

iTelSwitchPlus API - Developer Guide	
Document Version	7.0.1
Last Update	1st-January-2016
Last change on	OTP API added



REVE Systems

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Special Note:

- In this document http://sip.myswitch.com/ is consider as a sample billing link which must needed to be replaced with your own billing link to get proper response status for any request.
- All the content of this document is well tested and fully verified. So if you are getting any issue with response then the iTelBilling might not be updated with latest files.
- If you found any content in this document is confusing then do not feel hesitate to communicate with Nafiul Alam Nion (nafiul@revesoft.com) or Mizanur Rahman (mizanur@revesoft.com) directly.
- For improving readability and better understanding any suggestions regarding this document is highly appreciated

Sign Up API

Signup API will allow creating a SIP user in the switch. So this API can be usable from any other third party website or client side application to create a client in the iTelBilling

API Usability:

- A. Generating new PIN
- B. Sing Up with existing PIN
- C. Sign Up for Reseller and IP Client

Generating new PIN

Procedure for PIN Signup

New Pin will be generated in the iTelBilling according to user given information from your web site or application. Please follow below instruction to use Sign up API.

Prerequisites:

- 1. Source IP should be allowed in the billing server.
- 2. Mobile Number you are using should be same as caller ID. You can provide additional Caller ID also.

How to use Signup API:

We have two steps in Signup process through API.

First, you need to verify the user input through API parameters.

Let's say end user had filled up only the mandatory field among API parameters i.e Mobile number, Password and Caller ID in the signup form. So,pass those information through the API parameters and send a verify request to the billing server. Your verify request API should be something like following

http://sip.myswitch.com/api/signupPin.jsp?type=verify&mobileNumber=8801811002233&callerIDs =8801811002233&password=7887

If the information is being verified by the iTelBilling server then you will be able to execute the next step. It should be kept in mind, without verification signup process will not complete.



Verify API Response Status:

Input	Response
If IP not Allowed	{status: 'false',description:'5400'}
If Mobile number not provided	{status: 'false',description: '5001'}
If Password not provided	{status: 'false',description: '5005'}
If Caller ID not provided	{status: 'false',description: '5003'}
If Client already exist	{status: 'false',description: '5100 8801811002233'}
If Mobile number is not in Caller ID	{status: 'false',description: '5103'}
If Client not verified	{status: 'false',description: '5104'}
If Invalid value given in type	{status: 'false',description:'5500'}
If Verification successful	{status: 'true',description: '8801811002233'}

This API will process values of following parameters only.

Туре	Parameter	Description	Required
Request	type	Value will be : verify	Х
	firstName	First name	Χ
	lastName	Last name	Х
	address	Contact information	Х
	companyName	Company name	Χ
	state	State	Χ
	countryID	Country id. See A.2.1 to get country ID	Χ
	emailAddress	Valid email id to get pin and password details through Email	X
	fax	Fax number	Χ
	mobileNumber	Put a mobile number to generate a pin and also use to retrieve password through SMS.	V
	password	Password for the pin	V
	infoFrom	Reference	Χ
call from his pin.		Put a rate plan ID. If not set then user can't make VoIP call from his pin.	х
		Put initial balance. If balance not set then user can't make VoIP call.	Х
	topUpRatePlanID	Set mobile top up rate plan id	Х
callerIDs		Set caller id against a pin. You can set several mobile number as caller id which is used for Pin less calling card. For example: 8801811002233,8801811002244 Duplicate callerIDs will not be accepted	V
	currency	Put Currency ID	Χ
	language	Put Language ID	Χ
	parentID	Put Parent ID who will be the parent of new created pin	Х
Response	successful	ful {status: 'true',description:'8801811002233'}	
Failure {status: 'false',description:'ERROR-CODE'}		{status: 'false',description:'ERROR-CODE'}	

In second step, send a Signup request to the iTelBilling server with just only verified mobile number.

Sample Request:

http://sip.myswitch.com/api/signupPin.jsp?type=signUp&mobileNumber=8801811002233

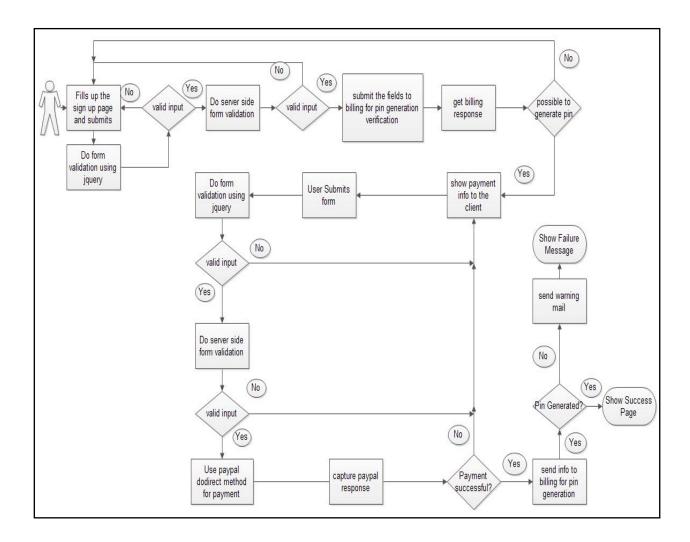
Sign Up API Response Status:

Input	Response
If Invalid value given in type	{status: 'false',description:'5500'}
If Mobile number not provided	{status: 'false',description: '5001'}
If Client not verified	{status: 'false',description: '5104'}
If Sign Up successful	{status: 'true',description: '8801811002233'}

Signup Request Parameters:

Туре	Parameter	Description	Required
Request	type	Value will be : signUp	$\sqrt{}$
	mobileNumber	Put verified mobile number	$\sqrt{}$
	pinbatchID	Put Pin Batch ID that is created by its parent	Χ
	dontSendMail	If true then system will not send any email for details information of created pin. If false then	Х
		signed up user will get email.	
Response	Successful	{status: 'true',description: 'PIN-Number'}	
	Failure	{status: 'false',description:'ERROR-CODE'}	

Signup process Flow chart:



Load country List:

API URL: http://sip.myswitch.com/api/signupPin.jsp?type=country

Туре	Parameter	value	Required
Request	type	country	√
Response		Sample response <select id="countryID" name="countryID"> <option value="18">Bangladesh</option> <option value="99">India</option> </select>	

Auto Recharge Configuration with PayPal using Signup API

End user can also enable auto recharge feature for his own account. Verify and Sign Up processes are same like as above procedure.

Just extra 2 parameters (autoRechargeAmt, autoRechargeAtBalance) are needed in Signup API to enable auto recharge feature for a PIN account.

