a Principal associated with a Legal Entity. (See Delete a Principal on page 58)
POST /legalentity/legalEntityId/submerchant	Request to create a Sub-merchant associated with the designated Legal Entity. (See Create Sub-Merchant on page 60)
PUT /legalentity/legalEntityId/submerchant/subM erchantId	Request to update data associated with the designated Sub-merchant. (See Update Sub-Merchant on page 67)

TABLE 1-1 API Methods Summary (replace **bold** items with values)

Resource	Description
GET /legalentity/legalEntityId/submerchant/subM erchantId	Request to retrieve information about the designated Sub-merchant. (See Retrieve Sub-Merchant on page 70)
GET/mcc	Returns the list of merchant category codes that are currently approved for the Payment Service Provider. (See Retrieve Allowed MCC List on page 74)

1.3 Header Information

To authenticate, you will need a merchant ID (merchant identity), username and password. We uses an HTTP Basic Authentication scheme in combination with SSL to guarantee the protection of your authentication information. You must include your username and password in the HTTP header according to the HTTP Basic Authentication (i.e. base-64 encoding) on every API method invocation. The tables below contains additional information concerning the header.

TABLE 1-2 HTTP Request Header

Authorization	Basic (with user name and password)	
Content-Type	application/com.vantivcnp.payfac-v13+xml	
Accept	application/com.vantivcnp.payfac-v13+xml	

IMPORTANT: The Content-Type and Accept may not be required for all methods. When included, the version number in Content-Type and Accept should always reflect the API version you use. For example, if you use API V14, use application/com.vantivcnp.payfac-v14+xml for Content-Type and Accept.

TABLE 1-3 Header Information

Description	Example/Info	Comments
Authorization	username:password = merchant1:password Base-64 encoded = bWVyY2hhbnQxOnBhc3N3b3Jk	Required for authentication purpose.

Example: HTTP Header Example - Create Sub-merchant

```
POST /legalentity/1/submerchant
Host: example_only.vantiv.com
Authorization: Basic bWVyY2hhbnQxOnBhc3N3b3Jk=
Content-Type: application/com.vantivcnp.payfac-v13+xml
Accept: application/com.vantivcnp.payfac-v13+xml

<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
.
.
```

Introduction Header Information



PAYFAC API CERTIFICATION TESTS

You must complete a number of certification tests prior to submitting transactions to the Merchant Provisioning system. This testing process allows you to verify that your system not only submits correctly formatted transaction data, but also correctly parses the data returned to you in the response messages. To facilitate the certification process, we have established a certification environment that simulates the production environment.

During certification testing, an Implementation Consultant will guide you through each required test scenario. For each transaction type, specific data is supplied that you must use in your transactions. Use of this data allows the validation of your transaction structure/syntax, as well as the return of a response file containing known data. Please refer to Chapter 4, "PayFac API XML Elements" for element definitions and XML message structure.

IMPORTANT: The test data supplied does not account for all data fields/xml elements in a particular request. Where data is not supplied, you should provide appropriate information. You should never override your own system to enter supplied data. If you cannot enter the supplied data without overriding your system, please consult your Implementation Consultant concerning the test and how to proceed.

2.1 Testing Legal Entity Transactions

The following sections provide information used to test the creation and updating of Legal Entities, as well as the retrieval of information for already existing Legal Entities.

2.1.1 Creating Legal Entities

NOTE: For Canadian Legal Entity tests see section Creating Canadian Legal Entities on page 11.

You must create a Legal entity prior to creating Sub-merchants. Each Legal entity can have one or more associated Sub-Merchants.

To test the creation of Legal Entities:

- 1. Verify that your Create Legal Entity template is coded correctly (see Create Legal Entity on page 33).
- 2. Submit legalEntityCreateRequest transaction using the data provided for Test # 1, 2, and 3. You must provide the data for all other required elements (see Notes About Required Fields on page 34). The response of the simulator for these test cases is tied to the contents of the streetAddress1 element.
- 3. Verify that your system parses the response file correctly and that the value are those shown in the Key Response Elements of the table.
- 4. Wait a minimum of two hours after submitting Test #2 and submit a Legal Entity Retrieval (see Retrieve Legal Entity on page 49), using the leagalEntityId returned in Test #2.
- 5. Follow the instructions returned in the Retrieval response and submit an Update Legal Entity request. Verify the approval of the Legal Entity.

TABLE 2-1 Create Legal Entity Test Data

	Supplied Data Elements		Key Response Elements	
Test #	Element	Value	Element	Value
1	<legalentitytype></legalentitytype>	INDIVIDUAL_SOLE_ PROPRIETORSHIP	HTTP Status Code:	201
	<streetadress1></streetadress1>	900 Chelmsford St Note: For this legalEntityType you must include the ssn element.	XML Response:	10 Approved

TABLE 2-1 Create Legal Entity Test Data

	Supplied Data Elements		Key Response Elements	
Test #	Element	Value	Element	Value
2	<legalentitytype></legalentitytype>	INDIVIDUAL_SOLE_ PROPRIETORSHIP	HTTP Status Code:	201
	<streetadress1></streetadress1>	912 Chelmsford St	XML Response:	
		Note: For this	<responsecode></responsecode>	20
		legalEntityType you must include the ssn element.	<responsedescription></responsedescription>	Manual Review
2a	legalEntityId	Value from in Test #2.	<backgroundcheckdecisio nnotes=""></backgroundcheckdecisio>	Notes for resubmission.
2b	legalEntityId	Value from in Test #2.	HTTP Status Code:	201
			XML Response:	
			<responsecode></responsecode>	10
			<responsedescription></responsedescription>	Approved
	la valEutit Eur	LIMITED LIADILITY	LITTO Chattae Conde	004
3	<legalentitytype></legalentitytype>	LIMITED_LIABILITY_ COMPANY	HTTP Status Code:	201
	<streetadress1></streetadress1>	914 Chelmsford St	XML Response:	
		Note: For this	<responsecode></responsecode>	10
		legalEntityType you must include the taxId element.	<responsedescription></responsedescription>	Approved

2.1.2 Creating Canadian Legal Entities

To test the creation of Legal Entities for Canada:

- 6. Verify that your Create Legal Entity template is coded correctly (see Create Legal Entity on page 33).
- 7. Submit legalEntityCreateRequest transaction using the data provided for Test # C.1.1, C.1.2, and C.1.3. You must provide the data for all other required elements (see Notes About Required Fields on page 34). The response of the simulator for these test cases is tied to the contents of the streetAddress1 element.
- 8. Verify that your system parses the response file correctly and that the value are those shown in the Key Response Elements of the table.

TABLE 2-2 Create Canadian Legal Entity Test Data

	Supplied Data Elements		Key Response Elements	
Test #	Element	Value	Element	Value
C.1.1	<legalentitytype></legalentitytype>	CORPORATION	HTTP Status Code:	201
	<doingbusinessas></doingbusinessas>	Canada Cert Test Legal Entity A	XML Response:	
	<streetadress1></streetadress1>	900 Chelmsford St	<responsecode></responsecode>	10
			<responsedescription></responsedescription>	Approved
C.1.2	<legalentitytype></legalentitytype>	INDIVIDUAL_SOLE_ PROPRIETORSHIP	HTTP Status Code:	201
	<streetadress1></streetadress1>	900 Chelmsford St	XML Response:	
		Note: For this	<responsecode></responsecode>	10
		legalEntityType you must include the ssn element.	<responsedescription></responsedescription>	Approved
C.1.3	<legalentitytype></legalentitytype>	GENERAL_PARTNE RSHIP	HTTP Status Code:	201
	<streetadress1></streetadress1>	912 Chelmsford St	XML Response:	
		Note: For this	<responsecode></responsecode>	20
		legalEntityType you must include the taxId element.	<responsedescription></responsedescription>	Manual Review

2.1.3 Updating Legal Entities

Note: For Canadian Legal Entity updating tests see section Updating Canadian Legal Entities on page 14.

You can update the several items associated with a Legal Entity. To update information associated with a Legal Entity, you use a PUT method with the appropriate legalEntityId along with a legalEntityUpdateRequest message containing the updated information.

You can update the following items:

- streetAddress1 (entity and/or principal)
- streetAddress2 (entity and/or principal)
- city (entity and/or principal)
- stateProvince (entity and/or principal)
- postalCode (entity and/or principal)
- doingBusinessAs
- annualCreditCardSalesVolume
- hasAcceptedCreditCards
- contactPhone (entity and/or principal)
- title (principal)
- emailAddress (principal)

- firstName (principal)
- lastName (principal)
- ssn (principal)
- dateOfBirth (principal)
- driversLicense (principal)
- driversLicenseState (principal)
- legalEntityName
- legalEntityType
- taxld
- yearsInBusiness

To test the legalEntityUpdateRequest transaction:

- 1. Verify that your Update Legal Entity template is coded correctly (see Update Legal Entity on page 43).
- 2. Submit legalEntityUpdateRequest transaction using the data provided for Test # 4 and 5. You must provide the data for all other required elements.
- 3. Verify that your system parses the response file correctly and that the value are those shown in the Key Response Elements of the table.

TABLE 2-3 Update Legal Entity Test Data

	Supplied Data Elements		Key Response Elements	
Test #	Element	Value	Element	Value
4	legalEntityId	Use the value returned in the response message from Test #1.	HTTP Status Code:	200
5	legalEntityId	Submit any invalid value	HTTP Status Code:	400
			XML Response:	
			<error></error>	Error in request: Could not find requested object.

2.1.4 Updating Canadian Legal Entities

To test the legalEntityUpdateRequest transaction:

- 1. Verify that your Update Legal Entity template is coded correctly (see Update Legal Entity on page 43).
- 2. Submit legalEntityUpdateRequest transaction using the data provided in Table 2-4. You must provide the data for all other required elements.
- 3. Verify that your system parses the response file correctly and that the value are those shown in the Key Response Elements of the table.

TABLE 2-4 Update Canadian Legal Entity Test Data

	Supplied Data Elements		Key Respons	e Elements
Test #	Element	Value	Element	Value
C2.2.1	legalEntityId	Use the value returned in the response message from Test #C.1.1.	HTTP Status Code:	200
	<doingbusinessas></doingbusinessas>	Canada A		
C2.2.2	legalEntityId	Use the value returned in the response message from Test #C.1.1.	HTTP Status Code: XML Response:	400
	<pri>cprincipal></pri>	10111 1000 1101111	<error></error>	Legal Entity Principal
	<address></address>			stateProvince: "XX" is not valid for Legal
	<stateprovince></stateprovince>	XX		Entity Principal country.
C2.2.3	legalEntityId	Use the value returned in the	HTTP Status Code:	400
		response message from Test #C.1.1.	XML Response:	
	<address></address>		<error></error>	Postal Code is not
	<postalcode></postalcode>	01730		valid for country "CAN".
C2.2.4	legalEntityId	Use the value returned in the response message from Test #C.1.3.	HTTP Status Code: XML Response:	400
	<pri>cprincipal></pri>	ποιπ 103ι πΟ. 1.0.	- <error></error>	Postal Code "01730"
	<address></address>			is not valid for country "CAN".
	<postalcode></postalcode>	01730		Country CAN.

TABLE 2-4 Update Canadian Legal Entity Test Data

	Supplied Data Elements		Key Response Elements	
Test #	Element	Value	Element	Value
C2.2.5	legalEntityId	Use the value returned in the response message from Test #C.1.1.	HTTP Status Code: XML Response:	200
	<doingbusinessas></doingbusinessas>	Canada Cert Test C - Update	<error></error>	Due to its current status, requested Legal Entity is not updatable
C2.2.6	legalEntityId	Use the value returned in the response message from Test #C.1.1.	HTTP Status Code: XML Response:	400
	<pre><backgroundcheckf ields=""> <taxid></taxid></backgroundcheckf></pre>	123456789	<error></error>	Background check fields cannot be updated after background check.

2.1.5 Retrieving Legal Entity Information

Note: For Canadian Legal Entity updating tests see section Retrieving Canadian Legal Entity Information on page 16.

If you need to retrieve the on-boarding information related to a Legal Entity for verification purposes or to check the status of cases requiring manual intervention, you must perform a GET operation specifying the legalEntityId.

To test the retrieval of Legal Entity information use the information supplied in Table 2-5.

Verify that your system parses the response file correctly and that the value are those shown in the Key Response Elements of the table.

TABLE 2-5 Retrieve Legal Entity Test Data

	Supplied Data Elements		Key Response Elements	
Test #	Element	Value	Element	Value
6	legalEntityId	Use the value returned in the response message from Test #2.	HTTP Status Code: XML Response:	200 Manual Review Note: Response message will include other Legal Entity information submitted with Test #2.
7	legalEntityId	Submit any invalid value	HTTP Status Code: XML Response: <error></error>	Error in request: Could not find requested object.

2.1.6 Retrieving Canadian Legal Entity Information

To test the retrieval of Canadian Legal Entity information use the information supplied in Table 2-6.

Verify that your system parses the response file correctly and that the values returned are those shown in the Key Response Elements of the table.

TABLE 2-6 Retrieve Legal Entity Test Data

	Supplied Data Elements		Key Response Elements	
Test #	Element	Value	Element	Value
C.3.1	legalEntityId	Use the value returned in the response message from Test #C.1.2.	HTTP Status Code: XML Response:	200 10 Approved Note: Response message will include other Legal Entity information submitted with Test #C.1.2.
C.3.2	legalEntityId	Submit any invalid value	HTTP Status Code: XML Response: <error></error>	Error in request: Could not find requested object.

2.2 Testing Sub-Merchant Transactions

The following sections provide information used to test the creation and updating of Sub-merchants, as well as the retrieval of information for already existing Sub-merchants.

2.2.1 Creating Sub-Merchants

NOTE: For Canadian Sub-merchant creation tests see section Creating Canadian Sub-merchants on page 19.

After creating a Legal Entity, you can create one or more Sub-merchants associated with the Legal Entity. Create transactions that succeed return a subMerchantCreateResponse message, while transactions that fail return an errorResponse message.

To test the creation of Sub-merchants:

- 1. Verify that your Create Sub-merchant template is coded correctly (see Create Sub-Merchant on page 60).
- 2. Submit subMerchantCreateRequest transaction using the data provided for Test # 8, 9, and 10. You must provide the data for all other required elements.
- 3. Verify that your system parses the response file correctly and that the value are those shown in the Key Response Elements of the table.

TABLE 2-7 Create Sub-merchant Test Data

	Supplied Data Elements		Key Response Elements	
Test #	Element	Value	Element	Value
8	legalEntityId	Use the value returned in the response message from Test #1.	HTTP Status Code:	201
9	legalEntityId	Submit any invalid value	HTTP Status Code:	400
			XML Response:	
			<error></error>	Error in request: Could not find requested object.

TABLE 2-7 Create Sub-merchant Test Data

	Supplied Data Elements		Key Response Elements		
Test #	Element	Value	Element	Value	
10	legalEntityId	Use the value returned in the response message from Test #2.	HTTP Status Code: XML Response:	400	
			<error></error>	Error in request: Legal entity [legalEntityName] is in inactive state. You cannot add/update a submerchant.	

2.2.2 Creating Canadian Sub-merchants

To test the creation of Canadian Sub-merchants:

- 1. Verify that your Create Sub-merchant template is coded correctly (see Create Sub-Merchant on page 60).
- 2. Submit subMerchantCreateRequest transaction using the data provided in Table 2-8. You must provide the data for all other required elements.
- 3. Verify that your system parses the response file correctly and that the value are those shown in the Key Response Elements of the table.

TABLE 2-8 Create Canadian Sub-merchant Test Data

	Supplied Data Elements		Key Response Elements	
Test #	Element	Value	Element	Value
C.4.1	legalEntityId	Use the value returned in the response message from Test #C.1.1.	HTTP Status Code:	201

TABLE 2-8 Create Canadian Sub-merchant Test Data

	Supplied Data Elements		Key Response	e Elements
Test #	Element	Value	Element	Value
C.4.2	legalEntityId	Use the value returned in the response message from Test #C.1.1.	HTTP Status Code: XML Response:	400
	<pre><purchasecurrency> <settlementcurrency></settlementcurrency></purchasecurrency></pre>	USD CAD	<error></error>	Error in request: No processing group defined with purchaseCurrencyCo de <840> and settlementCurrencyC ode <124>
C.4.3	legalEntityId <address> <countrycode></countrycode></address>	Use the value returned in the response message from Test #C.1.1.	HTTP Status Code: XML Response: <error></error>	Error in request: Submerchant country code "USA" does not match Legal Entity country code "CAN"
C.4.4	legalEntityId	Use the value returned in the response message from Test #C.1.3.	HTTP Status Code: XML Response: <error></error>	Error in request: Legal Entity "Legal Entity Name" has not been approved
C.4.5	legalEntityId	Use the value returned in the response message from Test #C.1.1.	HTTP Status Code: XML Response:	400
	<address> <postalcode></postalcode></address>	01970	<error></error>	Postal Code "01970" is not valid for country "CAN".

2.2.3 Updating Sub-Merchant information

NOTE:

For Canadian Sub-merchant update tests see section Updating Canadian Sub-Merchant Information on page 22.

You can update the several items associated with a Sub-Merchant. To update information associated with a Sub-merchant, you use a PUT method with the appropriate legalEntityId, subMerchantId, and a subMerchantUpdatable message containing the information to be updated.

You can update the following items:

- url
- customerServiceNumber
- hardCodedBillingDescriptor
- maxTransactionAmount
- bankRoutingNumber
- bankAccountNumber

- streetAddress1
- streetAddress2
- city
- stateProvince
- postalCode

To test the subMerchantUpdatable transaction:

- 1. Verify that your Update Sub-Merchant template is coded correctly (see Update Sub-Merchant on page 67).
- 2. Submit subMerchantUpdatable transaction using the data provided for Test # 11, 12, and 13. You must to provide the data for all other required elements.
- 3. Verify that your system parses the response file correctly and that the value are those shown in the Key Response Elements of the table.

TABLE 2-9 Update Sub-merchant Test Data

	Supplied Data Elements		Key Response Elements	
Test #	Element	Value	Element	Value
11	legalEntityId	Use the value returned in the response message from Test # 1.	HTTP Status Code:	200
	subMerchantId	Use the value returned in the response message from Test # 8.		
12	legalEntityId	Submit any invalid value	HTTP Status Code:	400
	subMerchantId	Submit any valid or invalid value.	XML Response: <error></error>	Error in request: Could not find requested object.
13	legalEntityId	Use the value returned in the response message from Test #1.	HTTP Status Code: XML Response:	400
	subMerchantId	Submit any invalid value.	<error></error>	Error in request: Could not find requested object.

2.2.4 Updating Canadian Sub-Merchant Information

To test the subMerchantUpdatable transaction:

- 1. Verify that your Update Sub-Merchant template is coded correctly (see Update Sub-Merchant on page 67).
- 2. Submit subMerchantUpdatable transaction using the data provided in Table 2-10. You must to provide the data for all other required elements.
- 3. Verify that your system parses the response file correctly and that the value are those shown in the Key Response Elements of the table.

TABLE 2-10 Update Canadian Sub-merchant Test Data

	Supplied Data Elements		Key Response Elements	
Test #	Element	Value	Element	Value
C.5.1	legalEntityId	Use the value returned in the response message from Test # C.1.1.	HTTP Status Code:	200
	subMerchantId	Use the value returned in the response message from Test # C.4.1.		
C.5.2	legalEntityId	Submit any invalid value	HTTP Status Code:	400
	subMerchantId	Submit any valid or invalid value.	XML Response: <error></error>	Error in request: Could not find requested object.
C.5.3	legalEntityId	Use the value returned in the response message from Test #C.1.1.	HTTP Status Code: XML Response:	400
	subMerchantId	Submit any invalid value.	<error></error>	Error in request: Could not find requested object.

2.2.5 Retrieving Sub-Merchant Information

If you need to retrieve the on-boarding information related to a Sub-merchant for verification purposes, you must perform a GET operation specifying the legalEntityId and subMerchantId.

To test the retrieval of Sub-merchant information use the information supplied in Table 2-11.

TABLE 2-11 Retrieve Sub-merchant Information Test Data

	Supplied Data Elements		Key Response Elements	
Test #	Element	Value	Element	Value
14	legalEntityId	Use the value returned in the response message from Test # 1.	HTTP Status Code:	200
	subMerchantId	Use the value returned in the response message from Test # 8.		
15	legalEntityId	Submit any invalid value	HTTP Status Code:	400
	subMerchantId	Submit any valid or invalid value.	XML Response: <error></error>	Error in request: Could not find requested object.
16	legalEntityId	Use the value returned in the response message from Test #1.	HTTP Status Code: XML Response:	400
	subMerchantId	Submit any invalid value.	<error></error>	Error in request: Could not find requested object.

2.2.6 Retrieving Canadian Sub-Merchant Information

To test the retrieval of Canadian Sub-merchant information use the information supplied in Table 2-12.

TABLE 2-12 Retrieve Canadian Sub-merchant Information Test Data

	Supplied Data Elements		Key Response Elements	
Test #	Element	Value	Element	Value
14	legalEntityId	Use the value returned in the response message from Test # C.1.1.	HTTP Status Code:	200
	subMerchantId	Use the value returned in the response message from Test # C.4.1.		

2.2.7 Retrieve Allowed MCC List

When on-boarding a new Sub-merchant, a Payment Service Provider should only use one of the approved MCCs. To retrieve the allowed MCC list perform a GET operation with the parameter mcc (GET/mcc).

Verify that you correctly parse the list returned. Please refer to Retrieve MCC List Response on page 74 for an example of the structure of the response message.

3

PAYFAC API TRANSACTION EXAMPLES

This chapter contains examples showing the message structure used by the PayFac Merchant Provisioner API. For each message type, the chapter provides a high level overview of the message structure followed by one or more examples of request and response messages. Examples of Error messages are also provided. The following message types are discussed:

- Create Legal Entity Agreement
- Legal Entity Agreement Retrieval Request
- Create Legal Entity
- Update Legal Entity
- Retrieve Legal Entity
- Create a Principal
- Delete a Principal
- Create Sub-Merchant
- Update Sub-Merchant
- Retrieve Sub-Merchant
- Retrieve Allowed MCC List
- Status Codes and Error Messages

Note:

Each high-level structural example shows the message parent element and its children (one element down). The parent and each child element links to the element definition page in Chapter 4. Where there is additional structure under the child element, the element definition page includes structural examples.

