Porta Billing 100™

PortaBilling External System Interfaces

Maintenance Release 16

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Preface

This document provides information for developers who want to interface their applications or VoIP systems with PortaBilling100.

Where to Get the Latest Version of This Guide

The hard copy of this guide is updated at major releases only, and does not always contain the latest material on enhancements occurring between minor releases. The online copy of this guide is always up to date, and integrates the latest changes to the product. You can access the latest copy of this guide at: **www.portaone.com/support/documentation/**

Conventions

This publication uses the following conventions:
- Commands and keywords are given in **boldface**
- Terminal sessions, console screens, or system file names are displayed in `fixed width font`

Caution indicates that the described action might result in program malfunction or data loss.

NOTE: Notes contain helpful suggestions about or references to materials not contained in this manual.

Timesaver means that you can save time by performing the action described in the paragraph.

Tips provide information that might help you solve a problem.

1. RADIUS Interface

RADIUS Protocol

PortaBilling uses the RADIUS protocol as per **Remote Authentication Dial-In User Service (RADIUS), RFC 2865** and **RADIUS Accounting, RFC 2866**. By default, the PortaBilling100 RADIUS server listens on port 1812 (UDP) for authentication requests and on port 1813 (UDP) for accounting requests.

RADIUS Attributes
PortaBilling100 uses a set of Cisco RADIUS VSAs (Vendor-Specific Attributes). For more information, please refer to the **Cisco website (http://www.cisco.com/univercd/cc/td/doc/product/access/acs_serv/vapp_dev/vsaig3.htm)**.

Required RADIUS Attributes

To ensure compatibility with future releases of PortaBilling, it is highly recommended that you follow the Cisco guidelines regarding which attributes must be contained in each authentication or accounting request. For more information, see:
http://www.cisco.com/univercd/cc/td/doc/product/access/acs_serv/vapp_dev/vsaig3.html

Authentication Requests

Currently, the following attributes are required for correct processing of accounting records:

Attribute	Description
NAS-IP-Address	
User-Name	
Password	
h323-conf-id	
Called-Station-Id	Only for authorization requests
h323-ivr-out	

Authentication Responses

Currently, the following standard attributes are used (A1 = authentication, A2 = authorization):

Attribute	A1	A2	Description
h323-billing-model	Y		
h323-return-code	Y	Y	
h323-currency	Y	Y	

h323-preferred-lang	Y	Y	
h323-credit-amount	Y		
h323-credit-amount	Y		
h323-redirect-number	Y		Optional

Accounting Requests

Currently, the following attributes are required for correct processing of accounting records:

Attribute	Description
NAS-IP-Address	
NAS-Port-Name	
User-Name	
Calling-Station-Id	
Called-Station-Id	
h323-setup-time	
h323-connect-time	
h323-disconnect-time	
h323-conf-id	
h323-incoming-conf-id	
h323-disconnect-cause	
h323-call-origin	
h323-call-type	
Acct-Session-Time	
Acct-Status-Type	
h323-ivr-out	

PortaBilling Custom Attributes

All custom attributes conform to the VSA syntax. Attributes received by PortaBilling are entered into the `h323-ivr-out` attribute (VSA No. 1), encoded as `name:value` pairs. Attributes sent by PortaBilling are entered into the `h323-ivr-in` attribute (VSA No. 1), encoded as `name:value` pairs. Unless otherwise specified, any custom attribute may be included only once in each request.

Attributes Sent by a RADIUS Client (Gateway) to the PortaBilling Server

PortaBilling_Session

This allows you to control an account's login session (sessions are used to prevent simultaneous logins by debit accounts). This attribute may be used in the accounting record for a specific call leg in order to force the

session to be unlocked. (For instance, to force a session unlock on the answer/VoIP call leg, instead of the customary answer/Telephony call leg).
Format:
`PortaBilling_Session:<string>`

Possible values:

Value	Description
nolock	Do not lock the account after the current request
unlock	Do not lock the account for the current session and unlock any other existing session for this account
relock	Lock the account for the current session and unlock any other existing session for this account
ignore	Do not set or remove any locks, and skip any lock checks

Example:
`h323-ivr-out      = 'PortaBilling_Session:nolock'`

PortaBilling_SessionEnv

Normally, the virtual environment for a call is defined by matching the value of the NAS-IP-Addr attribute to a list of nodes defined in the system. If a single RADIUS client is supplying data for multiple virtual environments, and is unable to change the NAS-IP-Addr attribute, it is possible to pass an ID for the environment (i_env) in this attribute.

Format:
`PortaBilling_SessionEnv:<integer>`

Possible values:
The i_env of an existing PortaBilling environment.

Example:
`h323-ivr-out      = 'PortaBilling_SessionEnv:2'`

PortaBilling_Ignore_Password

This allows the password check during authentication or authorization to be disabled.

Format:
`PortaBilling_Ignore_Password:<YES|NO>`

Possible values:
`YES` or `NO`.

Example:
`h323-ivr-out      = PortaBilling_Ignore_Password:YES'`

PortaBilling_CallbackHistory

This provides information about the other (second) call leg of a call, so that the first call leg can be billed properly (e.g. "do not bill the first leg if the second leg was not connected").
This attribute may be present multiple times in a request. Only the last occurrence is actually used, while the others are ignored.

Format:
```
PortaBilling_CallbackHistory:<string>
```

Possible values:

Value	Description
START	The first call leg was started
ATTEMPT	The callback engine attempted to establish an outgoing call for the second leg
OK	The second call leg was successfully connected

If there is no OK entry, the call leg will be billed using a special rate plan associated in the product configuration with the "CALLBACK_FAIL" access code.

Example:
```
h323-ivr-out      = 'PortaBilling_CallbackHistory:START'
h323-ivr-out      = 'PortaBilling_CallbackHistory:ATTEMPT'
h323-ivr-out      = 'PortaBilling_CallbackHistory:OK'
```

PortaBilling_AccessCode (formerly PortaBilling_Original_CLD)

An access code for selecting a specific rate plan within a product. Although originally used to pass the "IVR access number" to billing, it may contain any string (e.g. "FIRSTCALL"). For Quintum compatibility, this attribute also has the synonym ACCESSCODE.

Format:
```
PortaBilling_AccessCode:<string>
PortaBilling_Original_CLD:<string>
```

Possible values:
Any string. The value passed will be compared to the values entered in the product's accessibility (case-sensitively).

Example:
```
h323-ivr-out      = 'PortaBilling_AccessCode:18001234567'
```

PortaBilling_Original_DNIS

This replaces the value of the Called-Station-Id attribute (i.e. the destination phone number used for call rating).

Format:
```
PortaBilling_Original_DNIS:<value>
```
where the value is a semicolon-separated list of `name:value` pairs.

Possible values:
E.164 phone number (a sequence of digits, * and/or # signs).

Example:
```
h323-ivr-out     = 'PortaBilling_Original_DNIS:19001234567'
```

PortaBilling_RestoreCacheLevel

This controls how the billing engine uses the account information fetched during the authorization process for a request, in order to facilitate the processing of other requests. Its most common application is to disable this information for re-use, if for some reason information from the current request should not be applied to other call legs (e.g. in callback scripts).

Format:
```
PortaBilling_RestoreCacheLevel:<integer>
```

Possible values:

Value	Description
-1	Disable caching and reuse of account information.
0	Use the default policy.

Example:
```
h323-ivr-out     = ' PortaBilling_RestoreCacheLevel:-1'
```

PortaBilling_Notify

A generic attribute used to notify the billing engine about various conditions related to a call.

Format:
```
PortaBilling_Notify:<value>
```
where the value is a semicolon-separated list of `name:value` pairs.

Possible values:
Callback related
Used to notify the billing engine about the other call leg related to this one. For more details about double-CLD authorization, see the **PortaCallback User Guide**.

Name	Description
another_cld	Called number (DNIS) on the other call leg for "double-CLD" authorization.

another_username	Username (account ID) for authorization of the other call leg; should be provided even if identical to User-name in the current request.
another_orig_cld	Access code for looking up the rate plan to authorize the other call leg.
in_progress	Number of seconds already connected on the other call leg.

Example:
```
h323-ivr-out     =
'PortaBilling_Notify:tcl_call=2;another_username=1004391648;ano
ther_cld=15149615664'
```

Attributes Sent by the PortaBilling Server to a RADIUS Client (Gateway)

Attribute	A1	A2	Description	
DURATION		Y		
Tariff	Y	Y		
available-funds	Y			
h323-preferred-lang	Y	Y		
h323-credit-amount	Y			
h323-credit-time		Y		
PortaBilling_UserName	Y	Y		
PortaBilling_AuthCLD		Y		
PortaBilling_AccessCode	Y	Y		
PortaBilling_AccountBalance	Y			
PortaBilling_CustomerBalance	Y			
PortaBilling_CustomerCreditLimit	Y			
PortaBilling_CustomerCreditLimitThreshold	Y			
BalanceThreshold	Y			
PortaBilling_ProductBreakage	Y			
PortaBilling_No_Disconnect_Warning		Y		

DURATION

This specifies the real allowed maximum call duration (in seconds), which may differ from the announced credit time if billing tricks are applied.

Format:
```
DURATION:<integer>
```

Possible values:
Positive integer (number of seconds).

Example:
```
h323-ivr-in      = 'DURATION:320'
```

Tariff

The name of the rate plan applied to the account within this session.

Format:
```
Tariff:<string>
```

Possible values:
Positive integer (number of seconds).

Example:
```
h323-ivr-in     = 'Tariff:ABC prepaid'
```

available-funds

For debit accounts, this is equal to the h323-credit-amount. For credit accounts, this returns the actual amount of available funds (the difference between the credit limit and the current balance with respect to the credit limits for the individual account and customer).

Format:
```
available-funds:<decimal>
```

Possible values:
Any positive number formatted with two decimal places; a dot (.) is used as the decimal separator.

