

Transact

Version 1.1

Application Programming Interface (API) – Version 1.1

Last Modified: 10/22/2017 *

*Amount indicated added to get_status web method.

Introduction

This document provides the information needed to integrate your application with **Transact** using an API. This API is designed using Microsoft technologies, in this case Web Services that allow your application to send and receive data using web standards.

If you need assistance please contact us to provide you with a technical representative as soon as possible.

Getting Started

You have to contact us so we can send you a Merchant ID (Customer ID), username and password. This combination is used in all the procedures you call through the web service, all the information is conducted using standard HTTPS protocol to make sure every data is encrypted and secured.

To use the web service API you have to reference the following URL:

[https:// www.transact.ag /application/services/dtapi2.asmx](https://www.transact.ag/application/services/dtapi2.asmx)

If you are testing your interface before going to production, please use this URL:

[https:// www.transact.ag /test/services/dtapi2.asmx](https://www.transact.ag/test/services/dtapi2.asmx)

Overview of the Process

There are two main processes: Deposits and Payouts, both transactions use the concept of States. The description of each state is described below:

- Requested: this is the first step when the transaction is created; this state is assigned automatically by the application.
- Pending: this step is checked by the Agency representative and they have to validate the data. The transaction can be Approved, Rejected or Cancelled.
- Approve: this step indicates that the transaction is correct and the money transfer can be done.
- Rejected: this step indicates that the transaction has wrong information or any other reason that cannot be verified by the Agency. The representative has to enter a comment explaining why the transaction has been rejected so the merchant can correct it and resend.
- Cancelled: indicated that the transaction has been cancelled by the Agency or Merchant.
- Apply by Merchant

These states follow a logical order and can be returned to a back state for many reasons: errors in sender/receiver names, no name to be generated, incorrect control number, etc. For a successful transaction to occur, the process goes from Requested to Pending and finally to Approved. If the transaction is Rejected for some reason it has to be corrected and moved to the next state available again.

The functions that the web service provides needs parameters that has to be send by your application and when the web service processes the information returns a response in XML format. The parameters and return information will be described in the following sections.

Transaction: Deposit

The Deposit transaction is used to send money to a person (it is called P2P: Person to Person) through an Agency (Western Union and Money Gram), the function needs the information of the Sender and the Amount of money that will be sent. The return answer is the name of the Receiver, the transaction ID and the Status generated.

Function Name: `init_deposit`

Parameters description

Parameter	Type	Description	Required
Username	String	Merchant Username	Y
Password	String	Merchant Password	Y
PaymentMethod	String	ID of Payment: 1 for Western Union and 2 for MoneyGram	Y
TransferType	String	Type of Transfer: "PP" or "PB" (Person to Person or Person to Business)	Y
CustomerID	String	Merchant ID assigned by Transact	Y
SenderFirstName	String	Name of the Sender	Y
SenderLastName	String	Last Name of the Sender	Y
SenderPhone	String	Phone of the Sender	Y
SenderCity	String	City of Residence of the Sender	N
SenderState	String	State of Residence of the Sender (if country = "US" send the State Code, if not send the name of the State)	Y
SenderCountry	String	Country of Residence of the Sender	Y
TransactionAmount	Decimal(2)	Amount of the Deposit	Y
TransactionCurrency	String	Currency Code: "USD"	Y
Comments	String	Optional comments	N
UserCreditCard	Boolean	If the Sender is going to pay using credit card then send "True" or if not send "False"	Y
ExternalTraceID	String	Unique Merchant Transaction Identifier	Y

Deposit Response

The response is returned as an XML document, the first tag indicates the state of the transaction, if equals zero (0) then the transaction has been created successfully however if the state is greater than zero something is wrong and the code returned has to be compared with the table shown in the appendix of this document.

Successful Response Example

```
<?xml version="1.0"?>
<DirectTeller>
  <status>0</status>
  <datetime>7/10/201003:19:50PM</datetime>
  <transaction_state>Requested</transaction_state>
  <trans_id>125</trans_id>
  <merchant_code></merchant_code>
  <receiver_code></receive_code>
  <receiver_name>Sonia Vargas</receiver_name>
  <receiver_city>San Jose</receiver_city>
  <receiver_state></receiver_state>
  <receiver_country>Costa Rica</receiver_country>
  <receiver_country_code>CR</receiver_country_code>
  <external_trace_id>1321</external_trace_id>
</DirectTeller>
```

Unsuccessful Transaction Response

```
<?xml version="1.0" encoding="utf-8" ?>
<DirectTeller>
  <id>1000</id>
  <message>Description of the Message</ message>
  <transaction_status>Error</transaction_status>
</DirectTeller>
```

Confirm Deposit

The confirmation deposit function is used to provide the confirmation number (MTCN for WU or ReferenceNumber for MG) for the transaction initiated by the customer for person to person (PP) transactions. Once the confirmation number is successfully provided for a transaction, the transaction state changes to Pending and will be presented to the appropriate money transfer agency for review. The money transfer agency can either Approve or Reject a Pending transaction. If a transaction is Rejected, the comments will indicate the reason for the rejection and any suggested action to take to resolve the problem.