3.1 Create Legal Entity Agreement

You use the Create Legal Entity Agreement request transaction to designate the version of the agreement along with information about the agreeing party. You should use this transaction type only if your PayFac Account Manager directs you to do so.

To create a Legal Entity Agreement use an HTTP POST method to submit the legalEntityAgreementCreateRequest message.

TABLE 3-1 Resource Information

HTTP Method	POST
Call	/legalentity/legalEntityId/agreement
Request Format	XML
Response Format	XML
Rate Limited	No

TABLE 3-2 POST Parameters

Parameter	Required or Optional	Description
legalEntityId	Required	The Id of the Legal Entity

3.1.1 Create Legal Entity Agreement Request Message

You must structure a Create Legal Entity Agreement request as shown in the following examples.

```
<legalEntityAgreementCreateRequest>
    <legalEntityAgreementType>MERCHANT_AGREEMENT</legalEntityAgreementType>
        <agreementVersion>Agreement Version Number</agreementVersion>
        <userFullName>Full Name of Signer</userFullName>
        <userSystemName>User Name of Signer of PayFac System</userSystemName>
        <userIPAddress>IP Address of Signer's system</userIPAdress>
        <manuallyEntered>true or false</manuallyEntered>
        <acceptanceDateTime>Date and Time Agreement Signed</acceptanceDateTime>
        </legalEntityAgreementCreateRequest>
```

Example: Create Legal Entity Agreement Request

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<legalEntityAgreementCreateRequest
   xmlns="http://payfac.vantivcnp.com/api/merchant/onboard">
<legalEntityAgreement>
   <legalEntityAgreementType>MERCHANT_AGREEMENT</legalEntityAgreementType>
        <agreementVersion>agreementVersion1</agreementVersion>
        <userFullName>userFullName</userFullName>
        <userSystemName>systemUserName</userSystemName>
        <userIPAddress>196.198.100.100</userIPAddress>
        <manuallyEntered>false</manuallyEntered>
        <acceptanceDateTime>2017-02-11T12:00:00-06:00</acceptanceDateTime>
        </legalEntityAgreement>
</legalEntityAgreementCreateRequest>
```

NOTE:

If the value for the <manuallyEntered> element is false, you must include the <userIPAddress> element. If the value for the <manuallyEntered> element is true, you can omit the <userIPAddress> element.

3.1.2 Create Legal Entity Agreement Response Message

The structure for the response to a Create Legal Entity Agreement request has the following structure.

```
<legalEntityAgreementCreateResponse>
  <transactionId>1234567890123456789</transactionId>
</legalEntityAgreementCreateResponse>
```

Note:

If the create request is a duplicate, the response message includes a duplicate="true" attribute.

If the request fails, the system returns an error response. See Status Codes and Error Messages on page 76.

3.2 Legal Entity Agreement Retrieval Request

You use the Legal Entity Agreement Retrieval request to retrieve all agreements associated with a specified Legal Entity.

To retrieve a all agreements associated with a Legal Entity use an HTTP GET method to submit the legalEntityAgreementCreateRequest message.

TABLE 3-3 Resource Information

HTTP Method	GET
Call	/legalentity/legalEntityId/agreement
Request Format	XML
Response Format	XML
Rate Limited	No

TABLE 3-4 GET Parameters

Parameter	Required or Optional	Description
legalEntityId	Required	The Id of the Legal Entity

3.2.1 Legal Entity Agreement Retrieval Response

The structure of the response message is as follows:

NOTE:

If there are more than one agreements associated with the Legal Entity, the Retrieval Response message will have an agreements element containing a legalEntityArgeement child for each agreement.

```
<legalEntityAgreementRetrievalResponse>
```

```
<agreements>
```

```
<legalEntityAgreement>
```

```
<legalEntityAgreementType>MERCHANT_AGREEMENT</legalEntityAgreementType>
<agreementVersion>Agreement Version Number</agreementVersion>
<userFullName>Full Name of Signer</userFullName>
<userSystemName>User Name of Signer of PayFac System</userSystemName>
<userIPAddress>IP Address of Signer's system</userIPAdress>
```

Example: Legal Entity Agreement Response (no agreements)

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<legalEntityAgreementRetrievalResponse
  xmlns="http://payfac.vantivcnp.com/api/merchant/onboard">
  <legalEntityId>82826972905308177</legalEntityId>
  <transactionId>82826972904898673</transactionId>
  <agreements/>
</legalEntityAgreementRetrievalResponse>
```

Example: Legal Entity Agreement Response (with agreements)

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<legalEntityAgreementRetrievalResponse</pre>
 xmlns="http://payfac.vantivcnp.com/api/merchant/onboard">
 <legalEntityId>82826972905308177</legalEntityId>
 <transactionId>46226972904898673/transactionId>
 <agreements>
   <legalEntityAgreement>
    <legalEntityAgreementType>MERCHANT_AGREEMENT/legalEntityAgreementType>
    <agreementVersion>agreementVersion1</agreementVersion>
    <userFullName>userFullName
    <userSystemName>systemUserName</userSystemName>
    <userIPAddress>196.198.100.100</userIPAddress>
    <manuallyEntered>false</manuallyEntered>
    <acceptanceDateTime>2017-06-11T13:00:00-05:00</acceptanceDateTime>
   </legalEntityAgreement>
   <legalEntityAgreement>
    <legalEntityAgreementType>MERCHANT_AGREEMENT/legalEntityAgreementType>
    <agreementVersion>agreementVersion4</agreementVersion>
    <userFullName>userFullNameFour</userFullName>
    <userSystemName>systemUserNameFour</userSystemName>
    <userIPAddress>199.12.15.201</userIPAddress>
    <manuallyEntered>false</manuallyEntered>
    <acceptanceDateTime>2017-06-24T02:59:30-05:00</acceptanceDateTime>
   </legalEntityAgreement>
   <legalEntityAgreement>
```

```
<legalEntityAgreementType>MERCHANT_AGREEMENT/legalEntityAgreementType>
    <agreementVersion>agreementVersion3</agreementVersion>
    <userFullName>userFullNameThree
    <userSystemName>systemUserNameThree</userSystemName>
    <userIPAddress>210.13.154.155</userIPAddress>
    <manuallyEntered>false</manuallyEntered>
    <acceptanceDateTime>2017-06-23T01:59:30-05:00</acceptanceDateTime>
   </legalEntityAgreement>
   <legalEntityAgreement>
    <legalEntityAgreementType>MERCHANT_AGREEMENT/legalEntityAgreementType>
    <agreementVersion>agreementVersion2</agreementVersion>
    <userFullName>userFullNameTwo</userFullName>
    <userSystemName>systemUserNameTwo</userSystemName>
    <manuallyEntered>true</manuallyEntered>
    <acceptanceDateTime>2017-06-19T23:59:30-05:00</acceptanceDateTime>
   </legalEntityAgreement>
 </agreements>
</legalEntityAgreementRetrievalResponse>
```

3.3 Create Legal Entity

Prior to creating new Sub-merchants, a PayFac (Payment Facilitator) must establish the Legal Entity. The Legal Entity is the business or taxable entity (for example, corporation, or LLC) controlling the Sub-merchant within the system. You create the Legal Entity using the legalEntityCreateRequest message.

To create a Legal Entity use an HTTP POST method to submit the legalEntityCreateRequest message.

TABLE 3-5 Resource Information

HTTP Method	POST
Call	/legalentity
Request Format	XML
Response Format	XML
Rate Limited	No

3.3.1 Notes About Background Checks

As part of the Legal Entity creation process, Vantiv performs background and MasterCard MATCH checks as part of Risk Analysis and/or underwriting the Legal Entity. Depending upon the level of service configured for the Background Check operation (see Legal Entity Processing on page 3), different verification operations occur and the system returns different results in the response file.

Only when the MasterCard MATCH and/or other background checks have a positive outcome, or the Legal Entity was reviewed by a Vantiv risk analyst and approved, will you be able to register one or more Sub-merchants for the Legal Entity. You create and assign the sub-merchant through the use of the subMerchantCreateRequest (see Create Sub-Merchant on page 60) using the legalEntityId returned in the create legal entity response (see Create Legal Entity Response Message on page 36)

3.3.2 Notes About Required Fields

In order to create the Legal Entity and perform the required background checks, there are a number of required fields in the legalEntityCreateRequest message. Please note, the required fields vary according to the legalEntityType designation or if you process as part of the Vantiv PayFac Assurance program.

The following fields are required for all Legal Entity Types:

- legalEntityName
- legalEntityType
- taxId (EIN for Canada)
- firstName (principal)
- lastName (principal)
- streetAddress1 (Legal Entity)
- stateProvince (Legal Entity)
- city (Legal Entity)
- postalCode (Legal Entity)
- countryCode (Legal Entity)
- annualCreditCardSalesVolume
- hasAcceptedCreditCards
- dateOfBirth (Principal)
- stakePercent (Principal)
- title (Principal) (Required only if using AmEx Opt Blue)
- legalEntityOwnershipType

NOTE:

In addition to the required fields listed above, Vantiv recommends that you also include the contact phone number (contactPhone element) of the principal, as well as the business phone number of the Legal Entity and the DBA name (doingBusinessAs field).

If the value for the legalEntityType element is INDIVIDUAL_SOLE_PROPRIETORSHIP, in addition to the fields listed above, you must also include the following fields:

- streetAddress1 (Principal)
- stateProvince (Principal)
- city (Principal)
- postalCode (Principal)
- countryCode (Principal)

If you process as part of the Vantiv PayFac Assurance program, in addition to the fields listed above, you must also include the following fields:

- title (Principal)
- yearsInBusiness (Legal Entity)
- url (Sub-merchant)

3.3.3 Create Legal Entity Request Message

You must structure a Create Legal Entity request as shown in the following examples.

Example: Create Legal Entity Request

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<legalEntityCreateRequest
   xmlns="http://payfac.vantivcnp.com/api/merchant/onboard">
   <legalEntityName>Legal Entity Name</legalEntityName>
   <legalEntityType>CORPORATION</legalEntityType>
   <legalEntityOwnershipType>PUBLIC</legalEntityOwnershipType>
   <doingBusinessAs>Alternate Business Name</doingBusinessAs>
   <taxId>12345</taxId>
   <contactPhone>7817659800</contactPhone>
   <annualCreditCardSalesVolume>8000000</annualCreditCardSalesVolume>
   <hasAcceptedCreditCards>true</hasAcceptedCreditCards>
   <address>
   <streetAddress1>Street Address 1</streetAddress1>
   <streetAddress2>Street Address 2</streetAddress2>
```

```
<city>City</city>
   <stateProvince>MA</stateProvince>
   <postalCode>01730</postalCode>
   <countryCode>USA</countryCode>
 </address>
 cipal>
   <title>Chief Financial Officer</title>
   <firstName>p first</firstName>
   <lastName>p last/lastName>
   <emailAddress>emailAddress/emailAddress>
   <ssn>123459876</ssn>
   <contactPhone>7817659800</contactPhone>
   <dateOfBirth>1980-10-12</dateOfBirth>
   <driversLicense>892327409832</driversLicense>
   <driversLicenseState>MA</driversLicenseState>
   <address>
    <streetAddress1>p street address 1</streetAddress1>
    <streetAddress2>p street address 2</streetAddress2>
    <city>Boston</city>
    <stateProvince>MA</stateProvince>
    <postalCode>01890</postalCode>
    <countryCode>USA</countryCode>
   </address>
   <stakePercent>33</stakePercent>
 </principal>
 <yearsInBusiness>12/yearsInBusiness>
</legalEntityCreateRequest>
```

3.3.4 Create Legal Entity Response Message

The structure for the response to a Create Legal Entity message varies slightly depending upon if it is an original request, a duplicate request with all data matching (true duplicate), or a duplicate with data that does not entirely match, as well as the state of the original request, if the new request is a duplicate. The response message has the following structure with exceptions as noted:

```
<legalEntityCreateResponse duplicate="true or false">
  <transactionId>1234567890123456789</transactionId>
  <legalEntityId>ID assigned to Legal Entity</legalEntityId>(appears if first request)
  <responseCode>Response Code</responseCode>
  <responseDescription>Description of Response Code</responseDescription>
```

```
<originalLegalEntityId>Original ID assigned to Legal
Entity</originalLegalEntityId> (appears if dupe)

<originalLegalEntityStatus>Original Status of Legal
Entity</originalLegalEntityStatus> (appears if dupe)

<br/>
<b
```

NOTE:

If you receive a Response Code 30 - Retry, the decision notes will contain additional details about the information that you should provide/correct on the retry.

Example: Create Legal Entity Response - for original

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<legalEntityResponse</pre>
 xmlns="http://payfac.vantivcnp.com/api/merchant/onboard">
 <transactionId>82820200338801014/transactionId>
 <legalEntityId>8</legalEntityId>
 <responseCode>10</responseCode>
 <responseDescription>Approved</responseDescription>
 <principal>
   <principalId>1</principalId>
   <firstName>p first</firstName>
   <lastName>p last/lastName>
 </principal>
 <backgroundCheckResults>
   <business>
    <verificationResult>
      <overallScore>
        <score>Overall results for Business
        <description>Text Description of Score</description>
      </overallScore>
      <nameAddressTaxIdAssociation>
        <code>Name Address TIN_info</code>
        <description>Text Description of Code</description>
      </nameAddressTaxIdAssociation>
      <nameAddressPhoneAssociation>
        <code>Name_Address_Phone_info</code>
        <description>Text Description of Code</description>
      </nameAddressPhoneAssociation>
      <verificationIndicators>
        <nameVerified>true or false/nameVerified>
        <addressVerified>true or false</addressVerified>
```

```
<cityVerified>true or false</cityVerified>
    <zipVerified>true or false</zipVerified>
    <phoneVerified>true or false</phoneVerified>
    <taxIdVerified>true or false</taxIdVerified>
   </re>
   <riskIndicators>
    <riskIndicator>
      <code>Risk Indicator Info</code>
      <description>Text Description of Code</description>
    </riskIndicator>
   </riskIndicators>
 </verificationResult>
</business>
<principal>
 <verificationResult>
   <overallScore>
    <score>Overall Results for Principal</score>
    <description>Text Description of Score</description>
   </overallScore>
   <nameAddressSsnAssociation>
    <code>Name_Address_SSN_info</code>
    <description>Text Description of Code</description>
   </nameAddressSsnAssociation>
   <nameAddressPhoneAssociation>
    <code>Name_Address_Phone_info</code>
    <description>Text Description of Code</description>
   </nameAddressPhoneAssociation>
   <verificationIndicators>
    <nameVerified>true or false/nameVerified>
    <addressVerified>true or false</addressVerified>
    <phoneVerified>true or false</phoneVerified>
    <ssnVerified>true or false/ssnVerified>
    <dobVerified>true or false</dobVerified>
   </verificationIndicators>
  <riskIndicators>
    <riskIndicator>
      <code>Risk Indicator results
      <description>Text Description of Code</description>
    </riskIndicator>
   </riskIndicators>
 </re>
</principal>
<businessToPrincipalAssociation>
```

```
<score>Business_To_Principal_info</score>
    <description>Text Description of Score</description>
   </businessToPrincipalAssociation>
   <backgroundCheckDecisionNotes>Additional Info About
 Decision</backgroundCheckDecisionNotes>
   <bankruptcyData>
    <bankruptcyType>Sub-category of bankruptcy</bankruptcyType>
    <bankruptcyCount>1</bankruptcyCount>
    <companyName>Company Name</companyName>
    <streetAddress1>100 Main Street/streetAddress1>
    <streetAddress2>Suite 2</streetAddress2>
    <city>Boston</city>
    <state>MA</state>
    <zip>01150</zip>
    <zip4>2202</zip4>
    <filingDate>2011-05-13</filingDate>
   </bankruptcyData>
   enResult>
    <lienType>Subtype of Lien
    <releasedCount>2</releasedCount>
    <unreleasedCount>1</unreleasedCount>
    <companyName>Company Name
    <streetAddress1>100 Main Street/streetAddress1>
    <streetAddress2>Suite 2</streetAddress2>
    <city>Boston</city>
    <state>MA</state>
    <zip>01150</zip>
    <zip4>2202</zip4>
    <filingDate>2011-05-13</filingDate>
   </lienResult>
 </backgroundCheckResults>
</legalEntityResponse>
```

Example: Create Legal Entity Response - for duplicate

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<legalEntityCreateResponse
   xmlns="http://payfac.vantivcnp.com/api/merchant/onboard" duplicate="true">
   <transactionId>82821203948749101</transactionId>
   <legalEntityId>82821203948912667</legalEntityId>
   <responseCode>36</responseCode>
   <responseDescription>Duplicate</responseDescription>
```

```
<originalLegalEntityId>82821203948912667</originalLegalEntityId>
<originalLegalEntityStatus>Approved</originalLegalEntityStatus>
<backgroundCheckResults>
 <business>
   <verificationResult>
    <overallScore>
      <score>50</score>
      <description>Business is verified on multiple sources with no
contradictory findings</description>
    </overallScore>
    <nameAddressTaxIdAssociation/>
    <nameAddressPhoneAssociation/>
    <verificationIndicators>
      <nameVerified>false/nameVerified>
      <addressVerified>false</addressVerified>
      <cityVerified>false</cityVerified>
      <stateVerified>false</stateVerified>
      <zipVerified>false</zipVerified>
      <phoneVerified>false</phoneVerified>
      <taxIdVerified>false</taxIdVerified>
    </re>
    <riskIndicators>
      <riskIndicator>
       <code>ADDRESS_MATCHES_PRISON</code>
       <description>The input address matches a prison
address</description>
      </riskIndicator>
    </riskIndicators>
   </verificationResult>
 </business>
 <principal>
   <verificationResult>
    <overallScore>
      <score>50</score>
      <description>Full name, address, phone, SSN verified</description>
    </overallScore>
     <nameAddressSsnAssociation/>
    <nameAddressPhoneAssociation/>
    <verificationIndicators>
      <nameVerified>false/nameVerified>
      <addressVerified>false</addressVerified>
      <phoneVerified>false</phoneVerified>
      <ssnVerified>false</ssnVerified>
```

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```
<dobVerified>false</dobVerified>
      </verificationIndicators>
      <riskIndicators>
       <riskIndicator>
         <code>ADDRESS MATCHES PRISON</code>
         <description>The input address matches a prison
 address</description>
       </riskIndicator>
      </riskIndicators>
    </verificationResult>
   </principal>
   <businessToPrincipalAssociation>
    <score>50</score>
    <description>Association found between the person and the company in
 the Company Contacts data</description>
   </businessToPrincipalAssociation>
   <bankruptcyData>
    <bankruptcyType>Sub-category of bankruptcy</bankruptcyType>
    <bankruptcyCount>1</bankruptcyCount>
    <companyName>Company Name
    <streetAddress1>100 Main Street/streetAddress1>
    <streetAddress2>Suite 2</streetAddress2>
    <city>Boston</city>
    <state>MA</state>
    <zip>01150</zip>
    <zip4>2202</zip4>
    <filingDate>2011-05-13</filingDate>
   </bankruptcyData>
   enResult>
    IienType>Subtype of Lien
    <releasedCount>2</releasedCount>
    <unreleasedCount>1</unreleasedCount>
    <companyName>Company Name
    <streetAddress1>100 Main Street/streetAddress1>
    <streetAddress2>Suite 2</streetAddress2>
    <city>Boston</city>
    <state>MA</state>
    <zip>01150</zip>
    <zip4>2202</zip4>
    <filingDate>2011-05-13</filingDate>
   </lienResult>
 </backgroundCheckResults>
</legalEntityCreateResponse>
```

NOTE:

If the Legal Entity is in Manual Review the response would be identical to the above response except the responseCode element would have a value of 35 (instead of 36) and the responseDescription would be: Manual review - Duplicate.

3.4 Update Legal Entity

You can update the several items associated with a Legal Entity, including information about a Principal. To update information associated with a Legal Entity, you submit a legalEntityUpdateRequest message with the appropriate legalEntityId and the updated information.

You can update the following items:

- streetAddress1 (entity and/or principal)
- streetAddress2 (entity and/or principal)
- city (entity and/or principal)
- stateProvince (entity and/or principal)
- postalCode (entity and/or principal)
- doingBusinessAs
- annualCreditCardSalesVolume
- hasAcceptedCreditCards
- contactPhone (entity and/or principal)
- title (principal)
- emailAddress (principal)

- firstName (principal)
- lastName (principal)
- ssn (principal)
- dateOfBirth (principal)
- driversLicense (principal)
- driversLicenseState (principal)
- legalEntityName
- legalEntityType
- taxld
- yearsInBusiness

Note:

If the Legal Entity is approved and the TIN validation status is either approved or not required, you can not update the following elements: legalEntityName, legalEntityType, taxId, firstName, lastName, ssn, dateOfBirth, driversLicense, driversLicenseState.

Prior to the TIN validation, updating any of these elements triggers a background check.

TABLE 3-6 Resource Information

HTTP Methods	PUT
Call	/legalentity/legalEntityId
Request Format	XML
Response Format	XML

TABLE 3-6 Resource Information

Rate Limited	Yes
--------------	-----

TABLE 3-7 PUT Parameters

Parameter	Required or Optional	Description
legalEntityId	Required	The Id of the Legal Entity

3.4.1 Update Legal Entity Request

You must structure an Update Legal Entity request as shown in the following examples.

Example: Update Legal Entity Request

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<legalEntityUpdateRequest
   xmlns="http://payfac.vantivcnp.com/api/merchant/onboard">
   <address>
        <streetAddress1>LE Street Address 1</streetAddress1>
        <streetAddress2>LE Street Address 2</streetAddress2>
        <city>LE City</city>
        <stateProvince>MA</stateProvince>
        <postalCode>01730</postalCode>
        <countryCode>USA</countryCode>
        </address>
        <contactPhone>9785550101</contactPhone>
        <doingBusinessAs>Other Name Co.</doingBusinessAs>
```

```
<annualCreditCardSalesVolume>10000000</annualCreditCardSalesVolume>
 <hasAcceptedCreditCards>true</hasAcceptedCreditCards>
 <principal>
   <title>CEO</title>
   <emailAddress>jdoe@mail.net</emailAddress>
   <contactPhone>9785551234</contactPhone>
   <address>
    <streetAddress1>p street address 1</streetAddress1>
    <streetAddress2>p street address 2</streetAddress2>
    <city>Boston</city>
    <stateProvince>MA</stateProvince>
    <postalCode>01890</postalCode>
    <countryCode>USA</countryCode>
   </address>
   <backgroundCheckFields>
    <firstName>p first</firstName>
    <lastName>p last</lastName>
    <ssn>123459876</ssn>
    <dateOfBirth>1980-10-12</dateOfBirth>
    <driversLicense>892327409832</driversLicense>
    <driversLicenseState>MA</driversLicenseState>
   </backgroundCheckFields>
 </principal>
 <backgroundCheckFields>
   <legalEntityName>Company Name</legalEntityName>
   <legalEntityType>LE Type Enum</legalEntityType>
   <taxId>123456789</taxId>
 </backgroundCheckFields>
 <legalEntityOwnershipType>PUBLIC</legalEntityOwnershipType>
 <yearsInBusiness>10</yearsInBusiness>
</legalEntityUpdateRequest>
```