Example:
```
h323-ivr-in     = ' available-funds:124.78'
```

PortaBilling_UserName

The account ID to be used for billing this call. The RADIUS client **must** supply this value as the `User-Name` (or, alternatively, in `h323-ivr-out=PortaBilling_UserName`) attribute value in the accounting records for all call legs (incoming and outgoing).

Format:
```
PortaBilling_UserName:<value>
```

Possible values:
A non-empty string identifying an account in PortaBilling.

Example:
```
h323-ivr-in     = 'PortaBilling_UserName:16051233355'
```

PortaBilling_AuthCLD

The string used by PortaBilling to match the corresponding rate code/destination during authorization of an account, instead of the Called-Station-Id (e.g. when a customer is to be billed according to a

special rate such as VOICEVPN, rather than according to the actual number dialed). The RADIUS client **must** supply this value as the `h323-ivr-out=PortaBilling_AuthCLD` attribute value in the accounting records for all outgoing legs of this call.

Format:
```
PortaBilling_AuthCLD:<value>
```

Possible values:
A non-empty string, usually a destination number in e.164 format.

Example:
```
h323-ivr-in     = 'PortaBilling_AuthCLD:18001233355'
```

PortaBilling_AccessCode

The string actually used by PortaBilling to match the corresponding accessibility entry and tariff. NAS should copy this value into all future call accounting requests as h323-ivr-out=PortaBilling_AccessCode, in order to apply the same properties during billing.

Format:
```
PortaBilling_AccessCode:<value>
```

Possible values:
A non-empty string, the same as for h323-ivr-out=PortaBilling_AccessCode.

Example:
```
h323-ivr-in     = 'PortaBilling_AccessCode:18001234567'
```

PortaBilling_AccountBalance

The current amount of the account's balance in PortaBilling.

Format:
```
PortaBilling_AccountBalance:<value>
```

Possible values:
A number with a precision of five decimal places.

Example:
```
h323-ivr-in     = 'PortaBilling_AccountBalance:13.20000'
```

PortaBilling_CustomerBalance

The current amount of the customer's balance in PortaBilling.

Format:
```
PortaBilling_CustomerBalance:<value>
```

Possible values:
A number with a precision of five decimal places.

Example:
```
h323-ivr-in      = 'PortaBilling_CurstomerBalance:13.20000'
```

PortaBilling_CustomerCreditLimit

The current amount of the customer's credit limit in PortaBilling.

Format:
```
PortaBilling_CustomerCreditLimit:<value>
```

Possible values:
A number with a precision of five decimal places.

Example:
```
h323-ivr-in      = 'PortaBilling_CustomerCreditLimit:13.00000'
```

PortaBilling_CustomerCreditLimitThreshold

The current amount of the customer's credit limit threshold in PortaBilling. Note that the relative threshold limit is converted into an actual currency amount.

Format:
```
PortaBilling_CustomerCreditLimitThreshold:<value>
```

Possible values:
A number with a precision of five decimal places.

Example:
```
h323-ivr-in      =
'PortaBilling_CustomerCreditLimitThreshold:12.00000'
```

BalanceThreshold

Indicates that the customer's balance warning threshold has been reached.

Format:
```
BallanceThreshold:<value>
```

Possible values:
```
    YES
```

Example:
```
h323-ivr-in      = 'BallanceThreshold:YES'
```

PortaBilling_ProductBreakage

The breakage amount of the account's product in PortaBilling.

Format:
```
PortaBilling_ProductBreakage:<value>
```

Possible values:
A number with a precision of five decimal places.

Example:
```
h323-ivr-in      = 'PortaBilling_ProductBreakage:0.02000'
```

PortaBilling_No_Disconnect_Warning

Indicates that NAS should cancel IVR/beep warnings before call session timeouts (calls will be terminated silently).

Format:
```
PortaBilling_No_Disconnect_Warning:<value>
```
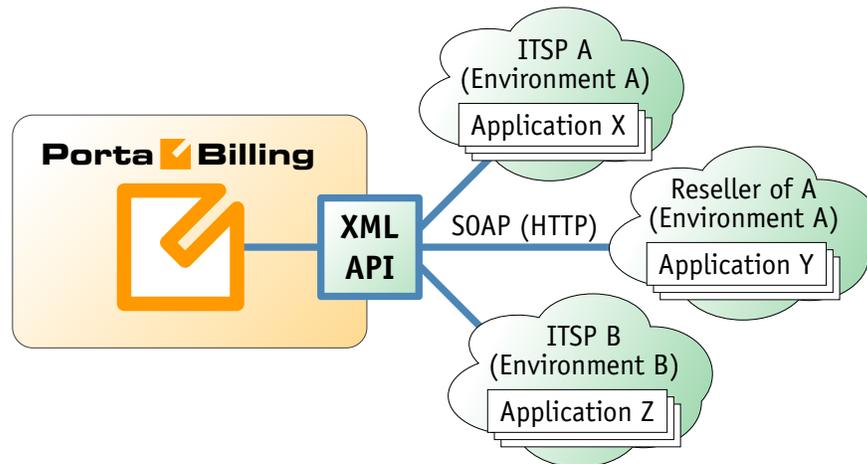
Possible values:
```
    YES
```

Example:
```
h323-ivr-in      = 'PortaBilling_No_Disconnect_Warning:YES'
```

2. XML API

Overview

PortaBilling allows you to perform operations such as data retrieval or data modification via XML API (SOAP).

This method has several advantages:

- It is based on SOAP (Simple Object Access Protocol) and HTTPS transport, so it is accessible from any platform or operating system, and all communication between the server and clients is secure.
- The business logic embedded into the API provides integrity checks for all data modifications, and can compile records from several database tables to create a single customer information retrieval structure.
- XML API is accessible to every owner of a virtual environment or reseller. Each user's access is automatically limited to his "visible" portion of the available data, e.g. a reseller can only retrieve information about his own sub-customers or their accounts.

XML API allows users to perform select, update, insert or delete operations on entities such as customers or accounts. Each user has his own login credentials, and each operation he wishes to perform is analyzed to determine if it is possible with regard to general data integrity (e.g. a new account cannot be created without being assigned to a customer) as well as the given user's security permissions (ACLs) (e.g. while it is generally possible to create new accounts, a certain user may be prohibited from doing so).

Access to API

Proxy (server address): **https://pbslave-server.yourdomain.com:443/soap**

URI (namespace): **https://pbslave-server.yourdomain.com//Porta/SOAP/Customer**

The SOAP interface for resellers is available on port 8444, instead of port 443.

Security

Connection to the SOAP interface is provided via HTTPS. Authentication is done using authentication pairs (login-password). Each request to a method should contain the `auth_info` structure as the SOAP header attribute.

Error Handling

SOAP faults are used to carry error information within a SOAP message. If the actual response has a SOAP fault element as the body entry, then an error has occurred. In this case, any other fields in the response cannot be guaranteed as accurate; only the fault sub-elements should be used to identify an error. Currently, these sub-elements are:

- **faultcode** is intended for use by the client software and provides an algorithmic mechanism for identifying the fault;
- **faultstring** provides a human readable explanation of the fault, and is not intended for algorithmic processing.

WSDL

Since the MR16-2 version of the PortaBilling100, each installation of the product has its own set of WSDL documents available for download from the web server. Assuming the name of the Admin server is pbslave-server.yourdomain.com, these documents can be downloaded from **https://pbslave-server.yourdomain.com/wsdl/**.

NOTE: WSDL is only supported starting with Maintenance Release 16 Build 2 (MR16-2). An application employing WSDL cannot be used with the XML API of Maintenance Release 15 or any earlier build of MR16.

All SOAP requests are handled via an SSL connection. By default, PortaBilling installations contain a self-signed certificate which provides the means to encrypt data. However, since the authenticity of this certificate cannot be validated, you may experience some problems when connecting to an SSL site. In this case, it may be necessary to obtain a certificate from a genuine certificate authority. Another option is to generate your own certificate authority and have certificates deployed to all SOAP clients. However, this goes beyond the scope of the present document.

Global Methods and Types

Key

- * - A value can be entered for this property only when inserting new records, and cannot be changed later.
- ** - This property is read-only, and its value cannot be changed.
- Mandatory properties (whose value must be entered during insertion, and cannot be set to an empty value later) are underlined.

Type Reference

auth_info structure

Property	Type	Description
login	string, 16 chars max	User login for PortaBilling100 web interface
password	string, 16 chars max	User password for PortaBilling100 web interface
or alternatively:		
session_id	string, 32 chars max	Unique ID of previously opened SOAP session

Access to Customer Information

Methods

get_customer_info

Parameters: **GetCustomerInfoRequest**
Return value: **GetCustomerInfoResponse**

This method allows an API user (administrator or reseller) to get a customer record from the database. The customer must be viewable (owned) by the user making the request.

get_customer_list

Parameters: **GetCustomerListRequest**
Return value: **GetCustomerListRespone**

This method allows an API user to get a list of customer records. The customer must be viewable (owned) by the user making the request.

validate_customer_info

Parameters: **ValidateCustomerInfoRequest**
Return value: **ValidateCustomerInfoResponse**

This method allows an API user to check if the supplied data can be used to create a new customer record or update an existing one. If successful, the completed data is returned.

add_customer

Parameters: **AddCustomerRequest**
Return value: **AddUpdateCustomerResponse**

This method allows an API user to create a new customer record using the supplied data.

update_customer

Parameters: **UpdateCustomerRequest**
Return value: **AddUpdateCustomerResponse**

This method allows an API user to update an existing customer record using the supplied data.

delete_customer

Parameters: **DeleteCustomerRequest**
Return value: **DeleteCustomerResponse**

This method allows an API user to delete an existing retail customer or reseller, provided it has no accounts, subcustomers, CDRs or managed objects.

get_subscriptions

Parameters: **GetCustomerSubscriptionsRequest**
Return value: **GetCustomerSubscriptionsResponse**

