

Online API

Version 2.0.3

Introduction

The requests are made with the help of POST (payment method) and GET (reference method).

Request body – is a JSON document.

Options of response HTTP statuses

| HTTP status | Description |
|---------------------------|--|
| 200 OK | Request is accepted and successfully processed |
| 400 BadRequest | Request is not accepted for processing. Possible reasons: <ul style="list-style-type: none">• JSON parsing syntax error;• missing mandatory fields or incorrect their values. |
| 401 Unauthorized | Client authentication error: <ul style="list-style-type: none">• missing or incorrect header Authorization. |
| 403 Forbidden | Forbidden operation |
| 500 Internal Server Error | General technical error |

Authentication

Basic http-authentication according to unique identifier and merchant key is used.

Example of request header

```
Authorization: Basic base64_str
```

where base64_str=base64(mid + ":" + mid_key)

Respond format

General parameters of respond

The respond is a json-document, containing the following fields.

| Field | Type | Description | Mandate |
|--------|----------------------------------|--|--|
| status | string, enum of (success, error) | Request execution status: <ul style="list-style-type: none">• success – successfully processed• error – an error occurred | + |
| result | Object | Request execution result | + (status=success) - (status=error) |
| errors | Array of errors | Request processing errors. | + (status=error) - (status=success) |

Error parameters

| Field | Type | Description | Mandate |
|---------------|--------------|-------------------------------------|---------|
| code | string, enum | Error code | + |
| description | string{50} | Error description | - |
| parameterName | string{50} | Name of parameter, containing error | - |

Example of respond with request processing errors

```
{
  "status": "error",
  "errors": [
    {
      "code": "IllegalParameter",
      "parameterName": "bankId"
    },
    {
      "code": "MissingRequiredParameter",
      "description": "Missing required parameter"
    }
  ]
}
```

Example of successful request processing respond

```
{
  "status": "success",
  "result": {
    "status": "created",
    "id": "321654987",
    "location": {
      "uri": "https://address/path/",
      "parameters": [
        {
          "name": "param1",
          "value": "value1"
        },
        {
          "name": "param2",
          "value": "value2"
        }
      ]
    }
  }
}
```

Payment acceptance (pay-in)

Pay-in onlinebanking

POST /api2/payin/onlinebanking

Request parameters

| Field | Type | Description | Mandate |
|------------------------|------------|--|---------|
| bankId | string{4} | Bank identifier (appendix C) | + |
| order | | Ordering information | + |
| order.moid | string{36} | Order identifier on the merchant side | + |
| order.amount | | Payment amount | + |
| order.amount.value | number(10) | Payment amount numerical value in minor units of currency | + |
| order.amount.currency | string{3} | Payment amount currency, format: ISO-4217 | + |
| endUser | | Final beneficiary | + |
| endUser.firstName | string{50} | Name | + |
| endUser.lastName | string{50} | Surname | + |
| endUser.phone | string{15} | Telephone number | + |
| endUser.email | string{50} | E-mail | + |
| endUser.ipAddress | string{15} | IP-address | + |
| endUser.billingAddress | | Payment address | + |

| | | | |
|--------------------------------|---------------------------------|--|---|
| endUser.billingAddress.zipCode | string{10} | ZIP code | + |
| endUser.billingAddress.country | string{2} | Country, format: ISO-3166-1-alpha-2. | + |
| endUser.billingAddress.city | string{50} | City | + |
| endUser.billingAddress.line1 | string{50} | Street address | + |
| notifyUrl | string{256} | Merchant service operation notification address | + |
| returnUrl | string{256} | Merchant user interface address for client return upon operation execution (see Appendix F) | - |
| additionalParameters | additional parameters, array | Additional parameters | - |
| additionalParameters.name | string{50} | Additional parameter name | + |
| additionalParameters.value | string{50} | Additional parameter value | + |

Example of request

```
curl https://serveraddress:443/api2/payin/onlinebanking \
-X POST \
-H 'Authorization: Basic 351a5f52bdbdbd6c028d3159a43c365' \
-H 'Content-Type: application/json' \
-d '{
  "bankId": "1",
  "order": {
    "moid": "663774",
    "amount": {
```

```

    "value": "10050",
    "currency": "CNY"
  }
},
"endUser": {
  "firstName": "Nik",
  "lastName": "Nolte",
  "phone": "3 543 777 9870",
  "email": "endUser@example.com",
  "ipAddress": "222.222.222.222",
  "billingAddress": {
    "zipCode": "10101",
    "country": "CN",
    "city": "New York",
    "line1": "123 Broadway Street, Apt.10"
  }
},
"notifyUrl": "https://www.example.com/notify/",
"returnUrl": "https://www.example.com/return/",
"additionalParameters": [
  {
    "name": "name1",
    "value": "value1"
  },
  {
    "name": "name2",
    "value": "value2"
  }
]
}'

```

Result field parameters in respond

| Field | Type | Description | Mandate |
|--------------|--------------|-------------------------------|---------|
| order | | Ordering information | + |
| order.status | string, enum | Operation status (Appendix A) | + |
| order.id | string{36} | Operation identifier | + |

| | | | |
|-------------------------------------|-----------------------------|--|---|
| location | | Redirect data. Redirect is performed only with the help of POST method | - |
| location.uri | string{50} | Payment redirect address | + |
| location.parameters | Array of object "parameter" | Array of objects name-value | + |
| location.parameters.parameter.name | string{50} | Name | + |
| location.parameters.parameter.value | string{50} | Value | + |

Example of respond

```
{
  "status": "success",
  "result": {
    "order": {
      "status": "processing",
      "id": "f33dd-df23-fdsdv-324234"
    },
    "location": {
      "uri": "https://gateway.example.com/api2/2/payin/result",
      "parameters": [
        {
          "name": "amount",
          "value": "100.5"
        },
        {
          "name": "bankAccountNumber",
          "value": "6217856400017630250"
        },
        {
          "name": "bankName",
          "value": "中国银行"
        },
        {
          "name": "payeeName",
```

```

    "value": "王远"
  },
  {
    "name": "transferNote",
    "value": "41537100"
  }
]
}
}
}