3.4.2 Update Legal Entity Response

The system replies to an Update Legal Entity request with a generic response message. The structure of the response message is as follows:

```
<legalEntityResponse>
  <transactionId>1234567890123456789</transactionId>
  <legalEntityId> (appears if first request of dupe with all matching data)
```

```
<responseCode>
  <responseDescription>
   <backgroundCheckResults> (appears if background check triggered by update)
</legalEntityResponse>
```

Example: Update Legal Entity Response

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<legalEntityResponse
 xmlns="http://payfac.vantivcnp.com/api/merchant/onboard">
 <transactionId>82820200338801014/transactionId>
 <legalEntityId>8</legalEntityId>
 <responseCode>10</responseCode>
 <responseDescription>Approved</responseDescription>
 <principal>
   <principalId>1</principalId>
   <firstName>p first</firstName>
   <lastName>p last/lastName>
 </principal>
 <backgroundCheckResults>
   <business>
    <verificationResult>
      <overallScore>
       <score>Overall results for Business</score>
       <description>Text Description of Score</description>
      </overallScore>
      <nameAddressTaxIdAssociation>
       <code>Name_Address_TIN_info</code>
       <description>Text Description of Code</description>
      </nameAddressTaxIdAssociation>
      <nameAddressPhoneAssociation>
       <code>Name_Address_Phone_info</code>
       <description>Text Description of Code</description>
      </nameAddressPhoneAssociation>
      <verificationIndicators>
       <nameVerified>true or false/nameVerified>
       <addressVerified>true or false</addressVerified>
       <cityVerified>true or false</cityVerified>
       <zipVerified>true or false</zipVerified>
       <phoneVerified>true or false</phoneVerified>
       <taxIdVerified>true or false</taxIdVerified>
      </re>
      <riskIndicators>
```

```
<riskIndicator>
       <code>Risk Indicator Info</code>
       <description>Text Description of Code</description>
      </riskIndicator>
    </riskIndicators>
   </re>
 </business>
 <principal>
   <verificationResult>
    <overallScore>
      <score>Overall Results for Principal</score>
      <description>Text Description of Score</description>
    </overallScore>
    <nameAddressSsnAssociation>
      <code>Name_Address_SSN_info</code>
      <description>Text Description of Code</description>
    </nameAddressSsnAssociation>
    <nameAddressPhoneAssociation>
      <code>Name_Address_Phone_info</code>
      <description>Text Description of Code</description>
    </nameAddressPhoneAssociation>
    <verificationIndicators>
      <nameVerified>true or false/nameVerified>
      <addressVerified>true or false</addressVerified>
      <phoneVerified>true or false</phoneVerified>
      <ssnVerified>true or false/ssnVerified>
      <dobVerified>true or false</dobVerified>
    </re></re>
    <riskIndicators>
      <riskIndicator>
       <code>Risk Indicator results
       <description>Text Description of Code</description>
      </riskIndicator>
    </riskIndicators>
   </re>
 </principal>
 <businessToPrincipalAssociation>
   <score>Business_To_Principal_info</score>
   <description>Text Description of Score</description>
 </businessToPrincipalAssociation>
 <backgroundCheckDecisionNotes>Additional Info About
Decision</backgroundCheckDecisionNotes>
 <bankruptcyData>
```

```
<bankruptcyType>Sub-category of bankruptcy</bankruptcyType>
    <bankruptcyCount>1</bankruptcyCount>
    <companyName>Company Name
    <streetAddress1>100 Main Street/streetAddress1>
    <streetAddress2>Suite 2</streetAddress2>
    <city>Boston</city>
    <state>MA</state>
    <zip>01150</zip>
    <zip4>2202</zip4>
    <filingDate>2011-05-13</filingDate>
   </bankruptcyData>
   enResult>
    <lienType>Subtype of Lien
    <releasedCount>2</releasedCount>
    <unreleasedCount>1</unreleasedCount>
    <companyName>Company Name
    <streetAddress1>100 Main Street/streetAddress1>
    <streetAddress2>Suite 2</streetAddress2>
    <city>Boston</city>
    <state>MA</state>
    <zip>01150</zip>
    <zip4>2202</zip4>
    <filingDate>2011-05-13</filingDate>
   </lienResult>
 </backgroundCheckResults>
</legalEntityResponse>
```

3.5 Retrieve Legal Entity

If you need to retrieve the latest information on file related to a Legal Entity for verification purposes or to check the status of cases requiring manual intervention, you must perform a GET operation specifying the <code>legalEntityId</code>. In the case of a retrieval request, the system does not require an accompanying XML message.

NOTE:

Vantiv makes the final results for the manual review of Legal entity information available within 2 business days of the initial response to the create request.

TABLE 3-8 Resource Information

HTTP Methods	GET
Call	/legalentity/legalEntityId
Request Format	XML
Response Format	XML
Rate Limited	Yes

TABLE 3-9 GET Parameters

Parameter	Required or Optional	Description
legalEntityId	Required	The Id of the legalEntity

3.5.1 Retrieve Legal Entity Response

The legalEntityRetrieveResponse message has the following format:

```
<legalEntityRetrievalResponse overallStatus="Approved">
    <legalEntityName>Name of Legal Entity</legalEntityName>
    <legalEntityType>Type of Legal Entity</legalEntityType>
    <doingBusinessAs>Alternate Name</doingBusinessAs>
    <taxId>Tax Id/EIN</taxId>
    <contactPhone>Legal Entity Contact Number</contactPhone>
    <annualCreditCardSalesVolume>Annual Visa Sales</annualCreditCardSalesVolume>
    <hasAcceptedCreditCards>true or false</hasAcceptedCrreditCards>
```

```
<address>
<principal>
<legalEntityId>12345678901234567</legalEntityId>
<responseCode>3-digit Code</responseCode>
<responseDescription>Description of Response Code</responseDescription>
<backgroundCheckResults>
<transactionId>1234567890123456789</transactionId>
<updateDate>YYYY-MM-DDTHH:MM:SS+/-HH:MM</updateDate>
<decisionDate>YYYY-MM-DDTHH:MM:SS+/-HH:MM</decisionDate>
<tinValidationStatus>Pending</tinValidationStatus>
<sub_merchant_processing_status>true or false</sub_merchant_processing_status>
</legalEntityRetrievalResponse>
```

Example: Legal Entity Retrieval Response

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<legalEntityRetrievalResponse</pre>
 xmlns="http://payfac.vantivcnp.com/api/merchant/onboard"
 overallStatus="Approved">
 <legalEntityName>Legal Entity Name
 <legalEntityType>CORPORATION</legalEntityType>
 <doingBusinessAs>Alternate Name</doingBusinessAs>
 <taxId>X-2345</taxId>
 <contactPhone>7817659800</contactPhone>
 <annualCreditCardSalesVolume>80</annualCreditCardSalesVolume>
 <hasAcceptedCreditCards>true</hasAcceptedCreditCards>
 <address>
   <streetAddress1>12 Norton St</streetAddress1>
   <city>City</city>
   <stateProvince>NH</stateProvince>
   <postalCode>03064</postalCode>
   <countryCode>USA</countryCode>
 </address>
 <principal>
   <principalId>1</principalId>
   <title>CEO</title>
   <firstName>p first</firstName>
   <lastName>p last/lastName>
   <emailAddress>emailAddress/emailAddress>
   <ssn>XXXXX-9876
```

```
<contactPhone>7817659800</contactPhone>
 <dateOfBirth>1980-10-12</dateOfBirth>
 <driversLicense>XXXXXXXX-9832</driversLicense>
 <driversLicenseState>MA</driversLicenseState>
 <address>
   <streetAddress1>p street address 1</streetAddress1>
   <streetAddress2>p street address 2</streetAddress2>
   <city>Boston</city>
   <stateProvince>MA</stateProvince>
   <postalCode>01890</postalCode>
   <countryCode>USA</countryCode>
 </address>
</principal>
<legalEntityId>3</legalEntityId>
<responseCode>10</responseCode>
<responseDescription>Approved</responseDescription>
<backgroundCheckResults>
 <business>
   <verificationResult>
    <overallScores>
      <score>Overall results for Business
      <description>Text Description of Score</description>
    </overallScores>
    <nameAddressTaxIdAssociation>
      <code>Name_Address_TIN_info</code>
      <description>Text Description of Code</description>
    </nameAddressTaxIdAssociation>
    <nameAddressPhoneAssociation>
      <code>Name_Address_Phone_info</code>
      <description>Text Description of Code</description>
    </nameAddressPhoneAssociation>
    <verificationIndicators>
      <nameVerified>true or false/nameVerified>
      <addressVerified>true or false</addressVerified>
      <cityVerified>true or false</cityVerified>
      <zipVerified>true or false</zipVerified>
      <phoneVerified>true or false</phoneVerified>
      <taxIdVerified>true or false</taxIdVerified>
    </verificationIndicators>
    <riskIndicators>
      <riskIndicator>
       <code>Risk Indicator Info</code>
       <description>Text Description of Code</description>
```

```
</riskIndicator>
    </riskIndicators>
   </verificationResult>
 </business>
 <principal>
   <verificationResult>
    <overallScores>
      <score>Overall Results for Principal</score>
      <description>Text Description of Score</description>
    </overallScores>
    <nameAddressSsnAssociation>
      <code>Name Address SSN info</code>
      <description>Text Description of Code</description>
    </nameAddressSsnAssociation>
    <nameAddressPhoneAssociation>
      <code>Name_Address_Phone_info</code>
      <description>Text Description of Code</description>
    </nameAddressPhoneAssociation>
    <verificationIndicators>
      <nameVerified>true or false/nameVerified>
      <addressVerified>true or false</addressVerified>
      <phoneVerified>true or false</phoneVerified>
      <ssnVerified>true or false/ssnVerified>
      <dobVerified>true or false</dobVerified>
    </re></re>
    <riskIndicators>
      <riskIndicator>
       <code>Risk Indicator results
       <description>Text Description of Code</description>
      </riskIndicator>
    </riskIndicators>
   </verificationResult>
 </principal>
 <businessToPrincipalAssociation>
   <score>Business_To_Principal_info</score>
   <description>Text Description of Score</description>
 </businessToPrincipalAssociation>
 <backgroundCheckDecisionNotes>Additional Info About
Decision</backgroundCheckDecisionNotes>
 <bankruptcyData>
   <bankruptcyType>Sub-category of bankruptcy/bankruptcyType>
   <bankruptcyCount>1</bankruptcyCount>
   <companyName>Company Name</companyName>
```

```
<streetAddress1>100 Main Street</streetAddress1>
    <streetAddress2>Suite 2</streetAddress2>
    <city>Boston</city>
    <state>MA</state>
    <zip>01150</zip>
    <zip4>2202</zip4>
    <filingDate>2011-05-13</filingDate>
   </bankruptcyData>
   enResult>
    <lienType>Subtype of Lien
    <releasedCount>2</releasedCount>
    <unreleasedCount>1</unreleasedCount>
    <companyName>Company Name
    <streetAddress1>100 Main Street/streetAddress1>
    <streetAddress2>Suite 2</streetAddress2>
    <city>Boston</city>
    <state>MA</state>
    <zip>01150</zip>
    <zip4>2202</zip4>
    <filingDate>2011-05-13</filingDate>
   </lienResult>
 </backgroundCheckResults>
 <transactionId>82820200338801030/transactionId>
 <tinValidationStatus>Status of TIN Validation/tinValidationStatus>
 <sub_merchant_processing_status>true</sub_merchant_processing_status>
</legalEntityRetrievalResponse>
```

3.6 Create a Principal

When you create a Legal Entity, you also create a Principal. You must create a Principal for each person that owns 25% or more of the Legal Entity. To create additional Principals associated with the Legal Entity you use a legalEntityPrincipalCreateRequest.

TABLE 3-10 Resource Information

HTTP Methods	POST
Call	/legalentity/legalEntityId/principal
Request Format	XML
Response Format	XML
Rate Limited	Yes

TABLE 3-11 POST Parameters

Parameter	Required or Optional	Description
legalEntityId	Required	The Id of the Legal Entity.

NOTE:

If the legalEntityType is SOLE_PROPRIETORSHIP, you cannot delete or add Principals. The only Principal allowed is the one created with the Legal Entity. Also, if you already defined multiple Principals, the system does not allow you to change the legalEntityType to SOLE_PROPRIETORSHIP until you delete all but one of the Principals.

3.6.1 Principal Create Request

You must structure an Principal Create request as shown in the following examples.

```
<legalEntityPrincipalCreateRequest>
  <principal>
</legalEntityPrincipalCreateRequest>
```

Example: Create Principal Request

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<legalEntityPrincipalCreateRequest
   xmlns="http://payfac.vantivcnp.com/api/merchant/onboard">
   <principal>
```

```
<title>Mr.</title>
    <firstName>First</firstName>
    <lastName>Last/lastName>
    <emailAddress>abc@gmail.com</emailAddress>
    <ssn>123450015</ssn>
    <dateOfBirth>1980-10-12</dateOfBirth>
    <address>
        <streetAddress1>p2 street address 1</streetAddress1>
        <streetAddress2>p2 street address 2</streetAddress2>
        <city>Boston2</city>
        <stateProvince>MA</stateProvince>
        <postalCode>01892</postalCode>
        <countryCode>USA</countryCode>
      </address>
     <stakePercent>31</stakePercent>
  </principal>
</legalEntityPrincipalCreateRequest>
```

3.6.2 Principal Create Response

The structure of the response message is as follows:

```
<legalEntityPrincipalCreateResponse>
  <transactionId>Transaction ID</transactionId>
  <principalId>ID of New Principal</principalId>
  <firstName>First Name of Principal</firstName>
  <lastName>Last Name of Principal</lastName>
  <responseCode>Response Code</responseCode>
  <responseDescription>Response Description</responseDescription>
  <backgroundCheckResults>Background Checks Results</background Check Results>
</legalEntityPrincipalCreateResponse>
```

Example: Create Principal Response

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<principalCreateResponse
   xmlns="http://payfac.vantivcnp.com/api/merchant/onboard">
   <transactionIdId>8282985303203</transactionId>
   <principalId>2</principalId>
   <firstName>Princ First</firstName>
   <lastName>Princ Last</lastName>
```

```
<responseCode>10</responseCode>
<responseDescription>Approved</responseDescription>
<backgroundCheckResults>
 <business>
   <verificationResult>
    <overallScore>
      <score>50</score>
      <description>Business is verified on multiple sources with no
contradictory findings</description>
    </overallScore>
    <nameAddressTaxIdAssociation/>
    <nameAddressPhoneAssociation/>
    <verificationIndicators>
      <nameVerified>false/nameVerified>
      <addressVerified>false</addressVerified>
      <cityVerified>false</cityVerified>
      <stateVerified>false</stateVerified>
      <zipVerified>false</zipVerified>
      <phoneVerified>false</phoneVerified>
      <taxIdVerified>false</taxIdVerified>
    </re>
    <riskIndicators/>
   </re>
 </business>
 <principal>
   <verificationResult>
    <overallScore>
      <score>50</score>
      <description>Full name, address, phone , SSN verified</description>
    </overallScore>
    <nameAddressSsnAssociation/>
    <nameAddressPhoneAssociation/>
    <verificationIndicators>
      <nameVerified>false/nameVerified>
      <addressVerified>false</addressVerified>
      <phoneVerified>false</phoneVerified>
      <ssnVerified>false</ssnVerified>
      <dobVerified>false</dobVerified>
    </re>
    <riskIndicators/>
   </verificationResult>
 </principal>
 <businessToPrincipalAssociation>
```

```
<score>50</score>
    <description>Association found between the person and the company in
 the Company Contacts data</description>
  </businessToPrincipalAssociation>
  <bankruptcyData>
    <bankruptcyType>btype</bankruptcyType>
    <bankruptcyCount>3</bankruptcyCount>
    <companyName>testCompanyName
    <streetAddress1>testStreetAddress1/streetAddress1>
    <streetAddress2>testStreetAddress2/streetAddress2>
    <city>testCity</city>
    <state>ST</state>
    <zip>bZip5</zip>
    <zip4>Zip4</zip4>
    <filingDate>1999-11-05</filingDate>
  </bankruptcyData>
  enResult>
    <lienType>ltype</lienType>
    <releasedCount>3</releasedCount>
    <companyName>testLienCompanyName
    <streetAddress1>testLienStreetAddress1/streetAddress1>
    <streetAddress2>testLienStreetAddress2/streetAddress2>
    <city>testLienCity</city>
    <state>ST</state>
    <zip>bZip5</zip>
    <zip4>Zip4</zip4>
    <filingDate>1999-11-05</filingDate>
  </backgroundCheckResults>
```

3.7 Delete a Principal

You can create and associate as many as four Principals with a Legal Entity. In the event that the Principals change and you need to remove one or more from association with the Legal Entity, you must delete a Principal. To delete a Principal perform a DELETE operation, specifying the legalEntityId with the parameter principal and the principalId. The system does not require an accompanying XML message.

NOTE: If the legalEntityType is SOLE_PROPRIETORSHIP, you cannot add or delete Principals.

TABLE 3-12 Resource Information

HTTP Methods	DELETE
Call	/legalentity/legalEntityId/principal/principalId
Request Format	XML
Response Format	XML
Rate Limited	Yes

TABLE 3-13 POST Parameters

Parameter	Required or Optional	Description
legalEntityId	Required	The Id of the Legal Entity.
principalld	Required	The Id of the Principal to be deleted.

3.7.1 Delete a Principal Response

The structure of the response message is as follows:

```
<legalEntityPrincipalDeleteResponse>
  <transactionId>82820200338801014</transactionId>
  <legalEntityId>ID of Legal entity</legalEntityId>
  <principalId>Id of Deleted Principal</principalId>
  <responseDescription>Description of Response</responseDescription>
</legalEntityPrincipalDeleteResponse>
```

Example: Delete a Principal Response

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<legalEntityPrincipalDeleteResponse
  xmlns="http://payfac.vantivcnp.com/api/merchant/onboard">
  <transactionId>82820200338801014</transactionId>
  <legalEntityId>8</legalEntityId>
  <principalId>2</principalId>
  <responseDescription>Legal Entity Principal successfully deleted</responseDescription>
</legalEntityPrincipalDeleteResponse>
```

3.8 Create Sub-Merchant

Once you have established a Legal Entity, you can create one or more associated Sub-merchants. For example, if the Legal Entity controlled three different business at different locations, you would establish three Sub-merchants under the Legal Entity. You create new Sub-merchants by submitting a subMerchantCreateRequest message.

TABLE 3-14 Resource Information

HTTP Methods	POST
Call	/legalentity/legalEntityId/submerchant
Request Format	XML
Response Format	XML
Rate Limited	Yes

TABLE 3-15 POST Parameters

Parameter	Required or Optional	Description
legalEntityId	Required	The Id of the Legal Entity.

Note:

After the creation of a Sub-merchant, wait a minimum of two minutes before attempting to process transactions for the Sub-merchant. This is the minimum amount of time required for information about the newly created Sub-merchant to propagate through our system. Attempts to process transactions for a new Sub-merchant sooner than two minutes will result in system errors.

3.8.1 Create Sub-Merchant Request

You must structure a Create Sub-merchant request as shown in the following examples.

