

**Porta  Switch<sup>®</sup>**



# **External System Interfaces Guide**

Maintenance Release 24

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## Preface

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

### 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/](http://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



The **exclamation mark** draws your attention to important information or actions.

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



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



**Tips** provide information that might help you solve a problem.

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## What's New in Maintenance Release 23?

The following changes have been made to PortaBilling® XML API:

### MR23-0

- The fields **sale\_commission\_rate** and **payment\_commission\_rate**, specified for distributors in the add/update customer SOAP methods, are now mandatory.
- The behaviour of the **update\_cp\_rule** method used to update call processing rules has been changed. Also, the *i\_account* parameter of the *cp\_rule\_info* structure is no longer obligatory, and any value for it will be ignored by this method.
- The **RateInfo** structure has been updated.
- New SOAP methods added:
  - **get\_discount\_list**
  - **get\_vd\_threshold\_list**
  - **get\_vd\_counter\_list**

### MR23-1

- In the **add\_account** SOAP method, the field *set i\_customer\_class* is no longer mandatory. The default customer class will be set if *i\_customer\_class* is not defined.
- In the **get\_xdr\_list** SOAP method, the *from\_date* / *to\_date* fields are now mandatory.
- New methods added to the customer namespace:
  - **get\_cdrs\_retail\_customer**
  - **get\_dial\_rule\_samples**
  - **get\_moh\_list\_info**
  - **get\_extensions\_list**
  - **get\_huntgroup\_list**
  - **get\_account\_aliases\_list**
- Some methods have been shared for the retail customer realm:
  - **get\_customer\_info**
  - **get\_service\_features**
  - **update\_service\_features**
- Some methods have been shared for the account realm:
  - **get\_account\_info**
  - **get\_xdr\_list**
  - **get\_alias\_list**
  - **get\_call\_barring\_options**
- The limit for the *timeout* field of the **FollowMeInfo** structure has been changed (max = 999).

- An account's login for the self-care web interface can now include only digits, letters and the following symbols: "@", "-", "\_", ".". Minimum value length is 4, maximum is 64 symbols.

### MR23-2

- Added new methods which allow you to fetch countries and country subdivisions lists:
  - `get_countries_list`
  - `get_subdivisions_list`

### MR23-3

- The `Add_followme_number` method has been updated.
- Added new method `get_version`
- Added new methods:
  - `get_destination_info`
  - `get_destination_list`
  - `get_tariff_info`
  - `get_tariff_list`
  - `get_rate_info`
  - `get_rate_list`

## What's New in Maintenance Release 24?

### MR24-0

- Added new methods which allow you to fetch custom fields for account/customer:
  - `get_custom_fields_values`
  - `update_custom_fields_values`
- Added new method **`get_customer_class_info`**, which allows you to fetch a customer classes record.
- Added new method **`get_env_info`**, which allows you to fetch information about a user's environment.
- Added new *login* field for the **`get_customer_info`** and **`get_account_info`** methods.
- Added new methods for the account realm:
  - `get_moh_list_info`
  - `get_full_vd_counter_info`
  - `change_password`
  - `get_account_product_info`
  - `get_member_of_huntgroups_list`
  - `get_permitted_sip_proxies_info`
  - `get_transactions_total_info`
- Added new methods for the customer realm:
  - `get_full_vd_counter_info`
  - `change_password`
  - `get_account_product_info`
  - `get_member_of_huntgroups_list`
  - `get_permitted_sip_proxies_info`
  - `get_transactions_total_info`
  - `add_customer_extension`
  - `update_customer_extension`
  - `delete_customer_extension`
  - `add_customer_huntgroup`
  - `update_customer_huntgroup`
  - `delete_customer_huntgroup`
  - `get_customer_invoices`
  - `get_lines_activesubscriptions`
  - `update_dialing_rules`

# 1. PortaBilling 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 PortaBilling® RADIUS server listens on port 1812 (UDP) for authentication requests and on port 1813 (UDP) for accounting requests.

### RADIUS Attributes

PortaBilling® uses a set of Cisco RADIUS VSAs (Vendor-Specific Attributes). For more information, please refer to the RADIUS Vendor-Specific Attributes Voice Implementation Guide at [Cisco website \(http://www.cisco.com\)](http://www.cisco.com).

## 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, please refer to the RADIUS Vendor-Specific Attributes Voice Implementation Guide at [Cisco website \(http://www.cisco.com\)](http://www.cisco.com).