Parameter:

Parameter	Description	Required
type	Value will be : signUp	$\sqrt{}$
mobileNumber	Put verified mobile number	$\sqrt{}$
autoRechargeAmt	Amount which should be auto-recharged to the client's account. This value can only be positive number, greater than zero	Х
autoRechargeAtBalance	Client's account will be auto-recharged if client's balance is below or equal to this value. This value can only be positive number.	Х

Example:

http://sip.myswitch.com/api/signupPin.jsp?type=signUp&mobileNumber=8801811002244&autoRechargeAtBalance=5

Data Modification API for existing PIN

This API can be used when you've previously created PINs and want to assign them to acaller IDs, balance etc.

Prerequisite:

Source IP must be allowed in Billing server.

Procedure to use this API:

There is no verify API for this type of sign up. Just need to execute below SignUp API with mandatory parameters like CallerIDs, emailAddress etc.

Example:

http://sip.myswitch.com/api/autoSignup.jsp?type=signUp&callerIDs=8801811002244&emailAddress=john@outlook.com



Parameter:

Туре	Parameter	Description	Required
Deamart	In company	Value villa e valentie	- /
Request	type	Value will be : signUp	V
	callerIDs	System will assign a pin and then it will set that mobile number as caller id. You can set several mobile number as caller id which is used for Pin less calling card. For example: 8801811002233,8801811002244	V
	balance	Put pin balance	Χ
	emailAddress	Valid email id to get pin and password details through Email	\checkmark
	dontSendMail	If true then system will not send any email for details information of created pin. If false then signed up user will get email.	Х
Response	If successful	{status: 'true',description: '8801811002244'}	

Sign Up API Response Status:

Input	Response
If Invalid value given in type	{status: 'false',description:'5500'}
If CallerIDsparameternot exist	{status: 'false',description: '5003'}
If emailAddress parameter not exist	{status: 'false',description: '5002'}
If Sign Up successful	{status: 'true',description: '8801811002244'}

Sign up for Reseller and IP Client

iTelBilling support reseller or IP client sign up facilities through API. Anyone can sign up and can get a reseller or IP client account by using any of his third party billing or mobile application with iTel signup API.

Steps to follow:

- 1. **Allow** your source IP from where signup request will be sent to the iTelBilling server. You can contact with your service provider to allow your IP.
- 2. **Verify the client account:** System will **verify** your given information first. It will be checked that all required information is given or not. All required information must be given by the user. System will work as per below table.

API URL: http://sip.myswitch.com/api/signupClient.jsp?type=verify

Verify API Response Status:

Input	Response
If IP not Allowed	{status: 'false',description:'5400'}
If username not provided	{status: 'false',description: '5006'}
If Password not provided	{status: 'false',description: '5005'}
If Customer Type not provided	{status: 'false',description: '5007'}
If Client already exist	{status: 'false',description: '5100 reserller'}
If Caller ID exist	{status: 'false',description: '5100 1131215567'}
If IP already exist	{status: 'false',description: '5105'}
If Duplicate Prefix found	{status: 'false',description: '5801 11'}
If Client not verified	{status: 'false',description: '5104'}
If Invalid value given in type	{status: 'false',description:'5500'}
If Verification successful	{status: 'true',description: 'Reseller'}

Verify API Parameters:

Parameter	Description	Required
type	Put its value: verify	√
username	User name	√
customerType	Type of customer:	√
	CUSTOMER TYPE ORIGINATING = 1;	
	CUSTOMERTYPETERMINATING = 2;	
	CUSTOMER TYPEBOTH = 3;	
	CUSTOMERTYPERESELLER = 4;	1
password ·	Set a password	V
ip	(for org/ter/both Client)	V
	Switch server IP of that customer (concatenated with colon	
	(:) and Switch server port)	
	Example: 165.32.23.23:5060	
balance	Put Balance Amount	X
ratePlanID	Put rate plan ID	Χ
topUpRatePlanID	Put Top Up rate plan ID	X
orgPrefix	(for IP/both Client)	Х
	Tech prefix	
orgPrefixRateID	(for IP/both Client)	X
	Corresponding Rate ID of given prefix	
terPrefix	(only for ter/both Client)	Х
	Tech prefix	
terPrefixRateID	(only for ter/both Client)	Х
	Corresponding Rate ID of given prefix	
callerIDs	(for org/both Client)	Х
	Set callerID as authentication type	
firstName	First name	Х
lastName	Last name	Х
address	Contact information	Χ
companyName	Company name	Χ
state	State name	X

countryID	Country id. See A.2.1 to get country ID	Χ
emailAddress	Put a valid email id	X
fax	Fax number	Χ
mobileNumber	Put a mobile number	Χ
infoFrom	Reference	Χ
currency	Put Currency ID	Χ
language	Put Language ID	Χ

3. **Signup a Client:** After successful verification, user needs to **sign up** with just only verified username.

API URL: http://sip.myswitch.com/api/signupClient.jsp?type=signUp

Sign Up API Response Status:

Input	Response
If Invalid value given in type	{status: 'false',description:'5500'}
If username not provided	{status: 'false',description: '5006'}
If Client not verified	{status: 'false',description: '5104'}
If Sign Up successful	{status: 'true',description: 'Reseller'}

Sign Up API Parameters:

Туре	Parameter	Description	Required
Request	type	Value will be : signUp	V
	username	User name	√
	dontSendMail	If true then system will not send any email for details information of created pin. If false then signed up user will get email.	X
Response	Successful	{status: 'true',description: 'username'}	
	Failure	{status: 'false',description:'ERROR-CODE'}	

Example:

a. Verify the account for a reseller:

http://sip.myswitch.com/api/signupClient.jsp?type=verify&username=reseller&password=11&cus tomerType=4

Signup Request:

http://sip.myswitch.com/api/signupClient.jsp?type=signUp&username=reseller

b. Verify the account for an Originating IP client:

http://sip.myswitch.com/api/signupClient.jsp?type=verify&username=originator&password=6Up 7554&customerType=1&orgPrefix=11,22&orgPrefixRateID=5004,36001&callerIDs=14241424,152515 25&ip=26.95.90.30:5000

Signup Request:

http://sip.myswitch.com/api/signupClient.jsp?type=signUp&username=originator

c. Verify the account for a Both Type client:

http://sip.myswitch.com/api/signupClient.jsp?type=verify&username=bothtypeclient&password =6Up7554&customerType=3&orgPrefix=11,22&orgPrefixRateID=5004,36001&terPrefix=11,00&terPrefixRateID=5004,36001&callerIDs=231,361&ip=71.71.72:3660

Signup Request:

http://sip.myswitch.com/api/signupClient.jsp?type=signUp&username=bothtypeclient

d. Verify the account for a Terminating client:

http://sip.myswitch.com/api/signupClient.jsp?type=verify&username=terminator&password=6Up 7554&customerType=2&terPrefix=00,55&terPrefixRateID=5004,36001&ip=26.14.17.35

Signup Request:

http://sip.myswitch.com/api/signupClient.isp?type=signUp&username=terminator

Auto Recharge API

Client can enable or disable auto recharge feature through this API.

Auto Recharge Status Check API:

This API will give the result that auto recharge is enabled or not for a client.