This method allows an API user to get a list of subscription records associated with a customer.

add_subscription

Parameters: **AddCustomerSubscriptionRequest**
Return value: **AddUpdateCustomerSubscriptionResponse**

This method allows an API user to add a new subscription associated with a customer. If successful, a new subscription ID is returned.

update_subscription

Parameters: **UpdateCustomerSubscriptionRequest**
Return value: **AddUpdateCustomerSubscriptionResponse**

This method allows an API user to update an existing subscription record associated with a customer. It requires an ID number returned, for example, by the add_subscription method.

close_subscription

Parameters: **CloseDeleteCustomerSubscriptionRequest**
Return value: **CloseCustomerSubscriptionResponse**

This method allows an API user to close an existing active subscription associated with a customer. It requires an ID number returned, for example, by the add_subscription method.

delete_subscription

Parameters: **CloseDeleteCustomerSubscriptionRequest**
Return value: **DeleteCustomerSubscriptionResponse**

This method allows an API user to delete a pending subscription associated with a customer. It requires an ID number returned, for example, by the add_subscription method.

activate_subscriptions

Parameters: **ActivateCustomerSubscriptionsRequest**
Return value: **ActivateCustomerSubscriptionsResponse**

This method allows an API user to instantly activate a customer's pending subscriptions, where the start date is less than or equal to today's date (in the customer's time zone). An activation fee will be charged for each subscription, if applicable.

make_transaction

Parameters: **MakeCustomerTransactionRequest**
Return value: **MakeCustomerTransactionResponse**

This method allows an API user to adjust a customer's balance or issue a payment transaction, including e-commerce transactions.

update_payment_method

Parameters: **UpdateCustomerPaymentMethodRequest**
Return value: **UpdateCustomerPaymentMethodResponse**

This method allows an API user to assign a preferred payment method to a customer. For online payment methods, all the information required by the payment processor should be provided, and an appropriate payment processor must be set up and properly configured beforehand.

Type Reference

GetCustomerInfoRequest structure

May include **any** of the following properties:

Property	Type	Description
i_customer	integer	Unique ID of the customer record
refnum	string, 32 chars max	Reference number (custom field)
name	string, 41 chars max	Name of the customer on the PortaBilling100 interface, unique in the environment

GetCustomerInfoResponse structure

Property	Type	Description
customer_info	**CustomerInfo**	Complete information about a customer; for more information, see below

GetCustomerListRequest structure

Property	Type	Description
offset	integer	Number of rows to skip at the beginning of the list
limit	integer	Number of rows to retrieve

GetCustomerListResponse structure

Property	Type	Description
customer_list	array of **CustomerInfo** objects	Set of customer data records

CustomerInfo structure

Property	Type	Description
i_customer **	integer	Unique ID of the customer record
refnum	string, 32 chars max	Reference number (custom field)

name	string, 41 chars max	Name of the customer on the PortaBilling100 interface, unique in the environment
i_customer_type *	integer	Either 1 (retail customer or subcustomer) or 2 (reseller)
i_parent *	integer	0 for a direct customer, or i_customer of the reseller for a subcustomer
iso_4217 *	string, 3 chars	ISO4217 code for currency in which the customer is billed
opening_balance *	number with 5 decimal places	Customer's initial balance
balance **	number with 5 decimal places	Customer's balance
i_billing_period	integer	ID for customer's billing period; refers to Billing_Period table
i_acl	integer	ID for customer's access level; refers to Access_Levels table
i_routing_plan	integer	ID for customer's routing plan; refers to Routing_Plans table
i_vd_plan	integer	ID for customer's discount plan; refers to Volume_Discount_Plans table
i_moh	integer	ID for customer's "music on hold" option; refers to Music_On_Hold table
i_customer_class	integer	ID for customer's customer class; refers to Customer_Classes table
i_tariff	integer	ID for customer's tariff; refers to Tariffs table; applies to resellers only
i_tariff_incoming	integer	ID for customer's incoming tariff; refers to Tariffs table; applies to resellers only
i_template	integer	ID for customer's invoice template; refers to Templates table; if undefined, the template defined in the customer class is used; if 0, invoices

		are not created
i_rep	integer	ID for customer's representative; refers to Representatives table
i_time_zone	integer	ID for customer's time zone; refers to Time_Zones table
i_lang	string	Code for customer's web language; refers to Locale_Languages table
service_flags	string, 32 chars max	Customer's call features settings
companyname	string, 41 chars max	Customer's company name
salutation	string, 15 chars max	Customer's salutation
firstname	string, 25 chars max	Customer's first name
midinit	string, 5 chars max	Customer's middle initial(s)
lastname	string, 25 chars max	Customer's last name
baddr1	string, 41 chars max	1st line of customer's address
baddr2	string, 41 chars max	2nd line of customer's address
baddr3	string, 41 chars max	3rd line of customer's address
baddr4	string, 41 chars max	4th line of customer's address
baddr5	string, 41 chars max	5th line of customer's address
city	string, 31 chars max	City of customer's address
state	string, 21 chars max	Province or state
zip	string, 13 chars max	Postal (zip) code
country	string, 31 chars max	Country
note	string, 41 chars max	Short note (description)
faxnum	string, 21 chars max	Fax number
cont1	string, 41 chars max	Main contact person
phone1	string, 21 chars	Main phone number

	max	
cont2	string, 41 chars max	Alternative contact person
phone2	string, 21 chars max	Alternative phone number
email	string, 99 chars max	Email address
bcc	string, 99 chars max	BCC email address
login	string, 16 chars max	Customer's login for self-care web interface
password	string, 16 chars max	Customer's password for self-care web interface
tax_id	string, 16 chars max	Tax ID
credit_limit	number with 5 decimal places	Customer's credit limit value; 0 if undefined
credit_limit_warning	string, 25 chars max	Balance threshold value for sending warnings; assigned either an absolute value or a positive relative value with a % sign
send_statistics	F, S or N	• F - send full statistics to customer • S - send short statistics • N - do not send statistics If undefined, the settings defined in the customer class are applied
send_invoices	boolean, Y/N	Allow customer to receive invoices; if undefined, the settings defined in the customer class are applied
blocked	boolean, Y/N	Block customer's calls
ppm_enabled	boolean, Y/N	Allow customer to manage periodic payments on his self-care interface
drm_enabled	boolean, Y/N	Allow customer to manage dialing rules on his self-care interface
callshop_enabled	boolean, Y/N	Enable callshop features on customer's self-care interface
bp_charge_cc	boolean, Y/N	Automatically charge customer's credit card when billing period is closed

bill_status	enumeration	• O - customer is open • S - customer is suspended due to an overdue invoice • C - customer is closed due to an unpaid invoice
max_abbreviated_length	integer	Maximum allowed length of customer's abbreviated numbers; applies to retail customers only
discount_rate	number with 5 decimal places	Value of customer's subscription discount; a percentage
out_date_format	string, 16 chars max	Output format for date indication on customer's self-care interface
out_time_format	string, 16 chars max	Output format for time indication
out_date_time_format	string, 16 chars max	Output format for full date/time indication
in_date_format	string, 16 chars max	Input format for date indication
in_time_format	string, 16 chars max	Input format for time indication
creation_date **	datetime, ISO format	Date and time when the customer was created
cld_translation_rule	string	Customer's translation rule; read-only for reseller API users
cli_in_translation_rule	string	Customer's translation rule for incoming calls; read-only for reseller API users
dialing_rules	**DialingRules Info** structure	If defined, overrides the cld_translation_rule and cli_in_translation_rule values

DialingRulesInfo structure

Property	Type	Description
cc	string	Country code
ac	string	Area code(s)
ia	integer, 0/1	1 - Always dial the area code as part of the number
op	string	Prefix for accessing the outside phone network
dp	string	Prefix for domestic calls outside area code
ip		International dialing prefix

em	string	Emergency numbers; comma-separated list
ex	string	Exceptions; comma-separated list
nl	integer	Local dialing number length
ct	integer, 0/1	1 - convert ANI (CLI) for incoming calls into this dialing format

ValidateCustomerInfoRequest structure

Property	Type	Description
customer_info	**CustomerInfo**	Complete information about a customer; note: omit i_customer to check if data can be used to create a new customer record

ValidateCustomerInfoResponse structure

Property	Type	Description
customer_info	**CustomerInfo**	Data about a customer, see **CustomerInfo** above

AddCustomerRequest structure

Property	Type	Description
customer_info	**CustomerInfo**	Notes: i_customer will be ignored; most fields may be omitted, but iso_4217 and name are mandatory; for reseller API users, the i_customer_type and i_parent fields will be replaced with predefined values

UpdateCustomerRequest structure

Property	Type	Description
customer_info	**CustomerInfo**	Note: i_customer is a mandatory field; fields not requiring modification may be omitted; the iso_4217, i_customer_type, i_parent and opening_balance fields are read-only

AddUpdateCustomerResponse structure

Property	Type	Description
i_customer	integer	ID of created/modified customer record

DeleteCustomerRequest structure

Property	Type	Description
i_customer	integer	ID of customer record to be deleted

DeleteCustomerResponse structure

Property	Type	Description
success	integer	1 in case of success, 0 in case of failure

GetCustomerSubscriptionsRequest structure

Property	Type	Description
i_customer	integer	ID of customer record

GetCustomerSubscriptionsResponse structure

Property	Type	Description
subscriptions	array of **CustomerSubscriptionInfo** structures	Set of customer subscription data records

AddCustomerSubscriptionRequest structure

Property	Type	Description
i_customer	integer	ID of customer record
subscription_info	**CustomerSubscriptionInfo**	Note: i_customer_subscription will be ignored; i_subscription is a mandatory field, and must be unique among all of the customer's pending and active subscriptions

UpdateCustomerSubscriptionRequest structure

Property	Type	Description
i_customer	integer	ID of customer record
i_customer_subscription	integer	ID of customer subscription record to be updated
subscription_info	**CustomerSubscriptionInfo**	Note: i_customer_subscription and i_subscription will be ignored