```
<maxTransactionAmount>100000/maxTransactionAmount>
 <purchaseCurrency>USD</purchaseCurrency>
 <merchantCategoryCode>MCC Number</merchantCategoryCode>
 <taxAuthority>Name of Tax Authority</taxAuthority> (MCC 9311 only)
 <taxAuthorityState>State of Tax Authority</taxAuthorityState> (MCC 9311 only)
 <bankRoutingNumber>123456789</bankRoutingNumber>
 <bankAccountNumber>1234</bankAccountNumber>
 <pspMerchantId>012345</pspMerchantId>
 <fraud>
 <amexAcquired>
 <address>
 contact>
 <createCredentials>true</createCredentials>
 <eCheck>
 <subMerchantFunding>
 <settlementCurrency>USD</settlementCurrency>
</subMerchantCreateRequest>
```

Example: Create Sub-merchant Request

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<subMerchantCreateRequest</pre>
 xmlns="http://payfac.vantivcnp.com/api/merchant/onboard">
 <merchantName>Merchant Name
 <amexMid>1234567890</amexMid>
 <discoverConveyedMid>123456789012345/discoverConveyedMid>
 <url>http://merchantUrl</url>
 <customerServiceNumber>8407809000/customerServiceNumber>
 <hardCodedBillingDescriptor>billing
 Descriptor</hardCodedBillingDescriptor>
 <maxTransactionAmount>8400</maxTransactionAmount>
 <purchaseCurrency>USD</purchaseCurrency>
 <merchantCategoryCode>5964</merchantCategoryCode>
 <bankRoutingNumber>840123124/bankRoutingNumber>
 <bankAccountNumber>84012312415/bankAccountNumber>
 <pspMerchantId>123456</pspMerchantId>
 <fraud enabled="true"></fraud>
 <amexAcquired enabled="true"></amexAcquired>
 <address>
   <streetAddress1>Street Address 1</streetAddress1>
```

```
<streetAddress2>Street Address 2</streetAddress2>
   <city>City</city>
   <stateProvince>MA</stateProvince>
   <postalCode>01970</postalCode>
   <countryCode>USA</countryCode>
 </address>
 contact>
   <firstName>John</firstName>
   <lastName>Doe</lastName>
   <emailAddress>John.Doe@company.com
   <phone>9785552222</phone>
 <createCredentials>true</createCredentials>
 <eCheck enabled="true">
   <eCheckCompanyName>Your Company Name</eCheckCompanyName>
   <eCheckBillingDescriptor>9785552222</eCheckBillingDescriptor>
 </eCheck>
 <subMerchantFunding enabled="false"></subMerchantFunding>
 <settlementCurrency>USD</settlementCurrency>
</subMerchantCreateRequest>
```

Example: Create Sub-merchant Request with Dynamic Payout

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<subMerchantCreateRequest</pre>
 xmlns="http://psp.vantivcnp.com/api/merchant/onboard">
 <merchantName>Merchant Name
 <amexMid>1234567890</amexMid>
 <discoverConveyedMid>123456789012345</discoverConveyedMid>
 <url>http://merchantUrl</url>
 <customerServiceNumber>8407809000/customerServiceNumber>
 <hardCodedBillingDescriptor>billing
 Descriptor</hardCodedBillingDescriptor>
 <maxTransactionAmount>8400</maxTransactionAmount>
 <purchaseCurrency>USD</purchaseCurrency>
 <merchantCategoryCode>5964</merchantCategoryCode>
 <bankRoutingNumber>840123124/bankRoutingNumber>
 <bankAccountNumber>84012312415/bankAccountNumber>
 <pspMerchantId>123456</pspMerchantId>
 <fraud enabled="true"></fraud>
 <amexAcquired enabled="true"></amexAcquired>
 <address>
   <streetAddress1>Street Address 1</streetAddress1>
```

```
<streetAddress2>Street Address 2</streetAddress2>
   <city>City</city>
   <stateProvince>MA</stateProvince>
   <postalCode>01970</postalCode>
   <countryCode>USA</countryCode>
 </address>
 contact>
   <firstName>John</firstName>
   <lastName>Doe</lastName>
   <emailAddress>John.Doe@company.com
   <phone>9785552222</phone>
 <createCredentials>true</createCredentials>
 <eCheck enabled="true">
   <eCheckCompanyName>Your Company Name</eCheckCompanyName>
   <eCheckBillingDescriptor>9785552222</eCheckBillingDescriptor>
 </eCheck>
 <subMerchantFunding enabled="true">
   <fundingSubmerchantId>Unique Identifier</fundingSubmerchantId>
 </subMerchantFunding>
 <settlementCurrency>USD</settlementCurrency>
</subMerchantCreateRequest>
```

Example: Create Sub-merchant Request with Managed Payout

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<subMerchantCreateRequest</pre>
 xmlns="http://psp.vantivcnp.com/api/merchant/onboard">
 <merchantName>Merchant Name
 <amexMid>1234567890</amexMid>
 <discoverConveyedMid>123456789012345/discoverConveyedMid>
 <url>http://merchantUrl</url>
 <customerServiceNumber>8407809000</customerServiceNumber>
 <hardCodedBillingDescriptor>billing
 Descriptor</hardCodedBillingDescriptor>
 <maxTransactionAmount>8400</maxTransactionAmount>
 <purchaseCurrency>USD</purchaseCurrency>
 <merchantCategoryCode>5964</merchantCategoryCode>
 <bankRoutingNumber>840123124/bankRoutingNumber>
 <bankAccountNumber>84012312415/bankAccountNumber>
 <pspMerchantId>123456</pspMerchantId>
 <fraud enabled="true"></fraud>
 <amexAcquired enabled="true"></amexAcquired>
```

```
<address>
   <streetAddress1>Street Address 1</streetAddress1>
   <streetAddress2>Street Address 2</streetAddress2>
   <city>City</city>
   <stateProvince>MA</stateProvince>
   <postalCode>01970</postalCode>
   <countryCode>USA</countryCode>
 </address>
 contact>
   <firstName>John</firstName>
   <lastName>Doe</lastName>
   <emailAddress>John.Doe@company.com</emailAddress>
   <phone>9785552222</phone>
 <createCredentials>true</createCredentials>
 <eCheck enabled="true">
   <eCheckCompanyName>Your Company Name</eCheckCompanyName>
   <eCheckBillingDescriptor>9785552222</eCheckBillingDescriptor>
 </eCheck>
 <subMerchantFunding enabled="true">
   <feeProfile>Fee Profile Id</feeProfile>
 </subMerchantFunding>
 <settlementCurrency>USD</settlementCurrency>
</subMerchantCreateRequest>
```

3.8.2 Create Sub-Merchant Response

The response message to the Create Sub-merchant request has the following structure:

```
<subMerchantCreateResponse>
  <transactionId>0123456789</teansactionId>
  <subMerchantId>1</subMerchantId>
  <merchantIdentString>123456789</merchantIdentString>
  <originalSubMerchant> (included only in some dulpicate cases)
  <credentials> (included only if credentials requested)
  <paypageCredentials> (only if credentials requested and PayPage enabled)
  <amexSellerId>1234567890</amexSellerId>
  </subMerchantCreateResponse>
```

NOTE:

If the submission is a duplicate with changed data, the submerchantId and merchantIdentString elements appear as children of the originalSubmerchant element.

Example: Create Sub-merchant Response with Credentials

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<subMerchantCreateResponse</pre>
 xmlns="http://payfac.vantivcnp.com/api/merchant/onboard">
 <transactionId>82821240469914003/transactionId>
 <subMerchantId>1100003/subMerchantId>
 <merchantIdentString>01100003</merchantIdentString>
 <credentials>
   <userName>JDoe123</userName>
   <password>MyPassword</password>
 <passwordExpirationDate>2016-06-30T23:59:59-05:00/passwordExpirationDate>
 </credentials>
 <paypageCredentials>
   <paypageCredential>
    <userName>JDoe123</userName>
    <paypageId>1234567890123456</paypageId>
   </paypageCredential>
 </paypageCredentials>
 <amexSellerId>1234567890</amexSellerId>
</subMerchantCreateResponse>
```

Example: Create Sub-merchant Response - Duplicate with All Data Matching

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<subMerchantCreateResponse
  xmlns="http://payfac.vantivcnp.com/api/merchant/onboard" duplicate="true">
  <transactionId>82821240469914003</transactionId>
       <subMerchantId>1100003</subMerchantId>
       <merchantIdentString>01100003</merchantIdentString>
</subMerchantCreateResponse>
```

Example: Create Sub-merchant Response - Duplicate with Data Not Matching

```
<merchantName>Merchant Name
   <amexMid>1234567890</amexMid>
   <discoverConveyedMid>123456789012345</discoverConveyedMid>
   <url>http://merchantUrl</url>
   <customerServiceNumber>8407809000/customerServiceNumber>
   <hardCodedBillingDescriptor>billing
 Descriptor</hardCodedBillingDescriptor>
   <maxTransactionAmount>8400</maxTransactionAmount>
   <purchaseCurrency>USD</purchaseCurrency>
   <merchantCategoryCode>5964</merchantCategoryCode>
   <bankRoutingNumber>840123124/bankRoutingNumber>
   <bankAccountNumber>84012312415/bankAccountNumber>
   <pspMerchantId>123456</pspMerchantId>
   <address>
    <streetAddress1>Street Address 1</streetAddress1>
    <streetAddress2>Street Address 2</streetAddress2>
    <city>City</city>
    <stateProvince>MA</stateProvince>
    <postalCode>01970</postalCode>
    <countryCode>USA</countryCode>
   </address>
   contact>
    <firstName>John</firstName>
    <lastName>Doe</lastName>
    <phone>9785552222</phone>
    <emailAddress>John.Doe@company.com</emailAddress>
   <subMerchantId>1002</subMerchantId>
   <merchantIdentString>01100002</merchantIdentString>
 </originalSubMerchant>
</subMerchantCreateResponse>
```

3.9 Update Sub-Merchant

You can update the several items associated with a Sub-merchant. To update information associated with a Sub-merchant, you submit a subMerchantUpdateRequest message with the appropriate legalEntityId, subMerchantId, and the updated information.

NOTE:

If/when the bank account and routing number of the Sub-merchant changes, it is important that you notify us as soon as possible, so that our required records are always up to date.

Also, please consult your Implementation Consultant before updating the American Express Merchant Id (amexMid element) or the Discover Merchant Id (discoverConveyedMid element), since this information has direct impact on transaction processing.

You can update the following items:

- url
- customerServiceNumber
- hardCodedBillingDescriptor
- maxTransactionAmount
- bankRoutingNumber
- bankAccountNumber
- discoverConveyedMid
- eCheckCompanyName

- streetAddress1
- streetAddress2
- city
- stateProvince
- postalCode
- amexMid
- eCheckBillingDescriptor

TABLE 3-16 Resource Information

HTTP Methods	PUT
Call	/legalentity/legalEntityId/submerchant/subMerchantId
Request Format	XML
Response Format	XML
Rate Limited	Yes

TABLE 3-17 PUT Parameters

Parameter	Required or Optional	Description
legalEntityId	Required	The Id of the Legal Entity
subMerchantId	Required	The Id of the Sub-merchant

3.9.1 Update a Sub-Merchant

You must structure an Update Sub-merchant message as shown in the following examples:

```
<subMerchantUpdateRequest>
 <amexMid>Amex Merchant Id</amexMid>
 <discoverConveyedMid>Discover Merchant Id</discoverConveyedMid>
 <url>MyCompany.com</url>
 <customerServiceNumber>9785551234/customerServiceNumber>
 <hardCodedBillingDescriptor>Default Descriptor/hardCodedBillingDescriptor>
 <maxTransactionAmount>100000/maxTransactionAmount>
 <bankRoutingNumber>123456789</bankRoutingNumber>
 <bankAccountNumber>1234</bankAccountNumber>
 <pspMerchantId>123456</pspMerchantId>
 <purchaseCurrency>USD</purchaseCurrency>
 <address>My Company Name</address>
 contact>
 <disable>true or false</disable>
 <fraud>
 <amexAcquired>
 <eCheck>
 <subMerchantFunding>
 <taxAuthority>Name of Tax Authority</taxAuthority> (MCC 9311 only)
 <taxAuthorityState>State of Tax Authority</taxAuthorityState> (MCC 9311 only)
</subMerchantUpdateRequest>
```

Example: Update a Sub-Merchant Request

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<subMerchantUpdateRequest
   xmlns="http://payfac.vantivcnp.com/api/merchant/onboard">
```

```
<amexMid>1234567890</amexMid>
 <discoverConveyedMid>123456789012345/discoverConveyedMid>
 <url>http://merchantUrl</url>
 <customerServiceNumber>8407809000/customerServiceNumber>
 <hardCodedBillingDescriptor>Descriptor</hardCodedBillingDescriptor>
 <maxTransactionAmount>8400</maxTransactionAmount>
 <bankRoutingNumber>840123124/bankRoutingNumber>
 <bankAccountNumber>84012312415/bankAccountNumber>
 <pspMerchantId>785412365</pspMerchantId>
 <purchaseCurrency>USD</purchaseCurrency>
 <address>
   <streetAddress1>Street Address 1</streetAddress1>
   <streetAddress2>Street Address 2</streetAddress2>
   <city>City</city>
   <stateProvince>MA</stateProvince>
   <postalCode>01970</postalCode>
 </address>
 contact>
   <firstName>John</firstName>
   <lastName>Doe</lastName>
   <phone>9785552222</phone>
   <emailAddress>John.Doe@company.com</emailAddress>
 <fraud enabled="true"></fraud>
 <amexAcquired enabled="true"></amexAcquired>
 <eCheck enabled="true">
   <eCheckBillingDescriptor>9785552222</eCheckBillingDescriptor>
   <eCheckCompanyName>Your Company Name</eCheckCompanyName>
 </eCheck>
</subMerchantUpdateRequest>
```

3.9.2 Update a Sub-Merchant Response

The system replies to an Update Sub-merchant request with a generic response message. The structure of the response message is as follows:

```
<response>
  <transactionId>1234567890123456789</transactionId>
</response>
```

Example: Update Sub-Merchant Response

3.10 Retrieve Sub-Merchant

If you need to retrieve the latest information on file related to a Sub-merchant for verification purposes, you must perform a GET operation specifying the legalEntityId and subMerchantId. A retrieval request does not require an accompanying XML message.

NOTE:

If you are processing transactions only on the Vantiv eCommerce platform and using Dynamic Payout, after creating a Sub-merchant using a value of AUTO_GENERATE for the fundingSubmerchantId, retrieve the assigned fundingSubmerchantId value by submitting a Sub-merchant Retrieval Request.

TABLE 3-18 Resource Information

HTTP Methods	GET
Call	/legalentity/legalEntityId/submerchant/subMerchantId
Request Format	XML
Response Format	XML
Rate Limited	Yes

TABLE 3-19 GET Parameters

Parameter	Required or Optional	Description
legalEntityId	Required	The Id of the Legal Entity
subMerchantId	Required	The Id of the Sub-merchant

3.10.1 Retrieve Sub-Merchant Response

The retrieve Sub-merchant response message has the following structure:

<subMerchantRetrievalResponse>

```
<merchantName>My Company Name/merchantName>
     <amexMid>Amex Merchant Id</amexMid>
     <discoverConveyedMid>Discover Merchant Id</discoverConveyedMid>
    <url>MyCompany.com</url>
     <customerServiceNumber>9785551234/customerServiceNumber>
    <hardCodedBillingDescriptor>Default Descriptor<hardCodedBillingDescriptor>
    <maxTransactionAmount>100000/maxTransactionAmount>
    <purchaseCurrency>USD</purchaseCurrency>
    <merchantCategoryCode>MCC Number</merchantCategoryCode>
    <bankRoutingNumber>123456789</bankRoutingNumber>
     <bankAccountNumber>XXXXX-1234</pankAccountNumber>
    <pspMerchantId>012345</pspMerchantId>
    <fraud>
    <amexAcquired>
    <address>
     contact>
    <createCredentials>true</createCredentials>
    <eCheck>
    <subMerchantFunding>
    <settlementCurrency>USD</settlementCurrency>
    <subMerchantId>1</subMerchantId>
     <amexSellerId>1234567890</amexSellerId>
    <disabled>true or false</disabled>
    <transactionId>0123456789</teansactionId>
    <merchantIdentString>011000022</merchantIdentString>
     <credentials>
     <paypageCredentials>
    <updateDate>2013-04-30T11:18:23.127-04:00</updateDate>
   </subMerchantretrievalResponse>
Example: Retrieval Sub-Merchant Response
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<subMerchantRetrievalResponse</pre>
 xmlns="http://payfac.vantivcnp.com/api/merchant/onboard">
 <merchantName>Merchant Name
 <amexMid>1234567890</amexMid>
```

```
<discoverConveyedMid>123456789012345</discoverConveyedMid>
<url>http://merchantUrl.com</url>
<customerServiceNumber>8407809000/customerServiceNumber>
<hardCodedBillingDescriptor>billing
Descriptor</hardCodedBillingDescriptor>
<maxTransactionAmount>100000/maxTransactionAmount>
<purchaseCurrency>USD</purchaseCurrency>
<merchantCategoryCode>5964</merchantCategoryCode>
<bankRoutingNumber>840123124/bankRoutingNumber>
<bankAccountNumber>XXXXX-3124/bankAccountNumber>
<pspMerchantId>123456</pspMerchantId>
<fraud enabled="false"/>
<address>
 <streetAddress1>Street Address 1</streetAddress1>
 <streetAddress2>Street Address 2</streetAddress2>
 <city>City</city>
 <stateProvince>MA</stateProvince>
 <postalCode>01970</postalCode>
 <countryCode>USA</countryCode>
</address>
contact>
 <firstName>John</firstName>
 <lastName>Doe</lastName>
 <phone>9785552222</phone>
 <emailAddress>John.Doe@company.com</emailAddress>
<eCheck enabled="true">
<eCheckCompanyName>Your Company Name</eCheckCompanyName>
<eCheckBillingDescriptor>9785552222</eCheckBillingDescriptor>
</eCheck>
<subMerchantFunding enabled="true">
 <fundingSubmerchantId>12345678901234</fundingSubmerchantId>
</subMerchantFunding>
<subMerchantId>88899966655544433</subMerchantId>
<amexSellerId>12345678901234</amexSellerId>
<disabled>true or false</disabled>
<transactionId>82820200338801105/transactionId>
<merchantIdentString>011000022</merchantIdentString>
<credentials>
 <userName>UserName
 <password>Password</password>
<passwordExpirationDate>2017-10-03T11:18:23.127-04:00/passwordExpirationD
```

```
ate>
 </credentials>
 <paypageCredentials>
   <paypageCredential>
    <userName>PSPxm1V8</userName>
    <paypageId>Asd23thI974Jpk32</paypageId>
   </paypageCredential>
   <paypageCredential>
    <userName>PSPxm1V8Two</userName>
    <paypageId>odzhgcbQX3e3EaKV</paypageId>
   </paypageCredential>
   <paypageCredential>
    <userName>PSPxm1V8Three
    <paypageId>qmnpUBM6G47YJAcq</paypageId>
   </paypageCredential>
 </paypageCredentials>
 <updateDate>2017-09-30T11:18:23.127-04:00</updateDate>
</subMerchantRetrievalResponse>
```

3.11 Retrieve Allowed MCC List

You can retrieve the list of Merchant Category Codes, which are pre-approved for your use. When on-boarding a new Sub-merchant, a Payment Service Provider should only use one of the approved MCCs, appropriate to the Sub-merchant. To retrieve the allowed MCC list perform a GET operation, specifying the legalEntityId with the parameter mcc. In the case of a request to retrieve the allowed MCC list, the system does not require an accompanying XML message.

NOTE:

Should you anticipate the need for new or different MCCs beyond those approved, please contact your Customer Experience Manager or our Underwriting team for additional information.

TABLE 3-20 Resource Information

HTTP Methods	GET
Call	/mcc
Request Format	XML
Response Format	XML
Rate Limited	Yes

3.11.1 Retrieve MCC List Response

The structure of the response message is as follows:

```
<approvedMccResponse>
  <transactionId>1234567890123456789</transactionId>
  <approvedMccs>
       <approvedMcc>Merchant Category Code</approvedMcc>
</approvedMcCResponse>
```

Example: Retrieve MCC List Response

3.12 Status Codes and Error Messages

The HTTP Status Codes provide information about the success or failure or a transaction. In the case of a failure, an errorResponse message will contain additional information.

TABLE 3-21 HTTP Status Codes

Code	Description
200	Update/Retrieval/Disable is successful
201	Create call is successful
400	Invalid Request. For example:
	requested legal entity/sub merchant doesn't exist
	invalid field data (data is too long, required data is not sent)
	extra fields found in request
	attempt to create sub merchant for unapproved legal entity
	The response message will contain more details.
401	Failed Authentication
500	Internal error. Vantiv is investigating the issue. Please contact Vantiv Customer Support for additional information.
503	Returns for a soft decline or if the background checking service is unavailable. For a soft decline, please verify the submitted information and retry. If the service was unavailable, the Retry-After header contains a suggested retry time.

3.12.1 Error Response Message

The structure of the Error response message is as follows:

```
<errorResponse>
  <transactionId>1234567890123456789</transactionId>
  <errors>
      <error>Error Message</error>
      </errors>
</errorresponse>
```

Example: Error Response - Status Code 400

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<errorResponse>
  <transactionId>82820205828260878</transactionId>
```

```
<errors>
   <error>Error in Request:Legal Entity [Entity Name] has not been
 approved</error>
 </errors>
</errorResponse>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<errorResponse>
 <errors>
   <error>Error of [may not be null] on
 [subMerchantCreateRequest.merchantCategoryCode]</error>
   <error>Error of [size must be between 1 and 50] on
 [subMerchantCreateRequest.merchantName]</error>
 </errors>
</errorResponse>
Example: Error Response - Status Code 401
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<errorResponse>
 <errors>
   <error>You are not authorized to access this resource. Please check your
 credentials.
 </errors>
</errorResponse>
Example: error Response - Status Code 500
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<errorResponse>
 <errors>
   <error>Internal Error. This error has already been escalated to Vantiv
 for resolution. Please contact support with questions.</error>
 </errors>
```

</errorResponse>



4

PAYFAC API XML ELEMENTS

This chapter provides definitions for the elements used in PayFac API. This information is intended to assist you as you build the code necessary to submit messages creating and updating Legal Entities and Sub-merchants. Each section defines a particular element, its relationship to other elements (parents and children), as well as any attributes associated with the element.

For additional information on the structure of requests and responses using these elements, as well as XML examples, please refer to Chapter 3, "PayFac API Transaction Examples".

The XML elements defined in this chapter appear alphabetically.

4.1 acceptanceDateTime

The acceptanceDateTime element is a required child of the legalEntityAgreement element and defines date and time the party signing agreed to the Legal Entity Agreement.

Type = dateTime; **Format** = YYYY-MM-DDTHH:MM:SS+/-HH:MM

NOTE:	The +/-HH:MM portion of the dateTime format represents the offset from UTC time. For example, for Boston the value would be -05:00, meaning five hours behind UTC time.
	five hours behind UTC time.

Parent Elements:

legalEntityAgreement

Attributes:

None

Child Elements:

4.2 address

The parent element of several address related child elements.

Parent Elements:

legalEntityCreateRequest, legalEntityUpdateRequest, principal, legalEntityRetrievalResponse, subMerchantCreateRequest, subMerchantUpdateRequest, subMerchantRetrievalResponse

NOTE:

When you include the address element in a legalEntityUpdateRequest message, you can not update the countryCode child element.

