



ApigateHub API Specification [Northbound] – Provisioning

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Provisioning API Specification

NOTE:

All APIs discussed under this section are RESTful APIs with a JSON payload where applicable.

Provisioning API Specification will cover the following operations;

- Query Available Services
- Provision Service
- Remove Service
- List Service by customer

API End Point Name	URI
PROVISIONING	
QUERY SERVICE URL	Please Request
PROVISION SERVICE URL	Please Request
REMOVE SERVICE URL	Please Request
LIST SERVICE URL	Please Request

1 Query Applicable Services

HTTP Method	GET
Operation	List the applicable services for a given MSISDN. Already provisioned services can be omitted here.

1.1 Request

```
GET
<ProvisioningAPIURL>/provisioning/v1/123456789/list/applicable?mcc=413&mnc=02&onBehalfOf=my
_Merchant&purchaseCategoryCode=game&requestIdentifier=REQ12345678&offset=0&limit=10
HTTP/1.1
Accept: application/json
Authorization: Bearer <access key>
```

1.1.1 Request Parameters

Parameter name	Description	Usage
msisdn	Mobile number of the subscriber.	Mandatory
mcc	Mobile Network Code	Optional
mnc	Mobile Country Code	Optional/Mandatory if mcc is set
onBehalfOf	(string) specify the Merchant name	Optional
purchaseCategoryCode	(string) an indication of the content type	Optional

requestIdentifier	(String) a unique identifier set by the Service Provider to identify each request. Minimum length should be 6 characters.	Mandatory
offset	If pagination is required, the starting point of the list	Optional
limit	The number of results to be returned	Optional

NOTE: If offset and limit are not present, all the applicable services or a subsystem defined maximum will be returned.

1.2 Response

HTTP / 1.1 200 OK

Content - Type: application / json

Date: Thu, 04 Jun 2009 02: 51: 59 GMT {

```

"serviceList": {
  "serviceInfo": [{
    "serviceCode": "SRV0001",
    "serviceType": "Roaming",
    "description": "serviceDescription",
    "serviceCharge": "10"
  }, {
    "serviceCode": "SRV0002",
    "serviceType": "Roaming",
    "description": "serviceDescription",
    "serviceCharge": "0"
  }
],
"currencyCode": "USD",
"onBehalfOf": "my_Merchant",
"purchaseCategoryCode": "game",
"requestIdentifier": "REQ12345678",
"responseIdentifier": "RES12345678",
"resourceURL": "<Resource URL>/provisioning/v1/123456789/list/applicable/dsd45fdf"
}
}

```

1.2.1 Response Parameters

Parameter name	Description	Usage
serviceCode	(string) The unique identifier for the service. This code will be used when provisioning the service later.	Mandatory
description	(string) a brief description of the service. Limit to 150 characters.	Mandatory
serviceCharge	(string) uniquely identifies this request.	Mandatory
currencyCode	(string) The currency in which the service charge will be applied	Mandatory
onBehalfOf	(string) specify the Merchant name	Optional
purchaseCategoryCode	(string) an indication of the content type	Optional
requestIdentifier	(String) a unique identifier set by the Service Provider to identify each request. Minimum length should be 6 characters.	Mandatory
responseIdentifier	(string) uniquely identifies and OpCo will response with a transaction id which will be the responseIdentifier	Mandatory
resourceURL	A reference URL to the request	Mandatory
serviceType	The service type would define the type of service. E.g.: DATA ROAMING VAS	Optional

2 Provision Service

HTTP Method	POST
Operation	Provision a service onto the specified MSISDN

2.1 Request

```

HTTP / 1.1
Content - Type: application / json
Location: < ProvisioningAPIURL > / provisioning / v1 / 12345678901 ? mcc = 413 & mnc = 02
Content - Length : 324
Date: Fri, 31 Oct 2014 08: 04: 55 GMT {
  "serviceProvisionRequest": {
    "serviceCode": "SRV0001",
    "serviceName": "ROAM5G",
    "clientCorrelator": "12345",
    "clientReferenceCode": "REF12345",
    "onBehalfOf": "my_Merchant",
  }
}

```

```

    "purchaseCategoryCode": "game",
    "callbackReference": {
      "notifyURL": "http://application.com/notifyURL",
      "callbackData": "some-data-useful-to-the-requester"
    }
  }
}

```

2.1.1 Request Parameters

Parameter name	Description	Usage								
msisdn	(string) Mobile number of the subscriber	Mandatory								
mnc	Mobile Network Code	Optional								
mcc	Mobile Country Code	Optional/Mandatory if mcc is set								
onBehalfOf	(string) specify the Merchant name	Optional								
purchaseCategory Code	(string) an indication of the content type	Optional								
serviceCode	(string) The unique identifier for the service.	Optional* (Mandatory if serviceName is empty)								
serviceName	(string) The unique name given to a Service. These names are defined at the ApigateHub Exchange. The ApigateHub Exchange should maintain a list of Service Names and Map them accordingly to the relevant Service Codes on the Gateway. Example: <table border="1" data-bbox="459 1491 1177 1572"> <thead> <tr> <th>OpCo</th> <th>XLs</th> <th>Celcom</th> <th>Robi</th> </tr> </thead> <tbody> <tr> <td>serviceName</td> <td>SRV0001</td> <td>CEL5G</td> <td>DATA5G</td> </tr> </tbody> </table>	OpCo	XLs	Celcom	Robi	serviceName	SRV0001	CEL5G	DATA5G	Optional* (Mandatory if serviceCode is empty)
OpCo	XLs	Celcom	Robi							
serviceName	SRV0001	CEL5G	DATA5G							
clientCorrelator	(string) uniquely identifies this request. If there is a communication failure during the request, using the same clientCorrelator when retrying the request allows the ApigateHub Exchange to avoid request duplication.	Optional								
clientReferenceCode	This is a unique reference code for the service provider. Each request should have a different reference code.	Mandatory								
callbackData	(string) is a function name or other data that you would like included when the POST is sent to your application.	Mandatory								

notifyURL	(URI) is the URI of your application to which notifications will be sent	Mandatory
-----------	--	-----------

2.2 Response

```

HTTP / 1.1 201 CREATED
Content - Type: application / json
Date: Thu, 04 Jun 2009 02: 51: 59 GMT {
  "serviceProvisionResponse": {
    "serviceCode": "SRV0001",
    "clientCorrelator": "12345",
    "clientReferenceCode": "REF12345",
    "serverReferenceCode": "SRV-REF5445",
    "onBehalfOf": "my_Merchant",
    "purchaseCategoryCode": "game",
    "callbackReference": {
      "notifyURL": "http:// application.com/notifyURL",
      "callbackData": "some-data-useful-to-the-requester",
      "resourceURL": "http://127.0.0.1:8080/provisioning/v1/12345678901"
    },
    "transactionStatus": "Pending"
  }
}

```

2.2.1 Response Parameters

Parameter name	Description	Usage
serviceCode	(string) The unique identifier for the service.	Mandatory
clientCorrelator	(string) uniquely identifies this request. If there is a communication failure during the request, using the same clientCorrelator when retrying the request allows the ApigateHub Exchange to avoid request duplication.	Optional
clientReferenceCode	This is a unique reference code for the service provider. The original clientReferenceCode should be sent back with the response	Mandatory
serverReferenceCode	This is a unique reference code for the Gateway. This should be generated by the provisioning subsystem.	Mandatory
callbackData	(string) is a function name or other data that you would like included when the POST is sent to your application.	Mandatory

notifyURL	(URI) is the URI of your application to which notifications will be sent	Mandatory
purchaseCategory Code	(string) an indication of the content type	Optional
onBehalfOf	(string) specify the Merchant name	Optional
resourceURL	A reference URL to the request	Mandatory
transactionStatus	The status of the provisioning request should be returned. Possible statuses are; Pending – Transaction is pending with subsystem Failed - Provisioning failed due to subsystem error Success - Successfully provisioned Already Active - Service already active	Mandatory

2.3 Notification of Service Provision Status

```

HTTP / 1.1 200 OK
Content - Type: application / json
Date: Thu, 04 Jun 2009 02: 51: 59 GMT {
  "serviceProvisionResponse": {
    "serviceCode": "SRV0001",
    "clientCorrelator": "12345",
    "clientReferenceCode": "REF12345",
    "serverReferenceCode": "SRV-REF5445",
    "onBehalfOf": "my_Merchant",
    "purchaseCategoryCode": "game",
    "callbackReference": {
      "notifyURL": "http:// application.com/notifyURL ",
      "callbackData": "some-data-useful-to-the-requester",
      "resourceURL": "<Resource URL>/provisioning/v1/12345678901"
    },
    "transactionStatus": "Success"
  }
}

```

2.3.1 Notification of Service Provision Status Parameters

Refer section 2.2.1 Response Parameters for the parameter definition.

3 Un-Provision Service

HTTP Method	POST
Operation	Remove a provisioned service from an MSISDN

3.1 Request

HTTP / 1.1

Content - Type: application / json

Location: < ProvisioningAPIURL > / provisioning / v1 / 12345678901 / remove ? mcc = 413 & mnc = 02

Content - Length : 324

Date: Fri, 31 Oct 2014 08: 04: 55 GMT {

```
"serviceRemoveRequest": {
  "serviceCode": "SRV0001",
  "clientCorrelator": "12345",
  "clientReferenceCode": "REF12345",
  "onBehalfOf": "my_Merchant",
  "purchaseCategoryCode": "game",
  "callbackReference": {
    "notifyURL": "http:// application.com/notifyURL",
    "callbackData": "some-data-useful-to-the-requester"
  }
}
}
```

3.1.1 Request Parameters

Parameter name	Description	Usage
msisdn	(string) Mobile number of the subscriber	Mandatory
mnc	Mobile Network Code	Optional
mcc	Mobile Country Code	Optional/Mandatory if mcc is set
onBehalfOf	(string) specify the Merchant name	Optional
purchaseCategoryCode	(string) an indication of the content type	Optional
serviceCode	(string) The unique identifier for the service.	Mandatory
clientCorrelator	(string) uniquely identifies this request. If there is a communication failure during the request, using the	Optional

	same clientCorrelator when retrying the request allows the ApigateHub Exchange to avoid request duplication.	
clientReferenceCode	This is a unique reference code for the service provider. Each request should have a different reference code.	Mandatory
callbackData	(string) is a function name or other data that you would like included when the POST is sent to your application.	Mandatory
notifyURL	(URI) is the URI of your application to which notifications will be sent	Mandatory

3.2 Response

```

HTTP / 1.1 201 CREATED
Content - Type: application / json
Date: Thu, 04 Jun 2009 02: 51: 59 GMT {
"serviceRemoveResponse": {
  "serviceCode": "SRV0001",
  "clientCorrelator": "12345",
  "clientReferenceCode": "REF12345",
  "serverReferenceCode": "SRV-REF5445",
  "onBehalfOf": "my_Merchant",
  "purchaseCategoryCode": "game",
  "callbackReference": {
    "notifyURL": "http:// application.com/notifyURL",
    "callbackData": "some-data-useful-to-the-requester",
    "resourceURL": "<Resource URL> /provisioning/v1/12345678901/remove"
  },
  "transactionStatus": "Pending"
}
}

```

3.2.1 Response Parameters

Parameter name	Description	Usage
serviceCode	(string) The unique identifier for the service.	Mandatory
clientCorrelator	(string) uniquely identifies this request. If there is a communication failure during the request, using the	Optional

	same clientCorrelator when retrying the request allows the ApigateHub Exchange to avoid request duplication.	
serverReferenceCode	This is a unique reference code for the Gateway. This should be generated by the provisioning subsystem.	Mandatory
callbackData	(string) is a function name or other data that you would like included when the POST is sent to your application.	Mandatory
notifyURL	(URI) is the URI of your application to which notifications will be sent	Mandatory
onBehalfOf	(string) specify the Merchant name	Optional
purchaseCategoryCode	(string) an indication of the content type	Optional
resourceURL	A reference URL to the request	Mandatory
transactionStatus	The status of the provisioning request should be returned. Possible statuses are; Pending – Transaction is pending with subsystem Failed - Removal failed due to subsystem error Success - Successfully Removed Not Active - Service not provisioned for user	Mandatory

3.3 Notification for Service Un-Provisioning

HTTP / 1.1 200 OK

Content - Type: application / json

Date: Thu, 04 Jun 2009 02: 51: 59 GMT {

```
"serviceRemoveResponse": {
  "serviceCode": "SRV0001",
  "clientCorrelator": "12345",
  "clientReferenceCode": "REF12345",
  "serverReferenceCode": "SRV-REF5445",
  "onBehalfOf": "my_Merchant",
  "purchaseCategoryCode": "game",
  "callbackReference": {
    "notifyURL": "http:// application.com/notifyURL",
    "callbackData": "some-data-useful-to-the-requester",
    "resourceURL": "<Resource URL> /provisioning/v1/12345678901/remove"
  },
  "transactionStatus": "Success"
```

```
}
}
```

3.3.1 Notification of Service Provision Status Parameters

Refer section 3.2.1 Response Parameters for the parameter definition

4 List Service by Customer

HTTP Method	GET
Operation	List the provisioned services for a given MSISDN. Only active services will be returned.

4.1 Request

```
GET
<ProvisioningAPIURL>/v1/provision/123456789/list/active?mcc=413&mnc=02&onBehalfOf=my_Mercha
nt&purchaseCategoryCode=game&requestIdentifier=REQ12345678&offset=0&limit=10
HTTP/1.1 Accept: application/json
Authorization: Bearer <access key>
```

4.1.1 Request Parameters

Parameter name	Description	Usage
msisdn	Mobile number of the subscriber.	Mandatory
mnc	Mobile Network Code	Optional
mcc	Mobile Country Code	Optional/Mandatory if mcc is set
onBehalfOf	(string) specify the Merchant name	Optional
purchaseCategory Code	(string) an indication of the content type	Optional
requestIdentifier	(String) a unique identifier set by the Service Provider to identify each request. Minimum length should be 6 characters.	Mandatory
offset	If pagination is required, the starting point of the list	Optional
limit	The number of results to be returned	Optional

NOTE: If offset and limit are not present, all the active services or a subsystem defined maximum will be returned.

4.2 Response

```

HTTP / 1.1 200 OK
Content - Type: application / json
Date: Thu, 04 Jun 2009 02: 51: 59 GMT {
  "serviceList": {
    "serviceInfoList": [{
      "serviceCode": "SRV0001",
      "description": "serviceDescription",
      "timestamp": "2015-12-26T00:27:23.000Z ",
      "serviceInfo": [{
        "tag": "limit",
        "value": "1000"
      }
    ]
  }, {
    "serviceCode": "SRV0002",
    "description": "serviceDescription",
    "timestamp": "2015-12-26T00:27:23.000Z ",
    "serviceInfo": [{
      "tag": "count",
      "value": "25"
    }
  ]
}
],
"onBehalfOf": "my_Merchant",
"purchaseCategoryCode": "game",
"requestIdentifier": "REQ12345678",
"responseIdentifier": "RES12345678",
"resourceURL": "<Resource URL> /provisioning/v1/123456789/list/active/67Xfrgs7"
}
}
    
```

4.2.1 Response Parameters

Parameter name	Description	Usage
serviceCode	(string) The unique identifier for the service. This code will be used when provisioning the service later.	Mandatory
description	(string) a brief description of the service. Limit to 150 characters.	Mandatory

timestamp	(timestamp) Service activated timestamp.	Mandatory
onBehalfOf	(string) specify the Merchant name	Optional
purchaseCategory Code	(string) an indication of the content type	Optional
requestIdentifier	(String) a unique identifier set by the Service Provider to identify each request. Minimum length should be 6 characters.	Mandatory
responseIdentifier	(string) uniquely identifies and OpCo will response with a transaction id which will be the responseIdentifier	Mandatory
resourceURL	A reference URL to the request	Mandatory
serviceInfo	An array of optional parameters sent by the OpCo to the Service Provider. These values will pass through the ApigateHub Exchange to the Service Provider without being involved in any transformation or logic. The array elements will be Tag, Value pairs.	Optional