### Authentication Requests

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

| Attribute             | Description                                                                                     |
|-----------------------|-------------------------------------------------------------------------------------------------|
| NAS-IP-Address        | IP address of the NAS                                                                           |
| User-Name             | The user's name to be authenticated                                                             |
| Password              | The user's password                                                                             |
| h323-conf-id          | Unique identifier for H323 call                                                                 |
| Called-Station-Id     | Only for authorization requests                                                                 |
| h323-ivr-out          | User-definable AV pairs sent from the voice gateway to the RADIUS server                        |
| Message-Authenticator | Used to authenticate and protect the integrity of Access-Requests in order to prevent spoofing. |

### Authentication Responses

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

| Attribute             | A1 | A2 | Description                                                                                     |
|-----------------------|----|----|-------------------------------------------------------------------------------------------------|
| h323-billing-model    | Y  |    | Type of billing service for a specific call                                                     |
| h323-return-code      | Y  | Y  | Return codes are the server's instructions to the voice gateway                                 |
| h323-currency         | Y  | Y  | Currency used with h323-credit-amount                                                           |
| h323-preferred-lang   | Y  | Y  | Language to use for the audio prompt                                                            |
| h323-credit-amount    | Y  |    | Amount of credit (in currency) in the account                                                   |
| h323-redirect-number  | Y  |    | Optional<br>Phone number to which the call is redirected                                        |
| Message-Authenticator | Y  | Y  | Used to authenticate and protect the integrity of Access-Requests in order to prevent spoofing. |

## Accounting Requests

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

| Attribute             | Description                                                                                                 |
|-----------------------|-------------------------------------------------------------------------------------------------------------|
| NAS-IP-Address        | IP address of the NAS                                                                                       |
| NAS-Port-Name         | Indicates the name of the physical NAS port that is authenticating the user                                 |
| User-Name             | The user name to be authenticated                                                                           |
| Calling-Station-Id    | Allows the network access server to send the caller's telephone number as part of the Access-Request packet |
| Called-Station-Id     | Allows the network access server to send the telephone number called as part of the Access-Request packet   |
| h323-setup-time       | Indicates the setup time for this connection                                                                |
| h323-connect-time     | Indicates the length of connection for this call leg                                                        |
| h323-disconnect-time  | Indicates the time this call leg was disconnected                                                           |
| h323-conf-id          | Unique identifier for H323 call                                                                             |
| h323-incoming-conf-id | Unique identifier for incoming H323 call                                                                    |
| h323-disconnect-cause | Specifies the reason a call was disconnected                                                                |
| h323-call-origin      | Indicates the call's origin relative to the gateway                                                         |
| h323-call-type        | Indicates the call leg type                                                                                 |
| Acct-Session-Time     | Indicates length (in seconds) of user's service                                                             |

|                  |                                                                          |
|------------------|--------------------------------------------------------------------------|
| Acct-Status-Type | Indicates beginning or end of user service for this Accounting-Request   |
| h323-ivr-out     | User-definable AV pairs sent from the voice gateway to the RADIUS server |

## 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 “TVR access number” to billing, it may contain any string (e.g. “FIRSTCALL”). For Quantum 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 Username 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;another\_cld=15149615664'

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

| Attribute       | A1 | A2 | Description                                                                                        |
|-----------------|----|----|----------------------------------------------------------------------------------------------------|
| DURATION        |    | Y  | The maximum allowed call duration (in seconds)                                                     |
| Tariff          | Y  | Y  | The name of the rate plan applied to the account within this session                               |
| available-funds | Y  |    | 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) |
| h323-preferred-lang                       | Y | Y | Language preference for the audio prompt                                                                                                                                     |
| h323-credit-amount                        | Y |   | Amount of credit (in currency) in the account                                                                                                                                |
| h323-credit-time                          |   | Y | Amount of seconds for which the call is authorized                                                                                                                           |
| PortaBilling_UserName                     | Y | Y | The account ID to be used for billing this call                                                                                                                              |
| PortaBilling_AuthCLD                      |   | Y | The string used by PortaBilling® to match the corresponding rate code/destination during authorization of an account, instead of the Called-Station-Id                       |
| PortaBilling_AccessCode                   | Y | Y | Access code to be used for matching accessibility entry and tariff                                                                                                           |
| PortaBilling_AccountBalance               | Y |   | The current amount of the account's balance in PortaBilling®                                                                                                                 |
| PortaBilling_CustomerBalance              | Y |   | The current amount of the customer's balance in PortaBilling®                                                                                                                |
| PortaBilling_CustomerCreditLimit          | Y |   | The current amount of the customer's credit limit in PortaBilling®                                                                                                           |
| PortaBilling_CustomerCreditLimitThreshold | Y |   | The current amount of the customer's credit limit threshold in PortaBilling®                                                                                                 |
| BalanceThreshold                          | Y |   | Indicates that a customer's balance warning threshold has been reached                                                                                                       |
| PortaBilling_ProductBreakage              | Y |   | The breakage amount of the account's product in PortaBilling®                                                                                                                |
| PortaBilling_No_Disconnect_Warning        |   | Y | Indicates that NAS should cancel IVR/beep warnings before call                                                                                                               |

|  |  |                                                      |
|--|--|------------------------------------------------------|
|  |  | session timeouts (calls will be terminated silently) |
|--|--|------------------------------------------------------|