AddUpdateCustomerSubscriptionResponse structure

Property	Type	Description
i_customer_subscription	integer	ID of created/modified customer subscription record

CustomerSubscriptionInfo structure

Property	Type	Description
i_customer_subscription	integer	Unique ID of the customer

**		subscription record
<u>i_subscription</u> *	string, 32 chars max	ID for subscription plan; refers to the Subscriptions table
name **	string, 32 chars max	Name of subscription plan, referenced by the i_subscription attribute
discount_rate	number with 5 decimal places	Discount rate for the subscription, in percents; if missing or undefined, the discount rate defined in the customer information is applied
start_date	date, ISO format	The desired subscription activation date (defined in the customer's time zone); if missing or undefined, the subscription will start immediately after it is created; otherwise, the value should be greater than or equal to today's date (in the customer's time zone); can be updated for pending subscriptions only
activation_date **	date, ISO format	Date when the subscription was activated
billed_to **	date, ISO format	Date to which subscription charges have already been applied
finish_date	date, ISO format	Date when the subscription should be automatically canceled; if defined, must be greater than or equal to start_date
is_finished **	boolean, Y/N	Indicates whether the subscription has already been closed
int_status **	integer	Status of the subscription: • 0 – pending • 1 – active • 2 – closed

CloseDeleteCustomerSubscriptionRequest structure

Property	Type	Description
i_customer	integer	ID of customer record
i_customer_subscription	integer	ID of customer subscription

		record to be closed/deleted

CloseCustomerSubscriptionResponse structure

Property	Type	Description
i_customer_subscription	integer	ID of closed customer subscription record

DeleteCustomerSubscriptionResponse structure

Property	Type	Description
success	integer	1 in case of success, 0 in case of failure

ActivateCustomerSubscriptionsRequest

Property	Type	Description
i_customer	integer	ID of customer record

ActivateCustomerSubscriptionsResponse

Property	Type	Description
success	integer	1 in case of success, 0 in case of failure

MakeCustomerTransactionRequest structure

Property	Type	Description
i_customer	integer	ID of customer record
action	One of the following: • Manual charge • Manual refund • Manual payment • Promotional credit • e-commerce payment • e-commerce refund • Authorization only • Capture payment	Same as those available on the Maintenance tab of the Customer edit interface, including e-commerce transactions
amount	number with 5 decimal places	Amount by which the customer's balance will increase / decrease
visible_comment	string, 32 chars max	A comment on this transaction, visible to the customer in the xDR browser
internal_comment	string, 32 chars max	An internal comment on this transaction; not visible in the xDR

		browser, and accessible only directly from the database
suppress_notification	integer	1 – do not send email notifications to this customer, 0 – send email notifications
transaction_id	string	Applicable to capture payment and e-commerce refund transactions; must contain the ID of a previously issued authorization only / e-commerce payment transaction.

MakeCustomerTransactionResponse structure

Property	Type	Description
balance	number with 5 decimal places	Customer's modified balance

UpdateCustomerPaymentMethodRequest structure

Property	Type	Description
i_customer	integer	ID of customer record
payment_method_info	**PaymentMethodInfo**	Data about payment method; see below

UpdateCustomerPaymentMethodResponse structure

Property	Type	Description
i_credit_card	integer	ID of modified payment method record

PaymentMethodInfo structure

***   - Mandatory for all methods, except Cash and Cheque
**** - Mandatory for all credit card methods

Property	Type	Description
payment_method	string	Name of payment method; one of the following: • Cash • Cheque • American Express

		• Discover • MasterCard • VISA • FirePay • Switch • Check • DirectDebitNL (pass an undefined value in order to clear the payment method setting)
name ***	string, 41 chars max	Name of cardholder (e.g. owner of bank account).
address ***	string, 41 chars max	Address of cardholder
zip ***	string, 41 chars max	Postal code of cardholder
city	string, 50 chars max	Name of city of cardholder
i_country_subdivision	integer	ID for cardholder's state; refers to Country_Subdivision table
iso_3166_1_a2	string, 2 chars	ISO 3166 two-letter country code
number ****	string, 32 chars max	Credit card number without spaces, e.g. 4444333322221111
cvv	string, 16 chars max	Card security code (CVV, CVS, etc.); applicable to all credit card methods
exp_date ****	date, ISO format	Card expiration date; applicable to all credit card methods
start_date	date, ISO format	Card activation date; applicable to the Switch method
issue_no	string, 2 chars max	Card issue number; applicable to the Switch method
account_number	string, 16 chars max	Bank account number; applicable to the Check and DirectDebitNL methods
bank_number	string, 32 chars max	Bank routing number; applicable to the Check method

Access to Account Information

Methods

get_account_info

Parameters: **GetAccountInfoRequest**
Return value: **GetAccountInfoResponse**

This method allows an API user (administrator or reseller) to get an account record from the database. The account must be viewable (owned) by the user making the request.

get_account_list

Parameters: **GetAccountListRequest**
Return value: **GetAccountListResponse**

This method allows an API user to get a list of account records. The account must be viewable (owned) by the user making the request.

validate_account_info

Parameters: **ValidateAccountInfoRequest**
Return value: **ValidateAccountInfoResponse**

This method allows an API user to check if the supplied data can be used to create a new account record or update an existing one. If successful, the completed data is returned.

add_account

Parameters: **AddAccountRequest**
Return value: **AddUpdateAccountResponse**

This method allows an API user to create a new account record using the supplied data.

update_account

Parameters: **UpdateAccountRequest**
Return value: **AddUpdateAccountResponse**

This method allows an API user to update an existing account record using the supplied data.

get_account_followme

Parameters: **GetAccountFollowMeRequest**

Return value: **GetAccountFollowMeResponse**

This method retrieves the follow-me settings associated with an account. Follow-me entries (numbers) are returned in the order of their priority.

update_account_followme

Parameters: **UpdateAccountFollowMeRequest**
Return value: **UpdateAccountFollowMeResponse**

This method allows an API user to update the follow-me settings associated with an account. It does not add or update follow-me entries.

add_followme_number

Parameters: **AddFollowMeNumberRequest**
Return value: **AddUpdateFollowMeNumberResponse**

This method allows an API user to add a new follow-me entry (number) associated with an account. If successful, a new ID number is returned. Note: the newly added number becomes the last entry in the list of the account's follow-me numbers.

update_followme_number

Parameters: **UpdateFollowMeNumberRequest**
Return value: **AddUpdateFollowMeNumberResponse**

This method allows an API user to update an existing follow-me entry (number) associated with an account. It requires an ID number returned, for example, by the add_followme_number method.

delete_followme_number

Parameters: **DeleteFollowMeNumberRequest**
Return value: **DeleteFollowMeNumberResponse**

This method allows an API user to delete an existing follow-me entry (number) associated with the account. It requires an ID number returned, for example, by the add_followme_number method.

arrange_followme_numbers

Parameters: **ArrangeFollowMeNumbersRequest**
Return value: **ArrangeFollowMeNumbersResponse**

This method arranges follow-me entries in a specified order.

get_subscriptions

Parameters: **GetAccountSubscriptionsRequest**
Return value: **GetAccountSubscriptionsResponse**

This method allows an API user to get a list of subscription records associated with an account.

add_subscription

Parameters: **AddAccountSubscriptionRequest**
Return value: **AddUpdateAccountSubscriptionResponse**

This method allows an API user to add a new subscription associated with an account. If successful, a new subscription ID is returned.

update_subscription

Parameters: **UpdateAccountSubscriptionRequest**
Return value: **AddUpdateAccountSubscriptionResponse**

This method allows an API user to update an existing subscription record associated with an account. It requires an ID number returned, for example, by the add_subscription method.

close_subscription

Parameters: **CloseDeleteAccountSubscriptionRequest**
Return value: **CloseAccountSubscriptionResponse**

This method allows an API user to close an existing active subscription associated with an account. It requires an ID number returned, for example, by the add_subscription method.

delete_subscription

Parameters: **CloseDeleteAccountSubscriptionRequest**
Return value: **DeleteAccountSubscriptionResponse**

This method allows an API user to delete a pending subscription associated with an account. It requires an ID number returned, for example, by the add_subscription method.

activate_subscriptions

Parameters: **ActivateAccountSubscriptionsRequest**
Return value: **ActivateAccountSubscriptionsResponse**

This method allows an API user to instantly activate an accounts's pending subscriptions, where the start date is less than or equal to today's

date (in the customer's time zone). An activation fee will be charged for each subscription, if applicable.

make_transaction

Parameters: **MakeAccountTransactionRequest**
Return value: **MakeAccountTransactionResponse**

This method allows an API user to adjust an account's balance. Note: e-commerce transactions are not supported.

update_payment_method

Parameters: **UpdateAccountPaymentMethodRequest**
Return value: **UpdateAccountPaymentMethodResponse**

This method allows an API user to assign a preferred payment method to an account. For online payment methods, all the information required by the payment processor should be provided, and an appropriate payment processor must be set up and properly configured beforehand.

get_sip_status

Parameters: **GetSipStatusRequest**
Return value: **GetSipStatusResponse**

This method allows an API user to check if an account is currently being used by a SIP UA to register with the SIP server and retrieve registration information, such as the user agent's identification or URI.

get_ua_info

Parameters: **GetUAInfoRequest**
Return value: **GetUAInfoResponse**

This method allows an API user to get information about the UA (IP phone) assigned to account.

assign_ua

Parameters: **AssignUARequest**
Return value: **AssignUAResponse**

This method allows an API user to assign a UA to an account.

release_ua

Parameters: **ReleaseUARequest**
Return value: **ReleaseUAResponse**

This method allows an API user to release an account's UA.