Parameter description:

Parameter Name	Description	Required
type	statusCheck	$\sqrt{}$
User	User PIN	$\sqrt{}$
password	MD5 digest of (nonce+user+password)	$\sqrt{}$
nonce	<nonce></nonce>	V

Auto Recharge API Response Status:

Input	Output
If parameter type is wrong	Status:101
If invalid username	Status:109
If invalid nonce	Status:106
If invalid password	Status:108

Request:

http://sip.myswitch.com/api/autoRechargeAPI.jsp?type=statusCheck&user=10001&password=3 3f2e21ddf8a308336ad5cfc3fa7516b&nonce=F956DB74

Response:

status=0 autoRecharge=1

Auto Recharge Enable/Disable API:

Client can enable or disable auto recharge option through this API.

Parameter description:

Parameter Name	Description	Required
type	setAutoRecharge	$\sqrt{}$
User	User PIN	V
password	MD5 digest of (nonce+user+password)	$\sqrt{}$
nonce	<nonce></nonce>	$\sqrt{}$
status	0 for disable, 1 for enable	V

Auto Recharge API Response Status:

Input	Response
If parameter type is wrong	Status:101
If invalid username	Status:109
If invalid nonce	Status:106
If invalid password	Status:108
If parameter status is wrong	Status:114

Request:

http://sip.myswitch.com/api/autoRechargeAPI.jsp?type=setAutoRecharge&status=0&user=1000 1&password=33f2e21ddf8a308336ad5cfc3fa7516b&nonce=F956DB74

Response:

status=0

Recharge API

Recharge API will facilitate account recharge of an end user from third party application. You just need to pass values of following parameters through the API.

Prerequisite

Source IP should be allowed in the billing server

Request Format

http://sip.myswitch.com/api/rechargeByAPI.jsp?CustomerID=12345&paymentType=braintree&Transaction Ref=hx96bp&Amount=5.00&Currency=USD

Parameter description:

Parameter Name	Description	Required
CustomerID	The Customer ID which will be recharged	$\sqrt{}$
paymentType	It can be braintree, paypal, ingenico through which payment will	$\sqrt{}$
	be made	
Amount	The amount that will be recharged for that Customer	$\sqrt{}$
Currency	Currency of user who is paying.	$\sqrt{}$
Transaction_ Ref	A reference number should be come to prevent the duplicate	$\sqrt{}$
	request	

Reply Format

For Successful transaction:

You will get affirmative reply such as:

0

Current Balance: 100.00

For unsuccessful transaction:

You will get feedback like:

errorCode: Code_Number

Login API

Account holder can login into iTelBilling through API from his any other third party billing. Need to pass below information properly to login.

Parameter:

Parameter	Description	Required
username	Put billing user	$\sqrt{}$
password	Put billing password	$\sqrt{}$

Request:

http://sip.myswitch.com/Login.do?username=12345&password=abcd1234

Response:

API will redirect to user in our Billing.

Client Rate API

Client Rate API will provide rate information. So using this API you will be able to show clients rate into any other website.

Prerequisite

Source IP should be allowed in the billing server

Parameter:

1. All clients can check his assigned rate plan by immediate parent.

Parameter	Description	Required
username	Put user name (PIN,Reseller,IPClient,Ter Client)	V

Request:

http://sip.myswitch.com/api/checkRate.jsp?username=12345

Sample Response format: Destination code, Destination Name, RPM

For Example: 880,Bangladesh-1,0.5

2. Any rate plan can be checked by this API of rate plan id is known to him.

Parameter	Description	Required
RatePlanID	Put rate plan ID of specific rate plan	$\sqrt{}$

Request:

http://sip.myswitch.com/api/checkRate.jsp?RatePlanID=1

Sample Response format: Destination code, Destination Name, RPM

For Example:

P8,Pin-8,0.1 91,India - ROC,0.2 P5,Pin-5,1.6 SMS880,Bangladesh,0.6 012,pin012,0.03 880,Bangladesh-1,1.0 P1,Pin-1,0.03 p9,rerer,2.3 3. Client can also able to see rate for his dialed destination as per dialed number.

Parameter	Description	Required
username	Put user name (PIN,Reseller,IPClient,Ter Client)	\checkmark
dialedNumber	Put dialed number	\checkmark

Request:

http://sip.myswitch.com/api/checkRate.jsp?username=12345&dialedNumber=8801912026219

Response:

0.5

4. Client can also see all the available rates of a specific country

Parameter	Description	Required
username	Put user name (PIN,Reseller,IPClient,Ter Client)	$\sqrt{}$
country	Put country name	\checkmark

Request:

http://sip.myswitch.com/api/checkRate.jsp?username=12345&country=Bangladesh

Response:

880,Bangladesh-1,1.0 SMS880,Bangladesh,0.6

5. All rates will be found for specific country for particular rate plan ID.

Parameter	Description	Required
RatePlanID	Put rate plan ID of specific rate plan	$\sqrt{}$
country	Put country name	Х

Request:

http://sip.myswitch.com/api/checkRate.jsp?RatePlanID=1&country=Bangladesh

Response:

880,Bangladesh-1,0.02 SMS880,Bangladesh,1.0 08801,BanglaDesh Mobile IGW,0.0252 8801,Bangladesh Mobile CLI,0.05 9998801,Bangladesh Mobile Prime,0.021 008801,Bangladesh Mobile Non CLI,0.0136

Balance Fetch API

Balance API provides available balance of a pin from iTelBilling server. You just need to put pin number during sending request into below API.

Parameter	Description	Required
pin	Put PIN number to get balance	$\sqrt{}$

Request:

http://sip.myswitch.com/getclientbalance.do?pin=112233

Response:

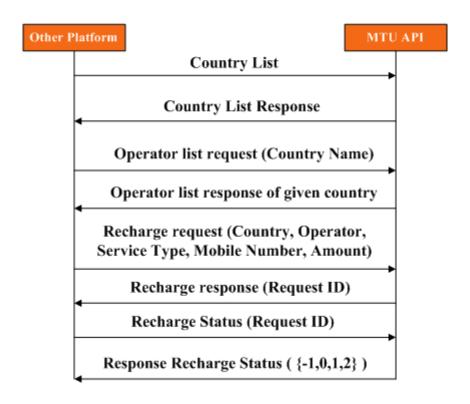
4724.367126

Mobile Top up API

Mobile Top up service can be operated through this APIs from any third party billing system or any third party application. User just needs to provide corresponding API parameter input and he will get the result in his personal website. See the below details description for all top up process.

MTU Process Flow

MTU API



Prerequisite

• Source IP must be allowed in the billing server as org client.

MTU Response Status:

Input	Response
If Required parameter not exist	{"errorCode":105}
If value of parameter type is wrong	{"errorCode":5011}
If value of parameter countryName is invalid	{"errorCode":103}
If value of parameter rechargeAmount is negative	{"status":-3,"convertedAmount":"0.00"}
If invalid username	{"nonce":"00FC80D9","errorCode":109}
If invalid nonce	{"nonce":"253CB636","errorCode":106}
If invalid password	{"nonce":"253CB636","errorCode":108}

The parameters of different requests are mentioned below.

Type "countrylist":

API will find all the list of countries for those top up service.

Parameters and values

Parameter	Value	Required
type	countrylist	$\sqrt{}$

Sample Request:

http://sip.myswitch.com/api/mtuApi.jsp?type=countrylist

Response:

{"countrylist":[{"name":"Bangladesh","code":"880"}]}

Type "operatorlist"

API will response with all the available operator list for the selected country.

Parameters and values

Parameter	Value	Required
type	operatorlist	$\sqrt{}$
countryName	Name of the country returned by the country list	$\sqrt{}$

Sample Request:

http://sip.myswitch.com/api/mtuApi.jsp?type=operatorlist&countryName=Bangladesh

Response:

{"operatorlist":[{"name":"GP"},{"name":"Robi"},{"name":"Teletalk"}]}

Type "convertAmount"

API response will show the amount which will be deducted for specific top up request.

Parameters and values

Parameter	Value	Required
type	convertAmount	$\sqrt{}$
countryName	Name of the country returned by the country list	$\sqrt{}$
operatorName	Name of the operator returned by the operator list	$\sqrt{}$
rechargeAmount	The amount to recharge	$\sqrt{}$

Request for originating IP client:

http://sip.myswitch.com/api/mtuApi.jsp?type=convertAmount&countryName=Bangladesh&operatorName=Robi&rechargeAmount=10

Response:

{"status":0,"convertedAmount":"0.15"}

Request for PIN user:

http://sip.myswitch.com/api/mtuApi.jsp?type=convertAmount&countryName=Bangladesh&operatorName=Banglalink&rechargeAmount=10&user=1234&nonce=AB52C5&password=MD5(nonce+user+password)

Response:

{"status":0,"convertedAmount":"0.13"}

Type "recharge" for originating IP client

Any IP Client can send top up request to iTelBilling server using this API. This API will act like a topup gateway for that IP client.

Parameters and values

Parameter	Value	Required
type	recharge	$\sqrt{}$
countryName	Name of the country returned by the country list	$\sqrt{}$
operatorName	Name of the operator returned by the operator list	$\sqrt{}$
serviceType	0 for prepaid and 1 for post paid	\checkmark
mobileNumber	Recipient's mobile number (i.e 8801710358518)	$\sqrt{}$
rechargeAmount	The amount to recharge	$\sqrt{}$

Sample Request for originating IP client:

http://sip.myswitch.com/api/mtuApi.jsp?type=recharge&countryName=Bangladesh&operatorName=GP&serviceType=0&mobileNumber=8801710358518&rechargeAmount=10

Response:

{"rechargeID":12002}

Type "recharge" for PIN user

End user can make top up request from third party website using following API.

Parameters and values

Parameter	Value	Required
type	recharge	$\sqrt{}$
countryName	Name of the country returned by the country list	$\sqrt{}$
operatorName	Name of the operator returned by the operator list	$\sqrt{}$
serviceType	0 for prepaid and 1 for post paid	$\sqrt{}$
mobileNumber	Recipient's mobile number (i.e 8801710358518)	$\sqrt{}$
rechargeAmount	The amount to recharge	$\sqrt{}$
User	PIN number	$\sqrt{}$
nonce	<nonce></nonce>	V
password	MD5 digest of (nonce+user+password)	$\sqrt{}$

Sample Request for PIN user:

http://sip.myswitch.com/api/mtuApi.jsp?type=recharge&countryName=Bangladesh&operatorName=Robi&serviceType=1&mobileNumber=8801847003229&rechargeAmount=10&user=12345&nonce=AB52C5&password=MD5(nonce+user+password)

Response:

{"rechargeID":12003}

Type "status"

Top up status can be checked for any specific top up request by below API.

Parameters and values

Parameter	Value	Required
type	status	\checkmark
verificationCode	rechargeID for the above example rechargeID is 12002	$\sqrt{}$

Sample Request:

http://sip.myswitch.com/api/mtuApi.jsp?type=status&verificationCode=12002

Response:

{"status":0}

MTU Status Code:

Status	Status Code
FAILED	0
SUCCESSFUL	1
ONGOING	2
PENDING	3
CANCELED	4
Invalid Recharge ID	-1

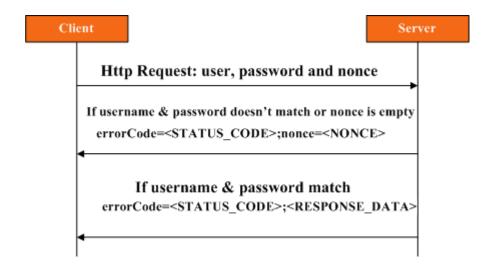
How to use Nonce:

Nonce is a part of the key that is used to create the MD5 Hash. The other two parts are username and password. We follow two steps in creating the Hash.

- 1. Join nonce, username and password one after another. For example if nonce is **ABCD**, username is **123** and password is **6655**: then the joined string will be **ABCD1236655**.
- 2. Then the joined string is used as a key to create the MD5 hash. The output Hash is then used as the parameter **password** in the following requests.
- Life time of a nonce is 120 seconds. So after each 120 seconds the server will update the nonce and inform client side in response of any request.

Call History API

From any other third party billing or application, client can see his call history through this API. API will give the call history for selected client according to the input of API parameter. See the below details description for call history process.



Prerequisite

Source IP should be allowed in the billing server

How to use Nonce:

Nonce is a part of the key that is used to create the MD5 Hash. The other two parts are username and password. We follow two steps in creating the Hash.

- 1. Join nonce, username and password one after another. For example if nonce is **ABCD**, username is **123** and password is **6655**: then the joined string will be **ABCD1236655**.
- 2. Then the joined string is used as a key to create the MD5 hash. The output Hash is then used as the parameter **password** in the following requests.
- Life time of a nonce is 120 seconds. So after each 120 seconds the server will update the nonce and inform client side in response of any request.

PARAMETERS:

Parameter	Value	Required
service_type	1	Χ
from_time	<pre><from_time> in format yyyy-MM-ddHH:mm:ss (space should</from_time></pre>	$\sqrt{}$
	be replace with %20 between dd and HH)	
to_time	<to_time> in format yyyy-MM-ddHH:mm:ss (space should be $\sqrt{}$</to_time>	
	replace with %20 between dd and HH)	
user	<pin user=""></pin>	$\sqrt{}$
password	MD5 digest of (nonce+user+password)	$\sqrt{}$
nonce	<nonce></nonce>	$\sqrt{}$
account_id	<account_id></account_id>	$\sqrt{}$

Sample request:

http://sip.myswitch.com/api/callHistoryApi.jsp?service_type=1&from_time=2014-06-01 12:33:34&to_time=2014-08-01

12:33:34&user=3236&password=5be8c0aa91dc857e64f03e59b30ff8e4&nonce=0AB5CB8D

Sample Response

error_code=0

si;dialed_no;connect_time;duration;region;call_cost

si = 0;8801753716990; 2014-08-26 16:30:18;200;Bangladesh (880);0.50

si = 1;8801753716990; 2014-08-26 16:32:18;120;India (91);1.20

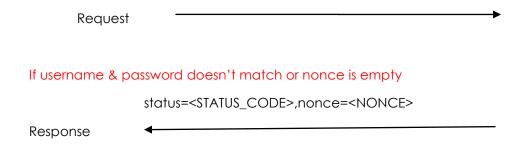
Here si means serial index.

Add fund API

Say, user has a third party website and he wants to recharge his iTel account from his personal website. He can easily send recharge request into iTelBilling server through this API. See the details description for add fund process.

Example:

http://sip.myswitch.com/api/addFundAPI.jsp?type=recharge&paymentType=1&cardSerial=1811 5&cardNo=33896&user=12345&password=<MD5 DIGEST OF (nonce+user+pass)>&nonce=E8DB6 F79



Replace the NONCE value in your request API after getting it from server and send the request again. If the NONCE matches then server will provide password in MD5 encryption.

Replace the password in your request API and send the request again to the server.

If username & password match

Recharge Card API Response Status Code:

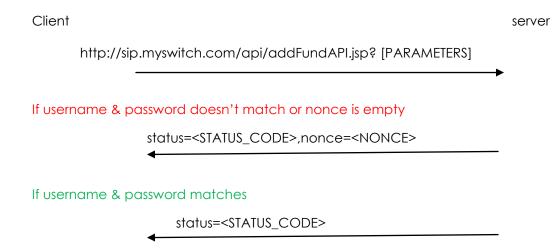
Input	Response
If Recharge failed	Status=119
If Recharge successful	Status=118
If invalid username	status=109
If invalid nonce	status=110,nonce=EA238E68
If invalid password	status=108

Parameter

Parameter	Value	Required
type	recharge	$\sqrt{}$
paymentType	1	$\sqrt{}$
cardSerial	Recharge Card Number	$\sqrt{}$
cardNo	Recharge Card Number	$\sqrt{}$
user	User PIN	$\sqrt{}$
password	MD5 digest of (nonce+user+password)	$\sqrt{}$
nonce	<nonce></nonce>	

Online Payment through Add Fund API:

Request Procedure:



Parameter for PayPal

Parameter	Value
type	recharge
paymentType	2
paymentMethod	1
paymentAmount	User Payment Amount
emailID	<email id="" of="" the="" user=""></email>
user	User PIN
password	MD5 digest of (nonce+user+password)
nonce	<nonce></nonce>

For other payment methods

Parameter	Value
type	recharge
paymentType	2
payementMethod	2
cardType	<card_type></card_type>
cardNumber	<card_number></card_number>
cardExpireDate	<mmyyyy></mmyyyy>
cardSecurityCode	<card_security_code></card_security_code>
firstName	<first_name></first_name>
lastName	<last_name></last_name>
paymentAmount	User Payment Amount
user	User PIN
password	MD5 digest of (nonce+user+password)
nonce	<nonce></nonce>

Balance Transfer API

It can be transferred easily any amount of balance to the other pin with this API if client have sufficient balance to transfer that amount in his account by using any other of his third party billing or website. See the below details description for balance transfer process.

Sample Link:

http://sip.myswitch.com/api/addFundAPI.jsp?type=balanceTransfer&pinNoToRecharge=123456 &transferAmount=10&user=12345&password=5555&nonce=sdf23432

Parameter

Parameter	Value	Required
type	balanceTransfer	\checkmark
pinNoToRecharge	Targeted PIN Number	\checkmark
transferAmount	Transferred Amount	\checkmark
user	User PIN	\checkmark
password	MD5 digest of (nonce+user+password)	\checkmark
nonce	<nonce></nonce>	V

Response:

Status - 118 means PAYMENT_SUCCESSFUL

Status - 120 means PAYMENT_FAILURE

Recharge History API

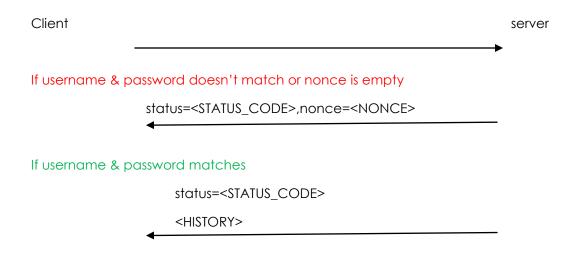
From any other third party billing or application, client can see his recharge history using this API. API will give the recharge history for selected client according to the input of API parameter. See the below details description for recharge history process.

Sample Example:

http://sip.myswitch.com/api/addFundAPI.jsp?type=rechargeHistory&historyCount=50&user=1234 5&password=123451715BB1CA&nonce=715BB1CA

Parameter

Parameter	Value	Required
type	rechargeHistory	$\sqrt{}$
historyCount	The number of previous transaction	$\sqrt{}$
user	User PIN	$\sqrt{}$
password	MD5 digest of (nonce+user+password)	$\sqrt{}$
nonce	<nonce></nonce>	$\sqrt{}$



Sample response:

```
status=122
Date,Description,Amount,RechargeDescription,RechargeBy
2015-09-03 10:24:53,Account Recharged by Ingenico,4.795,Transaction ID:46344834,10001
2015-09-03 10:22:45,Account Recharged by Ingenico,4.795,Transaction ID:46344777,10001
2015-09-02 05:55:59,Account Recharged by Ingenico,4.795,Transaction ID:46282725,10001
2015-09-02 05:23:10,Account Recharged by Ingenico,4.795,Transaction ID:46281758,10001
2015-09-02 03:42:33,Account Recharged by Ingenico,4.795,Transaction ID:46278488,10001
2015-09-02 10:12:24,Account Recharge by Recharge Card,10.0,Recharge Card Number :41781,10001
2015-08-26 04:32:06,Account Recharged by BrainTree after deducting tax 3.1%,4.845,Transaction ID:j5g4rt,10001
2015-08-26 04:25:40,Account Recharged by Authorized.net,5.0,Transaction ID:0,10001
2015-08-07 02:16:50, for auto renewal of package:Test-auto-1 of value:1.0,-1.0,Package renewal,10001
2015-08-05 12:08:23,Account Recharge,100.0,masud
```

Recharge HistoryAPIResponse Status:

Input	Response
If invalid parameter	Status=101
If Recharge History found	Status=122 + Recharge History
If invalid username	status=109
If invalid nonce	status=110,nonce=EA238E68
If invalid password	status=108

Profile Picture API

UploadAPI Flow:	
Client	<u>Server</u>
Get nonce request(requesttype, username, imageHash)	
Server response with nonce and imageHash search result	
←	
IF hash match found:	
File upload request (requesttype, username, password, nonce, hash)	
Server response with status	
4	
IF hash match not found:	
File upload request (requesttype, username, password, nonce, hash,file)	
Server response with status	

GetNonce:

The following parameters are must for gettingnonce:

Parameter	Value
requesttype	getNonce
username	PIN number
nonce	Nonce

Sent request using following API:

http://sip.myswitch.com/profilePictureHandler.do?requesttype=getNonce&username=<UserName>&n once=NONCE

Sample Response:

Status <status code>, nonce=<NONCE>

The hash function used for hashing is given below:

```
/* Second reduction step to reduce sums to 16 bits */
sum1 = (sum1 & 0xffff) + (sum1 >> 16);
sum2 = (sum2 & 0xffff) + (sum2 >> 16);
return sum2 << 16 | sum1;
}
</pre>
```

Sample Response

status=108, nonce=BCF1C6FE

Image Upload Request

HRI

http://sip.myswitch.com/profilePictureHandler.do?requesttype=uploadImage&username=<PINN umber>&nonce=<Nonce>&password=MD5(nonce+username+password)

If hashed value already is in server then:

Parameters:

Parameter	Value
requesttype	uploadImage
username	PIN number
nonce	Nonce
password	md5(nonce + username + password)

If hashed value is not in server then:

Parameters:

Parameter	Value
requesttype	uploadImage
username	PIN number
nonce	Nonce
password	md5(nonce + username + password)

File (image file to be uploaded)

Sample Response

status=0

DownloadAPI FLOW:

Get nonce request (requesttype, username)

Server response with nonce

File download request (requesttype, username, nonce)

Server response with status

GetNonce:

First you will need to get current nonce from server.

The following parameters are must for gettingnonce:

Parameter	Value
requesttype	getNonce
username	PIN number
nonce	Nonce

Sent request using following API:

http://sip.myswitch.com/profilePictureHandler.do?requesttype=getNonce&username=<UserName>&nonce=<NONCE>



Sample Response:

Status <status code>, nonce=<NONCE>

Image download request

http://sip.myswitch.com/profilePictureHandler.do?requesttype=downloadImage&username=< PINNumber>&nonce=<Nonce>

The following parameters are must for Image Download API:

Parameter	Value
requesttype	downloadImage
username	PIN number
nonce	Nonce

Sample Response

status=112, pp_data=profile_picture/9006/50001_1413088101159.jpeg

Profile info Edit/Fetch API

Get Nonce:

First you will need to get current nonce from server.

The following parameters are must for gettingnonce:

Parameter	Value
requesttype	getNonce
username	PIN number
nonce	Nonce

Sent request using following API:

http://sip.myswitch.com/profilePictureHandler.do?requesttype=getNonce&username=<UserName>&nonce=<NONCE>



Sample Response:

Status <status code>, nonce=<NONCE>

Edit Profile Info:

Update info request can be sent without any requesttype

The following parameters are must for updating information:

Parameter	Value
username	PIN number
nonce	Nonce
password	MD5 digest of (nonce + username + password)
updateData	1

Optional parameters:

You can send one or more of the following parameters to update information

Parameter	Value
name	Name of the user
emailID	Email ID of the user
nationality	Country ID for the user
state	State of selected Country
dateOfBirth	YYYYMMDD

Example:

http://sip.myswitch.com/profilePictureHandler.do?updateData=1&username=12345&nonce=AF 9EBBE3&password=MD5(nonce+user+password)&name=Mizanur%20Rahman&emailID=mizanur @revesoft.com&nationality=18&state=Dhaka&dateOfBirth=19910103

To get profile info:

The following parameters are must for getting information:

Parameter	Value
requesttype	getProfileInfo
username	PIN number
nonce	Nonce
password	MD5 digest of (nonce + username + password)

Example:

http://sip.myswitch.com/profilePictureHandler.do?requesttype=getProfileInfo&username=12345&nonce=AF9EBBE3&password=(nonce+user+password)

Sample Response:

status=0,name= xx emailID=yy@revesoft.com nationality=Bangladesh state=Dhaka dateOfBirth=YYYYMMDD

Profile Picture Status Code:

Status	Description
0	Image has been uploaded successfully
	Example:
	status=0
101	InvalidPassword.
	Example:
	status=101, nonce=3EC580E3
102	InvalidUser.
	Example:
	status=102
104	New nonce created.
	Example:
	status=104, nonce=3EC580E3
105	Internal Server Error.
	Example:
	status=105
106	Invalid nonce
	Example:
	status=106, nonce=3EC580E3

107	Hash match found
	Example:
	status=107, nonce=3EC580E3
108	Hash match not found
	Example: status=108, nonce=3EC580E3
109	Insufficient parameters
	Example: status=109
110	Invalid parameter
	Example: status=110
111	Profile picture has not been set yet
	Example: status=111
112	Successfully downloaded profile picture
	Example: status=112, pp_data=profile_picture/9006/50001_1413088101159.jpeg

IVR Language Change API

Get IVR Language List API

This API will provide available IVR Language in the iTelSwitchPlusSystem as per request input

Sample Request

http://sip.myswitch.com/api/languageAPI.jsp?type=getLanguageList&username=880181753573



Sample Response

English=1 Bangla=2 nonce=xaqiw

Get Current IVR Language

Sample Request

http://sip.myswitch.com/api/languageAPI.jsp?type=getIVRLanguage&username=880181753573 <u>7</u>

Sample Response

LanguageID=1

Change IVR Language

IVR language change for a user. The request should be as follows:

Possible Input Parameters:

• type = updateLanguage

username = username
 md5 = md5 digest of (nonce+username+password)

nonce = nonce value

• languageID = IVR Language ID which we want to set

Sample Request

http://sip.myswitch.com/api/languageAPI.jsp?type=updateLanguage&languageID=1&usernam e=8801817535737&nonce=anw0z&md5=<MD5_DIGEST_OF_(nonce+user+pass)>

Response

[When IVR Language is set successfully]

status=0



IVR Language API Response Status:

Input	Output
If Invalid type parameter	errorCode=100
If invalid languageID,username parameter	errorCode=105
If invalid nonce	errorCode=106
	nonce=B7AC9CE5
If invalid password	errorCode=108
	nonce=B7AC9CE5

Package Selection API:

This API is intended to get available packages offered by the Admin and subscribed from 3rd party website.

Package API Response Status:

Input	Output
If Invalid type parameter	errorCode=101
If invalid user	status=109
If new nonce generated	status=110,nonce=585F9862
If invalid password	status=108

Parameters:

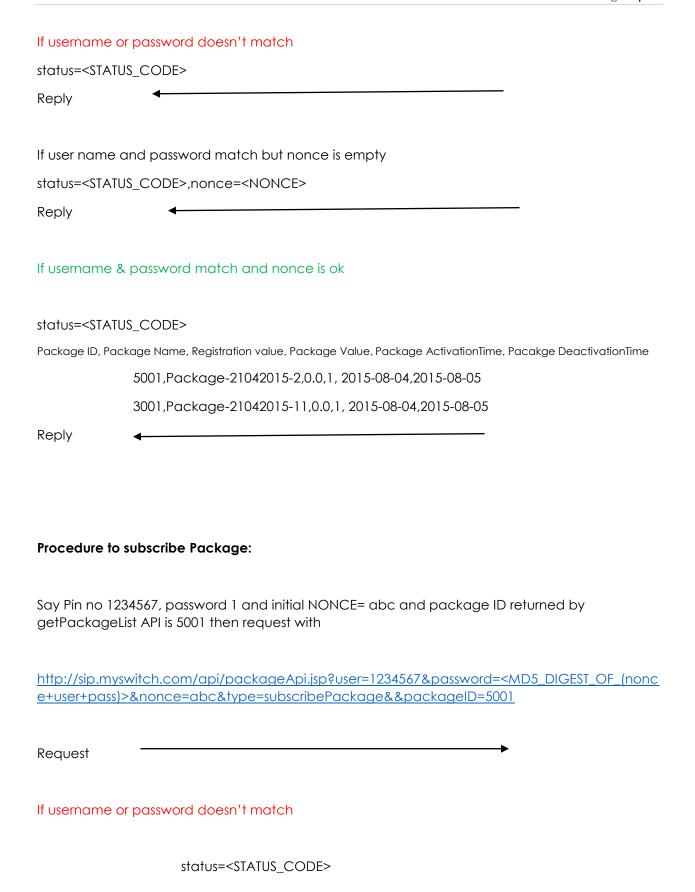
Parameter	Value	Required
type	getPackageList, subscribePackage, getSubscribedPackage,updateAutoRenewStatus	$\sqrt{}$
user	PIN User	√
password	MD5 digest of (nonce+user+password)	√
nonce	<value anything="" as="" be="" can="" initial="" nonce=""></value>	V
packageID	ID of the available packages	√
autorenew	0=not renewable, 1=renewable, 2= stopped auto renew	V

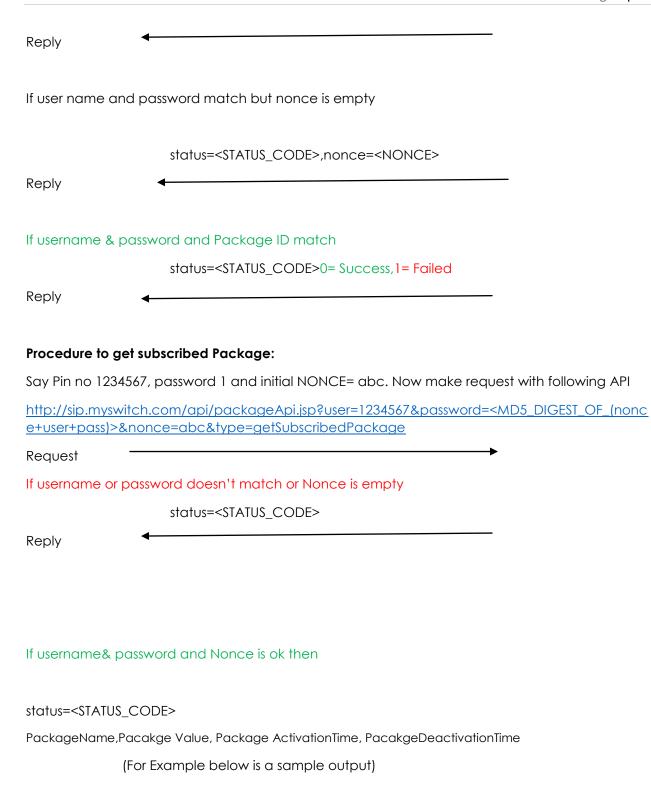
Procedure to request for getting list of available package:

Say Pin no = 1234567, password= 1 and initial NONCE= abc. Now make a request with

http://sip.myswitch.com/api/packageApi.jsp?user=1234567&password=<MD5_DIGEST_OF_(nonce+user+pass)>&nonce=abc&type=getPackageList

Request	,
VECTOE21	
'	





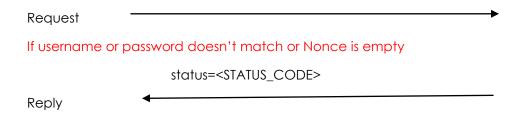
PackageName, PacakgeValue, Package ActivationTime, PacakgeDeactivationTime Auto-Renew-1,1,2015-08-04,2015-08-05

status=0

Reply

Procedure to get subscribed Package Details with available minutes:

Say Pin no 1234567, password 1 and initial NONCE= abc. Now make request with following API <a href="http://sip.myswitch.com/api/packageApi.jsp?user=1234567&password=<MD5_DIGEST_OF_(nonce+user+pass)>&nonce=abc&type=getSubscribedPackageDetails">http://sip.myswitch.com/api/packageApi.jsp?user=1234567&password=<MD5_DIGEST_OF_(nonce+user+pass)>&nonce=abc&type=getSubscribedPackageDetails



If username& password and Nonce is ok then

status=<STATUS_CODE>

PackageName,Pacakge Value, Package ActivationTime, PacakgeDeactivationTime, Auto Renew

status=0

PackageName, Pacakge Value, Package ActivationTime, PacakgeDeactivationTime, Auto Renew

Just Call BD \$5:200:0.025, 5, 2015-08-06, 2015-09-05, 0

Available Min

Bangladesh Fixed:= 5 min

Bangladesh:= 200 min

Reply

Procedure to change auto renew status of a Package:

Say Pin no 1234567, password 1 and initial NONCE= abc. Now make request with following API

http://sip.myswitch.com/api/packageApi.jsp?user=1234567&password=<MD5_DIGEST_OF (nonce+user+pass)>&nonce=abc&type=updateAutoRenewStatus&autorenew=2



Parameter:

autorenew=1 means enable auto renew

autorenew=2 means disable auto renew

Request

If username or password doesn't match or Nonce is empty

status=<STATUS_CODE>

Reply

If username& password and Nonce is given the

status=<STATUS_CODE>

status=0 for successful

satus=1 for failed

Reply

Password Reset/Change API:

This API will give opportunity to change/reset existing password to pin user only from 3rd party website.

1. API to reset the existing password through mail:

PARAMETERS:

Туре	Parameter	Description	Required
Request	type	Value will be : forgotPassword	$\sqrt{}$
	username	Put pin number	$\sqrt{}$
Response	If successful	{status: 0}	

http://sip.myswitch.com/api/passwordApi.jsp?type=forgotPassword&username=PIN_NUMBER

Which mail id is set for pin user, mail will send with reset link to this mail id.

2. Procedure to request for changing existing password:

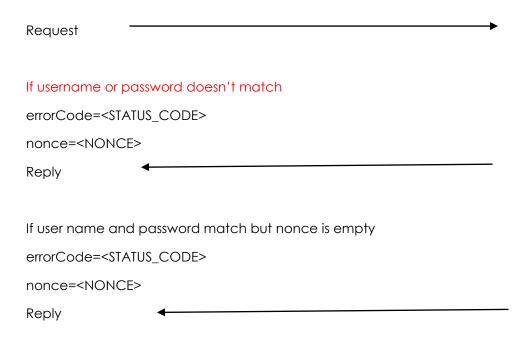
Pin user can change his existing password through this API.

Say Pin no = 12345, password= 1 and initial nonce= abc. Now make a request with

PARAMETERS:

Parameter	Value	Required
type	changePassword	$\sqrt{}$
username	<pin user=""></pin>	$\sqrt{}$
currentPassword	MD5 digest of (nonce+user+password)	$\sqrt{}$
nonce	<nonce></nonce>	$\sqrt{}$
newPassword	<account_id></account_id>	$\sqrt{}$

http://sip.myswitch.com/api/passwordApi.jsp?type=changePassword&username=12345&nonce =nonce&newPassword=2¤tPassword=<MD5_DIGEST_OF_(nonce+user+current_password) >



If username & password match and nonce is ok

status=<STATUS_CODE> // status=0 means successful, status=1 means failed



Password Change API Response Status:

Input	Output
If Invalid type parameter	errorCode=100
If invalid username parameter	errorCode=105
If invalid value of parameter username	errorCode=103
If new nonce generated	errorCode=106
	nonce=6E370F1C
If invalid password	errorCode=108
	nonce=6E370F1C

Brain Tree payment API:

http://sip.myswitch.com/api/braintreeAPI.jsp?user=1234567&&password=MD5(nonce+user+password)&nonce=09820934h09wr&type=token

Request
If nonce is empty
status= <status_code>,nonce=<nonce></nonce></status_code>
Reply
Send request with nonce Request ————————————————————————————————————
If username & password match and nonce is ok
Reply -

status=<STATUS CODE>

token=<Brain tree token>

Token will be there only if status is 0 (successful)

http://sip.myswitch.com/api/braintreeAPI.jsp?user=1234567&&password=MD5(nonce+user+password)&nonce=09820934h09wr&type=payment&braintreenonce=987nsdf974s9&amout=5&device data=bsfhadsfh&autoRechargeStatus=1&creditCardNumber=11111114231&rechargeAmount=5&rechargeAtBalance=2

ii usemame &	password match and nonce is ok
Request	•
Response:	
Status= <status code=""></status>	//0=successful; 1=failed
balance= <client curren<="" td=""><td>t balance></td></client>	t balance>
autoRecharaeStatus= <s< td=""><td>tatus code> //0=enabled: 1=disabled</td></s<>	tatus code> //0=enabled: 1=disabled

In request if autoRechargeStatus is set to 1 then below parameter is mandatory

- 1. creditCardNumber- must be masked card number
- 2. recharge Amount the amount that will be recharge automatically
- 3. rechargeAtBalance at which autoRecharge will try to recharge the rechargeAmount

OTP Verification API

User can verify their OTP serial and token through this API.

Prerequisite

• Source IP should be allowed in the billing server

Parameter:

Parameter	Description	Required
otpSerial	Put otp serial	√
otpToken	Put otp token	$\sqrt{}$

Request:

http://sip.myswitch.com/api/otpVerify.jsp?otpSerial=1800001961&otpToken=211781

Response:

Input	Response
If IP not allowed in JSP file	{status: 'false',description: '5400'}
If invalid/wrong otpToken parameter	{status: 'false',description: '5306'}
If invalid/wrong otpSerial parameter	{status: 'false',description: '5307'}
If successful	{status: 'true'}

All Error Codes:

All Error Code	3.
Error Code	Description
0	SUCCESS
1	FAILED
100	Insufficient Parameters
101	Invalid Parameters
101	INTERNAL_SERVER_ERROR (Call history API)
102	IP Not Allowed
103	Invalid Country
104	Invalid Operator
105	ERROR_INSUFFICIENT_PARAMETER
106	INVALID_NONCE
108	INVALID_PASSWORD
109	INVALID_USER
110	NEW_NONCE_CREATED
111	HASH_MATCH_FOUND
112	HASH_MATCH_NOT_FOUND
113	INSUFFICIENT_PARAMETER
114	INVALID_PARAMETER
115	PP_NOT_SET
116	SUCCESSFULLY_DOWNLOADED
117	FILE_DATA_CORRUPTED
118	PAYMENT_SUCCESSFUL
119	INVALID_SERIAL_CARD_NO PAYMENT FAILURE
121	COUNT_NOT_WITHIN_VALID_RANGE
122	RECHARGE_HISTORY_FOUND
124	PAYMENT_CURRENCY_UNMATCHED
401	INVALID SERVICE
405	INVALID_SERVICE INVALID FROM TIME
406	INVALID_TO_TIME
407	INVALID ACCOUNT ID
5001	Mobile Number not provided (if it's required)
5002	Email Address (emailAddress) not provided
5003	Caller IDs (callerIDs) not provided
5004	Type (type) parameter not provided
5005	Password Required
5006	REQUIRED_USERNAME
5007	Customer Type required
5008	Originating IP required
5009	ERROR_NO_COUNTRY_AVAILABLE
5010	ERROR_NO_OPERATOR_AVAILABLE
5011	ERROR_UNKNOWN
5012	RATE_NOT_FOUND
5100	Client Already Exists
5101	Pin Information not found. This is an internal server error.
5102	No free pin available. We need to create more free pins.

5200	Internal Server Error
5300	Failed to parse balance from given value in parameter balance
5400	IP restricted – the api was called from an IP which is not configured.
5500	Invalid value given in value for parameter type
5301	Error parsing value of field autoRechargeAmt
5302	Error parsing value of field autoRechargeAtBalance
5600	Invalid value: an illegal value was given for some parameter. For example,
	this error will occur if negative value given for parameter autoRechargeAmt.
5001	Mobile Number not provided
5002	Email Address (emailAddress) not provided
5003	Caller IDs (callerIDs) not provided
5005	Password (password) parameter not provided
5100	Client (caller-ID) Already Exists
5103	Mobile number was not found in Caller IDs. You need to pass the same
	mobile number as at least one caller-ID.
5104	Client Not verified
5200	Internal Server Error (may have additional information followed by a
	character)
5400	IP restricted – the API was called from an IP which is not configured.
5500	Invalid value given in value for parameter type
5105	Originating IP already exists
5800	Invalid Tech Prefix Rate ID
5700	Invalid Customer Type
5008	Originating IP required
5007	Customer Type required
5009	ERROR_NO_COUNTRY_AVAILABLE
5010	ERROR_NO_OPERATOR_AVAILABLE
5011	ERROR_UNKNOWN
5801	DUPLICATE PREFIX