Attributes:

None

Child Elements:

streetAddress1, streetAddress2, city, stateProvince, postalCode, countryCode

Example: Address Structure

```
<address>
    <streetAddress1>100 Main Street</streetAddress1>
    <streetAddress2>Suite 400</streetAddress2>
    <city>Lowell</city>
    <stateProvince>MA</stateProvince>
    <postalCode>01852</postalCode>
    <countryCode>USA</countryCode>
</address>
```

4.3 addressVerified

The addressVerified element is an optional child of the verificationIndicators element. A value of **true** indicates that the address was verified, while a value of **false** indicates that the address could not be verified.

Type = Boolean; **Allowed values** = true or false

Parent Ele	ments:
------------	--------

verificationIndicators

Attributes:

None

Child Elements:

4.4 agreements

The agreements element is an optional child of the

legalEntityAgreementRetrievalResponse message and contains a child element that define the agreements associated with the Legal Entity designated in the request. If this element is not returned in the response or is empty, the Legal Entity does not yet have any associated agreements. If the Legal Entity has multiple associated agreements, there will be multiple legalEntityAgreement child elements, one for each agreement.

Parent Elements:

legal Entity Agreement Retrieval Response

Attributes:

None

Child Elements:

legalEntityAgreement

Example: agreements Structure

4.5 agreementVersion

The agreementVersion element is a required child of the legalEntityAgreement element and defines the version of Legal Entity Agreement.

Type = String; **minLength** = 1; **maxLength** = 50

Parent Elements: legalEntityAgreement

Attributes:

None

Child Elements:

4.6 amexAcquired

The amexAcquired element is an optional child of the subMerchantCreateRequest and contains an attribute that indicates if the Sub-merchant is using the American Express Opt Blue program. The element is also a child of the subMerchantUpdateRequest and the subMerchantRetrievalResponse structures.

Parent Elements:

subMerchant Create Request, subMerchant Update Request, subMerchant Retrieval Response

Attributes:

Attribute Name	Туре	Required?	Description
enabled	Boolean	Yes	Defines if Amex Opt Blue processing is enabled for this sub-merchant. Valid values are either true or false .

Child Elements:

4.7 amexMid

The amexMid element is an optional child of the subMerchantCreateRequest element and specifies the American Express Merchant Id of the Sub-merchant. If you accept American Express transactions, you must submit the Merchant Id provided by American Express.

NOTE: You must supply an American Express Merchant Id if you plan to process American express payments.

Type = String; **minLength** = 1; **maxLength** = 15

Parent Elements:

subMerchant Create Request, subMerchant Update Request, subMerchant Retrieval Response

Attributes:

None

Child Elements:

4.8 amexSellerId

The amexSellerId element is an optional child of the subMerchantCreateResponse and the subMerchantRetrievalResponse elements. This value is the American Express Seller Id assigned to the Sub-merchant. We return this value to you for your use when you communicate Sub-merchant profile information to American Express. We also includes this information in AmEx transactions, when we submit them for approval.

NOTE: Use of the American Express Seller Id becomes mandatory in October of 2014.

Type = String; minLength = N/A; maxLength = 32

Parent Elements:

subMerchantCreateResponse, subMerchantRetrievalResponse

Attributes:

None

Child Elements:

4.9 annualCreditCardSalesVolume

The annualCreditCardSalesVolume element is a required child of the legalEntityCreateRequest element and defines the approximate annual credit card sales expected to be processed under this Legal Entity, in USD.

Type = Integer; minLength = 1; maxLength = 23

Parent Elements:

legal Entity Create Request, legal Entity Retrieval Response, legal Entity Update Request

Attributes:

None

Child Elements:

4.10 approvedMcc

The approvedMcc element is a child of the approvedMccs element a defines an approved Merchant Category Code for a Legal Entity/Sub-merchant.

Parent Elements:		
approvedMccs		
Attributes:		
None		
Child Elements:		
None		

4.11 approvedMccResponse

The approvedMccResponse element is the parent element for the XML message returned by the platform in response to a Approved MCC List retrieval request.

Parent Elements:

None

Attributes:

Attribute Name	Туре	Required?	Description
xmlns	String	Yes	Defines the URI of the schema definition. This is a fixed location you must specify it as: http://payfac.vantivcnp.com/api/merchant/onboard minLength = N/A maxLength = 50

Child Elements:

transactionId, approvedMccs

4.12 approvedMccs

The approvedMccs element is a required child of the approvedMccResponse message and contains a child element that define the list of Merchant Category Codes approved for use with Legal Entity/Sub-merchant.

Parent Elements:

approved MccResponse

Attributes:

None

Child Elements:

approvedMcc

Example: approvedMccs Structure

```
<approvedMccs>
<approvedMcc>4890</approvedMcc>
<approvedMcc>4891</approvedMcc>
<approvedMcc>4892</approvedMcc>
...
<approvedMcc>4899</approvedMcc>
</approvedMcc>4899</approvedMcc>
</approvedMcc>
```

4.13 backgroundCheckDecisionNotes

The backgroundCheckDecisionNotes element is an optional child of the backgroundCheckResults element and provides additional information about the background check preformed by us.

NOTE:	If the Legal Entity was declined after a manual review, this element will contain information relating to the reason for the decline.
Type = String	; minLength = N/A; maxLength = 2000
Parent Elem	ents:

Attributes:

None

Child Elements:

background CheckResults

4.14 backgroundCheckFields

The backgroundCheckFields element has multiple uses in the schema. This element is an optional child of the legalEntityUpdateRequest element, where it designates information about the Legal Entity. The element is also an optional child of the principal element, where it designates information about the Principal of the Legal Entity.

Parent Elements:

legalEntityResponse, principal

Attributes:

None

Child Elements (when used in legalEntityUpdateRequest):

All Optional: legalEntityName, legalEntityType, taxId

Example: backgroundCheckFields Structure when used in legalEntityUpdateRequest

```
<backgroundCheckFields>
  <legalEntityName>XYZ Co.</legalEntityName>
  <legalEntityType>LIMITED_LIABILITY_COMPANY</legalEntityType>
  <taxId>012345678</taxId>
</backgroundCheckFields>
```

Child Elements (when used in principal):

All Optional: firstName, lastName, ssn, dateOfBirth, driversLicense, driversLicenseState,

Example: backgroundCheckFields Structure when used in principal

```
<backgroundCheckFields>
  <firstName>John</firstName>
  <lastName>Doe</lastName>
  <ssn>012345678</ssn>
  <dateOfBirth>1958-12-12</dateOfBirth>
   <driversLicense>S123456789</driversLicense>
  <driversLicenseState>MA</driversLicenseState>
</backgroundCheckFields>
```

4.15 backgroundCheckResults

The backgroundCheckResults element is an optional child of both the legalEntityCreateResponse message and the legalEntityRetrievalResponse message. It contains child elements that provide scores and other information from the background checks performed by us.

Parent Elements:

legalEntityResponse, legalEntityRetrievalResponse

Attributes:

None

Child Elements:

business, principal, businessToPrincipalAssociation, backgroundCheckDecisionNotes, bankruptcyData, lienResult

4.16 bankAccountNumber

The bankAccountNumber element is a required child of the subMerchantCreateRequest element and the subMerchantRetrievalResponse, where it specifies the account number of the merchant account used to fund the Sub-merchant. The element is also an optional child of the subMerchantUpdateRequest element.

NOTE:

When returned in the submerchantRetrievalResponse, Vantiv masks the first five characters of the bankAccountNumber, as shown in the example below.

<bankAccountNumber>XXXXX-1234/bankAccountNumber>

Type = String; minLength = 1; maxLength = 50

Parent Elements:

subMerchantCreateRequest, subMerchantUpdateRequest, subMerchantRetrievalResponse

Attributes:

None

Child Elements:

4.17 bankRoutingNumber

The bankRoutingNumber element is a required child of the subMerchantCreateRequest element and specifies the routing number of the merchant account used to fund the Sub-merchant. The element is also an optional child of the subMerchantUpdateRequest element.

The element is also an optional child of the subMerchantUpdateRequest element.

Type = String; minLength = 1; maxLength = 50

Parent Elements:

subMerchant Create Request, subMerchant Update Request, subMerchant Retrieval Response

Attributes:

None

Child Elements:

4.18 bankruptcyCount

The bankruptcyCount element is an optional child of the bankruptcyData element and specifies the count of bankruptcy records found.

Type = int; totalDigits = N/A

Parent Elements:
bankruptcyData

Attributes:

Child Elements:

None

4.19 bankruptcyData

The bankruptcyData element is an optional child of the backgroundCheckResults element. It contains child elements that provides information about bankruptcy history of the company from the background checks performed by us.

Parent Elements:

backgroundCheckResults

Attributes:

None

Child Elements:

bankruptcyType, bankruptcyCount, companyName, streetAddress1, streetAddress2, city, state, zip, zip4, filingDate

Example: bankruptcyData Structure

bankruptcyType 4.20

The bankruptcyType element is an optional child of the bankruptcyData element and

specifies the sub-type of bankruptcy discovered during the background check process. **Type** = String; **minLength** = N/A; **maxLength** = 50 **Parent Elements:**

Attributes:

bankruptcyData

None

Child Elements:

4.21 business

The business element is a child of the backgroundCheckResults element and contains child elements providing the results of background checks performed on the Legal Entity.

Parent Elements:

backgroundCheckResults

Attributes:

None

Child Elements:

verificationResult

Example: business Structure

```
<business>
 <verificationResult>
   <overallScores>
     <score>Overall results for Business</score>
     <description>Text Description of Score</description>
   </overallScores>
   <nameAddressTaxIdAssociation>
     <code>Name_Address_TIN_info</code>
     <description>Text Description of Code</description>
   </nameAddressTaxIdAssociation>
   <nameAddressPhoneAssociation>
     <code>Name_Address_Phone_info</code>
     <description>Text Description of Code</description>
   </nameAddressPhoneAssociation>
   <verificationIndicators>
     <nameVerified>true or false/nameVerified>
     <addressVerified>true or false</addressVerified>
     <cityVerified>true or false</cityVerified>
     <zipVerified>true or false</zipVerified>
     <phoneVerified>true or false</phoneVerified>
     <taxIdVerified>true or false</taxIdVerified>
```

```
<
```

4.22 businessToPrincipalAssociation

The businessToPrincipalAssociation element is an optional child of the verificationResult element and contains child elements providing background check information about how tightly coupled the principal is to the Legal Entity.

Parent Elements:

background CheckResults

Attributes:

None

Child Elements:

score, description

Example: businessToPrincipalAssociation Structure

<businessToPrincipalAssociation>
 <score>Results for Business to Principal</score>
 <description>Text Description of Score</description>
</businessToPrincipalAssociation>

4.23 city

The city element defines the city of either the Legal Entity, principal, or Sub-merchant. This element is always required for a Legal Entity and is also required for a principal if the legalEntityType is Sole Proprietorship. It is optional for all other legalEntityType values and for Sub-merchants.

The city element is also an optional child of both the bankrupcyData and lienResults elements, where it specifies the city of the company with bankruptcy or lien information.

```
Type = String; minLength = 1; maxLength = 20 (for address)
Type = String; minLength = 1; maxLength = 30 (for bankruptcyData or lienResult)
```

Parent Elements:

address, bankruptcyData, lienResult

Attributes:

None

Child Elements:

4.24 cityVerified

The cityVerified element is an optional child of the verificationIndicators element, when verificationIndicators is a descendant of the business element. A value of **true** indicates that the city (of the business) was verified, while a value of **false** indicates that the city could not be verified.

Type = Boolean; **Allowed values** = true or false

Parent Elements:

verificationIndicators

Attributes:

None

Child Elements:

4.25 code

code

The code element is used in several locations and its meaning depends upon the parent element. In each case the element value is selected from a set of enumerated values.

Type = String (Enum); minLength = N/A; maxLength = N/A

Parent Elements:

nameAddressPhoneAssociation, nameAddressTaxIdAssociation, riskIndicator, nameAddressSsnAssociation,

Attributes:

None

Child Elements:

None

Enumerations (as a child of nameAddressTaxIdAssociation):

Enumeration	Description
NOT_VERIFIED	Supplied information could not be not verified.
WRONG_TAX_ID	Supplied Tax Id is wrong.
NAME_OR_ADDRESS	The name or the address is verified.
BAD_NAME	The name as submitted can not be verified.
BAD_ADDRESS	The address as submitted can not be verified.
MISSING_ADDRESS	The address information is missing from the submitted data.
NAME_AND_ADDRESS_BAD_TAX_ID	Name and address verified; bad Tax Id
NAME_AND_ADDRESS_NO_TAX_ID	Name and address verified; no Tax Id information
NAME_ADDRESS_TAX_ID	Name, address, and Tax Id verified.

Enumerations (as a child of (business) nameAddressPhoneAssociation):

Enumeration	Description
NOT_VERIFIED	Supplied information could not be not verified.

Enumeration	Description
WRONG_PHONE	Supplied Phone number is wrong.
NAME_OR_ADDRESS	The name or the address is verified.
BAD_NAME	The name, as submitted, can not be verified.
BAD_ADDRESS	The address, as submitted, can not be verified.
MISSING_ADDRESS	The address information is missing from the submitted data.
NAME_AND_ADDRESS_BAD_PHONE	Name and address verified; bad phone number
NAME_AND_ADDRESS_NO_PHONE	Name and address verified; no phone number submitted
NAME_ADDRESS_PHONE	Name, address, and phone verified.

Enumerations (as a child of nameAddressSsnAssociation):

Enumeration	Description
NOTHING	Supplied information could not be not verified.
WRONG_SSN	Supplied SSN is wrong.
FIRST_LAST	First and last name verified
FIRST_ADDRESS	First name and address.
FIRST_SSN	First name and SSN verified.
LAST_ADDRESS	Last name and address verified.
ADDRESS_SSN	Address and SSN verified.
LAST_SSN	Last name and SSN verified.
FIRST_LAST_ADDRESS	First name, last name, and address verified.
FIRST_LAST_SSN	First name, last name, and SSN verified.
FIRST_ADDRESS_SSN	First name, address, and SSN verified.
LAST_ADDRESS_SSN	Last name, address, and SSN verified.
FIRST_LAST_ADDRESS_SSN	First name, last name, address, and SSN verified.

Enumerations (as a child of (principal) nameAddressPhoneAssociation):

Enumeration	Description
NOTHING	Supplied information could not be not verified.
WRONG_PHONE	Supplied phone number is wrong.
FIRST_LAST	First and last name verified
FIRST_ADDRESS	First name and address.
FIRST_PHONE	First name and phone number verified.
LAST_ADDRESS	Last name and address verified.
ADDRESS_PHONE	Address and phone number verified.
LAST_PHONE	Last name and phone number verified.
FIRST_LAST_ADDRESS	First name, last name, and address verified.
FIRST_LAST_PHONE	First name, last name, and phone number verified.
FIRST_ADDRESS_PHONE	First name, address, and phone number verified.
LAST_ADDRESS_PHONE	Last name, address, and phone number verified.
FIRST_LAST_ADDRESS_PHONE	First name, last name, address, and phone number verified.

Enumerations (as a child of riskIndicator):

Enumeration	Description
UNKNOWN	Supplied information could not be not verified.
SSN_DECEASED	The submitted SSN is reported as deceased.
SSN_PRIOR_TO_DOB	The submitted SSN was issued prior the submitted DOB.
SSN_ADDRESS_PHONE_NOT_MATC	The submitted name and SSN have been verified, but the address and phone do not match.
SSN_INVALID	The submitted SSN is invalid.
PHONE_NUMBER_DISCONNECTED	The submitted phone number may be disconnected.
PHONE_NUMBER_INVALID	The submitted phone number is invalid.
PHONE_NUMBER_PAGER	The submitted phone number is a pager number.
PHONE_NUMBER_MOBILE	The submitted phone number is a mobile number.

Enumeration	Description
ADDRESS_INVALID	The submitted address may be invalid according to postal specifications.
ZIP_BELONGS_POST_OFFICE	The submitted zip code belongs to a post office box.
ADDRESS_INVALID_APARTMENT_D ESIGNATION	The submitted address has an invalid apartment designation.
ADDRESS_COMMERCIAL	The submitted address is a transient commercial or institutional address.
PHONE_NUMBER_COMMERCIAL	The submitted phone number matches a transient commercial or institutional address.
PHONE_NUMBER_ZIP_INVALID	The submitted phone number and zip code combination is invalid.
UNABLE_TO_VERIFY_NAS	Unable to verify name, address, and SSN.
UNABLE_TO_VERIFY_ADDRESS	Unable to verify address.
UNABLE_TO_VERIFY_SSN	Unable to verify SSN.
UNABLE_TO_VERIFY_PHONE	Unable to verify the phone number.
UNABLE_TO_VERIFY_DOB	Unable to verify the date of birth.
SSN_MISKEYED	The submitted SSN may have been miskeyed.
ADDRESS_MISKEYED	The submitted address may have been miskeyed.
PHONE_NUMBER_MISKEYED	The submitted phone number may have been miskeyed.
NUMBER_MATCHES_OFAC	The submitted name matches the Office of Foreign Assets Control (OFAC) file.
UNABLE_TO_VERIFY_NAME	Unable to verify name.
SSN_MATCHES_MULTI_NAMES	The SSN is associated with multiple last names.
SSN_RECENTLY_ISSUED	The SSN is recently issued.
ZIP_CORPORATE_MILITARY	The submitted zip code is a corporate-only, military zip code.
DLL_INVALID	The submitted driver's license number is invalid for the submitted state.
NAME_ADDRESS_MATCH_BANKRU PTCY	The submitted name and address match a bankruptcy.
PHONE_AREA_CODE_CHANGING	The submitted phone number area code is changing.
WORK_PHONE_PAGER	The submitted work phone is a pager number.
UNABLE_TO_VERIFY_FIRST_NAME	Unable to verify the first name.

Enumeration	Description
PHONE_ADDRESS_DISTANT	The submitted phone number and address are physically distant (>10 miles).
ADDRESS_MATCHES_PRISON	The submitted address match a prison address.
SSN_LAST_NAME_NO_MATCH	The submitted last name does not associate with the submitted SSN.
SSN_FIRST_NAME_NO_MATCH	The submitted first name does not associate with the submitted SSN.
WORK_HOME_PHONE_DISTANT	The submitted home phone number and work phone number are physically distant (>100 miles)
NAME_ADDRESS_TIN_MISMATCH	The submitted business name and address match a Tax Identification Number (TIN) different than the submitted TIN.
WORK_PHONE_INVALID	The submitted work phone is potentially invalid.
WORK_PHONE_DISCONNECTED	The submitted work phone is potentially disconnected.
WORK_PHONE_MOBILE	The submitted work phone is a mobile number.
ADDRESS_RETURNS_DIFF_PHONE	The submitted address returns a different phone number.
SSN_LNAME_NOT_MATCHED_FNAM E_MATCHED	The submitted SSN is associated with the same first name, but a different last name.
PHONE_RESIDENTIAL_LISTING	The submitted phone number is associated with a residential listing.
SINGLE_FAMILY_DWELLING	The submitted business address may be a residential address (single-family dwelling).
SSN_NOT_FOUND	The submitted SSN is not found in the public record.
SSN_BELONGS_TO_DIFF_NAME_AD DRESS	The submitted SSN is associated with a different name and address.
PHONE_BELONGS_TO_DIFF_NAMEADDRESS	The submitted phone number is associated with a different name and address.
NAME_ADDRESS_UNLISTED	The submitted name and address are associated with an unlisted phone number.
NAME_MISKEYED	The submitted name may have been miskeyed.
NAME_MISSING	The name was missing.
ADDRESS_MISSING	The address was missing.
SSN_MISSING	The SSN was missing.
PHONE_NUMBER_MISSING	The phone number was missing.
DOB_MISSING	The date of birth was missing.

Enumeration	Description
NAME_ADDRESS_RETURN_DIFF_P HONE	The submitted name and address return a different phone number.
DOB_MISKEYED	The submitted date of birthday have been miskeyed.
SSN_NON_US_CITIZEN	The submitted SSN was issued to a non-US citizen.
ALTERNATE_BUSINESS_NAME_FOU ND	The submitted business name not found; alternate business name found
DBA_MATCH_PUBLIC_RECORDS	DBA name matched public records
SSN_RECENT	The submitted SSN was issued in the last three years.
SSN_TOO_OLD	The submitted SSN was issued after age five (post-1990).
TIN_NAME_ADDRESS_MISMATCH	The submitted Tax Identification Number (TIN) is associated with a different business name and address.
BUSINESS_NOT_IN_GOOD_STANDI NG	The submitted business is not in good standing per the Secretary of State.
NAME_ADDRESS_MATCH_JUDGME NT	The submitted name and address match a judgement and/or lien filing.
BUSINESS_INACTIVE	The submitted business is inactive per the Secretary of State.
NO_UPDATE_IN_LAST_THREE_YEARS	No update to the business record in the last three years.
SSN_NOT_PRIMARY	The submitted SSN is not the primary SSN for the submitted identity.
ZIP_CORP_ONLY	The submitted zip code is a corporate only zip code.
ADDRESS_MISMATCH	The is an address mismatch between city/state and zip code.
DL_DIFFERENT	A different driver's license number was found for the submitted applicant.
DL_NOT_FOUND	The submitted driver's license number was not found.
DL_MISKEYED	The submitted driver's license number may have been miskeyed.
UNABLE_TO_VERIFY_DL	Unable to verify the submitted driver's license number.
SSN_INVALID_SSA	The submitted SSN is possibly randomly issued by the SSA, but invalid when first associated with the submitted identity.
SSN_IS_ITIN	The submitted SSN is an Individual Taxpayer Identification Number (ITIN).
SSN_MULTI_IDENTITY	Multiple SSNs reported for applicant

Enumeration	Description
ZIP_MILITARY	The submitted zip code is a military only zip code.
MULTIPLE_SSN_FOUND	Multiple SSNs reported for the applicant.
ADDRESS_DISCREPANCY	Potential address discrepancy - the submitted address may be a previous address.
ADDRESS_PO_BOX	The primary submitted address is a P.O. Box.
SSN_RANDOM_SSA	The submitted SSN is possibly randomly issued by the SSA.
ADDRESS_MISMATCH_SECONDARY	Address mismatch on secondary address range.
NAME_MATCHES_NON_OFAC	The submitted name matches one or more of the non-OFAC global watchlist.
UNABLE_TO_VERIFY_ZIP_CODE	Unable to verify zip code.
IP_ADDRESS_UNKNOWN	The submitted IP Address is unknown.
IP_ADDRESS_DIFFERENT_STATE	The submitted IP Address is assigned to a different State than the Bill-To state.
IP_ADDRESS_DIFFERENT_ZIP	The submitted IP Address is assigned to a different zip code than the Bill-To zip code.
IP_ADDRESS_DIFFERENT_PHONE	The submitted IP Address is assigned to a different area code than the Bill-To phone number.
IP_ADDRESS_DOMAIN_UNKNOWN	The submitted IP Address second level domain is unknown.
IP_ADDRESS_NOT_ASSIGNED_TO_ USA	The submitted IP Address is not assigned to the United States.
IP_ADDRESS_NON_ROUTABLE	The submitted IP Address is non-routable over the internet.