Type Reference

GetAccountInfoRequest structure

May include **any** of the following property combinations:

Property	Type	Description
i_account	integer	Unique ID of the account database record
or:		
i_batch	integer	Refers to batch record to which the account belongs
control_number	integer	Sequential number of the account in the batch
or:		
batch_name	string, 32 chars max	Name of batch to which the account belongs
control_number	integer	Sequential number of the account in the batch
or:		
id	string, 32 chars max	ID (PIN) of the account on the PortaBilling100 interface, unique in the environment

GetAccountInfoResponse structure

Property	Type	Description
account_info	**AccountInfo** structure	Data about an account, see **AccountInfo** below

GetAccountListRequest structure

Property	Type	Description
offset	integer	Number of rows to skip at the beginning of the list
limit	integer	Number of rows to retrieve
i_customer	integer	Refers to customer record to which the account belongs
i_batch	integer	Refers to batch record to which the account belongs

GetAccountListResponse structure

Property	Type	Description
account_list	array of **AccountInfo**	Set of account data records

		objects	

AccountInfo structure

Property	Type	Description
i_account **	integer	Unique ID of account database record
id	string, 32 chars max	ID (PIN) of the account on the PortaBilling100 interface, unique in the environment
billing_model *	integer	-1 - Debit account type 0 - Recharge voucher account type 1 - Credit account type
i_customer *	integer	Refers to customer record to which the account belongs
i_batch *	integer	Refers to batch record to which the account belongs
batch_name *	string, 32 chars	Name of batch to which the account belongs; this may be passed as a parameter to the add_account method instead of i_batch value; if there is no batch record in the database with the same name, a new record will be created
control_number *	integer	Sequential number of the account in the batch
iso_4217 **	string, 3 chars	ISO4217 code for currency in which the account is billed
opening_balance *	number with 5 decimal places	Initial balance of the account
balance **	number with 5 decimal places	Balance of the account
zero_balance_date **	date, ISO	Applicable only to debit accounts; specifies when the account has used up all its available funds
refunds **	number with 5 decimal places	Amount refunded to the account owner
non_call_related_charges	number with 5	Charges not directly

**	decimal places	associated with calls this account has made
issue_date *	date, ISO format	Date of issue of the account
activation_date	date, ISO format	Date from which the account is usable
expiration_date	date, ISO format	Date from which the account will become unusable
first_usage	date, ISO format	Date on which the account was used for the first time
last_usage	datetime, ISO format	Date on which the account was last used
last_recharge	datetime, ISO format	Date on which the account was recharged using IVR or web self-care
life_time	integer	Relative to the activation date, the account will expire on the first usage date + lifetime days
redirect_number	string, 15 chars	Associated number
i_product	integer	ID for account's product; refers to Products table
i_acl	integer	ID for account's access level; refers to Access_Levels table
i_vd_plan	integer	ID for account's discount plan; refers to Volume_Discount_Plans table
i_moh	integer	ID for account's "music on hold" option; refers to Music_On_Hold table
ua_profile_id	integer	ID for UA profile
i_time_zone	integer	ID for account's time zone; refers to Time_Zones table
i_lang	string	Code for account's web language; refers to Locale_Languages table
iso_639_1	string, 2 chars max	
service_flags	string, 32 chars max	Account's call features settings
companyname	string, 41 chars	Account's company name

	max	
salutation	string, 15 chars max	Account's salutation
firstname	string, 25 chars max	Account's first name
midinit	string, 5 chars max	Account's middle initial(s)
lastname	string, 25 chars max	Account's last name
baddr1	string, 41 chars max	1st line of account's address
baddr2	string, 41 chars max	2nd line of account's address
baddr3	string, 41 chars max	3rd line of account's address
baddr4	string, 41 chars max	4th line of account's address
baddr5	string, 41 chars max	5th line of account's address
city	string, 31 chars max	City of account's address
state	string, 21 chars max	Province or state
cip	string, 13 chars max	Postal (zip) code
country	string, 31 chars max	Country
note	string, 41 chars max	Short note (description)
faxnum	string, 21 chars max	Fax number
cont1	string, 41 chars max	Main contact person
phone1	string, 21 chars max	Main phone number
cont2	string, 41 chars max	Alternative contact person
phone2	string, 21 chars max	Alternative phone number
subscriber_email	string, 99 chars max	Subscriber's email address
login	string, 16 chars max	Account's login for self-care web interface
password	string, 16 chars max	Account's password for self-care web interface
h323_password	string, 255 chars	VoIP password used to

	max	authenticate calls made using the account
email	string, 128 chars max	email address associated with the account
credit_limit	number with 5 decimal places	Account's credit limit value; 0 if undefined
blocked	boolean, Y/N	Block account's calls
um_enabled	boolean, Y/N	Allow the account's user to access unified messaging system
follow_me_enabled	string, 1 char	Control forward mode settings for this account: • N - No forwarding • Y - Follow-me • F - Advanced forwarding • U - Forward to SIP URI • C - Forward to CLD
ecommerce_enabled	boolean, Y/N	Allow the account's owner to make online payments or set up periodical payments on the account's self-care page
out_date_format	string, 16 chars max	Output format for time indication
out_time_format	string, 16 chars max	Output format for time indication
out_date_time_format	string, 16 chars max	Output format for full date/time indication
in_date_format	string, 16 chars max	Input format for date indication
in_time_format	string, 16 chars max	Input format for time indication
bill_status	enumeration	• O - account is open • C - account is terminated

ValidateAccountInfoRequest structure

Property	Type	Description
account_info	**AccountInfo**	Complete information about an account; note: omit i_account to check if data can be used to create a new account record

ValidateAccountInfoResponse structure

Property	Type	Description
account_info	**AccountInfo**	Data about an account, see **AccountInfo** above

AddAccountRequest structure

Property	Type	Description
account_info	**Account Info**	Note: i_account will be ignored; most fields may be omitted

UpdateAccountRequest structure

Property	Type	Description
account_info	**AccountInfo**	Note: i_account is a mandatory field; only fields requiring modification should be provided

AddUpdateAccountResponse structure

Property	Type	Description
i_account	integer	ID of created/modified account record

GetAccountFollowMeRequest structure

Property	Type	Description
i_account	integer	ID of the account record

GetAccountFollowMeResponse structure

Property	Type	Description
followme_info	**FollowMeInfo** structure	Follow-me settings associated with the account
followme_numbers	array of **FollowMeNumberInfo** structures	List of follow-me numbers associated with the account

UpdateAccountFollowMeRequest structure

Property	Type	Description
i_account	integer	ID of the account record
followme_info	**FollowMeInfo** structure	Follow-me settings associated with the account

UpdateAccountFollowMeResponse structure

Property	Type	Description
i_follow_me	integer	ID of the follow-me database record

FollowMeInfo structure

Property	Type	Description
i_account *	integer	ID of the account database record
i_follow_me **	integer	ID of the follow-me database record
mode	string; default is Never	Follow-me mode: • **Never** - follow-me disabled • **Unavail** - when unavailable • **Always** - at all times
sequence	string; default is Order	Order of use of numbers: • **Order** - as listed • **Random** - random order • **Simultaneous** - all at once
timeout	integer between 0 and 90	Timeout, in seconds

FollowMeNumberInfo structure

Property	Type	Description
i_account *	integer	ID of the account database record
i_follow_me **	integer	ID of the follow-me database record
i_follow_me_number **	integer	ID of the follow-me number database record
name	string, 32 chars max	Symbolic name of entry
timeout	integer between 0 and 90; default 15	Number timeout, in seconds
redirect_number	string, 32 chars max	Destination of number
period	string, 255 chars	Period during which

	max	number can be used
period_description	string, 64K chars max	Verbal description of the period seen by interface user
active	boolean, Y/N	Defines use of follow-me number
i_follow_order **	integer	Serial number or follow-me entry, sequentially incremented within array of numbers
domain	string, 1 char	IP address of network device the call will be routed to; applies to the Advanced Forwarding and Forward to SIP URI forward mode settings
keep_original_cld	boolean, Y/N	If set to Y, the call will appear as originated by the account forwarding the call; applies to the Advanced Forwarding, Forward to SIP URI and Forward CLD forward mode settings

AddFollowMeNumberRequest structure

Property	Type	Description
i_account	integer	ID of the account record
number_info	**FollowMeNumberInfo** structure	Follow-me number to be added to account's follow-me entries

AddFollowMeNumberRequest structure

Property	Type	Description
i_account	integer	ID of the account record
number_info	**FollowMeNumberInfo** structure	Follow-me number to be added to account's follow-me entries

UpdateFollowMeNumberRequest structure

Property	Type	Description
i_follow_me_number	integer	ID of follow-me number database record to be updated
number_info	**FollowMeNumberInfo** structure	Follow-me number to be added to account's follow-me entries

AddUpdateFollowMeNumberResponse structure

Property	Type	Description
i_follow_me_number	integer	ID of follow-me number database record

DeleteFollowMeNumberRequest structure

Property	Type	Description
i_follow_me_number	integer	ID of follow-me number database record to be deleted

DeleteFollowMeNumberResponse structure

Property	Type	Description
success	integer	• 1 in case of success • 0 in case of failure

ArrangeFollowMeNumbersRequest structure

Property	Type	Description
i_account	integer	ID of the account record
numbers	array of integers	List of i_follow_me_number values in the desired order; this may be partial, i.e. it is possible to swap the first two numbers, providing two values only

ArrangeFollowMeNumbersResponse structure

Property	Type	Description
success	integer	• 1 in case of success • 0 in case of failure

GetAccountSubscriptionsRequest structure

Property	Type	Description
i_account	integer	ID of account record

GetAccountSubscriptionsResponse structure

Property	Type	Description
subscriptions	array of **AccountSubscriptionInfo** structures	Set of account subscription data records

AddAccountSubscriptionRequest structure

Property	Type	Description
i_account	integer	ID of account record
subscription_info	**AccountSubscriptionInfo**	Note: i_account_subscription will be ignored; i_subscription is a mandatory field, and must be unique among all of the account's pending and active subscriptions