This function can be called multiple times. If it was determined the confirmation number was incorrectly entered, you can re-submit the correct information.

Function Name: confirm_deposit

Parameters description

Parameter	Type	Description	Required
Username	String	Merchant Username	Y
Password	String	Merchant Password	Y
CustomerID	String	Merchant ID assigned by Transact	Y
TransactionID	String	Transaction number generated when you call the function init_deposit	Y
MerchantCustomerPin	String	Customers account identifier within the merchant.	Y
SenderFirstName	String	Name of the Sender	Y

SenderLastName	String	Last Name of the Sender	Y
SenderPhone	String	Phone of the Sender	Y
SenderCity	String	City of Residence of the Sender	N
SenderState	String	State of Residence of the Sender (if country = "US" send the State Code, if not send the name of the State)	Y
SenderCountry	String	Country of Residence of the Sender	Y
TransactionAmount	Decimal(2)	Amount of the Deposit	Y
ControlNumber	String	MTCN for Western Union or Reference Number for MoneyGram (only number permitted)	Y
Comments	String	Optional comments	N
TransferCharge	Decimal(2)	You can enter the fee amount indicated by the customer to complete the money transfer or leave it zero. This field will be verified by the money transfer agency and changed as required	N
ExternalTraceID	String	Unique Merchant Transaction Identifier	Y

Deposit Response

The response is returned as an XML document, the first tag indicates the state of the transaction, if equals zero (0) then the transaction has been created successfully however if the state is greater than zero something is wrong and the code returned has to be compared with the table shown in the appendix of this document.

Successful Response Example

```
<?xml version="1.0"?>
<DirectTeller>
  <status>0</status>
  <transaction_state>Pending</transaction_state>
  <datetime>7/28/2010 10:00:00 AM</datetime>
  <trans_id>125</trans_id>
  <external_trace_id>1321</external_trace_id>
</DirectTeller>
```

Unsuccessful Transaction Response

```
<?xml version="1.0" encoding="utf-8" ?>
<DirectTeller>
  <id>1010</id>
  < message> Confirmation number already used</ message>
  <transaction_status>Error</transaction_status>
</DirectTeller>
```

Transaction Status

The transaction status function gets the actual state. This function can be called at any time; it also returns the amount, currency, fees and comments. We have two versions: `get_status` that uses the `transactionID` (DT's internal transaction ID) to locate the transaction and `get_status2` that uses the external trace id to locate the transaction. Both return the same response.

Function Name: `get_status`

Parameters description

Parameter	Type	Description	Required
Username	String	Merchant Username	Y
Password	String	Merchant Password	Y
CustomerID	String	Merchant ID assigned by Transact	Y
TransactionID	String	Transaction number generated when you call the function <code>init_deposit</code>	Y

Function Name: `get_status2`

Parameters description

Parameter	Type	Description	Required
Username	String	Merchant Username	Y
Password	String	Merchant Password	Y
CustomerID	String	Merchant ID assigned by Transact	Y
ExternalTraceID	String	Unique Merchant Transaction Identifier	Y

Status Response

The response is returned as an XML document, the first tag indicates the state of the transaction, if equals zero (0) then the transaction has been created successfully however if the state is greater than zero something is wrong and the code returned has to be compared with the table shown in the appendix of this document.

Successful Response Example

```
<?xml version="1.0"?>
<DirectTeller>
  <status>0</status>
  <trans_id>125</trans_id>
  <customer_pin>2234</customer_pin>
  <transaction_state>Pending</transaction_state >
  <amount>195.00</amount>
  <amount_indicated>200.00</amount_indicated>
  <currency>USD</ currency>
  <transfer_fee>0.00</transfer_fee>
  <dmt_total_fees>5.00</dmt_total_fees>
  <comments></comments>
  <trans_control_number>44445555344</trans_control_number>
  <sender_beneficiary_info>PEREZ MOREIRA</sender_beneficiary_info>
  <sender location>Costa Rica- San Jose</sender location>
  <external_trace_id>1321</external_trace_id>
  <reject_code>0</reject_code>
</DirectTeller>
```

** Amount indicated is the amount that the sender sent. Due to exchange conversions the amount received (amount) by Transact and finally credited to the merchant balance could be less.*

```
<?xml version="1.0"?>
<DirectTeller>
  <status>0</status>
  <trans_id>125</trans_id>
  <customer_pin>2234</customer_pin>
  <transaction_state>Rejected</transaction_state >
  <amount>200.00</amount>
  <currency>USD</ currency>
  <transfer_fee>0.00</transfer_fee>
  <dmt_total_fees>5.00</dmt_total_fees>
  <comments></comments>
  <trans_control_number>44445555344</trans_control_number>
  <sender_beneficiary_info>PEREZ MOREIRA</sender_beneficiary_info>
  <sender location>Costa Rica- San Jose</sender location>
  <external_trace_id>1321</external_trace_id>
  <reject_code>78</reject_code>
</DirectTeller>
```


Note that the “reject_code” element only applies when the transaction state is “Rejected”, otherwise it must be ignored. This code indicates why the transaction was rejected and it should not be confused with the *status* element. The list of reject codes and descriptions will be provided by email.

Unsuccessful Transaction Response

```
<?xml version="1.0" encoding="utf-8" ?>
  <DirectTeller>
    <id>1020</id>
    < message> Invalid TraceID and/or Customer PIN</message>
    <transaction_status>Error</transaction_status>
  </DirectTeller>
```

Transaction: PayOut

This function is used by merchants to transfer money to customers using Western Union and Money Gram.

Function Name: init_payout

Parameters description

Parameter	Type	Description	Required
Username	String	Merchant Username	Y
Password	String	Merchant Password	Y
PaymentMethod	String	ID of Payment: 1 for Western Union (example)	Y
TransferType	String	Type of Transfer: “PP” or “PB” (Person to Person or Person to Business)	Y
CustomerID	String	Merchant ID assigned by Transact	Y
ReceiverFirstName	String	Name of the Sender	Y
ReceiverLastName	String	Last Name of the Sender	Y
ReceiverPhoneNumber	String	Phone of the Sender	Y
ReceiverCity	String	City of Residence of the Sender	N
ReceiverState	String	State of Residence of the Sender (if country = “US” send the State Code, if not send the name of the State)	Y
ReceiverCountry	String	Country of Residence of the Sender	Y
TransactionAmount	Decimal(2)	Amount of the Deposit	Y
TransactionCurrency	String	Currency Code: “USD”	Y
Comments	String	Optional comments	N
ExternalTraceID	String	Unique Merchant Transaction Identifier	Y

Payout Response

The response is returned as an XML document, the first tag indicates the state of the transaction, if equals zero (0) then the transaction has been created successfully however if the state is greater than zero something is wrong and the code returned has to be compared with the table shown in the appendix of this document.

Successful Response Example

```
<?xml version="1.0"?>
<DirectTeller>
  <status>0</status>
  <datetime>8/18/2010 12:19:00 PM</datetime>
  <transaction_state>Pending</transaction_state>
  <trans_id>1225</trans_id>
  <merchant_code>9048</merchant_code>
  <sender_name>Marco Ramirez</sender_name>
  <sender_city>Managua</sender_city>
  <sender_state ></sender_state >
  <sender_country>Nicaragua</sender_country>
  <sender_country_code>NI</sender_country_code>
  <external_trace_id>1321</external_trace_id>
</DirectMoneyTransfer>
```

Unsuccessful Transaction Response

```
<?xml version="1.0" encoding="utf-8" ?>
  <DirectTeller>
    <id>1018</id>
    <message>Insufficient Funds</ message>
    <transaction_status>Error</transaction_status>
  </DirectTeller>
```

Appendix: Status Codes

The following codes are returned by the web service for you to know what happens with the transaction sent by your application:

Status	Description
0	The Transaction was processed successfully (No error)
1000	Unknown error
1001	The Username and/or Password is not valid
1002	Invalid currency code
1003	Invalid country code
1004	Invalid state code
1005	Merchant does not have available and API payment processor or the Amount is invalid
1006	Could not create receiver name
1007	The transaction number is invalid
1008	The transaction status is (pending or approved or cancelled or applied), you can't set it to pending
1009	Merchant balance is not enough to process this payout
1010	The amount is out of the range permitted on this payment method
1011	Could not create sender name
1012	Sender name has been used recently
1013	There are no names available to generate
1014	External Trace ID has already been used.
1015	External Transaction ID is invalid
1016	Amount is out of limits. Must between MIN and MAX.
1017	Service is not available for your current jurisdiction (black list)