4.26 companyName

The companyName element is an optional child of both the lienResult and bankruptcyData elements and specifies the name of the company to which the lien or bankruptcy information applies.

Type = String; $minLength = 1$; $maxLength = 120$
Parent Elements:
bankruptcyData, lienResult
Attributes:
None
Child Elements:
None

4.27 contactPhone

The contactPhone element is an optional child of the legalEntityCreateRequest, legalEntityUpdateRequest, and the principal elements, as well as the legalEntityRetrievalResponse. It defines the contact phone number for the parent element.

Type = String; **minLength** = 1; **maxLength** = 10

Parent Elements:

 $legal Entity Create Request,\ principal,\ legal Entity Update Request,\ legal Entity Retrieval Response$

Attributes:

None

Child Elements:

None

4.28 countryCode

The countryCode element is a required child of the address element that defines the country of either the Legal Entity, the principal, or Sub-merchant.

Type = String; $minLength = 2$; $maxLength = 3$
Parent Elements:
address
Attributes:
None
Child Elements:

4.29 createCredentials

The createCredentials element is an optional child of the submerchantCreateRequest element and indicates if the system should create login credentials (username, password, and paypageId, if necessary) for this Sub-merchant. Submit a value of **true** with each subMerchantCreateRequest, only if each Sub-merchant requires individual credentials for transaction submission.

Type = Boolean; **Possible Values** = true or false

Parent Elements:

 $subMerchant Create Request, \, subMerchant Retrieval Response \,$

Attributes:

None

Child Elements:

4.30 credentials

The credentials element is an optional child of the subMerchantCreateResponse element and contains child elements that define the username and password for use by the sub-merchant, as well as the expiration date of the password.

Parent Elements:

subMerchant Create Response, subMerchant Retrieval Response

Attributes:

None

Child Elements:

userName, password, passwordExpirationDate

Example: credentials

```
<credentials>
  <userName>UserName</userName>
  <password>Password</password>
   <passwordExpirationDate>YYYY-MM-DDTHH:MM:SS+/-HH:MM</passwordExpirationDate>
</credentials>
```

4.31 customerServiceNumber

The customerServiceNumber element is a required child of the subMerchantCreateRequest element and specifies the customer service phone number of the Sub-merchant. It is also a child of the subMerchantUpdateRequest and the subMerchantRetrievalResponse.

Type = String; **minLength** = 1; **maxLength** = 13

Parent Elements:

subMerchant Create Request, subMerchant Update Request, subMerchant Retrieval Response

Attributes:

None

Child Elements:

4.32 dateOfBirth

The dateOfBirth element is a required child of the principal element and specifies the date of birth of the principal.

of birth of the principal.

Type = Date; Format = yyyy-mm-dd

Parent Elements:

principal

Attributes:

None

Child Elements:

4.33 decisionDate

The decisionDate element is and optional child of the legalEntityRetrievalResponse element. The value represents the date/time a decision was made for a Legal Entity that was in manual review. This element is returned only for Legal Entities that underwent manual review.

Type = dateTime; **Format** = YYYY-MM-DDTHH:MM:SS+/-HH:MM

NOTE:

The +/-HH:MM portion of the dateTime format represents the offset from UTC time. For example, for Boston the value would be -05:00 (or -04:00 depending upon daylight savings time), meaning five hours behind UTC time.

Parent Elements:

legalEntityRetrievalResponse

Attributes:

None

Child Elements:

4.34 description

The description element is a child of multiple elements and provides a text description of the accompanying code or score.

Type = String; **minLength** = N/A; **maxLength** = varies from 60 to 200 depending upon parent

Parent Elements:

overallScore, nameAddressTaxIdAssociation, nameAddressPhoneAssociation, riskIndicator, nameAddressSsnAssociation, businessToPrincipalAssociation

nameAddressSsnAssociation, businessToPrincipalAssociation	
Attributes:	

Child Elements:

None

4.35 disable

The disable element is an optional child of the subMerchantUpdateRequest element and allows you to disable an existing Sub-merchant. A value of **true** indicates that you want to changes the status of the Sub-merchant to disabled. The default value is **false**.

Type = Boolean; **Allowed values** = true or false

Parent Elements:

subMerchant Update Request

Attributes:

None

Child Elements:

4.36 disabled

The disabled element is an optional child of the subMerchantRetrievalResponse element and indicates the status of the Sub-merchant. A value of **true** indicates that the Sub-merchant is currently disabled, while a value of **false** indicates that the Sub-merchant is enabled.

Type = Boolean; **Allowed values** = true or false

Parent Elements:

sub Merchant Retrieval Response

Attributes:

None

Child Elements:

4.37 discoverConveyedMid

The discoverConveyedMid element is an optional child of the subMerchantCreateRequest element and specifies the Discover Merchant Id of the Sub-merchant.

NOTE:

If you have a direct relationship and are funded by Discover for Discover transaction, then you are a Discover conveyed merchant and for proper processing, must supply the merchant ID assigned to you by Discover.

Type = String; **minLength** = 1; **maxLength** = 15

Parent Elements:

subMerchant Create Request, subMerchant Update Request, subMerchant Retrieval Response

Attributes:

None

Child Elements:

4.38 dobVerified

The dobVerified element is an optional child of the verificationIndicators element, when verificationIndicator is a descendant of the **principal** element. A value of **true** indicates that the Date of Birth of the principal was verified, while a value of **false** indicates that the DOB could not be verified.

Type = Boolean; **Allowed values** = true or false

Parent Elements:

verificationIndicators

Attributes:

None

Child Elements:

4.39 doingBusinessAs

The doingBusinessAs element is an optional child of the legalEntityCreateRequest element and specifies an alternate name of the Legal Entity.

Type = String; minLength = 1; maxLength = 60

Parent Elements:

 $legal Entity Create Request, \ legal Entity Update Request$

Attributes:

None

Child Elements:

None

4.40 driversLicense

The driversLicense element is an optional child of the principal element and specifies the driver's license number of the principal.

driver's needs number of the principal.
Type = String; minLength = 1; maxLength = 25
Parent Elements:
principal
Attributes:
None
Child Elements:

4.41 driversLicenseState

The driversLicenseState element is an optional child of the principal element and specifies the state that issued the driver's license of the principal.

Type = String; $minLength = 1$; $maxLength = 2$			
Parent Elements:			
principal			
Attributes:			
None			
Child Elements:			
None			

4.42 eCheck

The eCheck element is an optional child of the subMerchantCreateRequest and contains child elements that define the eCheckCompanyName and eCheckBillingDescriptor.

Parent Elements:

subMerchant Create Request, subMerchant Update Request, subMerchant Retrieval Response

Attributes:

Attribute Name	Туре	Required?	Description
enabled	Boolean	Yes	Defines if eCheck processing is enabled for this merchant. Valid values are either true or false .

Child Elements:

eCheckBillingDescriptor, eCheckCompanyName

Example: eCheck Structure

```
<eCheck enabled="true">
   <eCheckCompanyName>ABA Company</eCheckCompanyName>
   <eCheckBillingDescriptor>9785551111</eCheckBillingDescriptor>
</eCheck>
```

4.43 eCheckBillingDescriptor

The eCheckBillingDescriptor element is an optional child of the subMerchantCreateRequest, and the subMerchantUpdateRequest elements. It specifies the Billing Descriptor used for eCheck Transaction. You should specify this element when the Sub-Merchant is enabled for eCheck transaction.

NOTE:

Typically, you use this field to submit the company phone number. You use the eCheckCompanyName field to submit the company name, which is the equivalent of a Billing Descriptor on a credit card transaction.

Type = String; minLength = 1; maxLength = 10

Parent Elements:

eCheck

Attributes:

None

Child Elements:

4.44 eCheckCompanyName

The eCheckCompanyName element is an optional child of the subMerchantCreateRequest and the subMerchantUpdateRequest elements. It specifies the Company Name used for eCheck Transaction. You should specify this element when the Sub-Merchant is enabled for eCheck transaction.

Type = String; $minLength = 1$; $maxLength = 16$
Parent Elements:
eCheck
Attributes:
None
Child Elements:
None

4.45 emailAddress

The emailAddress element is an optional child of both the principal and legalEntityPrincipalUpdatable elements, where it specifies the email address of the principal, and a required child of the primaryContact element, where it specifies the email address of the Sub-merchant's primary contact.

Type = String; minLength = 1; maxLength = 100

Parent Elements:

principal, primaryContact

Attributes:

None

Child Elements:

4.46 error

The error element is a child of the errors element and is a text description of the error preventing the processing of the transaction.

Type = String; minLength = N/A; maxLength = 512

Parent Elements:

errors

Attributes:

None

Child Elements:

4.47 errorResponse

The errorResponse element is the parent element for the XML message returned by the platform for a transaction that the system cannot process due to a validation, authentication, or communication error.

Parent Elements:

None

Attributes:

Attribute Name	Туре	Required?	Description
xmlns	String	Yes	Defines the URI of the schema definition. This is a fixed location and you must specify it as: http://payfac.vantivcnp.com/api/merchant/onboard minLength = N/A maxLength = 50

Child Elements:

transactionId, errors

4.48 errors

The errors element is a child of the errorResponse element and through its child, error, provides a text description of the error preventing the processing of the transaction.

provides a tent description of the error providing the providents of the transmission	
Parent Elements:	
errorResponse	
Attributes:	
None	
Child Elements:	
error	

4.49 feeProfile

The feeProfile element is an optional child of the subMerchantFunding element and defines the Fee Profile used for Sub-merchant fund disbursements using Managed Payout.

Type = String; **minLength** = 1; **maxLength** = 150

Note:	You must create the Fee Profiles using the PayFac Portal.						
Parent Elem	ents:						
subMerchantF	Punding						

Attributes:

None

Child Elements:

4.50 filingDate

The filingDate element is an optional child of both the bankruptcyData element and the lienResult element. It specifies the date of either the most recent lien or most recent bankruptcy filing, depending upon where used.

Type = Date; Format = yyyy-mm-dd

Parent Elements:

bankruptcyData, lienResult

Attributes:

None

Child Elements:

4.51 firstName

The firstName element is a required child of both the principal element, where it specifies the first name of the principal, and the primaryContact element, where it specifies the first name of the Sub-merchant's primary contact.

Type = String; minLength = 1; maxLength = 20

Parent Elements:

principal, primaryContact, legalEntityPrincipalCreateResponse

Attributes:

None

Child Elements:

4.52 fraud

The fraud element is an optional child of both the subMerchantCreateRequest and the subMerchantUpdateRequest. It defines whether fraud filters are enabled for the Sub-merchant.

Parent Elements:

subMerchant Create Request, subMerchant Update Request, subMerchant Retrieval Response

Attributes:

Attribute Name	e Name Type Required? Descript		Description
enabled	Boolean	Yes	Defines if fraud Filters are enabled for this Sub-merchant. Valid values are either true or false .

Child Elements:

4.53 fundingSubmerchantId

The fundingSubmerchantId element is an optional child of the subMerchantFunding element (required if you use Dynamic Payout) and specifies the funding Id used to identify the Sub-merchant in funding instructions. (Also see, Retrieve Sub-Merchant on page 70)

IMPORTANT: If you are processing transactions on both the Vantiv Core and Vantiv eCommerce platforms, submit the Sub-merchant Id provided for use on the Vantiv Core platform.

If you are processing transactions only on the Vantiv eCommerce platform, submit a value of AUTO_GENERATE. To retrieve the fundingSubmerchantId value for use in Funding Instructions, submit a Sub-merchant Retrieval Request. (Please refer to the Vantiv cnpAPI Reference Guide for additional information about Funding Instructions.)

Type = String; minLength = 1; maxLength = 32

Parent Elements:
subMerchantFunding

Attributes:
None

Child Elements:

Document Version: 2.0 — API Release: 13.0

4.54 hardCodedBillingDescriptor

The hardCodedBillingDescriptor element is a required child of the subMerchantCreateRequest element and specifies the Billing descriptor that will be hard-coded into the profile of the Sub-merchant. This default value appears on the customer's billing statement unless overridden by the submission of a soft billing descriptor in the Authorization/Sale transaction.

IMPORTANT: If the PayFac is configured with a forced prefix, the hardCodedBillingDescriptor value you submit for the Sub-merchant must include the prefix.

Type = String; **minLength** = 1; **maxLength** = 25

Parent Elements:

subMerchant Create Request, subMerchant Update Request, subMerchant Retrieval Response

Attributes:

None

Child Elements:

4.55 hasAcceptedCreditCards

The hasAcceptedCreditCards element is a required child of the legalEntityCreateRequest element and indicates if this Legal Entity has accepted credit cards in the past.

Type = Boolean; **Possible Values** = true or false

Parent Elements:

legal Entity Create Request, legal Entity Retrieval Response, legal Entity Update Request

Attributes:

None

Child Elements:

4.56 lastName

The lastName element is a required child of both the principal element, where it specifies the last name (surname) of the principal, and the primaryContact element, where it specifies the last name (surname) of the Sub-merchant's primary contact.

Type = String; minLength = 1; maxLength = 20

Parent Elements:

principal, primaryContact, legalEntityPrincipalCreateResponse

Attributes:

None

Child Elements:

4.57 legalEntityAgreement

The legalEntityAgreement element is a required child of the legalEntityAgreementCreateRequest and contains child elements that provide information about the Legal Entity Agreement. It is also an optional child of the agreements element, where it provides information about agreements associated with the designated Legal Entity in a Legal Entity Agreement Retrieval request. You should use this transaction type only if your PayFac Account Manager directs you to do so.

Parent Elements:

legalEntityAgreementCreateRequest, agreements

Attributes:

None

Child Elements:

Required: legalEntityAgreementType, agreementVersion, userFullName, userSystemName, acceptanceDateTime

Optional: userIPAddress, manuallyEntered,

Example: legalEntityAgreement Structure

```
<legalEntityAgreement>
  <legalEntityAgreementType>MERCHANT_AGREEMENT</legalEntityAgreementType>
  <agreementVersion>Agreement Version Number</agreementVersion>
  <userFullName>Full Name of Signer</userFullName>
  <userSystemName>User Name of Signer of PayFac System</userSystemName>
  <userIPAddress>IP Address of Signer's system</userIPAdress>
  <manuallyEntered>true or false</manuallyEntered>
  <acceptanceDateTime>Date and Time Agreement Signed</acceptanceDateTime>
</legalEntityAgreement>
```

4.58 legalEntityAgreementCreateRequest

The legalEntityAgreementCreateRequest element is the parent element for the XML message used to create a Legal Entity Agreement. You should use this transaction type only if your PayFac Account Manager directs you to do so.

Parent Elements:

None

Attributes:

Attribute Name	Туре	Required?	Description
xmlns	String	Yes	Defines the URI of the schema definition. This is a fixed location and you must specify it as: http://payfac.vantivcnp.com/api/merchant/onboard minLength = N/A maxLength = 50

Child Elements:

Required: legalEntityAgreement

4.59 legalEntityAgreementCreateResponse

The legalEntityAgreementCreateResponse element is the parent element for the XML message returned by the platform in response to a successful (or duplicate) legalEntityAgreementCreateRequest message.

Parent Elements:

None

Attributes:

Attribute Name	Туре	Required?	Description
xmlns	String	Yes	Defines the URI of the schema definition. This is a fixed location and you must specify it as: http://payfac.vantivcnp.com/api/merchant/onboard minLength = N/A maxLength = 50
duplicate	Boolean	No	Appears in the response message only if the legalEntityAgreementCreateRequest was a duplicate request. Allowed values = true or false

Child Elements:

Required: transactionId

4.60 legalEntityAgreementRetrievalResponse

The legalEntityAgreementRetrievalResponse element is the parent element for the XML message returned by the platform in response to a Legal Entity Agreement Retrieval request.

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None

Attributes:

Attribute Name	Туре	Required?	Description
xmlns	String	Yes	Defines the URI of the schema definition. This is a fixed location and you must specify it as: http://payfac.vantivcnp.com/api/merchant/onboard
			minLength = N/A maxLength = 50

Child Elements:

legalEntityId, transactionId, agreements

4.61 legalEntityAgreementType

The legalEntityAgreementType element is a required child of the legalEntityAgreement element and defines the type of Legal Entity Agreement. At this time, the only valid value is **MERCHANT_AGREEMENT**.

Type = String (Enum); minLength = N/A; maxLength = N/A

Parent Elements:
legalEntityAgreement

Attributes:

None

Child Elements:

4.62 legalEntityCreateRequest

The legalEntityCreateRequest element is the parent element for the XML message used to create a Legal Entity. You must create a Legal Entity prior to adding Sub-merchants controlled by the entity.

Parent Elements:

None

Attributes:

Attribute Name	Туре	Required?	Description
xmlns	String	Yes	Defines the URI of the schema definition. This is a fixed location and you must specify it as: http://payfac.vantivcnp.com/api/merchant/onboard minLength = N/A maxLength = 50

Child Elements:

Always Required: legalEntityName, legalEntityType, taxId, annualCreditCardSalesVolume, hasAcceptedCreditCards, address (some child elements may be optional), principal

Required/Optional (depending upon if using PayFac Assurance model): yearsInBusiness

Optional: doingBusinessAs, contactPhone

4.63 legalEntityCreateResponse

The legalEntityResponse element is the parent element for the XML message returned by the platform in response to a legalEntityCreateRequest message.

Parent Elements:

None

Attributes:

Attribute Name	Туре	Required?	Description
xmlns	String	Yes	Defines the URI of the schema definition. This is a fixed location and you must specify it as: http://payfac.vantivcnp.com/api/merchant/onboard minLength = N/A maxLength = 50
duplicate	Boolean	No	Appears in the response message only if the legalEntityCreateRequest was a duplicate request. Allowed values = true or false

Child Elements:

Always Required: transactionId

Optional: legalEntityId, pspMerchantId, responseCode, responseDescription,

background Check Results, original Sub Merchant

4.64 legalEntityId

The legalEntityId element is a required child of the legalEntityResponse element and is a system generated identifier for the Legal Entity.

Type = String; **minLength** = 1; **maxLength** = 19

Parent Elements:

legal Entity Response, legal Entity Retrieval Response, legal Entity Response

Attributes:

None

Child Elements:

4.65 legalEntityName

The legalEntityName element is a required child of the legalEntityCreateRequest element and defines the name of the Legal Entity controlling the Sub-merchants.

Type = String; **minLength** = 1; **maxLength** = 60

Parent Elements:

 $legal Entity Create Request, \ legal Entity Retrieval Response$

Attributes:

None

Child Elements:

4.66 legalEntityOwnershipType

The legalEntityOwnershipType element is a required child of the legalEntityCreateRequest and the legalEntityUpdateRequest where it defines whether the Legal Entity is Public or Private.

Type = String (Enum); **Valid Values** = PUBLIC or PRIVATE

NOTE: If the legalEntityType is either TAX_EXEMPT_ORGANIZATION or GOVERNMENT_AGENCY, you must set the legalEntityOwnershipType to PUBLIC.

Parent Elements:

 $legal Entity Create Request, \ legal Entity Update Request$

Attributes:

None

Child Elements:

4.67 legalEntityPrincipalCreateRequest

The legalEntityPrincipalCreateRequest element is the parent element for the XML message used to create a Legal Entity Principal. You must create a Principal record for each individual holding a 25% or greater stake in the Legal Entity.

NOTE: If the legalEntityType is SOLE_PROPRIETORSHIP, you cannot add or

delete Principals.

Parent Elements:

None

Attributes:

Attribute Name	Туре	Required?	Description
xmlns	String	Yes	Defines the URI of the schema definition. This is a fixed location and you must specify it as: http://payfac.vantivcnp.com/api/merchant/onboard minLength = N/A maxLength = 50

Child Elements:

Required: principal

4.68 legalEntityPrincipalCreateResponse

The legalEntityPrincipalCreateResponse element is the parent element for the XML message returned by the platform in response to a Legal Entity Principal Create Request.

Parent Elements:

None

Attributes:

Attribute Name	Туре	Required?	Description
xmlns	String	Yes	Defines the URI of the schema definition. This is a fixed location and you must specify it as: http://payfac.vantivcnp.com/api/merchant/onboard minLength = N/A maxLength = 50
duplicate	String	No	Appears in the response message only if the legalEntityUpdateRequest was a duplicate request. Allowed values = true or false

Child Elements:

transactionId, principalId, firstName, lastName, backgroundCheckResults

4.69 legalEntityPrincipalDeleteResponse

The legalEntityPrincipalDeleteResponse is the parent element for the XML message returned by the platform in response to a Legal Entity Principal Delete request.