UpdateAccountSubscriptionRequest structure

Property	Type	Description
i_account	integer	ID of account record
i_account_subscription	integer	ID of account subscription record to be updated
subscription_info	**AccountSubscriptionInfo**	Note: i_account_subscription and i_subscription will be ignored

AddUpdateAccountSubscriptionResponse structure

Property	Type	Description
i_account_subscription	integer	ID of created/modified account subscription record

AccountSubscriptionInfo structure

Property	Type	Description
i_account_subscription **	integer	Unique ID of the account subscription record
i_subscription *	string, 32 chars max	ID for subscription plan; refers to the Subscriptions table
name **	string, 32 chars max	Name of the subscription plan, referenced by the

		i_subscription attribute
discount_rate	number with 5 decimal places	Discount rate for the subscription, in percents; if missing or undefined, the discount rate defined in the customer information is applied
start_date	date, ISO format	The desired subscription activation date (defined in the customer's time zone); if missing or undefined, the subscription will start immediately after it is created; otherwise, the value should be greater than or equal to today's date (in the customer's time zone); can be updated for pending subscriptions only
activation_date **	date, ISO format	Date when the subscription was activated
billed_to **	date, ISO format	Date to which subscription charges have already been applied
finish_date	date, ISO format	Date when the subscription should be automatically canceled; if defined, must be greater than or equal to start_date
obligatory **	boolean, Y/N	Indicates that the subscription comes from the account's product, and so cannot be closed until the account has this product assigned to it
is_finished **	boolean, Y/N	Indicates whether the subscription has already been closed
int_status **	integer	Status of the subscription: • 0 – pending • 1 – active • 2 – closed

CloseDeleteAccountSubscriptionRequest structure

Property	Type	Description
i_account	integer	ID of account record
i_account_subscription	integer	ID of account subscription record to be closed/deleted

CloseAccountSubscriptionResponse structure

Property	Type	Description
i_account_subscription	integer	ID of closed account subscription record

DeleteAccountSubscriptionResponse structure

Property	Type	Description
success	integer	1 in case of success, 0 in case of failure

ActivateAccountSubscriptionsRequest

Property	Type	Description
i_account	integer	ID of account record

ActivateAccountSubscriptionsResponse

Property	Type	Description
success	integer	1 in case of success, 0 in case of failure

MakeAccountTransactionRequest structure

Property	Type	Description
i_account	integer	ID of account record
action	one of the following: • Manual charge • Manual refund • Manual payment • Promotional credit	Same as those available on the Maintenance tab of the Customer edit interface, except for e-commerce transactions
amount	number with 5 decimal places	Amount by which the customer's balance will increase / decrease Note: for a manual charge transaction applied to a debit account, the amount must not exceed the account's balance
visible_comment	string, 32 chars max	A comment on this transaction visible in the xDR browser
internal_comment	string, 32 chars max	An internal comment on this transaction; not visible in the xDR

		browser, and accessible only directly from the database
suppress_notification	integer	1 – do not send email notifications to this customer, 0 – send notifications
transaction_id	string	Applicable to capture payment and e-commerce refund transactions; must contain the ID of a previously issued authorization only / e-commerce payment transaction.

MakeAccountTransactionResponse structure

Property	Type	Description
balance	number with 5 decimal places	Modified account balance

UpdateAccountPaymentMethodRequest structure

Property	Type	Description
i_account	integer	ID of account record
payment_method_info	**PaymentMethodInfo**	Data about payment method; see *Access to Customer Information* section above

UpdateAccountPaymentMethodResponse structure

Property	Type	Description
i_credit_card	integer	ID of modified payment method record

GetSipStatusRequest structure

Property	Type	Description
i_account	integer	ID of account record

GetSipStatusResponse structure

Property	Type	Description
sip_status	integer	1 – online (account is used by SIP UA to register with the SIP server) 0 – offline
sip_info	**SipStatusInfo**	Information about SIP UA registration

SipStatusInfo structure

Property	Type	Description
username	string	Username of registered account; same as account's id attribute from AccountInfo
i_env	integer	ID of the environment to which the registrar belongs
user_agent	string	User agent identification info
contact	string	URI of the user agent which the SIP Proxy uses to contact the IP phone
domain	string	Domain of the registrar: IP address and, if port is non-standard, port number (after a colon)
callid	string	Call-id of the register request
flags	integer	1 - UA behind NAT
expires	datetime, ISO format	Date and time this registration will expire
last_modified	datetime, ISO format	Date and time the register request was received

GetUAInfoRequest structure

Property	Type	Description
i_account	integer	ID of account record

GetUAInfoResponse structure

Property	Type	Description
i_ua	integer	ID of UA record; refers to the UA table
name	string	Name of UA
mac	string	MAC address of UA
port	integer	UA port used by this account
inventory_id	string	Inventory ID of UA
profile	string	Name of UA profile
type	string	UA type

AssignUARequest structure

Property	Type	Description
i_account	integer	ID of account record
i_ua	integer	ID of UA record
port	integer	UA port used by this account

AssignUAResponse structure

Property	Type	Description

success	integer	1 in case of success, 0 in case of failure

ReleaseUARequest structure

Property	Type	Description
i_account	integer	ID of account record

ReleaseUAResponse structure

Property	Type	Description
success	integer	1 in case of success, 0 in case of failure

Access to DID Inventory Information

Methods

get_vendor_batch_list

Parameters: **GetVendorBatchListRequest**
Return value: **GetVendorBatchListResponse**

This method allows an API user (administrator or reseller) to get a list of DID vendor batches filtered by various parameters. The DID inventory must be accessible to the user making the request. Only those batches containing DID numbers owned by the user will be returned.

get_number_list

Parameters: **GetDIDNumberListRequest**
Return value: **GetDIDNumberListResponse**

This method allows an API user to get a list of DID numbers filtered by various parameters.

get_number_info

Parameters: **GetDIDNumberInfoRequest**
Return value: **GetDIDNumberInfoResponse**

This method allows an API user to get a DID number record from the database.

reserve_number

Parameters: **ReserveDIDNumberRequest**
Return value: **ReserveDIDNumberResponse**

This method allows an API user to reserve a DID number for future use. The reserved field will be filled with the current date and time.

release_number

Parameters: **ReleaseDIDNumberRequest**
Return value: **ReleaseDIDNumberResponse**

This method allows an API user to release a previously reserved DID number.

Type Reference

GetVendorBatchListRequest structure

Property	Type	Description
country	string	ISO 3166 two-letter country code
area_code	string	Search pattern for area code
area_code_description	string	Search pattern for area code description
i_do_batch	integer	ID of an owner batch record; the list will include only those vendor batches containing DID numbers included in this particular owner batch
reserve_term	integer	Number of seconds to check for reserved status; the list will include only those vendor batches containing DID numbers reserved more than reserve_term seconds ago (or were not reserved at all)
limit	integer	Number of rows to retrieve
offset	integer	Number of rows to skip at beginning of list

GetVendorBatchListResponse structure

Property	Type	Description
vendor_batch_list	array of **VendorBatchInfo** objects	Set of vendor batch records

VendorBatchInfo structure

Property	Type	Description
i_dv_batch	integer	ID of vendor batch record
name	string	Name of vendor batch
country	string	ISO 3166 two-letter country code
area_code	string	Area code
area_code_description	string	Area code description

GetDIDNumberListRequest structure

Property	Type	Description
number	string	Search pattern for DID number

i_do_batch	integer	ID of owner batch record for looking up numbers
country	string	ISO 3166 two-letter country code
area_code	string	Search pattern for area code
area_code_description	string	Search pattern for area code description
reserve_term	integer	Number of seconds to check for reserved status
usage	string	• U – used (assigned to an account) • F – not used • A – all (default value)
limit	integer	Number of rows to retrieve
offset	integer	Number of rows to skip at beginning of list

GetDIDNumberListResponse structure

Property	Type	Description
did_number_list	array of **DIDNumberInfo** objects	Set of DID number records

DIDNumberInfo structure

Property	Type	Description
i_did_number	integer	ID of DID number record
number	string	DID number
description	string	Description
owner_batch_name	string	Name of owner batch this number belongs to
vendor_batch_name	string	Name of vendor batch this number belongs to
reserved	datetime, ISO format	Date and time when this number was reserved
reserved_stamp	datetime, Unix timestamp	Date and time when this number was reserved
released	datetime, ISO format	Date and time when this number was de-assigned from an account (account was terminated or its ID changed)
assigned	datetime, ISO format	Date and time when this number was assigned to an account

GetDIDNumberInfoRequest structure

Property	Type	Description
number	string	DID number

GetDIDNumberInfoResponse structure

Property	Type	Description
did_number_info	**DIDNumberInfo** object	Data for account; see **DIDNumberInfo** above

ReserveDIDNumberRequest structure

Property	Type	Description
number	string	DID number to reserve
reserve_term	integer	Number of seconds to check for reserved status and prevent reservation of numbers still reserved

ReserveDIDNumberResponse structure

Property	Type	Description
success	integer	1 – success 0 – failed
timestamp	datetime, Unix timestamp	Time stamp of reservation

ReleaseDIDNumberRequest structure

Property	Type	Description
number	string	DID number to release
timestamp	datetime, Unix timestamp	Time stamp of previous reservation to be checked

ReleaseDIDNumberResponse structure

Property	Type	Description
success	integer	1 – success 0 – failed

Access to UA Inventory Information

Methods

get_ua_list

Parameters: **GetUAListRequest**
Return value: **GetUAListResponse**

This method allows an API user (administrator or reseller) to get a list of UA devices (IP phones) in the IP phone inventory, filtered by various parameters.

Type Reference

GetUAListRequest structure

Property	Type	Description
name	integer	Search pattern for UA name
type	string	Search pattern for UA type
profile	string	Search pattern for UA profile
description	string	Search pattern for UA description
mac	string	Search pattern for UA MAC address
inventory_id	string	Search pattern for UA inventory ID
usage	string	• U – used • F – not used • A – all (default value)
limit	integer	Number of rows to retrieve
offset	integer	Number of rows to skip at beginning of list

GetUAListResponse structure

Property	Type	Description
ua_list	array of **UAInfo** objects	Set of UA records

UAInfo structure

Property	Type	Description
name	integer	UA name
type	string	UA type
profile	string	UA profile name
description	string	UA description
mac	string	UA MAC address
inventory_id	string	UA inventory ID

3. Appendices

Examples of RADIUS Communication

Failed Login (Authentication failure)

Authentication request

```
NAS-IP-Address          = '127.0.0.102'
User-Name               = '6502001'
Calling-Station-Id      = '6502001'
h323-conf-id            = '01010101 00000000 00000000 00000001'
Password                = 'test1234'
h323-ivr-out            = 'PortaBilling_Original_CLD:01001inbound'
```

Authentication reject response

```
h323-ivr-in             = ErrorExplanation:invalid_account
h323-return-code        = 1
```

Failed Outgoing Call (Authorization failure)

Authorization request

```
NAS-IP-Address          = '127.0.0.102'
NAS-Port-Type           = 'Async'
User-Name               = '02001'
Called-Station-Id       = '160801001'
Calling-Station-Id      = '02001'
h323-conf-id            = '01010101 00000000 00000000 00000001'
Password                = 'test1234'
h323-ivr-out            = 'PortaBilling_Original_CLD:160801001inbound'
NAS-Port-Id             = '0'
```

Authorization reject response

```
h323-billing-model = 1
h323-ivr-in             = PortaBilling_AccessCode:160801001inbound
h323-ivr-in             = Tariff:T_SubService_1
h323-ivr-in             = ErrorExplanation:cld_blocked
h323-return-code        = 9
h323-currency           = USD
h323-preferred-lang = en
```

Successful Prepaid Card IVR Session

Authentication Request

```
NAS-IP-Address          = '164.9.9.100'
NAS-Port-Type           = 'Async'
User-Name               = '10086610975'
Calling-Station-Id      = '6045550193'
Service-Type            = 'Login-User'
h323-conf-id            = '39AE126B CD4D11DB 958E0014 1C3F6886'
Password                = ''
h323-ivr-out            = 'PortaBilling_Original_CLD:6045551600'
h323-ivr-out            = 'transactionID:526267'
NAS-Port                = '0'
NAS-Port-Id             = 'ISDN 3/0:D:13'
```

Authentication Response

```
h323-credit-amount      = 10.00
h323-billing-model      = 1
h323-ivr-in             = Tariff:PrepaidCard
h323-ivr-in             = PortaBilling_AccountBalance:10.00000
h323-ivr-in             = PortaBilling_ProductBreakage:0.00000
h323-ivr-in             = available-funds:10.00
h323-return-code        = 0
h323-currency           = CAD
h323-preferred-lang     = en
```

Authorization Request

```
NAS-IP-Address          = '164.9.9.100'
User-Name               = '10086610975'
Called-Station-Id       = '01182623634515'
Calling-Station-Id      = '6045550193'
Service-Type            = 'Login-User'
h323-conf-id            = '39AE126B CD4D11DB 958E0014 1C3F6886'
Password                = ''
h323-ivr-out            = 'PortaBilling_Seed:18879071672'
h323-ivr-out            = 'PortaBilling_Original_CLD:6045551600'
h323-ivr-out            = 'transactionID:526273'
```

Authorization Response

```
h323-billing-model      = 1
h323-ivr-in             = Tariff:PrepaidCard
h323-ivr-in             = PortaBilling_CLI:6045550193
h323-ivr-in             = PortaBilling_CompleteNumber:82623634515
h323-ivr-in             = PortaBilling_Auth_CLD:82623634515
h323-ivr-in             = PortaBilling_Auth_Reseller_CLD:82623634515
h323-ivr-in             = DURATION:30000
h323-return-code        = 0
h323-currency           = CAD
h323-credit-time        = 30000
h323-preferred-lang     = en
```

Accounting Request (Outgoing Call Leg)

```
NAS-IP-Address          = '164.9.9.100'
User-Name               = '10086610975'
Called-Station-Id       = '82623634515'
Calling-Station-Id      = '6045550193'
Acct-Status-Type        = 'Stop'
Service-Type            = 'Login-User'
h323-gw-id              = '5350-1.'
h323-call-origin        = 'originate'
h323-call-type          = 'VoIP'
h323-setup-time         = '00:16:18.192 PST Fri Mar 9 2007'
h323-connect-time       = '00:16:21.164 PST Fri Mar 9 2007'
h323-disconnect-time    = '00:17:31.893 PST Fri Mar 9 2007'
h323-disconnect-cause   = '10'
h323-voice-quality      = '30'
h323-conf-id            = '39AE126B CD4D11DB 958E0014 1C3F6886'
call-id                 = '4A65E46C-CD4D11DB-886EDEBF-
7AF0CBAB@164.9.9.100'
Acct-Session-Id         = '00123C60'
Acct-Input-Octets       = '7676'
Acct-Output-Octets      = '107380'
Acct-Input-Packets      = '471'
Acct-Output-Packets     = '3521'
Acct-Session-Time       = '71'
Acct-Delay-Time         = '0'
h323-incoming-conf-id   = '39AE126B CD4D11DB 958E0014 1C3F6886'
subscriber              = 'RegularLine'
session-protocol        = 'sipv2'
```

```
gw-rxd-cdn              = 'ton:2,npi:1,#:6045551600'
h323-ivr-out            = 'PortaBilling_Original_CLD:6045551600'
h323-ivr-out            = 'PortaBilling_Seed:18879071672'
h323-remote-address     = '164.9.9.101'
release-source          = '1'
alert-timepoint         = '00:16:19.497 PST Fri Mar 9 2007'
remote-media-address    = '164.9.9.101'
gw-rxd-cgn              = 'ton:2,npi:1,pi:0,si:3,#:6045550193'
gw-collected-cdn        = '01182623634515T'
gw-final-xlated-cdn     = 'ton:2,npi:1,#:82623634515'
gw-final-xlated-cgn     = 'ton:2,npi:1,pi:0,si:3,#:6045550193'
charged-units           = '0'
disconnect-text         = 'normal call clearing (16)'
peer-address            = '82623634515'
info-type               = 'speech'
peer-id                 = '30'
peer-if-index           = '625'
logical-if-index        = '0'
codec-bytes             = '20'
coder-type-rate         = 'g729br8'
ontime-rv-playout       = '40000'
remote-udp-port         = '5060'
remote-media-udp-port   = '46396'
vad-enable              = 'disable'
receive-delay           = '60 ms'
round-trip-delay        = '60 ms'
hiwater-playout-delay   = '130 ms'
lowater-playout-delay   = '60 ms'
gapfill-with-prediction = '0 ms'
gapfill-with-redundancy = '0 ms'
gapfill-with-silence    = '0 ms'
early-packets           = '16'
late-packets            = '1'
lost-packets            = '0'
Acct-Authentic          = 'RADIUS'
```

Accounting Request (Incoming Call Leg)

```
NAS-IP-Address          = '164.9.9.100'
NAS-Port-Type           = 'Async'
User-Name               = '10086610975'
Called-Station-Id       = '6045551600'
Calling-Station-Id      = '6045550193'
Acct-Status-Type        = 'Stop'
Service-Type            = 'Login-User'
h323-gw-id              = '5350-1.'
h323-call-origin        = 'answer'
h323-call-type          = 'Telephony'
h323-setup-time         = '00:15:50.148 PST Fri Mar 9 2007'
h323-connect-time       = '00:15:50.156 PST Fri Mar 9 2007'
h323-disconnect-time    = '00:17:31.889 PST Fri Mar 9 2007'
h323-disconnect-cause   = '10'
h323-voice-quality      = '0'
h323-conf-id            = '39AE126B CD4D11DB 958E0014 1C3F6886'
Acct-Session-Id         = '00123C4F'
Acct-Input-Octets       = '70420'
Acct-Output-Octets      = '110624'
Acct-Input-Packets      = '3521'
Acct-Output-Packets     = '894'
Acct-Session-Time       = '102'
Acct-Delay-Time         = '0'
h323-incoming-conf-id   = '39AE126B CD4D11DB 958E0014 1C3F6886'
subscriber              = 'RegularLine'
gw-rxd-cdn              = 'ton:2,npi:1,#:6045551600'
calling-party-category  = '9'
transmission-medium-req = '0'
h323-ivr-out            = 'PortaBilling_Session:unlock'
h323-ivr-out            = 'Tariff:Unknown'
release-source          = '1'
dsp-id                  = '2/4:0'
gw-rxd-cgn              = 'ton:2,npi:1,pi:0,si:3,#:6045550193'
```

```
gw-collected-cdn       = '01182623634515T'
charged-units          = '0'
disconnect-text        = 'normal call clearing (16)'
peer-address           = '6045550193'
info-type              = 'speech'
peer-id                = '10'
peer-if-index          = '615'
logical-if-index       = '243'
acom-level             = '39'
coder-type-rate        = 'g729br8'
noise-level            = '4294967213'
voice-tx-duration      = '10000 ms'
tx-duration            = '97785 ms'
Acct-Authentic         = 'RADIUS'
NAS-Port               = '0'
NAS-Port-Id            = 'ISDN 3/0:D:13'
```

SIP Routing Request

Authorization Request

```
NAS-IP-Address         = '65.61.203.144'
User-Name              = '14255551108'
Called-Station-Id      = '380444903490'
Calling-Station-Id     = '14255551108'
h323-conf-id           = '7BC5C486 47F611DC B7B70011 43CD0D2C'
call-id                = '9D9F94ED24B747AD806128E45F6539060xc0a8002d'
Digest-Attributes      = 'Realm = "65.61.203.144"'
Digest-Attributes      = 'Nonce =
"5ccca2d31f1e47d2dfd66aaafd1a8efc46c1d050"'
Digest-Attributes      = 'Method = "INVITE"'
Digest-Attributes      = 'URI = "sip:380444903490@65.61.203.144"'
Digest-Attributes      = 'Algorithm = "MD5"'
Digest-Attributes      = 'User-Name = "14255551108"'
Digest-Response        = 'be888ab3a0c6fdddb2b90dc54cf7e291'
h323-remote-address    = '193.28.87.193'
h323-session-protocol  = 'sipv2'
h323-ivr-out           = 'PortaBilling_Routing:SIP'
h323-ivr-out           = 'PortaBilling_AuthMethod:INVITE'
h323-ivr-out           = 'PortaBilling_Notify:rtpp_same_nat=1;NAT'
h323-ivr-out           = 'PortaBilling_Seed:1058711856'
NAS-Port               = '5060'
```

Authorization Response

```
h323-ivr-in            = PortaBilling_Routing:@;g-hunt=seq
h323-ivr-in            = PortaBilling_Routing: @;g-
hunt=skip;expires=300;rtpp=1;patience=20
h323-ivr-in            = PortaBilling_Routing:380444903490@216.78.43.12
h323-ivr-in            = PortaBilling_Routing:
380444903490@67.34.130.55;auth=DD1B04568F1316608E13E567B705918F7C352221
D6945914
h323-billing-model     = 0
h323-ivr-in            = PortaBilling_AccessCode:OUTGOING
h323-ivr-in            = Tariff:c Porta Internal
h323-ivr-in            = MOH:1
h323-ivr-in            = DURATION:7674
h323-ivr-in            = PortaBilling_CompleteNumber:380444903490
h323-ivr-in            = PortaBilling_CLI:14255551108
h323-return-code       = 0
h323-currency          = USD
h323-credit-time       = 7674
h323-preferred-lang    = en
```

Callback session

First call leg authorization

```
NAS-IP-Address          = "142.179.71.220"
User-Name               = "00099900113"
Called-Station-Id       = "00099900113"
Calling-Station-Id      = "00099900113"
h323-conf-id            = "2F01F3F6 B89192B8 711B0000 1C7A0F2A "
Password                = "secret"
h323-remote-address     = "193.28.87.193"
h323-ivr-out            = "PortaBilling_OriginalCLD:555333"
h323-ivr-out            = "PortaBilling_AuthMethod:INVITE"
h323-ivr-out            = "PortaBilling_Seed:4094388346"
```

Second call leg authorization

```
NAS-IP-Address          = "142.179.71.220"
User-Name               = "00099900113"
Called-Station-Id       = "00099900111"
Calling-Station-Id      = "00099900222"
h323-conf-id            = "2F01F3F6 B89192B8 711B0000 1C7A0F2A"
Password                = "secret"
h323-ivr-out            = "PortaBilling_OriginalCLD:OUT"
h323-ivr-out            = "PortaBilling_AuthMethod:INVITE"
h323-ivr-out            =
PortaBilling_Notify:another_cld=00099900113;another_orig_cld=555333;in_
progess=13"
h323-ivr-out            = "PortaBilling_Seed:4094388346"
```

Second call leg 1, accounting for failed call attempt

```
NAS-IP-Address          = 142.179.71.220
h323-call-origin        = "originate"
h323-call-type          = "VoIP"
h323-setup-time         = "11:34:20.677 GMT Fri Feb 23 2007"
User-Name               = "00099900113"
Calling-Station-Id      = "00099900113"
Called-Station-Id       = "000999002222"
h323-incoming-conf-id   = "2F01F3F6 B89192B8 711B0000 1C7A0F2A"
h323-conf-id            = "11111111 B89192B8 711B0000 1C7A0F2A"
Acct-Session-Id         = "B89192B8-66BC43D89"
h323-disconnect-time    = "11:34:30.677 GMT Fri Feb 23 2007"
h323-connect-time       = "11:34:30.677 GMT Fri Feb 23 2007"
h323-ivr-out            = "PortaBilling_Seed:4094388346"
h323-remote-address     = "10.28.87.193"
h323-ivr-out            = "PortaBilling_OriginalCLD:OUT"
Acct-Session-Time       = 0
h323-disconnect-cause   = "1C"
Acct-Status-Type        = Stop
```

Second call leg, accounting for connected call

```
NAS-IP-Address          = 142.179.71.220
h323-call-origin        = "originate"
h323-call-type          = "VoIP"
h323-setup-time         = "11:34:35.677 GMT Fri Feb 23 2007"
User-Name               = "00099900113"
Calling-Station-Id      = "00099900113"
Called-Station-Id       = "00099900222"
h323-incoming-conf-id   = "2F01F3F6 B89192B8 711B0000 1C7A0F2A"
h323-conf-id            = "11111111 B89192B8 711B0000 1C7A0F2A"
Acct-Session-Id         = "B89192B8-66BC43D89"
h323-disconnect-time    = "11:34:30.677 GMT Fri Feb 23 2007"
h323-connect-time       = "11:36:32.677 GMT Fri Feb 23 2007"
h323-ivr-out            = "PortaBilling_Seed:4094388346"
```

```
h323-remote-address    = "10.28.87.200"
h323-ivr-out           = "PortaBilling_OriginalCLD:OUT"
Acct-Session-Time      = 122
h323-disconnect-cause  = "0"
Acct-Status-Type       = Stop
```

First call leg accounting

```
NAS-IP-Address         = 142.179.71.220
h323-call-origin       = "originate"
h323-call-type         = "VoIP"
h323-setup-time        = "11:33:38.677 GMT Fri Feb 23 2007"
User-Name              = "00099900113"
Calling-Station-Id     = "00099900113"
Called-Station-Id      = "00099900113"
h323-ivr-out           = PortaBilling_CallbackHistory:START
h323-ivr-out           = PortaBilling_CallbackHistory:ATTEMPT
h323-ivr-out           = PortaBilling_CallbackHistory:ATTEMPT
h323-ivr-out           = PortaBilling_CallbackHistory:OK
h323-conf-id           = "2F01F3F6 B89192B8 711B0000 1C7A0F2A"
Acct-Session-Id        = "B89192B8-66BC43D89"
h323-disconnect-time   = "11:34:18.677 GMT Fri Feb 23 2007"
h323-connect-time      = "11:35:18.677 GMT Fri Feb 23 2007"
h323-ivr-out           = "PortaBilling_Seed:4094388346"
h323-remote-address    = "10.28.87.200"
h323-ivr-out           = "PortaBilling_OriginalCLD:555333"
Acct-Session-Time      = 60
h323-disconnect-cause  = "0"
Acct-Status-Type       = Stop
Acct-Delay-Time        = 0
```

Voucher Recharge Session

Authentication (main account login) request

```
NAS-IP-Address         = '127.0.0.102'
User-Name              = '02001'
Calling-Station-Id     = '02001'
h323-conf-id           = '01010101 00000000 00000000 00000012'
Password               = 'test1234'
h323-ivr-out           = 'PortaBilling_Original_CLD:01inbound'
```

Authentication response

```
h323-credit-amount     = 10.00
h323-billing-model     = 1
h323-ivr-in            = PortaBilling_AccessCode:01inbound
h323-ivr-in            = Tariff:T_SubService_1
h323-ivr-in            = PortaBilling_AccountBalance:10.00000
h323-ivr-in            = PortaBilling_ProductBreakage:0.00000
h323-ivr-in            = available-funds:10.00
h323-return-code       = 0
h323-currency          = USD
h323-preferred-lang    = en
```

Voucher recharge request

```
NAS-IP-Address         = '127.0.0.102'
User-Name              = '02001'
Calling-Station-Id     = '02001'
h323-conf-id           = '01010101 00000000 00000000 00000012'
Password               = 'test1234'
h323-ivr-out           = 'PortaBilling_Original_CLD:01inbound'
```

Voucher recharge response

```
h323-credit-amount     = 60.00
h323-ivr-in            = PortaBilling_AccessCode:01inbound
h323-ivr-in            = Tariff:T_SubService_1
h323-ivr-in            = PortaBilling_RechargedAmount:50.00000
h323-ivr-in            = available-funds:60.00
h323-return-code       = 0
h323-currency          = USD
h323-preferred-lang    = en
```

Example script for SOAP communication

```perl
#!/usr/bin/perl -w

use strict;
use Data::Dumper;
use SOAP::Lite
    +trace => 'debug'
;

my $soap_host = '<INSERT YOUR PB SLAVE HERE>';
my $soap_port = ':<PORT>';

my ($login, $password) = ('PB LOGIN', 'PBPASSWORD');

my $soap = SOAP::Lite
    -> uri("https://$soap_host/Porta/SOAP/Session")
    -> proxy("https://${soap_host}${soap_port}/soap")
    -> on_fault(
        sub {
            my ($soap, $result) = @_;
            die ref $result ? $result-> faultstring : $soap->transport-
>status, "\n";
        }
    );

my $soap_customer = SOAP::Lite
    -> uri("https://$soap_host/Porta/SOAP/Customer")
    -> proxy("https://${soap_host}${soap_port}/soap")
    -> on_fault(
        sub {
            my($soap, $res) = @_;
            # die on any error
            die ref $res ? $res->faultstring : $soap->transport-
>status, "\n";
        }
    );

my $session = $soap->SOAP::new();

my $session_id = $soap
    -> login($session, $login, $password)
    -> result;

print "session_id => $session_id \n";

my $auth_info = {
    session_id => $session_id
};

$auth_info = SOAP::Header->name(auth_info => $auth_info);

my $res = $soap_customer
    -> get_customer_info($auth_info, {i_customer => 40})
    -> result;

print Dumper($res->{customer_info});
```

```
$res = $soap_customer
    -> get_customer_list($auth_info, {limit => 1})
    -> result;

print Dumper($res);
```