```

Pay-in onlinebanking status

Hereafter, at any point, there may be requested the operation status payin/onlinebanking

```

curl https://serveraddress:443/api2/payin/onlinebanking/status/<id> \
-X GET \
-H 'Authorization: Basic 351a5f52bdbddb6c028d3159a43c365' \

```

Result field parameters in respond

| Field | Type | Description | Mandate |
|-----------------------|--------------|--|---------|
| order | | Ordering information | + |
| order.status | string, enum | Operation status (Appendix A) | + |
| order.moid | string{36} | Merchant order id | + |
| order.amount | | Payment amount | + |
| order.amount.value | number(10) | Payment amount numerical value in minor units of currency | + |
| order.amount.currency | string{3} | Payment amount currency, format: ISO- 4217 | + |
| order.actualAmount | | Actual payment amount | + |

| | | | |
|-----------------------------|------------|--|---|
| order.actualAmount.value | number(10) | Payment amount numerical value in minor units of currency | + |
| order.actualAmount.currency | string{3} | Payment amount currency, format: ISO-4217 | + |
| order.createdDateTime | string{20} | Payment creation date in format "yyyy-MM-dd HH:mi:ss" | + |
| order.id | string{36} | Order identifier | + |
| order.authorizationDateTime | string{20} | Payment authorization date in format "yyyy-MM-dd HH:mi:ss" | - |

Example of respond

```

{
  "status": "success",
  "result": {
    "order": {
      "status": "done",
      "id": "f33dd-df23-fdsdv-324234",
      "moid": "1231123244412123",
      "amount": {
        "value": "10050",
        "currency": "CNY"
      },
      "actualAmount": {
        "value": "10050",
        "currency": "CNY"
      },
      "createdDateTime": "2017-10-23 14:36:21",
      "authorizationDateTime": "2017-10-23 14:46:21"
    }
  }
}

```

Pay-in onlinebanking notification

Upon operation processing, notification is sent to the specified notifyUrl.

There are several attempts of notification delivery up to reception of final status in respond or up to maximal number of notification delivery attempts exceedance.

Request parameters

| Field | Type | Description | Mandate |
|-----------------------------|--------------|--|---------|
| order | | Ordering information | + |
| order.status | string, enum | Operation status (Appendix A) | + |
| order.moid | string{36} | Merchant order id | + |
| order.amount | | Payment amount | + |
| order.amount.value | number(10) | Payment amount numerical value in minor units of currency | + |
| order.amount.currency | string{3} | Payment amount currency, format: ISO-4217 | + |
| order.actualAmount | | Actual payment amount | + |
| order.actualAmount.value | number(10) | Payment amount numerical value in minor units of currency | + |
| order.actualAmount.currency | string{3} | Payment amount currency, format: ISO-4217 | + |
| order.createdDateTime | string{20} | Payment creation date in format "yyyy-MM-dd HH:mi:ss" | + |
| order.id | string{36} | Order identifier | + |
| order.authorizationDateTime | string{20} | Payment authorization date in format "yyyy-MM-dd HH:mi:ss" | - |

Example of request

```
curl https://merchantaddress:443/notify \  
-X POST \  
-H 'Content-Type: application/json' \  
-d '{  
  "order": {  
    "status": "done",  
    "id": "1234rf23rdfw33",  
    "moid": "1231123244412123",  
    "amount": {  
      "value": "10050",  
      "currency": "CNY"  
    },  
    "actualAmount": {  
      "value": "10050",  
      "currency": "CNY"  
    },  
    "createdDateTime": "2017-10-23 14:36:21",  
    "authorizationDateTime": "2017-10-23 14:46:21"  
  }  
}'
```

Respond parameters

| Field | Type | Description | Mandate |
|--------|------------------------|--------------------------------------|---------|
| status | Fixed value: "success" | Notification acceptance success flag | + |

Example of respond

```
{  
  "status": "success"  
}
```

Pay-in p2p with redirect to the payment service page

POST /api2/payin/p2p

Request header:

-H 'Authorization': Basic 351a5f52bdbddb6c028d3159a43c365'

Request parameters

| Field | Type | Description | Mandate |
|--------------------------------|------------|---|---------|
| order | | Ordering information | + |
| order.moid | string{36} | Order identifier on the merchant side | + |
| order.amount | | Payment amount | + |
| order.amount.value | number(10) | Payment amount numerical value in minor units of currency | + |
| order.amount.currency | string{3} | Payment amount currency, format: ISO-4217 | + |
| endUser | | Final beneficiary | + |
| endUser.firstName | string{50} | Name | + |
| endUser.lastName | string{50} | Surname | + |
| endUser.phone | string{15} | Telephone number | + |
| endUser.email | string{50} | E-mail | + |
| endUser.ipAddress | string{15} | IP-address | + |
| endUser.billingAddress | | Payment address | + |
| endUser.billingAddress.zipCode | string{10} | ZIP code | + |

| | | | |
|--------------------------------|------------------------------|---|---|
| endUser.billingAddress.country | string{2} | Country, format: ISO-3166-1-alpha-2. | + |
| endUser.billingAddress.city | string{50} | City | + |
| endUser.billingAddress.line1 | string{50} | Street address | + |
| notifyUrl | string{256} | Merchant operation notification address | + |
| returnUrl | string{256} | Merchant user interface address for client return upon operation execution (see Appendix F) | - |
| additionalParameters | additional parameters, array | Additional parameters | - |
| additionalParameters.name | string{50} | Additional parameter name | + |
| additionalParameters.value | string{50} | Additional parameter value | + |