Parent Elements:

None

Attributes:

Attribute Name	Туре	Required?	Description
xmlns	String	Yes	Defines the URI of the schema definition. This is a fixed location and you must specify it as: http://payfac.vantivcnp.com/api/merchant/onboard minLength = N/A maxLength = 50

Child Elements:

transactionId, legalEntityId, principalId, responseDescription

4.70 legalEntityPrincipalUpdatable

The legalEntityPrincipalUpdatable element is the parent element for the XML message used to update a Legal Entity Principal. Using this transaction type, you can update the following Legal Entity items:

- contactPhone
- streetAddress1
- streetAddress2
- city

- stateProvince
- postalCode
- emailAddress

Parent Elements:

None

Attributes:

Attribute Name	Туре	Required?	Description
xmlns	String	Yes	Defines the URI of the schema definition. This is a fixed location and you must specify it as: http://payfac.vantivcnp.com/api/merchant/onboard minLength = N/A maxLength = 50

Child Elements:

Optional: emailAddress, contactPhone, address, backgroundCheckFields

4.71 legalEntityResponse

The legalEntityResponse element is the parent element for the XML message returned by the platform in response to a Legal Entity Update request.

Parent Elements:

None

Attributes:

Attribute Name	Туре	Required?	Description
xmlns	String	Yes	Defines the URI of the schema definition. This is a fixed location and you must specify it as: http://payfac.vantivcnp.com/api/merchant/onboard minLength = N/A maxLength = 50
duplicate	String	No	Appears in the response message only if the legalEntityUpdateRequest was a duplicate request. Allowed values = true or false

Child Elements:

transactionId, legalEntityId, responseCode, responseDescription, backgroundCheckResults

4.72 legalEntityRetrievalResponse

The legalEntityRetrievalResponse element is the parent element for the XML message returned by the platform in response to a Legal Entity retrieval request.

Parent Elements:

None

Attributes:

Attribute Name	Туре	Required?	Description
xmlns	String	Yes	Defines the URI of the schema definition. This is a fixed location and you must specify it as: http://payfac.vantivcnp.com/api/merchant/onboard
			minLength = N/A maxLength = 50
overallStatus	String	Yes	Defines the overall status of the Legal Entity.
			minLength = 1 maxLength = 100

Child Elements:

legalEntityName, legalEntityType, taxId, annualCreditCardSalesVolume, hasAcceptedCreditCards, address, legalEntityId, responseCode, responseDescription, backgroundCheckResults, transactionId, updateDate, decisionDate, tinValidationStatus, sub_merchant_processing_status

4.73 legalEntityType

The legalEntityType element is a required child of the legalEntityCreateRequest element and defines the business type of the Legal Entity.

Type = String (enum); minLength = N/A; maxLength = N/A

Parent Elements:

legalEntityCreateRequest, legalEntityRetrievalResponse

Attributes:

None

Child Elements:

None

Enumerations:

Enumeration
INDIVIDUAL_SOLE_PROPRIETORSHIP
CORPORATION
LIMITED_LIABILITY_COMPANY
PARTNERSHIP
LIMITED_PARTNERSHIP
GENERAL_PARTNERSHIP
TAX_EXEMPT_ORGANIZATION
GOVERNMENT_AGENCY

Note:

All Legal Entity Type are available for use by Canadian based Legal Entities; however, LIMITED_PARTNERSHIP and GENERAL_PARTNERSHIP will be deprecated in a future release, so you should avoid their use.

4.74 legalEntityUpdateRequest

The legalEntityUpdateRequest element is the parent element for the XML message used to update a Legal Entity. Using this transaction type, you can update the following Legal Entity items:

- streetAddress1 (entity and/or principal)
- streetAddress2 (entity and/or principal)
- city (entity and/or principal)
- stateProvince (entity and/or principal)
- postalCode (entity and/or principal)
- doingBusinessAs
- annualCreditCardSalesVolume
- hasAcceptedCreditCards
- firstName (principal)

- lastName (principal)
- ssn (principal)
- dateOfBirth (principal)
- driversLicense (principal)
- driversLicenseState (principal)
- legalEntityName
- legalEntityType
- taxld

Parent Elements:

None

Attributes:

Attribute Name	Туре	Required?	Description
xmlns	String	Yes	Defines the URI of the schema definition. This is a fixed location and you must specify it as: http://payfac.vantivcnp.com/api/merchant/onboard
			minLength = N/A maxLength = 50

Child Elements:

Optional: address, contactPhone, doingBusinessAs, annualCreditCardSalesVolume, hasAcceptedCreditCards, principal, backgroundCheckFields

4.75 lienResult

The lienResult element is an optional child of the backgroundCheckResults element. It contains child elements that provides information about the lien history of the company from the background checks performed by us.

Parent Elements:

backgroundCheckResults

Attributes:

None

Child Elements:

lienType, releasedCount, unreleasedCount, companyName, streetAddress1, streetAddress2, city, state, zip, zip4, filingDate

Example: lienResult Structure

4.76 lienType

The lienType element is an optional child of the lienResult element and specifies the sub-type of lien discovered during the background check process.

Type = String; minLength = 1; maxLength = 50
Parent Elements:
lienResult
Attributes:

None

Child Elements:

4.77 manuallyEntered

The manuallyEntered element is a required child of the legalEntityAgreement element and defines whether information about the party signing the Legal Entity Agreement was entered manually or electronically. When this element is set to **false**, you must include a value for the userIPAddress element. When this element is set to **true**, the userIPAddress element is optional.

Type = boolean; Allowed Values = true or false
Parent Elements:
legalEntityAgreement
Attributes:
None
Child Elements:
None

4.78 maxTransactionAmount

The maxTransactionAmount element is a required child of the subMerchantCreateRequest element and specifies the maximum transaction amount (in the purchase currency) allowed on a single transaction submitted by the Sub-merchant. Supply the value in dollars without a decimal point. For example, a value of 50000 signifies \$50,000.

Type = Long; minLength = N/A; maxLength = 12

Parent Elements:

subMerchant Create Request, subMerchant Update Request, subMerchant Retrieval Response

Attributes:

None

Child Elements:

4.79 merchantCategoryCode

The merchantCategoryCode element is a required child of the subMerchantCreateRequest element and specifies the Merchant Category Code of the Sub-merchant.

Sub-merchant.

Type = String; minLength = 1; maxLength = 4

Parent Elements:

 $subMerchant Create Request, \ subMerchant Retrieval Response$

Attributes:

None

Child Elements:

4.80 merchantIdentString

The merchantIdentString element is a required child of the subMerchantCreateResponse element and is a system generated merchant identifier required to process transactions for this Sub-merchant. It is also returned as a child of both the originalSubMerchant and subMerchantRetrievalResponse elements.

NOTE:

This value is the unique string used to identify the merchant when submitting payment transactions to our system. In the cnpAPI used for payment transactions, it is the merchantId attribute used in the batchRequest, batchResponse, and cnpOnlineRequest.

Type = String; minLength = 1; maxLength = 50

Parent Elements:

subMerchantCreateResponse, originalSubMerchant, subMerchantRetrievalResponse

Attributes:

None

Child Elements:

4.81 merchantName

The merchantName element is a required child of the subMerchantCreateRequest element and specifies the name of the Sub-merchant.

Type = String; **minLength** = 1; **maxLength** = 50

Parent Elements:

subMerchant Create Request, subMerchant Retrieval Response

Attributes:

None

Child Elements:

4.82 nameAddressPhoneAssociation

The nameAddressPhoneAssocaition element is an optional child of the verificationResult element and contains child elements providing the results of background checks performed on the Legal Entity that indicate how tightly coupled the name is to the phone number and address provided.

Parent Elements:

verificationResult

Attributes:

None

Child Elements:

code, description

Example: nameAddressPhoneAssociation Structure

```
<nameAddressPhoneAssociation>
  <code>Name_Address_Phone_info</code>
  <description>Text Description of Code</description>
</nameAddressPhoneAssociation>
```

4.83 nameAddressSsnAssociation

The nameaddressSsnAssociation element is an optional child of the verificationResult element and contains child elements providing the results of background checks performed on the Legal Entity that indicate how tightly coupled the name is to the SSN and address provided.

Parent Elements:

verificationResult

Attributes:

None

Child Elements:

code, description

Example: nameAddressTaxIdAssociation Structure

<nameAddressSsnAssociation>
 <code>Name_Address_SSN_info</code>
 <description>Text Description of Code</description>
</nameAddressSsnAssociation>

4.84 nameAddressTaxIdAssociation

The nameaddressTaxIdAssociation element is an optional child of the verificationResult element and contains child elements providing the results of background checks performed on the Legal Entity that indicate how tightly coupled the name is to the Tax Id and address provided.

Parent Elements:

verificationResult

Attributes:

None

Child Elements:

code, description

Example: nameAddressTaxIdAssociation Structure

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4.85 nameVerified

The nameVerified element is an optional child of the verificationIndicators element. A value of **true** indicates that the name of the principal or business was verified, while a value of **false** indicates that the name could not be verified.

Type = Boolean; **Allowed values** = true or false

Parent Elements	:
verificationIndicato	rs

Attributes:

None

Child Elements:

4.86 originalLegalEntityId

The originalLegalEntityId element is an optional child of the legalEntityCreateResponse, returned when the legalEntityCreateRequest is a duplicate. The value indicates the Legal Entity ID of the original Legal Entity.

Type = String; **minLength** = 1; **maxLength** = 19

Parent Elements:

legal Entity Create Response

Attributes:

None

Child Elements:

4.87 originalLegalEntityStatus

The originalLegalEntityStatus element is an optional child of the legalEntityCreateResponse, returned when the legalEntityCreateRequest is a duplicate. The value indicates the status of the Legal Entity.

Type = String; **minLength** = 1; **maxLength** = 100

Parent Elements:

legal Entity Create Response

Attributes:

None

Child Elements:

4.88 originalSubMerchant

The originalSubMerchant element is optional child of the subMerchantCreateResponse message. This element and its children are returned only if the system has determined the subMerchantCreateRequest is a duplicate and provides the information from the creation of the original Sub-merchant.

Parent Elements:

subMerchantCreateResponse

Attributes:

None

Child Elements:

address, disabled, bankAccountNumber, bankRoutingNumber, customerServiceNumber, amexMid, discoverConveyedMid, hardCodedBillingDescriptor, maxTransactionAmount, merchantCategoryCode, merchantName, url, subMerchantId, transactionId, merchantIdentString

4.89 overallScore

The overallScore element is an optional child of the verificationResult element and contains child elements providing the results of background checks performed on the Legal Entity.

Parent Elements:

verificationResult

Attributes:

None

Child Elements:

score, description

Example: overallScore Structure

```
<overallScore>
  <score>Overall results for Business</score>
  <description>Text Description of Score</description>
</overallScore>
```

4.90 password

The password element is a required child of the credentials element and specifies the password portion of the authentication credentials used to submit transaction to the production environment.

Type = String; $minLength = 1$; $maxLength = 72$
Parent Elements:
credentials
Attributes:
None
Child Elements:
None

4.91 passwordExpirationDate

The passwordExpirationDate is an optional of the credentials element that specifies the expiration date of the provided password.

Type = dateTime; **Format** = YYYY-MM-DDTHH:MM:SS+/-HH:MM

NOTE: The +/-HH:MM portion of the dateTime format represents the offset from UTC time. For example, for Boston the value would be -05:00, meaning five hours behind UTC time.

Parent Elements:

credentials

Attributes:

None

Child Elements:

4.92 paypageCredential

The paypageCredential element is a required child of the paypageCredentials element and contains child elements that define the paypageId and associated userName used to submit card info via the PayPage application.

Parent Elements:

paypageCredentials

Attributes:

None

Child Elements (required):

userName, paypageId

Example: paypageCredential Structure

4.93 paypageCredentials

The paypageCredentials element is an optional child of the subMerchantCreateResponse and subMerchantRetrievalResponse elements and contains child elements that define the paypageId and associated userName used to submit card info via the PayPage application.

Parent Elements:

subMerchantCreateResponse, subMerchantRetrievalResponse

Attributes:

None

Child Elements (required):

paypageCredential

4.94 paypageld

The paypageId element is an optional child of the paypageCredential element and specifies the PayPage identifier used to submit PayPage transactions to the production environment. The system returns a paypageId only if the Sub-merchant uses the Vault/PayPage feature and you set the createCredentials element to true in the create request.

Type = String; minLength = 1; maxLength = 50

Parent Elements:
paypageCredential

Attributes:

None

Child Elements:

4.95 phone

The phone element is a required child of the primaryContact element. It defines the phone number for the Sub-merchant's primary contact.

Type = String; minLength = 1; maxLength = 13

Parent Elements:

primaryContact

Attributes:

None

Child Elements:

4.96 phoneVerified

The phoneVerified element is an optional child of the verificationIndicators element. A value of **true** indicates that the phone number (of the business) was verified, while a value of **false** indicates that the phone number could not be verified.

Type = Boolean; **Allowed values** = true or false

Par	ent	E	lem	en	ts:

verificationIndicators

Attributes:

None

Child Elements:

4.97 postalCode

Depending upon where used, this is either the postal code of the Legal Entity controlling the Sub-merchant or of the principal, or of the Sub-merchant. This postalCode element is always required for a Legal Entity and for a principal if the Legal Entity is a Sole Proprietorship (legalEntityType).

Type = String; $minLength = 1$; $maxLength = 7$
Parent Elements:
address
Attributes:
None
Child Elements:
None

4.98 primaryContact

The primaryContact element is an optional child of both the subMerchantCreateRequest and the subMerchantUpdateRequest transactions. The children of this element specify information about the primary contact of the Sub-merchant.

Parent Elements:

subMerchant Create Request, subMerchant Update Request, subMerchant Retrieval Response

Attributes:

None

Child Elements (all required):

firstName, lastName, phone, emailAddress

Example: primaryContact

```
<primaryContact>
  <firstName>John</firstName>
  <lastName>Doe</lastName>
  <emailAddress>John.Doe@company.com</emailAddress>
  <phone>9785552222</phone>
```

4.99 principal

The principal element has multiple uses in the schema. In two instances it is the parent for the child elements used to provide information about the Legal Entity principal owners/officers. Its structure changes based upon whether it is part of a legalEntityCreateRequest, legalEntityPrincipalCreateRequest, or a legalEntityResponse. It is also a child of the backgroundCheckResults element.

Parent Elements:

legalEntityCreateRequest, legalEntityCreateResponse, legalEntityUpdateRequest, backgroundCheckResults, legalEntityPrincipalCreateRequest,

Attributes:

None

Child Elements (when used in legalEntityCreateRequest or legalEntityPrincipalCreateRequest):

NOTE:

Although part of the schema structure, the principalId element is not used in a legalEntityCreateRequest message.

Required: firstName, lastName, ssn (required for Sole Proprietorship, otherwise optional), address (some child elements may be optional), dateOfBirth, stakePercent

Optional: emailAddress, contactPhone, driversLicense, driversLicenseState, title

Example: principal Structure when used in legalEntityCreateRequest and legalEntityPrincipalCreateRequest

```
<principal>
  <title>Chief Financial Officer</title>
  <firstName>John</firstName>
  <lastName>Doe</lastName>
  <emailAddress>jdoe@mail.net</emailAddress>
  <ssn>012345678</ssn>
  <contactPhone>9785551234</contactPhone>
  <dateOfBirth>1958-12-12</dateOfBirth>
  <driversLicense>S123456789</driversLicense>
  <ddriversLicenseState>MA</driversLicenseState>
  <address>
```

Child Elements (when used in legalEntityCreateResponse):

principalId, firstName, lastName, responseCode, responseDescription, backgroundCheckResults

Example: principal Structure when used in a legalEntityCreateResponse

```
<principal>
 <principalId>1234567890</principalId>
 <firstName>John</firstName>
 <lastName>Doe</lastName>
 <backgroundCheckResults>
   <business>
     <verificationResult>
      <overallScore>
        <score>50</score>
        <description>Business verified on multiple sources - no contradictory
findings</description>
      </overallScore>
     <nameAddressTaxIdAssociation/>
     <nameAddressPhoneAssociation/>
     <verificationIndicators>
      <nameVerified>false/nameVerified>
      <addressVerified>false</addressVerified>
      <cityVerified>false</cityVerified>
       <stateVerified>false</stateVerified>
      <zipVerified>false</zipVerified>
      <phoneVerified>false</phoneVerified>
      <taxIdVerified>false</taxIdVerified>
```

```
</verificationIndicators>
     <riskIndicators/>
   </re>
   </business>
 <principal>
   <verificationResult>
     <overallScore>
      <score>50</score>
      <description>Full name, address, phone , SSN verified</description>
     </overallScore>
     <nameAddressSsnAssociation/>
     <nameAddressPhoneAssociation/>
     <verificationIndicators>
      <nameVerified>false/nameVerified>
      <addressVerified>false</addressVerified>
      <phoneVerified>false</phoneVerified>
      <ssnVerified>false</ssnVerified>
      <dobVerified>false</dobVerified>
     </verificationIndicators>
     <riskIndicators/>
   </re>
 </principal>
 <businessToPrincipalAssociation>
   <score>50</score>
   <description>Association found between the person and the company in the
Company Contacts data</description>
 </businessToPrincipalAssociation>
     <bankruptcyData>
     <bankruptcyType>btype</bankruptcyType>
     <bankruptcyCount>3</bankruptcyCount>
     <companyName>testCompanyName
     <streetAddress1>testStreetAddress1/streetAddress1>
     <streetAddress2>testStreetAddress2</streetAddress2>
     <city>testCity</city>
     <state>ST</state>
```

```
<zip>bZip5</zip>
     <zip4>Zip4</zip4>
     <filingDate>1999-11-05</filingDate>
   </bankruptcyData>
   enResult>
     <lienType>ltype</lienType>
     <releasedCount>3</releasedCount>
     <companyName>testLienCompanyName
     <streetAddress1>testLienStreetAddress1/streetAddress1>
     <streetAddress2>testLienStreetAddress2</streetAddress2>
     <city>testLienCity</city>
     <state>ST</state>
     <zip>bZip5</zip>
     <zip4>Zip4</zip4>
     <filingDate>1999-11-05</filingDate>
   </lienResult>
 </backgroundCheckResults>
</principal>
```

Example: principal Structure when used in legalEntityUpdateRequest

```
<principal>
  <principalId>4</principalId>
  <title>CFO</title>
  <emailAddress>jdoe@mail.net</emailAddress>
  <contactPhone>9785551234</contactPhone>
  <address>
        <streetAddress1>100 Main Street</streetAddress1>
        <streetAddress2>Suite 400</streetAddress2>
        <city>Lowell</city>
        <stateProvince>MA</stateProvince>
        <postalCode>01852</postalCode>
        <countryCode>USA</countryCode>
        </address>
        <stakePercent>33</stakePercent>
        <backgrgoundCheckFields>
```

4.100 principalld

The principalId element is a required child of the principal element, when used in a legalEntityCreateResponse message. It is a system generated identifier for the principal/owner.

NOTE: Although part of the schema structure, this element is not used in a legalEntityCreateRequest message.

Type = Integer; minLength = N/A; maxLength = 10

Parent Elements:

principal, legalEntityPrincipalCreateResponse

Attributes:

None

Child Elements:

4.101 pspMerchantId

The pspMerchantId element is a required child of the subMerchantCreateRequest element and is the PayFac supplied identifier string for the Sub-merchant within the PayFac's systems.

Type = String; **minLength** = 1; **maxLength** = 32

Parent Elements:

subMerchant Create Request, subMerchant Retrieval Response, subMerchant Update Request

Attributes:

None

Child Elements:

4.102 purchaseCurrency

The purchaseCurrency element is an optional child of the subMerchantCreateRequest element and defines the purchase currency of transactions from this Sub-merchant. If this element is not included in the create request, the purchase currency value defaults to the value defined in the Sub-merchant template used to provision other Sub-merchants associated with this Legal Entity. When included in the create request, the purchaseCurrency element is also returned in the Sub-merchant retrieval request and the Sub-merchant create response if the create request was a duplicate.

Type = String; **minLength** = 3; **maxLength** = 3

Parent Elements:

subMerchantCreateRequest, subMerchantRetrievalResponse, subMerchantCreateResponse (if duplicate), subMerchantUpdateRequest

Attributes:

None

Child Elements:

None

192

4.103 releasedCount

The releasedCount element is an optional child of the lienResult element and specifies the count of released lien records found.

count of released lien records found.

Type = int; totalDigits = N/A

Parent Elements:
lienResult

Attributes:

Child Elements:

None

4.104 response

The response element is the parent of the XML message acknowledging the receipt of a Legal Entity Update (legalEntityUpdateRequest), Sub-merchant update (subMerchantUpdateRequest), or Disable Sub-merchant message.

Parent Elements:

None

Attributes:

Attribute Name	Туре	Required?	Description
xmlns	String	Yes	Defines the URI of the schema definition. This is a fixed location and must be specified as: http://payfac.vantivcnp.com/api/merchant/onboard minLength = N/A maxLength = 50

Child Elements:

transactionId

4.105 responseCode

The responseCode element is an optional child of the legalEntityResponse message. The code indicate either success or the reason for the failure of the request. Possible values are listed in the table below.

Type = String; minLength = N/A; maxLength = 2

Parent Elements:

legalEntityResponse, legalEntityRetrievalResponse

Attributes:

None

Child Elements:

None

Possible Values:

Code	responseDescription
10	Approved
20	Manual Review
30	Retry
35	Manual Review - Duplicate
36	Duplicate
40	Declined
98	Manual Review - End Point Down
99	Manual Review - Background Check Error

NOTE:

If you receive a responseCode 30 - Retry, the decision notes will contain additional details about the information that you should provide/correct on the retry.

4.106 responseDescription

The responseDescription element is an optional child of the legalEntityResponse message and is a text description of the responseCode.

Type = String; **minLength** = 1; **maxLength** = 100

Parent Elements:

legalEntityResponse, legalEntityRetrievalResponse, legalEntityResponse

Attributes:

None

Child Elements:

None

Possible Values:

responseDescription	Code
Approved	10
Manual Review	20
Retry	30
Manual Review - Duplicate	35
Duplicate	36
Declined	40
Manual Review - Background Check Error	99

Note:

If you receive a responseCode 30 - Retry, the decision notes will contain additional details about the information that you should provide/correct on the retry.

4.107 riskIndicator

The verificationResult element is an optional child of the business and principal elements and contains child elements providing the results of background checks performed on the Legal Entity.

