

# Number Masking

Service for quick integration of substitute numbers for communication with third parties..

## Authentication

requests must include a token value in the authorization header:

```
Authorization: Bearer {token}
```

To obtain an access key, please contact support.

## Campaign

A campaign combines [goals](#) and [masks](#). It contains all general settings.

### Creating a Campaign

#### Request

```
[POST] /public/api/v1/masking/campaign
{
  "name": "Campaign#1",
  "directStrategy": "BRIDGE",
  "reverseStrategy": "BRIDGE",
  "bindingPeriod": 60,
  "state": "ACTIVE",
  "integration": {
    "eventsUrl": "http://localhost:8080",
    "eventsToken": "00000000-0000-0000-0000-000000000000"
  }
}
```

- name - campaign name;
- directStrategy - [target](#) masking strategy;
- reverseStrategy - [reverse](#) masking strategy;
- bindingPeriod - the time for which the binding takes place is specified in minutes, the value may be absent, the default value is 180 minutes.;
- state - campaign [state](#). By default, the campaign is created in the INACTIVE state;
- integration - integration settings for sending notifications about the campaign's;
  - eventsUrl - URL for sending events;
  - eventsToken - authorization token for the HTTP event server;

#### Strategies ( directStrategy and reverseStrategy fields in campaign settings )

##### Target Masking

directStrategy field. The strategy for masking target numbers. Possible values::

- [BRIDGE](#)
- [EXTS](#)

##### Reverse Masking

reverseStrategy field. Possible values:

- [DISABLE](#)
- [BRIDGE](#)
- [EXTS](#)
- [STATIC](#)

#### Strategy Descriptions

##### DISABLE

Masking will not be performed. The call will be dropped.

## BRIDGE

The next available phone number will be selected for masking and associated with the number to be forwarded.

If all numbers are already in use when requesting another mask number to mask the target, an error will be received and a notification will be sent that the number pool is exhausted.

If all numbers are already in use when requesting the next mask number for reverse masking, the mapping created before the others will be preempted.

## EXTS

The following extension number will be selected for masking. The range of extension numbers is 001-999.

## EXTS

Direct masking will work similarly to the BRIDGE strategy. The value of the reverseStrategy field will be ignored. The same number will be selected for reverse masking as for direct masking.

## Campaign States

- ACTIVE - the campaign is active
- INACTIVE - the campaign is inactive
- ARCHIVE - the campaign is archived

## Response

### In case of success.

The execution will return a unique identifier for the new campaign in UUID format.

```
HTTP/1.1 200 OK
{
  "id": "00000000-0000-0000-0000-000000000000"
}
```

- id - new campaign ID

## Errors

```
HTTP/1.1 400
[
  "EMPTY_CAMPAIGN_NAME",
  "NOT_UNIQUE_CAMPAIGN_NAME",
  "WRONG_DIRECT_STRATEGY",
  "WRONG_REVERSE_STRATEGY",
]
```

- EMPTY\_CAMPAIGN\_NAME - empty campaign name
- NOT\_UNIQUE\_CAMPAIGN\_NAME - campaign name is not unique
- WRONG\_DIRECT\_STRATEGY - unavailable masking strategy
- WRONG\_REVERSE\_STRATEGY - unavailable reverse masking strategy

## Editing a campaign

```
[PUT] /public/api/v1/masking/campaign/{campaignId}
{
  "name": "Campaign#1",
  "bindingPeriod": 180,
  "state": "ACTIVE",
  "integration": {
    "eventsUrl": "http://localhost:9090",
    "eventsToken": "00000000-0000-0000-0000-000000000000"
  }
}
```

- campaignId - the identifier of the campaign to be updated

You can change the value of the directStrategy and reverseStrategy fields only in the INACTIVE status

## Response

In case of success.

```
HTTP/1.1 200 OK
```

## Errors

See [errors](#)

## Get a list of campaigns

---

### Request

```
[GET] /public/api/v1/masking/campaign
```

### Response

```
HTTP/1.1 200 OK
{
  "00000000-0000-0000-0000-000000000000": {
    "name": "Campaign#1",
    "directStrategy": "BRIDGE",
    "reverseStrategy": "BRIDGE",
    "bindingPeriod": 180,
    "state": "ACTIVE"
  },
  ...
}
```

## Campaign Cloning

---

```
[POST] /public/api/v1/masking/clone/campaign/{campaignId}
```

Campaign settings will be copied to a new campaign. The campaign name will change to "Campaign Name (N)".

### Response

In case of success (campaign cloned):

```
HTTP/1.1 200 OK
{
  "id": "00000000-0000-0000-0000-000000000000"
}
```

- id - new campaign ID

### Errors

```
HTTP/1.1 404
```

## Campaign Deletion

---

```
[DELETE] /public/api/v1/masking/campaign/{campaignId}
```

### Response

In case of success (campaign deleted):

```
HTTP/1.1 200 OK
```

## Errors

```
HTTP/1.1 404
```

- campaignId - the identifier of the campaign to be updated

## Campaign State Management

---

### Start Campaign

```
[POST] /public/api/v1/masking/campaign/activate/{campaignId}
```

### Stop Campaign

```
[POST] /public/api/v1/masking/campaign/deactivate/{campaignId}
```

### Archive Campaign

```
[POST] /public/api/v1/masking/campaign/archive/{campaignId}
```

## Response

In case of success

```
HTTP/1.1 200 OK
```

## Errors

```
HTTP/1.1 404
```

## Masks

---

Masked numbers are the numbers that will act as substitute numbers for target and reverse masking.

## Adding Target Numbers

---

New campaign masks will be added. Already added masks will not be re-added. To update the mask, they must first be deleted.

## Request

The list must contain available numbers.

```
[POST] /public/api/v1/masking/masks/{campaignId}
[
  "7800000000",
  "7800000001",
  "7800000002"
]
```

- campaignId – campaign ID

## Response

```
HTTP/1.1 200 OK
{
  "errors": {
    "79509219806": [
      "NUMBER_NOT_AVAILABLE"
    ],
    "79509219807": [
      "NUMBER_NOT_AVAILABLE"
    ]
  },
  "created": [
    "79509219805"
  ]
}
```

- errors - numbers that encountered issues
- created - numbers successfully added to the campaign
- WRONG\_PHONE\_NUMBER - Invalid target phone number, number must consist of numbers, valid length is from 7 to 15 characters;
- NUMBER\_NOT\_AVAILABLE - the telephone number is unavailable or not in service;

## List of mask numbers

---

```
[GET] /public/api/v1/masking/masks/{campaignId}
```

### Response

```
HTTP/1.1 200 OK
[
  "78000000000",
  "78000000001",
  "78000000002"
]
```

## Deleting a mask number

---

Once deleted, all associated links will be destroyed..

```
[POST] /public/api/v1/masking/masks/remove/{campaignId}
[
  "78000000000",
  "78000000001",
  "78000000002"
]
```

### Response

#### In case of success

```
HTTP/1.1 200 OK
```

### Errors

If at least one entry is deleted

The response body will contain phone numbers that have not been deleted..

```
HTTP/1.1 200 OK
[
  "78000000001"
]
```

No entries have been deleted

```
HTTP/1.1 404
```

## Targets

Phone numbers for masking. The number must correspond to a unique identifier. One phone number can be assigned several different identifiers.

### Setting target numbers

New records will be created for new identifiers. Records for identifiers that have already been created will not be updated. To update targets, they must first be deleted.

#### Request

```
[POST] /public/api/v1/masking/targets/{campaignId}
{
  "uniqueId1": "70000000000",
  "uniqueId2": "70000000001",
  "uniqueId3": "70000000002"
}
```

- campaignId – campaign ID
- uniqueId#1, uniqueId#2 ... - unique identifiers, can accept any ASCII characters and numbers

#### Response

```
HTTP/1.1 200 OK
{
  "errors": {
    "uniqueId3": [
      "NOT_UNIQUE_EXTERNAL_ID"
    ]
  },
  "created": [
    "uniqueId1",
    "uniqueId2"
  ]
}
```

- errors - targets with which errors occurred
- created - added targets
- NOT\_UNIQUE\_EXTERNAL\_ID - The identifier is not unique
- WRONG\_PHONE\_NUMBER - invalid target phone number, number must consist of numbers, valid length from 7 to 15 characters;
- EMPTY\_EXTERNAL\_ID - empty target id;

### List of target numbers

```
[GET] /public/api/v1/masking/targets/{campaignId}
```

#### Response

```
{
  "uniqueId1": "7000000000",
  "uniqueId2": "7000000001",
  "uniqueId3": "7000000002"
}
```

## Removal

---

Once deleted, all associated links will be destroyed..

```
[POST] /public/api/v1/masking/targets/remove/{campaignId}
[
  "uniqueId1",
  "uniqueId2",
  "uniqueId3"
]
```

## Response

```
HTTP/1.1 200 OK
{
  "errors": [],
  "removed": [
    "uniqueId1",
    "uniqueId2"
  ]
}
```

## Getting a mask number

---

### Request

---

```
[GET] /public/api/v1/masking/bindings/{campaignId}/{offerId}
```

- campaignId – campaign ID
- targetId – target ID

### Response

---

```
HTTP/1.1 200 OK
{
  "mask": "7800000000",
  "ext": "2222"
}
```

- mask - number mask for communication with the number that was assigned to targetId.
- ext - extension that must be dialed to contact the target number. If the extension is missing, the ext field will also be missing.

## Errors

### If the target ID is missing

```
HTTP/1.1 404
```

### If the next mask number is not available

```
HTTP/1.1 406 Not Acceptable
```

# Pre-installation of bindings

The system allows preloading a list of bindings. When a call is made to a number with a predefined binding, the associated target number will be selected.

## To download the full JSON list

It is necessary to send an object where the keys are unique identifiers, and the values should include the target number, optional extension, and mask number.

In the request header    Content-Type    a value must be specified    application/json

```
[POST] /public/api/v1/masking/bindings/{campaignId}
{
  "uniqueId#1001": {
    "mask": "78000000000",
    "ext": "1111",
    "target": "711111111110"
  },
  "uniqueId#1002": {
    "mask": "78000000000",
    "ext": "2222",
    "target": "711111111111"
  },
  "uniqueId#1003": {
    "mask": "78000000000",
    "ext": "3333",
    "target": "711111111112"
  }
}
```

- campaignId – campaign ID;
- mask – mask ID;
- ext - extension number (optional), required for reaching the target;
- target – target ID

## Для загрузки полного списка CSV

Fields correspond to fields in JSON

In the request header    Content-Type    a value must be specified    application/csv

```
[POST] /public/api/v1/masking/bindings/{campaignId}
uniqueId;mask;ext;target
uniqueId#1001;78000000000;1111;711111111110
...
```

## To download the shortened JSON list

The mask number is set globally in the request to the server.

In the request header    Content-Type    a value must be specified    application/json



```
[POST] /public/api/v1/masking/bindings/{campaignId}/{mask}
{
  "uniqueId#1001": {
    "ext": "1111",
    "target": "711111111110"
  },
  "uniqueId#1002": {
    "ext": "2222",
    "target": "711111111111"
  },
  "uniqueId#1003": {
    "ext": "3333",
    "target": "711111111112"
  }
}
```

## To download a shortened CSV list

The mask number is set globally in the request to the server.

Fields correspond to fields in JSON

In the request header   **Content-Type**   a value must be specified   `application/csv`

```
[POST] /public/api/v1/masking/bindings/{campaignId}/{mask}
uniqueId;ext;target
uniqueId#1001;1111;711111111110
...
```

## Response

```
HTTP/1.1 200 OK
```

## Errors

```
HTTP/1.1 400
{
  "uniqueId#1001": [
    "WRONG_FORMAT_TARGET",
    "MASK_NOT_AVAILABLE",
    "WRONG_FORMAT_MASK",
    "EMPTY_TARGET_ID",
    "TARGET_ID_NOT_UNIQUE",
    "WRONG_EXT"
  ]
}
```

- **WRONG\_TARGET\_PHONE\_NUMBER** - invalid target phone number, number must consist of numbers, valid length from 7 to 15 characters;
- **MASK\_NOT\_AVAILABLE** - the phone number is unavailable or out of service;
- **NOT\_UNIQUE\_MASK** - the mask is repeated within the query;
- **MASK\_ALREADY\_USED** - the mask is already in use;
- **WRONG\_MASK\_PHONE\_NUMBER** - invalid target phone number, number must consist of numbers, valid length from 7 to 15 characters;
- **EMPTY\_TARGET\_ID** - empty target id;
- **TARGET\_ID\_NOT\_UNIQUE** - target id is not unique;
- **WRONG\_EXT** - Invalid extension phone number format, must contain numbers and at least 3 characters;
- **NOT\_UNIQUE\_EXT** - the extension number for the mask is repeated within the request;
- **EXT\_ALREADY\_USED** - extension number already in use for mask;

## HTTP events

### Example of an event

```
[POST]
{
  "eventCode": "FIRST_CALL",
  "campaign": "00000000-0000-0000-0000-000000000000",
  "info": null
}
```

- eventCode – event code
- campaign – campaign id
- info – additional information about event

## Event description

---

### FIRST\_CALL

The event occurs when the campaign performs the first masking. Example info value:

```
null
```

### TARGET\_FOR\_BINDING\_NOT\_FOUND

The event occurs when trying to create a link for a non-existent target. Example info value (*non-existent target ID*):

```
5
```

### REACHED\_CAPACITY

The event occurs when the direct masking number pool reaches 25%, 75%, or 90% capacity. Example info value (*percentage of pool usage*):

```
0.75
```

### NO\_MORE\_MASKS

The event occurs when the number pool is completely filled. Example info value:

```
null
```

### CALLING\_ERROR

The event occurs when an error occurs during the call process. Example info value:

```
null
```