Example of request

```
curl https://serveraddress:443/api2/payin/p2p \
-X POST \
-H 'Authorization: Basic 351a5f52bdbdbd6c028d3159a43c365' \
-H 'Content-Type: application/json' \
-d '{
  "order": {
    "moid": "663774",
    "amount": {
      "value": "10050",
      "currency": "CNY"
    }
  }
},
```

```

"endUser": {
  "firstName": "Nik",
  "lastName": "Nolte",
  "phone": "3 543 777 9870",
  "email": "endUser@example.com",
  "ipAddress": "222.222.222.222",
  "billingAddress": {
    "zipCode": "10101",
    "country": "CN",
    "city": "New York",
    "line1": "123 Broadway Street, Apt.10"
  }
},
"notifyUrl": "https://www.example.com/notify/",
"returnUrl": "https://www.example.com/return/",
"additionalParameters": [
  {
    "name": "name1",
    "value": "value1"
  },
  {
    "name": "name2",
    "value": "value2"
  }
]
}'

```

Result field parameters in respond

| Field | Type | Description | Mandate |
|--------------|-----------------|---|---------|
| order | | Ordering information | + |
| order.status | string, enum | Operation status (appendix A) | + |
| order.id | string{36} | Operation identifier | + |
| location | | Redirect data. Redirect is performed only with the help of POST method | - |

| | | | |
|-------------------------------------|-----------------------------|-----------------------------|---|
| location.uri | string{50} | Payment redirect address | + |
| location.parameters | Array of object "parameter" | Array of objects name-value | + |
| location.parameters.parameter.name | string{50} | Name | + |
| location.parameters.parameter.value | string{50} | Value | + |

Example of respond

```

{
  "status": "success",
  "result": {
    "order": {
      "status": "processing",
      "id": "f33dd-df23-fdsdv-324234"
    },
    "location": {
      "uri": "https://gateway.example.com/api2/2/payin/result",
      "parameters": [
        {
          "name": "amount",
          "value": "100.5"
        },
        {
          "name": "bankAccountNumber",
          "value": "6217856400017630250"
        },
        {
          "name": "bankName",
          "value": "中国银行"
        },
        {
          "name": "payeeName",
          "value": "王远"
        },
        {
          "name": "transferNote",
          "value": "41537100"
        }
      ]
    }
  }
}

```

```
]
}
}
}
```


Pay-in p2p status

Hereafter, at any point, there may be requested the operation status payin/p2p

```
curl https://serveraddress:443/api2/payin/p2p/status/<id> \
-X GET \
-H 'Authorization: Basic 351a5f52bdbdbd6c028d3159a43c365' \
```

where id - order identifier in our system,

Result field parameters in respond

| Field | Type | Description | Mandate |
|-----------------------------|--------------|--|---------|
| order | | Ordering information | + |
| order.status | string, enum | Operation status (appendix A) | + |
| order.moid | string{36} | Merchant order id | + |
| order.amount | | Payment amount | + |
| order.amount.value | number(10) | Payment amount numerical value in minor units of currency | + |
| order.amount.currency | string{3} | Payment amount currency, format: ISO- 4217 | + |
| order.actualAmount | | Actual payment amount | + |
| order.actualAmount.value | number(10) | Payment amount numerical value in minor units of currency | + |
| order.actualAmount.currency | string{3} | Payment amount currency, format: ISO- 4217 | + |
| order.createdDateTime | string{20} | Payment creation date in format "yyyy-MM-dd HH:mi:ss" | + |
| order.id | string{36} | Order identifier | + |

| | | | |
|-----------------------------|------------|--|---|
| order.authorizationDateTime | string{20} | Payment authorization date in format "yyyy-MM-dd HH:mi:ss" | - |
| adjustmentTicketId | string{36} | Ticket identifier at transaction adjustment | - |

Example of respond

```
{
  "status": "success",
  "result": {
    "order": {
      "status": "done",
      "id": "f33dd-df23-fdsdv-324234",
      "moid": "1231123244412123",
      "amount": {
        "value": "10050",
        "currency": "CNY"
      },
      "actualAmount": {
        "value": "10050",
        "currency": "CNY"
      },
      "createdDateTime": "2017-10-23 14:36:21",
      "authorizationDateTime": "2017-10-23 14:46:21"
    },
    "adjustmentTicketId": "123"
  }
}
```

Pay-in p2p notification

Upon operation processing, notification is sent to the specified notifyUrl.

There are several attempts of notification delivery up to reception of final status in respond or up to maximal number of notification delivery attempts exceedance.

Request parameters

| Field | Type | Description | Mandate |
|-------|------|----------------------|---------|
| order | | Ordering information | + |

| | | | |
|-----------------------------|--------------|--|---|
| order.status | string, enum | Operation status (appendix A) | + |
| order.moid | string{36} | Merchant order id | + |
| order.amount | | Payment amount | + |
| order.amount.value | number(10) | Payment amount numerical value in minor units of currency | + |
| order.amount.currency | string{3} | Payment amount currency, format: ISO-4217 | + |
| order.actualAmount | | Actual payment amount | + |
| order.actualAmount.value | number(10) | Payment amount numerical value in minor units of currency | + |
| order.actualAmount.currency | string{3} | Payment amount currency, format: ISO-4217 | + |
| order.createdDateTime | string{20} | Payment creation date in format "yyyy-MM-dd HH:mi:ss" | + |
| order.id | string{36} | Order identifier | + |
| order.authorizationDateTime | string{20} | Payment authorization date in format "yyyy-MM-dd HH:mi:ss" | - |

Example of request

```
curl https://merchantaddress:443/notify \
-X POST \
-H 'Content-Type: application/json' \
-d '{
  "order": {
    "status": "done",
    "id": "1234rf23rdfw33",
    "moid": "1231123244412123",
```

```

"amount": {
  "value": "10050",
  "currency": "CNY"
},
"actualAmount": {
  "value": "10050",
  "currency": "CNY"
},
"createdDateTime": "2017-10-23 14:36:21",
"authorizationDateTime": "2017-10-23 14:46:21"
}
}

```

Respond parameters

| Field | Type | Description | Mandate |
|--------|------------------------|--------------------------------------|---------|
| status | Fixed value: "success" | Notification acceptance success flag | + |

Example of respond

```

{
  "status": "success"
}

```

Pay-in p2p without redirect

POST /api2/payin/p2p/direct

Request header:

-H 'Authorization': Basic 351a5f52bdbdbd6c028d3159a43c365'

Request parameters

| Field | Type | Description | Mandate |
|--------------|------------|---------------------------------------|---------|
| order | | Ordering information | + |
| order.moid | string{36} | Order identifier on the merchant side | + |
| order.amount | | Payment amount | + |

| | | | |
|--------------------------------|-------------|---|---|
| order.amount.value | number(10) | Payment amount numerical value in minor units of currency | + |
| order.amount.currency | string{3} | Payment amount currency, format: ISO-4217 | + |
| endUser | | Final beneficiary | + |
| endUser.firstName | string{50} | Name | + |
| endUser.lastName | string{50} | Surname | + |
| endUser.phone | string{15} | Telephone number | + |
| endUser.email | string{50} | E-mail | + |
| endUser.ipAddress | string{15} | IP-address | + |
| endUser.billingAddress | | Payment address | + |
| endUser.billingAddress.zipCode | string{10} | ZIP code | + |
| endUser.billingAddress.country | string{2} | Country, format: ISO-3166-1-alpha-2. | + |
| endUser.billingAddress.city | string{50} | City | + |
| endUser.billingAddress.line1 | string{50} | Street address | + |
| notifyUrl | string{256} | Merchant service operation notification address | + |
| returnUrl | string{256} | Merchant user interface address for client return upon operation execution (see Appendix F) | - |

| | | | |
|----------------------------|------------------------------|----------------------------|---|
| additionalParameters | additional parameters, array | Additional parameters | - |
| additionalParameters.name | string{50} | Additional parameter name | + |
| additionalParameters.value | string{50} | Additional parameter value | + |

Example of request:

```
curl https://serveraddress:443/api2/payin/p2p/direct \
-X POST \
-H 'Authorization: Basic 351a5f52bdbdbd6c028d3159a43c365' \
-H 'Content-Type: application/json' \
-d '{
  "order": {
    "moid": "663774",
    "amount": {
      "value": "10050",
      "currency": "CNY"
    }
  },
  "endUser": {
    "firstName": "Nik",
    "lastName": "Nolte",
    "phone": "3 543 777 9870",
    "email": "endUser@example.com",
    "ipAddress": "222.222.222.222",
    "billingAddress": {
      "zipCode": "10101",
      "country": "CN",
      "city": "New York",
      "line1": "123 Broadway Street, Apt.10"
    }
  },
  "notifyUrl": "https://www.example.com/notify/",
  "returnUrl": "https://www.example.com/return/",
  "additionalParameters": [
    {
      "name": "name1",
```

```

    "value": "value1"
  },
  {
    "name": "name2",
    "value": "value2"
  }
]
}'

```

Result field parameters in respond

| Field | Type | Description | Mandate |
|--|-----------------------------|-------------------------------|---------|
| order | | Ordering information | + |
| order.status | string, enum | Operation status (appendix A) | + |
| order.id | string{36} | Operation identifier | + |
| payment | | Details for p2p payment | |
| payment.parameters | Array of object "parameter" | Array of objects name-value | + |
| payment.parameters.parameter.name | string{50} | Name | + |
| payment.parameters.parameter.value | string{50} | Value | + |
| payment.parameters.parameter.description | string{100} | Parameter description | - |

Example of respond

```

{
  "status": "success",
  "result": {
    "order": {
      "status": "processing",
      "id": "f33dd-df23-fdsdv-324234"
    }
  },
}

```

```

"payment": {
  "parameters": [
    {
      "name": "amount",
      "value": "100.5"
    },
    {
      "name": "bankAccountNumber",
      "value": "6217856400017630250"
    },
    {
      "name": "bankName",
      "value": "中国银行"
    },
    {
      "name": "payeeName",
      "value": "王远"
    },
    {
      "name": "transferNote",
      "value": "41537100"
    }
  ]
}
}
}

```

Pay-in p2p direct status

Hereafter, at any point, there may be requested the operation status payin/p2p

```

curl https://serveraddress:443/api2/payin/p2p/direct/status/<id> \
-X GET \
-H 'Authorization: Basic 351a5f52bdbdbd6c028d3159a43c365' \

```

where id - order identifier in our system.

Result field parameters in respond

| Field | Type | Description | Mandate |
|-------|------|----------------------|---------|
| order | | Ordering information | + |

| | | | |
|-----------------------------|--------------|--|---|
| order.status | string, enum | Operation status (appendix A) | + |
| order.moid | string{36} | Merchant order id | + |
| order.amount | | Payment amount | + |
| order.amount.value | number(10) | Payment amount numerical value in minor units of currency | + |
| order.amount.currency | string{3} | Payment amount currency, format: ISO-4217 | + |
| order.actualAmount | | Actual payment amount | + |
| order.actualAmount.value | number(10) | Payment amount numerical value in minor units of currency | + |
| order.actualAmount.currency | string{3} | Payment amount currency, format: ISO-4217 | + |
| order.createdDateTime | string{20} | Payment creation date in format "yyyy-MM-dd HH:mi:ss" | + |
| order.id | string{36} | Order identifier | + |
| order.authorizationDateTime | string{20} | Payment authorization date in format "yyyy-MM-dd HH:mi:ss" | - |
| adjustmentTicketId | string{36} | Ticket identifier at transaction adjustment | - |

Example of respond

```
{
  "status": "success",
  "result": {
    "order": {
      "status": "done",
```

```

    "id": "f33dd-df23-fdsdv-324234",
    "moid": "1231123244412123",
    "amount": {
      "value": "10050",
      "currency": "CNY"
    },
    "actualAmount": {
      "value": "10050",
      "currency": "CNY"
    },
    "createdDateTime": "2017-10-23 14:36:21",
    "authorizationDateTime": "2017-10-23 14:46:21"
  }
}
}

```

Pay-in p2p direct notification

Upon operation processing, notification is sent to the specified notifyUrl.

There are several attempts of notification delivery up to reception of final status in respond or up to maximal number of notification delivery attempts exceedance.

Request parameters

| Field | Type | Description | Mandate |
|-----------------------|--------------|---|---------|
| order | | Ordering information | + |
| order.status | string, enum | Operation status (appendix A) | + |
| order.moid | string{36} | Merchant order id | + |
| order.amount | | Payment amount | + |
| order.amount.value | number(10) | Payment amount numerical value in minor units of currency | + |
| order.amount.currency | string{3} | Payment amount currency, format: ISO-4217 | + |
| order.actualAmount | | Actual payment amount | + |

| | | | |
|-----------------------------|------------|--|---|
| order.actualAmount.value | number(10) | Payment amount numerical value in minor units of currency | + |
| order.actualAmount.currency | string{3} | Payment amount currency, format: ISO-4217 | + |
| order.createdDateTime | string{20} | Payment creation date in format "yyyy-MM-dd HH:mi:ss" | + |
| order.id | string{36} | Order identifier | + |
| order.authorizationDateTime | string{20} | Payment authorization date in format "yyyy-MM-dd HH:mi:ss" | - |

Example of request

```
curl https://merchantaddress:443/notify \
-X POST \
-H 'Content-Type: application/json' \
-d '{
  "order": {
    "status": "done",
    "id": "1234rf23rdfw33",
    "moid": "1231123244412123",
    "amount": {
      "value": "10050",
      "currency": "CNY"
    },
    "actualAmount": {
      "value": "10050",
      "currency": "CNY"
    },
    "createdDateTime": "2017-10-23 14:36:21",
    "authorizationDateTime": "2017-10-23 14:46:21"
  }
}
```

Respond parameters

| Field | Type | Description | Mandate |
|--------|------------------------|--------------------------------------|---------|
| status | Fixed value: "success" | Notification acceptance success flag | + |

Example of respond

```
{  
  "status": "success"  
}
```

p2p transaction adjustment

POST /api2/payin/p2p/adjustment

Request header:

-H 'Authorization': Basic 351a5f52bdbdbd6c028d3159a43c365'

Request parameters

| Field | Type | Description | Mandate |
|---------|------------------------------|---------------------------------------|---------|
| orderId | string{36} | Order identifier on the merchant side | + |
| image | jpg, jpeg, png (20MB max) | Payment confirmation screenshot | + |

Example of request:

```
curl https://serveraddress:443/api2/payin/p2p/adjustment \  
-X POST \  
-H 'Authorization: Basic 351a5f52bdbdbd6c028d3159a43c365' \  
-H 'Content-Type: multipart/form-data' \  
-F 'orderId=1223' \  
-F 'image=@data.jpg'
```

Result field parameters in respond

| Field | Type | Description | Mandate |
|--------------|-----------------|----------------------------------|---------|
| order | | Ordering information | + |
| order.status | string, enum | Operation status (appendix A) | + |
| order.id | string{36} | Operation identifier | + |

| | | | |
|--------------------|------------|---|---|
| payment | | Details for p2p payment | |
| adjustmentTicketId | string{36} | Ticket identifier at transaction adjustment | + |

Example of respond

```
{
  "status": "success",
  "result": {
    "order": {
      "status": "adjustment",
      "id": "f33dd-df23-fdsdv-324234"
    },
    "adjustmentTicketId": "123"
  }
}
```

Out payments (pay-out)

Payot banktransfer

POST /api2/payout/banktransfer

Request header:

-H 'Authorization': Basic 351a5f52bdbdbd6c028d3159a43c365'

Request parameters

| Field | Type | Description | Mandate |
|--------------------|------------|---|---------|
| order | | Ordering information | |
| order.moid | string{36} | Merchant order id | + |
| order.amount | | Payment amount | + |
| order.amount.value | number(10) | Payment amount numerical value in minor units of currency | + |

| | | | |
|----------------------------|------------------------------|---|---|
| order.amount.currency | string{3} | Payment amount currency, format: ISO-4217 | + |
| bank | | Bank information | |
| bank.id | string{4} | Appendix C | + |
| bank.branch | string{50} | Address of the account-opening branch | + |
| bank.accountName | string{50} | Customer name in Simplified Chinese | + |
| bank.cardNumber | string{20} | Withdrawal bank card Number | + |
| bank.province | number{6}, enum | Appendix D | + |
| bank.area | number{6}, enum | Appendix E | + |
| additionalParameters | additional parameters, array | Additional parameters | - |
| additionalParameters.name | string{50} | Additional parameter name | + |
| additionalParameters.value | string{50} | Additional parameter value | + |
| notifyUrl | string{256} | Merchant service operation notification address | + |

Example of request

```
{
  "order": {
    "moid": "1231123244412123",
    "amount": {
      "value": 1222,

```

```
    "currency": "CNY"
  }
},
"notifyUrl": "https://185.117.73.231:8443/notify",
"bank": {
  "id": "1",
  "branch": "广东分行广州北京路支行",
  "accountName": "何国荣",
  "cardNumber": "12345678901234567890",
  "province": 230000,
  "area": 110100
},
"additionalParameters": [
  {
    "name": "name1",
    "value": "value1"
  },
  {
    "name": "name2",
    "value": "value2"
  }
]
}
```


Respond parameters

| Field | Type | Description | Mandate |
|-------------------------------------|-----------------------------|---|---------|
| order | | Ordering information | + |
| order.status | string, enum | Operation status (appendix A) | + |
| order.id | string{36} | Operation identifier | + |
| location.uri | string{50} | Pay-out redirect address. Redirect is performed only with the help of POST method | - |
| location.parameters | Array of object "parameter" | Array of objects name-value | + |
| location.parameters.parameter.name | string{50} | Name | + |
| location.parameters.parameter.value | string{50} | Value | + |

Example of respond

```
{
  "status": "success",
  "result": {
    "order": {
      "status": "processing",
      "id": "f33dd-df23-fdsdv-324234"
    },
    "location": {
      "uri": "https://gateway.example.com/api2/2/payout/result",
      "parameters": [
        {
          "name": "amount",
          "value": "100.5"
        }
      ]
    }
  }
}
```

```

    "name": "bankAccountNumber",
    "value": "6217856400017630250"
  },
  {
    "name": "bankName",
    "value": "中国银行"
  },
  {
    "name": "payeeName",
    "value": "王远"
  },
  {
    "name": "transferNote",
    "value": "41537100"
  }
]
}
}
}

```

Pay-out banktransfer status

Hereafter, at any point, there may be requested the operation status payout/banktransfer

```

curl https://serveraddress:443/api2/payout/banktransfer/status/<id> \
-X GET \
-H 'Authorization: Basic 351a5f52bdbddb6c028d3159a43c365' \

```

where id - order identifier in our system.

Result field parameters in respond

| Field | Type | Description | Mandate |
|--------------|--------------|-------------------------------|---------|
| order | | Ordering information | + |
| order.status | string, enum | Operation status (appendix A) | + |
| order.moid | string{36} | Merchant order id | + |
| order.amount | | Payment amount | + |

| | | | |
|-----------------------------|------------|--|---|
| order.amount.value | number(10) | Payment amount numerical value in minor units of currency | + |
| order.amount.currency | string{3} | Payment amount currency, format: ISO-4217 | + |
| order.createdDateTime | string{20} | Payment creation date in format "yyyy-MM-dd HH:mi:ss" | + |
| order.id | string{36} | Order identifier | + |
| order.authorizationDateTime | string{20} | Payment authorization date in format "yyyy-MM-dd HH:mi:ss" | - |

Example of respond

```
{
  "status": "success",
  "result": {
    "order": {
      "status": "done",
      "id": "f33dd-df23-fdsdv-324234",
      "moid": "1231123244412123",
      "amount": {
        "value": "10050",
        "currency": "CNY"
      },
      "createdDateTime": "2017-10-23 14:36:21",
      "authorizationDateTime": "2017-10-23 14:46:21"
    }
  }
}
```

Pay-out banktransfer notification

Upon operation processing, notification is sent to the specified notifyUrl.

There are several attempts of notification delivery up to reception of final status in respond or up to maximal number of notification delivery attempts exceedance.

Request parameters

| Field | Type | Description | Mandate |
|-----------------------------|--------------|--|---------|
| order | | Ordering information | + |
| order.status | string, enum | Operation status (appendix A) | + |
| order.moid | string{36} | Merchant order id | + |
| order.amount | | Payment amount | + |
| order.amount.value | number(10) | Payment amount numerical value in minor units of currency | + |
| order.amount.currency | string{3} | Payment amount currency, format: ISO-4217 | + |
| order.createdDateTime | string{20} | Payment creation date in format "yyyy-MM-dd HH:mi:ss" | + |
| order.id | string{36} | Order identifier | + |
| order.authorizationDateTime | string{20} | Payment authorization date in format "yyyy-MM-dd HH:mi:ss" | - |

Example of request

```
curl https://merchantaddress:443/notify \
-X POST \
-H 'Content-Type: application/json' \
-d '{
  "order": {
    "status": "done",
    "id": "1234rf23rdfw33",
    "moid": "1231123244412123",
    "amount": {
      "value": "10050",
      "currency": "CNY"
    },
    "createdDateTime": "2017-10-23 14:36:21",
```

```

"authorizationDateTime": "2017-10-23 14:46:21"
}
}'

```

Respond parameters

| Field | Type | Description | Mandate |
|--------|------------------------|--------------------------------------|---------|
| status | Fixed value: "success" | Notification acceptance success flag | + |

Example of respond

```

{
"status": "success"
}

```

Pay-in transactions list request

POST /api2/payin/<payment method>/list

Request header:

-H 'Authorization': Basic 351a5f52bdbdbd6c028d3159a43c365'

Request parameters

| Field | Type | Description | Mandate |
|---------------------------------|------------|---|---------|
| dateTimeInterval | | Time interval, for which you need to obtain data. (Should not exceed one month) | + |
| dateTimeInterval.startInclusive | string{36} | Time interval start | + |
| dateTimeInterval.endExclusive | string{36} | Time interval end | + |
| lastMark | string{10} | Order identifier, before which the data will not be given | - |

| | | | |
|----------|---|---|---|
| limit | string{4} | Maximum number of orders in return respond (max - 1000) | + |
| statuses | Array of object order statuses (Appendix A) | Order statuses | + |

Example of request:

```
curl https://serveraddress:443/api2/payin/list \
-X POST \
-H 'Authorization: Basic 351a5f52bdbddb6c028d3159a43c365' \
-H 'Content-Type: application/json' \
-d '{
  "dateTimeInterval": {
    "endExclusive": "2018-07-02T10:15:30",
    "startInclusive": "2018-06-11T10:15:30"
  },
  "lastMark": "12",
  "limit": "555",
  "statuses": [
    "created",
    "processing"
  ]
}'
```

Result field parameters in respond

| Field | Type | Description | Mandate |
|---------------------|-------------------------|----------------------------------|---------|
| orders | Array of object 'order' | Array of objects of type 'order' | + |
| orders.order.status | string, enum | Operation status (appendix A) | + |
| orders.order.id | string{36} | Operation identifier | + |
| orders.order.moid | string{36} | Operation identifier on | |

| | | | |
|--|-------------------------------|---|---|
| | | merchant side | |
| orders.order.bank | string{4} | Bank identifier | + |
| orders.order.netAmount | | Deposit amount | + |
| orders.order.netAmount.value | number(10) | Payment amount numerical value in minor units of currency | + |
| orders.order.netAmount.currency | string{3} | Payment amount currency, format: ISO-4217 | + |
| orders.order.totalAmount | | deposit amount with commission | + |
| orders.order.totalAmount.value | number(10) | Deposit numerical value in minor units of currency | + |
| orders.order.totalAmount.currency | string{3} | Deposit currency, format: ISO-4217 | + |
| orders.order.createdDateTime | string{36} | Order creation date | + |
| orders.order.additionalParameters | additional parameters , array | Additional parameters | - |
| orders.order.additionalParameters.name | string{50} | Additional parameter name | + |

| | | | |
|---|------------|--|---|
| orders.order.additionalParameters.value | string{50} | Additional parameter value | + |
| lastMark | string{10} | Identifier of payment, before which the data are given | + |

Example of respond

```
{
  "status": "success",
  "result": {
    "orders": [
      {
        "status": "created",
        "id": "15",
        "moid": "order111",
        "bank": "ABC",
        "netAmount": {
          "value": "118",
          "currency": "CNY"
        },
        "totalAmount": {
          "value": "100",
          "currency": "CNY"
        },
        "createdDateTime": "2018-06-13T10:13:13",
        "additionalParameters": [
          {
            "name": "param1",
            "value": "value1"
          },
          {
            "name": "param2",
            "value": "value2"
          }
        ]
      }
    ],
    "status": "done",
```



```

    "id": "23",
    "moid": "order207",
    "bank": "ABC",
    "merchantAmount": {
      "value": "428",
      "currency": "CNY"
    },
    "totalAmount": {
      "value": "401",
      "currency": "CNY"
    },
    "createdDateTime": "2018-07-01T22:39:55",
    "authorizationDateTime": "2018-07-02T22:39:55"
  }
],
  "lastMark": "23"
}
}

```

Pay-out transactions list request

POST /api2/payout/<payout method>/list

Request header:

-H 'Authorization': Basic 351a5f52bdbdbd6c028d3159a43c365'

Request parameters

| Field | Type | Description | Mandate |
|---------------------------------|------------|--|---------|
| dateTimeInterval | | Time interval, for which you need to obtain data (Should not exceed one month) | + |
| dateTimeInterval.startInclusive | string{36} | Time interval start | + |
| dateTimeInterval.endExclusive | string{36} | Time interval end | + |

| | | | |
|----------|---|---|---|
| lastMark | string{10} | Order identifier, before which the data will not be given | - |
| limit | string{4} | Maximum number of orders in return respond (max - 1000) | + |
| statuses | Array of object order statuses (Appendix A) | Order statuses | + |

Example of request

```
curl https://serveraddress:443/api2/payout/list \
-X POST \
-H 'Authorization: Basic 351a5f52bdbdbd6c028d3159a43c365' \
-H 'Content-Type: application/json' \
-d '{
  "dateTimeInterval": {
    "endExclusive": "2018-07-02T10:15:30",
    "startInclusive": "2018-06-11T10:15:30"
  },
  "lastMark": "12",
  "limit": "555",
  "statuses": [
    "created",
    "processing"
  ]
}'
```

Result field parameters in respond

| Field | Type | Description | Mandate |
|---------------------|-------------------------|----------------------------------|---------|
| orders | Array of object 'order' | Array of objects of type 'order' | + |
| orders.order.status | string, enum | Operation status (appendix A) | + |

| | | | |
|------------------------------------|-------------------------------|--|---|
| orders.order.id | string{36} | Operation identifier | + |
| orders.order.moid | string{36} | Operation identifier on merchant side | |
| orders.order.bank | string{4} | Bank identifier | + |
| orders.order.payoutAmount | | Pay-out amount | + |
| orders.order.payoutAmount.value | number(10) | Pay-out numerical value in minor units of currency | + |
| orders.order.payoutAmount.currency | string{3} | Pay-out amount currency, format: ISO-4217 | + |
| orders.order.totalAmount | | Pay-out amount less commission | + |
| orders.order.totalAmount.value | number(10) | Pay-out numerical value in minor units of currency | + |
| orders.order.totalAmount.currency | string{3} | Pay-out amount currency, format: ISO-4217 | + |
| orders.order.createdDateTime | string{36} | Order creation time | + |
| orders.order.additionalParameters | additional parameters , array | Additional parameters | - |

| | | | |
|---|------------|--|---|
| orders.order.additionalParameters.name | string{50} | Additional parameter name | + |
| orders.order.additionalParameters.value | string{50} | Additional parameter value | + |
| lastMark | string{10} | Identifier of payment, before which the data are given | + |

Example of respond

```

{
  "status": "success",
  "result": {
    "orders": [
      {
        "status": "created",
        "id": "15",
        "moid": "order111",
        "bank": "ABC",
        "payoutAmount": {
          "value": "118",
          "currency": "CNY"
        },
        "totalAmount": {
          "value": "100",
          "currency": "CNY"
        },
        "createdDateTime": "2018-06-13T10:13:13",
        "additionalParameters": [
          {
            "name": "param1",
            "value": "value1"
          },
          {
            "name": "param2",
            "value": "value2"
          }
        ]
      }
    ]
  }
}

```

```

    ]
  },
  {
    "status": "done",
    "id": "23",
    "moid": "order207",
    "bank": "ABC",
    "merchantAmount": {
      "value": "428",
      "currency": "CNY"
    },
    "totalAmount": {
      "value": "401",
      "currency": "CNY"
    },
    "createdDateTime": "2018-07-01T22:39:55",
    "authorizationDateTime": "2018-07-02T22:39:55"
  }
],
"lastMark": "23"
}
}

```

Pay-out banktransfer balance

```

curl https://serveraddress:443/api2/payout/balance/<currencyCode>/\
-X GET \
-H 'Authorization: Basic 351a5f52bdbdbd6c028d3159a43c365' \

```

where currencyCode – is the balance currency, format: ISO-4217.

Result field parameters in respond

| Field | Type | Description | Mandate |
|------------------|------------|--|---------|
| balance | | Amount available for pay-outs | + |
| balance.value | number(10) | Balance numerical value in minor units of currency | + |
| balance.currency | string{3} | Balance currency, format: ISO-4217 | + |

Example of respond

```
{  
  "status": "success",  
  "result": {  
    "balance": {  
      "value": "6362",  
      "currency": "CNY"  
    }  
  }  
}
```

Appendix A

Order status codes

| | |
|------------|------------------------------|
| created | Created |
| processing | Processing |
| done | Done |
| rejected | Rejected |
| refunded | Refunded |
| adjustment | Order is sent for adjustment |

Appendix B

Error codes

| HTTP-status | Error code | Description |
|-------------|--------------------------|---|
| 200 | ProviderNotAvailable | Provider is not available |
| 200 | BankNotAvailable | Bank is not available |
| 200 | MinAmountLimit | Amount is less than minimal limit |
| 200 | MaxAmountLimit | Amount is more than maximal limit |
| 200 | DailyLimit | Daily limit is exceeded |
| 200 | LocalLimit | Local limit is exceeded |
| 200 | AdjustmentNotAvialible | Adjustment is not available |
| 400 | MissingRequiredParameter | Mandatory parameter is missing |
| 400 | IllegalParameter | Parameter has invalid value |
| 400 | OrderDuplication | Order with such number already exists |
| 401 | MissingRequiredHeader | Mandatory header is missing |
| 401 | IllegalHeader | Header field has invalid value |
| 403 | OperationForbidden | Forbidden operation for this merchant |
| 500 | TechnicalError | Technical error. The request may equiprobably be executed and not executed. |

Example of failure respond #1

```
{
  "status": "error",
  "errors": [
    {
      "code": "IllegalParameter",
      "parameterName": "bankId"
    },
  ],
}
```

```
{
  "code": "MissingRequiredParameter",
  "parameterName": "order"
}
]
```

Example of failure respond #2

```
{
  "status": "error",
  "errors": [
    {
      "code": "TechnicalError",
      "description": "Technical error"
    }
  ]
}
```


Appendix C

Banks of China list request

Pay-in banks

```
GET /api2/dictionary/china/banks/payin/list
curl https://serveraddress:443/api2/dictionary/china/banks/payin/list \
-X GET \
-H 'Authorization: Basic 351a5f52bdbddb6c028d3159a43c365' \
```

Pay-out banks

```
GET /api2/dictionary/china/banks/payout/list
curl https://serveraddress:443/api2/dictionary/china/banks/payout/list \
-X GET \
-H 'Authorization: Basic 351a5f52bdbddb6c028d3159a43c365' \
```

Respond parameters

There returns the array of objects, consisting of the following parameters.

| Field | Type | Description | Mandate |
|-------------|------------|--------------------|---------|
| id | string{4} | Bank identifier | + |
| code | string{10} | Bank code | + |
| description | string{50} | Bank description | + |
| name | string{50} | Bank original name | + |

Example of respond

```
{
  "status": "success",
  "result": {
    "banks": [
      {
        "id": "1",
        "code": "ABC",
        "description": "Agricultural Bank of China",

```

```
    "name": "中国农业银行",
  },
  {
    "id": "2",
    "code": "BCOM",
    "description": "Bank of Communications",
    "name": "中国交通银行"
  }
]
}
```

Appendix D

Provinces of China list request

```
GET /api2/dictionary/china/provinces/list
curl https://serveraddress:443/api2/dictionary/china/provinces/list \
-X GET \
-H 'Authorization: Basic 351a5f52bdbdbd6c028d3159a43c365' \
```

Respond parameters

There returns the array of objects, consisting of the following parameters.

| Field | Type | Description | Mandate |
|-------|------------|---------------|---------|
| code | number{6} | Province code | + |
| name | string{50} | Province name | + |

Example of respond

```
{
  "status": "success",
  "result": {
    "provinces": [
      {
        "code": "110000",
        "name": "北京市"
      },
      {
        "code": "230000",
        "name": "黑龙江省"
      }
    ]
  }
}
```

Appendix E

Cities of China list request

GET /api2/dictionary/china/areas/list

```
curl https://serveraddress:443/api2/dictionary/china/areas/list \  
-X GET \  
-H 'Authorization: Basic 351a5f52bdbdbd6c028d3159a43c365' \  

```

Respond parameters

There returns the array of objects, consisting of the following parameters.

| Field | Type | Description | Mandate |
|-------|------------|-------------|---------|
| code | number{6} | City code | + |
| name | string{50} | City | + |

Example of respond

```
{  
  "status": "success",  
  "result": {  
    "areas": [  
      {  
        "code": "131000",  
        "name": "廊坊市"  
      },  
      {  
        "code": "150200",  
        "name": "包头市"  
      }  
    ]  
  }  
}
```

Appendix F

returnUrl parameters

Upon the client return to the merchant page after payment there are additionally transferred the following parameters.

| Field | Type | Description | Mandate |
|---------|--------------|---------------------------------------|---------|
| orderId | string{36} | Order identifier | + |
| moid | string{36} | Order identifier on the merchant side | + |
| status | string, enum | Operation status (Appendix A) | + |

Appendix G

Testing and integration

For initial testing and integration the service provides test system identifiers. In test mode, for P2P and Withdrawal requests the service equiprobably returns the statuses DONE and REJECTED.