Parent Elements:

riskIndicators

Attributes:

None

Child Elements:

code, description

Example: riskIndicator Structure

```
<riskIndicator>
  <code>Risk Indicator Info</code>
  <description>Text Description of Code</description>
</riskIndicator>
```

4.108 riskIndicators

The riskIndicators element is an optional child of the verificationResult element and contains child elements providing the results of background checks performed on the Legal Entity.

Parent Elements:

verificationResult

Attributes:

None

Child Elements:

riskIndicator

Example: riskIndicators Structure

```
<riskIndicators>
    <riskIndicator>
        <code>Risk Indicator Info</code>
        <description>Text Description of Code</description>
        </riskIndicator>
</riskIndicators>
```

4.109 score

score

Depending upon where used, this element defines overall score assigned based on the background checks of either the business, the principal, or the business-to-principal association.

Type = String (Enum); minLength = N/A; maxLength = N/A

Parent Elements:

overallScore, businessToPrincipalAssociation

Attributes:

None

Child Elements:

None

Enumerations: (Higher number is better.)

Enums	Definition when Descendant of business	Definition when Descendant of principal	Definition when Descendant of businessToPrincipalAs sociation
0	Nothing found to confirm existence of business.	Nothing verified - ID elements not found or are associated with a different person.	No information found to link Principal to Business
10	One or more of the following: Significant contradictory findings OFAC match exists Input address and phone are invalid	One or more of the following: Critical ID elements not verified or are associated with a different person OFAC matches deceased/invalid SSNs SSN issued prior to DOB records with invalid addresses and phones	Principal's verified name partially matches input Business name.
20	Partial verification of the input data; the business may exist, but cannot be positively confirmed.	Minimal verifications; critical ID elements not verified or are associated with a different person	Principal's verified address matches input Business address.

Enums	Definition when Descendant of business	Definition when Descendant of principal	Definition when Descendant of businessToPrincipalAs sociation
30	Business identity is confirmed, but failure to verify all identity elements.	Several ID elements verified; SSN or address verification failures exist.	Principal's verified address matches input Business address and Principal's verified name partially matches input Business name.
40	Business identity is confirmed at the input address	Last name, address, and SSN verified; first name or phone verification failures.	Principal linked to Business by SSN /Tax Id match.
50	Business is verified using multiple sources. no contradictory findings.	Full name, address, phone, and SSN verified.	Principal is likely an officer or employee of Business confirmed by public records.

4.110 settlementCurrency

The settlementCurrency element is an required child of the subMerchantCreateRequest element and defines the settlement currency of transactions from this Sub-merchant.

Type = String; **minLength** = 3; **maxLength** = 3

Parent Elements:

 $subMerchant Create Request, \, subMerchant Retrieval Response \,$

Attributes:

None

Child Elements:

4.111 ssn

The ssn element is a child of the principal element and specifies the Social Security Number of the principal. If the entityType is INDIVIDUAL_SOLE_PROPRIETORSHIP, you must submit the principal's SSN. For other Legal Entity types, you can substitute the Tax ID for the SSN in this element.

Type = String; **minLength** = 9; **maxLength** = 25

Parent Elements:

principal

Attributes:

None

Child Elements:

4.112 ssnVerified

The ssnVerified element is an optional child of the verificationIndicators element, when verificationIndicator is a descendant of the principal element. A value of **true** indicates that the SSN of the principal was verified, while a value of **false** indicates that the SSN could not be verified.

Type = Boolean; **Allowed values** = true or false

Parent Elements:

verificationIndicators

Attributes:

None

Child Elements:

4.113 stakePercent

The stakePercent element is a required child of the principal element and defines the percentage of the Legal Entity owned by the principal.

percentage of the Legal Entity owned by the principal. **Type** = Integer; **Minimum value** = 0; **Maximum value** = 100 **Parent Elements:**

principal

Attributes:

None

Child Elements:

4.114 state

The state element is an optional child of both the bankrupcyData and lienResults elements, where it specifies the state of the company with bankruptcy or lien information.

Type = String; **minLength** = N/A; **maxLength** = 2

Parent Elements:

bankruptcyData, lienResult

Attributes:

None

Child Elements:

4.115 stateVerified

The cityVerified element is an optional child of the verificationIndicators element, when verificationIndicators is a descendant of the business element. A value of **true** indicates that the city (of the business) was verified, while a value of **false** indicates that the city could not be verified.

Type = Boolean; **Allowed values** = true or false

Parent Elements:

verificationIndicators

Attributes:

None

Child Elements:

4.116 stateProvince

Depending upon where used, this is either the code representing the state of the business entity controlling the Sub-merchant or of the principal. This stateProvince element is always required for a Legal Entity and for a principal if the Legal Entity is a Sole Proprietorship (legalEntityType). If the Legal Entity is not a Sole Proprietorship, this element is optional.

Type = String; $minLength = 1$; $maxLength = 2$
Parent Elements:
address
Attributes:
None
Child Elements:
None

4.117 streetAddress1, streetAddress2

The elements streetAddress1 and streetAddress2 define the address information. The streetAddress1 element is always required for a Legal Entity. It is also required for the

principal if the Legal Entity is a Sole Proprietorship (legalEntityType). The streeAddress2 element is always optional.
Type = String; minLength = 1; maxLength = 60
Parent Elements:
address, bankruptcyData, lienResult

Attributes:

None

Child Elements:

4.118 subMerchantCreateRequest

The subMerchantCreateRequest element is the parent element for the XML message used to create a Sub-merchant associated with a Legal Entity. You must create a Legal Entity prior to adding Sub-merchants controlled by the entity.

NOTE:

After the creation of a Sub-merchant, wait a minimum of two minutes before attempting to process transactions for the Sub-merchant. This is the minimum amount of time required for information about the newly created Sub-merchant to propagate through our system. Attempts to process transactions for a new Sub-merchant sooner than two minutes will result in system errors.

Parent Elements:

None

Attributes:

Attribute Name	Туре	Required?	Description
xmlns	String	Yes	Defines the URI of the schema definition. This is a fixed location and must be specified as: http://payfac.vantivcnp.com/api/merchant/onboard
			minLength = N/A maxLength = 50

Child Elements:

Required: merchantName, customerServiceNumber, hardCodedBillingDescriptor, maxTransactionAmount, merchantCategoryCode, bankRoutingNumber, bankAccountNumber, pspMerchantId, address (some child elements may be optional), settlementCurrency

Required/Optional (depending upon if using PayFac Assurance model): url

Optional: address, amexMid, discoverConveyedMid, purchaseCurrency, primaryContact, createCredentials, eCheck, fraud, subMerchantFunding

4.119 subMerchantCreateResponse

The subMerchantResponse element is the parent element for the XML message returned by the platform in response to a subMerchantCreateRequest message.

Parent Elements:

None

Attributes:

Attribute Name	Туре	Required?	Description
xmlns	String	Yes	Defines the URI of the schema definition. This is a fixed location and must be specified as: http://payfac.vantivcnp.com/api/merchant/onboard minLength = N/A maxLength = 50
duplicate	Boolean	No	Appears in the response message only if the submerchantCreateRequest was a duplicate request. Allowed values = true or false

Child Elements:

Required: transactionId, merchantIdentString

Optional: subMerchantId, originalSubMerchant

4.120 subMerchantFunding

The subMerchantFunding element is an optional child of the subMerchantCreateRequest, the subMerchantUpdateRequest elements, as well as the subMerchantRetrievalResponse. Through its child elements, it defines either the Fee Profile applied to the funding of the Sub-merchant, when the Managed Payout funding feature is enabled, or the fundingSubMerchantId, when the Dynamic Payout feature is enabled.

Parent Elements:

subMerchant Create Request, subMerchant Update Request, subMerchant Retrieval Response

Attributes:

Attribute Name	Туре	Required?	Description
enabled	Boolean	Yes	Set to true and include the fundingSubmerchantId element when using Dynamic Payout. Set to true and include the feeProfile element when using Managed Payout for the Sub-merchant. If neither condition applies (i.e., you are funding directly), set to false. Allowed values = true or false

Child Elements (optional):

feeProfile (required for Managed Payout), fundingSubmerchantId (required for Dynamic Payout)

Example: subMerchantFunding Structure for Managed Payout

```
<subMerchantFunding enabled="true">
  <feeProfile>Name of Fee Profile</feeProfile>
</subMerchantFunding>
```

Example: subMerchantFunding Structure for Dynamic Payout

```
<subMerchantFunding enabled="true">
  <fundingSubmerchantId>Unique Funding Id</fundingSubmerchantId>
</subMerchantFunding>
```

4.121 subMerchantId

The subMerchantId element is an optional child of the subMerchantCreateResponse element and is a system generated identifier for this Sub-merchant within the legal entity. You use this value as a parameter in the calls when updating, retrieving, and disabling a Sub-merchant.

Note:	This value is unique within the Legal Entity, but not across Legal Entities.						
Type = String; minLength = N/A; maxLength = 19							
Parent Eleme	ents:						
subMerchantCreateResponse, subMerchantRetrievalResponse							
Attributes:							
None							
Child Elemen	nts:						
None							

4.122 sub_merchant_processing_status

Type = Boolean; **Allowed values** = true or false.

The sub_merchant_processing_status element is a required child of the legalEntityRetrievalResponse and indicates if you can create sub-merchants associated with the Legal Entity, based upon the state of the Legal Entity. A value of true indicates that you

can create sub-merchants.

Parent Elements:

legalEntityRetrievalResponse

Attributes:

None

Child Elements:

4.123 subMerchantRetrievalResponse

The subMerchantRetrievalResponse element is the parent element for the XML message returned by the platform in response to a Sub-merchant Retrieval Request.

Note:

If you are processing transactions only on the Vantiv eCommerce platform and using Dynamic Payout, after creating a Sub-merchant using a value of AUTO_GENERATE for the fundingSubmerchantId, retrieve the assigned fundingSubmerchantId value by submitting a Sub-merchant Retrieval Request.

Parent Elements:

None

Attributes:

Attribute Name	Туре	Required?	Description
xmlns	String	Yes	Defines the URI of the schema definition. This is a fixed location and must be specified as: http://payfac.vantivcnp.com/api/merchant/onboard minLength = N/A maxLength = 50

Child Elements:

merchantName, amexMid, discoverConveyedMid, url, customerServiceNumber, hardCodedBillingDescriptor, maxTransactionAmount, purchaseCurrency, merchantCategoryCode, bankRoutingNumber, bankAccountNumber, pspMerchantId, fraud, address, primaryContact, createCredentials, eCheck, subMerchantFunding, settlementCurrency, subMerchantId, amexSellerId, disabled, transactionId, merchantIdentString, credentials, paypageCredentials, updateDate

4.124 subMerchantUpdateRequest

The subMerchantUpdateRequest element is the parent element for the XML message used to update a Sub-merchant associated with a Legal Entity. You can update the following items:

- url
- customerServiceNumber
- hardCodedBillingDescriptor
- maxTransactionAmount
- bankRoutingNumber
- bankAccountNumber
- eCheckBillingDescriptor

- streetAddress1
- streetAddress2
- city
- stateProvince
- postalCode
- primaryContact
- eCheckCompanyName

Parent Elements:

None

Attributes:

Attribute Name	Туре	Required?	Description
xmlns	String	Yes	Defines the URI of the schema definition. This is a fixed location and must be specified as: http://payfac.vantivcnp.com/api/merchant/onboard minLength = N/A maxLength = 50

Child Elements:

amexMid, discoverConveyedMid, url, customerServiceNumber, hardCodedBillingDescriptor, maxTransactionAmount, bankRoutingNumber, bankAccountNumber, address, primaryContact, disable, fraud, eCheck, subMerchantFunding

4.125 taxAuthority

The taxAuthority element is an optional child of both the submerchantCreateRequest and the submerchantUpdateRequest elements; however, you must specify a value if the MCC of the sub-merchant is 9311 (Tax Payments - Government Agencies). The element specifies the Tax Authority (taxing body) for which the sub-merchant collects tax payments.

Type = String; minLength = N/A; maxLength = N/A

Note: Although maxLength is not defined in the schema, the maximum length of the taxAuthority + Billing Descriptor prefix cannot exceed 20 characters. Please ask your Implementation consultant for additional information.

Parent Elements:

subMerchant Create Request, subMerchant Update Request

Attributes:

None

Child Elements:

4.126 taxAuthorityState

The taxAuthorityState element is an optional child of both the submerchantCreateRequest and the submerchantUpdateRequest elements; however, you must specify a value if the MCC of the sub-merchant is 9311 (Tax Payments - Government Agencies). The element specifies the state for which the sub-merchant collects tax payments.

Type = String; minLength = 1; maxLength = 2

Parent Elements:

subMerchant Create Request, subMerchant Update Request

Attributes:

None

Child Elements:

4.127 taxld

The taxId element is a required child of the legalEntityCreateRequest element and defines the Tax ID (or EIN if applicable) of the Legal Entity controlling the Sub-merchants. If the entityType is INDIVIDUAL_SOLE_PROPRIETORSHIP and a Tax ID is not available, you can include the principal's SSN in this element.

Type = String; **minLength** = 9; **maxLength** = 25

Parent Elements:

 $legal Entity Create Request, \ legal Entity Retrieval Response$

Attributes:

None

Child Elements:

4.128 taxIdVerified

The taxIdVerified element is an optional child of the verificationIndicators element, when verificationIndicators is a descendant of the business element. A value of **true** indicates that the Tax Id (of the business) was verified, while a value of **false** indicates that the Tax Id could not be verified.

indicates that the Tax Id (of the business) was verified, while a value of **false** indicates that the Tax Id could not be verified. **Type** = Boolean; **Allowed values** = true or false

Parent Elements:

verificationIndicators

Attributes:

None

Child Elements:

4.129 tinValidationStatus

The tinValidationStatus element is an optional child of the legalEntityRetrievalResponse element and specifies the status of the Tax Id Number validation operation. Currently, possible values are: Approved, Failed, Pending, and Not Required.

validation operation. Currently, possible values are: Approved, Failed, Pending, and Not Required.

Type = String; minLength = 1; maxLength = 20

Parent Elements:

legalEntityRetrievalResponse

Attributes:

None

Child Elements:

4.130 title

The title element is an optional child of the principal element that specifies the title of the principal. It is, however, required when your Organization is configured (in your Merchant Profile) to use the PayFac Assurance model. In this case, failure to include the element will result in a validation error.

NOTE: Although the title element is optional, you must include a value if you support American Express Opt Blue transactions.

Type = String; minLength = N/A; maxLength = 60

Parent Elements:

principal

Attributes:

None

Child Elements:

4.131 transactionId

The transactionId element is a required child of the legalEntityResponse element and is a system generated identifier for the submitted request.

Type = String; **minLength** = 1; **maxLength** = 19

Parent Elements:

legalEntityAgreementCreateResponse, legalEntityResponse, legalEntityRetrievalResponse, subMerchantCreateResponse, response, errorResponse, subMerchantRetrievalResponse, approvedMccResponse

Attributes:

None

Child Elements:

None

4.132 unreleasedCount

The unreleasedCount element is an optional child of the lienResult element and specifies the count of unreleased lien records found.

Type = int; totalDigits = N/A

Parent Elements:
lienResult

Attributes:
None

Child Elements:

Document Version: 2.0 — API Release: 13.0

4.133 updateDate

The updateDate element is and optional child of both the legalEntityRetrievalResponse and the subMerchantRetrievalResponse element. The value represents the last date/time an update was performed to the Legal Entity/Sub-Merchant.

Type = dateTime; **Format** = YYYY-MM-DDTHH:MM:SS+/-HH:MM

NOTE:

The +/-HH:MM portion of the dateTime format represents the offset from UTC time. For example, for Boston the value would be -05:00, meaning five hours behind UTC time.

Parent Elements:

legal Entity Retrieval Response, sub Merchant Retrieval Response

Attributes:

None

Child Elements:

4.134 url

The url element is an optional child of the subMerchantCreateRequest element and specifies the URL of the Sub-merchant.

Type = String; **minLength** = 1; **maxLength** = 120

Parent Elements:

 $subMerchant Create Request, \ subMerchant Update Request, \ subMerchant Retrieval Response$

Attributes:

None

Child Elements:

4.135 userFullName

The userFullName element is a required child of the legalEntityAgreement element and defines name of the party signing the Legal Entity Agreement.

Type = String; minLength = 1; maxLength = 50

Parent Elements:
legalEntityAgreement

Attributes:

None

Child Elements:

4.136 userIPAddress

The userIPAddress element is a child of the legalEntityAgreement element and defines the IP Address of the party signing the Legal Entity Agreement. This element is required when the manuallyEntered element is set to **false**. It is not required when the manuallyEntered element is set to **true**. The only allowed characters are lower-case a-z, upper-case A-Z, numbers 0-9, colon (:), and a period (.).

Type = String; minLength = 1; maxLength = 40

Parent Elements:
legalEntityAgreement

Attributes:
None

Child Elements:

4.137 userName

The username element is a required child of the credentials element and specifies the user name portion of the authentication credentials used to submit transaction to the production environment.

Type = String; **minLength** = 1; **maxLength** = 72

NOTE: Although the V4 schema specifies this element as username, the actual element returned in the response file is userName.

Parent Elements:

credentials, paypageCredential

Attributes:

None

Child Elements:

4.138 userSystemName

The userSystemName element is a required child of the legalEntityAgreement element

and defines name the party signing the Legal Entity Agreement uses on the PayFac system. **Type** = String; **minLength** = 1; **maxLength** = 50 **Parent Elements:**

Attributes:

None

Child Elements:

legalEntityAgreement

4.139 verificationIndicators

The verificationIndicators element is an optional child of the verificationResult element and contains child elements that indicated whether or not certain data points about the Legal Entity were verified during the background checks.

Parent Elements:

verificationResult

Attributes:

None

Child Elements:

Common: nameVerified, addressVerified, phoneVerified

Descendant of bussiness: cityVerified, stateVerified, zipVerified, taxIdVerified

Descendant of principal: ssnVerified, dobVerified

Example: verification Indicators Structure (when descendant of bussiness)

```
<verificationIndicators>
    <nameVerified>true or false</nameVerified>
    <addressVerified>true or false</addressVerified>
    <cityVerified>true or false</cityVerified>
    <stateVerified>true or false</stateVerified>
    <zipVerified>true or false</stateVerified>
    <phoneVerified>true or false</phoneVerified>
    <taxIdVerified>true or false</taxIdVerified>
</verificationIndicators>
```

Example: verification Indicators Structure (when descendant of principal)

```
<verificationIndicators>
  <nameVerified>true or false</nameVerified>
  <addressVerified>true or false</addressVerified>
  <phoneVerified>true or false</phoneVerified>
  <ssnVerified>true or false</phoneVerified>
  <dobVerified>true or false</dobVerified>
```

</re></re>

4.140 verificationResult

The verificationResult element is an optional child of the business and principal elements and contains child elements providing the results of background checks performed on the Legal Entity.

Parent Elements:

business, principal

Attributes:

None

Child Elements:

Common: overallScore, nameAddressPhoneAssociation, verificationIndicators, riskIndicators

Descendant of bussiness: nameAddressTaxIdAssociation

Descendant of principal: nameAddressSsnAssociation

Example: verificationResult Structure (as child of business)

```
<verificationResult>
 <overallScore>
   <score>Overall results for Business</score>
   <description>Text Description of Score</description>
 </overallScore>
 <nameAddressTaxIdAssociation>
   <code>Name_Address_TIN_info</code>
   <description>Text Description of Code</description>
 </nameAddressTaxIdAssociation>
 <nameAddressPhoneAssociation>
   <code>Name_Address_Phone_info</code>
   <description>Text Description of Code</description>
 </nameAddressPhoneAssociation>
 <verificationIndicators>
   <nameVerified>true or false/nameVerified>
   <addressVerified>true or false</addressVerified>
   <cityVerified>true or false</cityVerified>
   <zipVerified>true or false</zipVerified>
```

Example: verificationResult Structure (as child of principal)

```
<verificationResult>
 <overallScore>
   <score>Overall Results for Principal</score>
   <description>Text Description of Score</description>
 </overallScore>
 <nameAddressSsnAssociation>
   <code>Name_Address_SSN_info</code>
   <description>Text Description of Code</description>
 </nameAddressSsnAssociation>
 <nameAddressPhoneAssociation>
   <code>Name_Address_Phone_info</code>
   <description>Text Description of Code</description>
 </nameAddressPhoneAssociation>
 <verificationIndicators>
   <nameVerified>true or false/nameVerified>
   <addressVerified>true or false</addressVerified>
   <phoneVerified>true or false</phoneVerified>
   <ssnVerified>true or false</ssnVerified>
   <dobVerified>true or false</dobVerified>
 </re>
 <riskIndicators>
   <riskIndicator>
     <code>Risk Indicator results</code>
```

4.141 yearsInBusiness

The yearsInBusiness element is an optional child of the legalEntityCreateRequest element. It is, however, required when your Organization is configured (in your Merchant Profile) to use the PayFac Assurance model. In this case, failure to include this element will result in a validation error.

Type = Integer; minLength = N/A; maxLength = 3

Parent Elements:
legalEntityCreateRequest, legalEntityUpdateRequest

Attributes:

None

Child Elements:

4.142 zip

The zip element defines the company postal code in both the bankruptcyData and lienResults elements. The element is optional.

Type = String; **minLength** = N/A; **maxLength** = 5

Parent Elements:

bankruptcyData, lienResult

Attributes:

None

Child Elements:

4.143 zip4

The zip4 element defines the extended +4 portion of the company postal code in both the bankruptcyData and lienResults elements. The element is optional.

Type = String; **minLength** = N/A; **maxLength** = 4

Parent Elements:

bankruptcyData, lienResult

Attributes:

None

Child Elements:

4.144 zipVerified

The zipVerified element is an optional child of the verificationIndicators element, when verificationIndicators is a descendant of the business element. A value of **true** indicates that the zip code (of the business) was verified, while a value of **false** indicates that the zip code could not be verified.

Type = Boolean; **Allowed values** = true or false

Parent Elements:

verificationIndicators

Attributes:

None

Child Elements: