

CONNECTWORLD PAYMENTS API

March 2024

USING CONNECTWORLD'S MULTICURRENCY GATEWAY TO PURCHASE ESPEES

ConnectWorld (ConnectW) is a compliant, multicurrency, low fee, bi-directional payment gateway developed for projects and organizations in the global south, and especially in African communities. ConnectW is compliant in that the requisite licenses to process fiat payments are maintained in jurisdictions where it operates.

ConnectW requires each merchant of the platform to be registered onto the gateway. Once registered, the merchant can invoke the gateway to receive payments.

Registration

To register, all the merchant needs to do is provide their onchain address, and it will be included or whitelisted to use the gateway.

Receiving Payments

To receive payments, the merchant needs to call the **paymentinitialize** API indicating the amount to be paid and the digital product that they wish to be provided to the payer. If the merchant is exchanging the received payment for some token on the chain, the merchant needs to have the amount in value residing in their account at the time of making the payment initialize API call.

Once processed, the gateway will receive the payment in fiat from the customer on behalf of the merchant. If the merchant is receiving the payment for a token managed on the payment gateway, the token is provided to the indicated customer's address onchain. Otherwise, the merchant may provide provenance within their own system on confirmation of the payment. Once the payment is cleared, the amount is deposited into the merchant's address onchain. If the merchant is set up with passthrough information, the fiat amounts are sent to the customer's address.

For certain payment types that require the customer to make their transfer through a different medium such as their bank account, the merchant may additionally need to make a call to **recordpayment** to complete the process of crediting the customer onchain.

API #5 : INITIALIZE PAYMENT

POST: <https://www.toronet.org/api/payment/toro/>

POST ALTERNATIVE: <https://restapi.connectw.com/api/payment/>

HEADERS

Content-Type:application/json

x-api-key: <>

admin: <merchant's address>

adminpwd:<merchant's password>

BODY

```
{
  "op": "paymentinitialize",
  "params": [
    {
      "name": "currency",
      "value": "USD" //current options are USD, EUR, NGN - default
    },
    {
      "name": "address",
      "value": "0x2e6e558780c9adc9ae5a9dad2066e56f98d3b18a"
    },
    {
      "name": "amount",
      "value": "1"
    },
    {
      "name": "success_url",
      "value": https://toronet.org/wallet/ //should point to the merchant App
    },
    {
      "name": "cancel_url",
      "value": https://toronet.org/cancel //should point to the merchant App
    },
    {
      "name": "feetype",
      "value": "0" //0 - customer pays offchain, 1 customer pays onchain, 2
merchant pays onchain (optional, default to 0)
    },
    {
      "name": "passthrough",
      "value": "0" // 0 - default, 1- if set up for passthrough (optional)
    },
    {
      "name": "exchange",
      "value": "0" // 0 exchange from own balance- default
    }
  ]
}
```

```
    },
    //the following inputs are optional. however omitting them could result in KYC
    requests for your first time customers.
    {
        "name": "payername",
        "value": "Dr. Adam Bartholomew"
    },
    {
        "name": "payeraddress",
        "value": "11 Olaoye Close"
    },
    {
        "name": "payercity",
        "value": "Lagos"
    },
    {
        "name": "payerstate",
        "value": ""
    },
    {
        "name": "payercountry",
        "value": ""
    },
    {
        "name": "payerzipcode",
        "value": ""
    },
    {
        "name": "payerphone",
        "value": ""
    },
    {
        "name": "description",
        "value": "Deposit"
    },
    {
        "name": "checkouttype",
        "value": "paymentintent"
    }
}
]
```

API #5 : RECORD PAYMENT

POST: <https://www.toronet.org/api/payment/toro/>

POST ALTERNATIVE: <https://restapi.connectw.com/api/payment/>

HEADERS

Content-Type:application/json

x-api-key: <>

admin: <merchant's address>

adminpwd:<merchant's password>

BODY

```
{
  "op": "recordpayment",
  "params": [
    {
      "name": "currency",
      "value": "USD" //current options are USD, EUR, NGN - default
    },
    {
      "name": "txid",
      "value": "8900510688"
    },
    {
      "name": "checkouttype",
      "value": "paymentintent"
    }
  ]
}
```

Input List

Below is description for each of the above input list for **paymentinitialize**, in addition to the comments already included within the API body.

Input	Data Type/Options	Description
Header Variables		
admin	address	Merchant address registered to use the payment gateway and having a balance sufficient to provide the amount in the digital product or token for an amount paid in fiat on the payment gateway.
adminpwd	Alphanumeric	Merchant password
Variables in the Body of the Call		
Currency	USD, NGN	The currency the payment was paid in.
Token or Product	ProductID, Token	The digital item being purchased. When not provided or when it is a registered product, this is simply recorded as a payment which will be recorded in the admin account.
Address	Blockchain address	The address of the customer making the payment, which will receive the token.
Amount	Money	Amount to pay
SuccessURL	URL	URL to direct the user to after making the payment
CancelURL	URL	URL to direct the user to if the user cancels the payment at any step prior to making it.
Feetype	0, 1, 2	0 – customer is charged the fee as a service charge while paying the amount specified 1 – Customer is charged the fee in the digital token on chain 2 – the merchant address is changed the fee.
Passthrough	0, 1	0 – No passthrough is set, merchant receives the amounts paid onchain 1 – Merchant has set up a fiat address to which the paid amounts are sent.
Exchange	0	The amounts purchased is dispensed to the customer's address from the merchant address
Customer Information	Alphanumeric	The customer information including name and address is provided with the payer information. If not provided, KYC info might be requested from the customer. If the customer's wallet has made payments before, then this information might not be requested from the customer.

Below is description for each of the above input list for **recordpayment**, in addition to the comments already included within the API body.

Input	Data Type/Options	Description
Header Variables		
admin	address	Merchant address registered to use the payment gateway and having a balance sufficient to provide the amount in the digital product or token for an amount paid in fiat on the payment gateway.
adminpwd	Alphanumeric	Merchant password
Variables in the Body of the Call		
Txid	Alphanumeric	The transactionID provided from the paymentinitialize call
Currency	USD, NGN	The currency the payment was paid in.

API #6 : RECORD PRODUCT

POST: <https://www.toronet.org/api/payment/toro/>

POST ALTERNATIVE: <https://restapi.connectw.com/api/payment/>

HEADERS

Content-Type:application/json

x-api-key: <>

admin: <merchant's address>

adminpwd:<merchant's password>

BODY

```
{
  "op": "recordproduct",
  "params": [
    {
      "name": "productid",
      "value": "001" //unique id for your product
    },
    {
      "name": "productname",
      "value": "PAYMENT" //name of the product
    },
    {
      "name": "description",
      "value": "This is a payment for Toros."
    },
    {
      "name": "productimage",
      "value": "https://toronet.org/explorerer/images/toro-logo.png"
    }
  ]
}
```

API #6 : UPDATE PRODUCT

POST: <https://www.toronet.org/api/payment/toro/>

POST ALTERNATIVE: <https://restapi.connectw.com/api/payment/>

HEADERS

Content-Type:application/json

x-api-key: <>

admin: <merchant's address>

adminpwd:<merchant's password>

BODY

```
{
  "op": "updateproduct",
  "params": [
    {
      "name": "productid",
      "value": "001" //unique id for your product
    },
    {
      "name": "productname",
      "value": "PAYMENT" //name of the product
    },
    {
      "name": "description",
      "value": "This is a payment for Toros"
    },
    {
      "name": "productimage",
      "value": "https://toronet.org/explorer/images/toro-logo.png"
    }
  ]
}
```


The following are APIs to query status of transactions:

1. GetProject
This call will provide you information on your project settings, balances, including any pending transactions.
2. GetbankList
This call will provide you a bank list for you to use if using the withdrawal APIs
3. GetfiattransactionbyTxID
This call will provide you information on a payment transaction
4. GetfiatwithdrawalbyTxID
This call will provide you information on a withdrawal transaction
5. Getfiattransactions_address_range
This call will provide you information on all payment transactions for a given customer address
6. Getfiatwithdrawals_address_range
This call will provide you information on all payment withdrawals for a given customer address
7. Getfiatwithdrawals_recorder_range
This call will provide you information on all payment transactions for your recorder or merchant address
8. Getfiattransactions_recorder_range
This call will provide you information on all withdrawal transactions for your recorder or merchant address

API #7 : GET PROJECT

POST: <https://www.toronet.org/api/payment/toro/>

POST ALTERNATIVE: <https://restapi.connectw.com/api/payment/>

HEADERS

Content-Type:application/json

x-api-key: <>

admin: <merchant's address>

adminpwd:<merchant's password>

BODY

```
{
  "op": "getproject",
  "params": [{"name": "getbalances", "value": "true"}]
}
```

API #8 : GET BANK LIST

POST: <https://www.toronet.org/api/payment/toro/>

POST ALTERNATIVE: <https://restapi.connectw.com/api/payment/>

HEADERS

Content-Type:application/json

x-api-key: <>

admin: <merchant's address>

adminpwd:<merchant's password>

BODY

```
{
  "op": "getbanklist",
  "params": [
    {
      "name": "currency",
      "value": "NGN" //current options are USD, NGN
    }
  ]
}
```

API #9 : GET PAYMENT TRANSACTION BY ID

POST: <https://www.toronet.org/api/payment/toro/>

POST ALTERNATIVE: <https://restapi.connectw.com/api/payment/>

HEADERS

Content-Type:application/json

x-api-key: <>

admin: <merchant's address>

adminpwd:<merchant's password>

BODY

```
{
  "op": "getfiattransactions_txid",
  "params": [
    {
      "name": "txid",
      "value": "pi_3OoFDgHQMdeh9eQU0fy3ERVx"
    }
  ]
}
```

API #10 : GET WITHDRAWAL TRANSACTION BY ID

POST: <https://www.toronet.org/api/payment/toro/>

POST ALTERNATIVE: <https://restapi.connectw.com/api/payment/>

HEADERS

Content-Type:application/json

x-api-key: <>

admin: <merchant's address>

adminpwd:<merchant's password>

BODY

```
{
  "op": " getfiatwithdrawals_txid",
  "params": [
    {
      "name": "txid",
      "value": "pi_3OoFDgHQMdeh9eQU0fy3ERVx"
    }
  ]
}
```

API #11 : GET PAYMENT TRANSACTION BY CUSTOMER

POST: <https://www.toronet.org/api/payment/toro/>

POST ALTERNATIVE: <https://restapi.connectw.com/api/payment/>

HEADERS

Content-Type:application/json

x-api-key: <>

admin: <merchant's address>

adminpwd:<merchant's password>

BODY

```
{
  "op": "getfiattransactions_address_range",
  "params": [
    {
      "name": "addr",
      "value": "0xbd5B12909291434b17D785AD0a00b8A6Da9b9ac5"
    },
    {
      "name": "startdate",
      "value": "2022-08-01"
    },
    {
      "name": "enddate",
      "value": "2024-11-18"
    },
    {
      "name": "currency", //optional. defaults to all if not provided
      "value": "ngn" //these are added so user can total by currency if needed
    },
    {
      "name": "token", //optional. defaults to all if not provided
      "value": "ngn" //these are added so user can total by currency if needed
    }
  ]
}
```

API #12 : GET WITHDRAWAL TRANSACTION BY CUSTOMER

POST: <https://www.toronet.org/api/payment/toro/>

POST ALTERNATIVE: <https://restapi.connectw.com/api/payment/>

HEADERS

Content-Type:application/json

x-api-key: <>

admin: <merchant's address>

adminpwd:<merchant's password>

BODY

```
{
  "op": "getfiatwithdrawals_address_range",
  "params": [
    {
      "name": "addr",
      "value": "0x2e6e558780c9adc9ae5a9dad2066e56f98d3b18a"
    },
    {
      "name": "startdate",
      "value": "2022-08-01"
    },
    {
      "name": "enddate",
      "value": "2024-11-18"
    },
    {
      "name": "currency", //optional. defaults to all if not provided
      "value": "ngn" //these are added so user can total by currency if needed
    },
    {
      "name": "token", //optional. defaults to all if not provided
      "value": "ngn" //these are added so user can total by currency if needed
    }
  ]
}
```

API #13 : GET PAYMENT TRANSACTION BY MERCHANT

POST: <https://www.toronet.org/api/payment/toro/>

POST ALTERNATIVE: <https://restapi.connectw.com/api/payment/>

HEADERS

Content-Type:application/json

x-api-key: <>

admin: <merchant's address>

adminpwd:<merchant's password>

BODY

```
{
  "op": "getfiatwithdrawals_recorder_range",
  "params": [
    {
      "name": "addr",
      "value": "0x6b03eea493cfeab887f40969e40b069bb334f632"
    },
    {
      "name": "startdate",
      "value": "2022-08-01"
    },
    {
      "name": "enddate",
      "value": "2024-11-18"
    },
    {
      "name": "currency", //optional. defaults to all if not provided
      "value": "ngn" //these are added so user can total by currency if needed
    },
    {
      "name": "token", //optional. defaults to all if not provided
      "value": "ngn" //these are added so user can total by currency if needed
    }
  ]
}
```

API #14 : GET WITHDRAWAL TRANSACTION BY MERCHANT

POST: <https://www.toronet.org/api/payment/toro/>

POST ALTERNATIVE: <https://restapi.connectw.com/api/payment/>

HEADERS

Content-Type:application/json

x-api-key: <>

admin: <merchant's address>

adminpwd:<merchant's password>

BODY

```
{
  "op": "getfiattransactions_recorder_range",
  "params": [
    {
      "name": "addr",
      "value": "0x6b03eea493cfeab887f40969e40b069bb334f632"
    },
    {
      "name": "startdate",
      "value": "2022-08-01"
    },
    {
      "name": "enddate",
      "value": "2024-11-18"
    },
    {
      "name": "currency", //optional. defaults to all if not provided
      "value": "ngn" //these are added so user can total by currency if needed
    },
    {
      "name": "token", //optional. defaults to all if not provided
      "value": "toro" //these are added so user can total by currency if needed
    }
  ]
}
```

API #15 : GET PRODUCT

POST: <https://www.toronet.org/api/payment/toro/>

POST ALTERNATIVE: <https://restapi.connectw.com/api/payment/>

HEADERS

Content-Type:application/json

x-api-key: <>

admin: <merchant's address>

adminpwd:<merchant's password>

BODY

```
{
  "op": "getproduct",
  "params": [
    {
      "name": "productid",
      "value": "001" //unique id for your product
    }
  ]
}
```


Making Withdrawals

If you are not set up with passthrough, you would typically accumulate a balance in tokens in your address. You can withdraw that amount at any time once it has cleared using the withdrawal APIs. To request a withdrawal, simply make the recordwithdrawal API call, which is described below:

API #16 : RECORD WITHDRAWAL

POST: <https://www.toronet.org/api/payment/toro/>

POST ALTERNATIVE: <https://restapi.connectw.com/api/payment/>

HEADERS

Content-Type:application/json

x-api-key: <>

admin: <merchant's address>

adminpwd:<merchant's password>

BODY

```
{
  "op": "recordfiatwithdrawal",
  "params": [
    {
      "name": "addr",
      "value": "0x2e6e558780c9adc9ae5a9dad2066e56f98d3b18a"
    },
    {
      "name": "pwd",
      "value": "Kenny778"
    },
    {
      "name": "currency",
      "value": "NGN"
    },
    {
      "name": "token",
      "value": "ngn"
    },
    {
      "name": "gateway",
      "value": "fcmb"
    },
    {
      "name": "payername",
      "value": "Ken Alabi"
    }
  ]
}
```

```
},
{
  "name": "payeremail",
  "value": "alabi.kenn@gmail.com"
},
{
  "name": "payeraddress",
  "value": ""
},
{
  "name": "payercity",
  "value": ""
},
{
  "name": "payerstate",
  "value": ""
},
{
  "name": "payercountry",
  "value": ""
},
{
  "name": "payerzipcode",
  "value": ""
},
{
  "name": "payerphone",
  "value": ""
},
{
  "name": "description",
  "value": "tNGN Withdrawal"
},
{
  "name": "amount",
  "value": "1000"
},
{
  "name": "accounttype",
  "value": "ach"
},
{
  "name": "bankname",
  "value": "GTBank Plc"
},
{
  "name": "routingno",
  "value": "000013"
```

```
},
{
  "name": "accountno",
  "value": "0125226043"
},
{
  "name": "expirydate",
  "value": "optional"
},
{
  "name": "accountname",
  "value": "ken alabi"
},
{
  "name": "recipientstate",
  "value": "ny"
},
{
  "name": "recipientzip",
  "value": "11778"
},
{
  "name": "recipientphone",
  "value": "6314133172"
}
]
}
```