## 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'

## RADIUS Return Codes

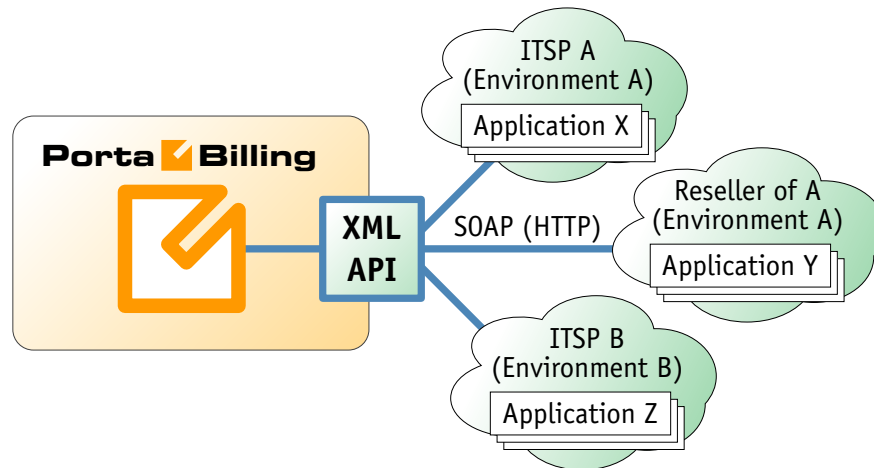
Return codes can be defined by the user through the implementation of the IVR script and RADIUS server agreement. The following table lists the return codes that are predefined and anticipated by existing Cisco IVR scripts.

| Explanation code  | h323-return-code | Description                                                                  |
|-------------------|------------------|------------------------------------------------------------------------------|
| success           | 0                | Success, proceed                                                             |
| invalid_account   | 1                | Failed - Invalid Account number                                              |
| invalid_password  | 2                | Failed - Invalid Password                                                    |
| account_in_use    | 3                | Failed - Account in use                                                      |
| zero_balance      | 4                | Failed - Zero balance                                                        |
| card_expired      | 5                | Failed - Card expired                                                        |
| credit_limit      | 6                | Failed - Credit limit                                                        |
| user_denied       | 7                | Failed - User denied                                                         |
| not_available     | 8                | Failed - Service not available                                               |
| cld_blocked       | 9                | Failed - Called number blocked                                               |
| retries_exceeded  | 10               | Failed - Number of retries exceeded                                          |
| invalid_argument  | 11               | Failed - Invalid argument                                                    |
| insuff_balance    | 12               | Failed - Insufficient balance                                                |
| toll_free_allowed | 13               | Toll-free calls allowed                                                      |
| invalid_card      | 14               | Failed - Invalid card number                                                 |
| hairpin_to_pstn   | 50               | Call will be hairpinned back to the Public Switched Telephone Network (PSTN) |
| redirect          | 51               | Redirect to called party (use redirect number)                               |
| redirect_to_cs    | 52               | Redirect to customer Service (use redirect number)                           |

## 2. PortaBilling 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/>



Please replace the **pbslave-server.yourdomain.com** with the actual hostname of your PortaBilling® slave server.

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

Each installation of PortaBilling® contains its own set of WSDL documents available for download from the web server from the following URL:

<https://pbslave-server.yourdomain.com/wsdl/>



Please replace the **pbslave-server.yourdomain.com** with the actual hostname of your PortaBilling® slave server.

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.

## Establishing Authenticated Session

URI (namespace): <https://pbslave-server.yourdomain.com/Porta/SOAP/Session>

### Methods

#### login

Parameters: [LoginRequest](#)

Return value: [LoginResponse](#)

Checks the validity of login and password and returns session\_id on success. SOAP Fault is thrown on failure.

#### ping

Parameters: [PingRequest](#)

Return value: [PingResponse](#)

Checks the validity of previously opened session and returns user\_id on success. SOAP Fault is thrown on failure.

#### logout

Parameters: [LogoutRequest](#)

Return value: no value is returned on success

Terminates the session. You should call logout() to terminate the session properly.

## Type Reference

### LoginRequest structure

| Property | Type   | Description                               |
|----------|--------|-------------------------------------------|
| login    | string | User Name, as specified on web interface. |
| password | string | Password, as specified on web interface   |

**LoginResponse structure**

| Property   | Type                    | Description                |
|------------|-------------------------|----------------------------|
| session_id | string, 32 chars<br>max | ID of newly opened session |

**PingRequest structure**

| Property   | Type   | Description                     |
|------------|--------|---------------------------------|
| session_id | string | ID of previously opened session |

**PingResponse structure**

| Property | Type | Description                                                |
|----------|------|------------------------------------------------------------|
| user_id  | int  | ID of user currently logged in to<br>the specified session |

**LogoutRequest structure**

| Property   | Type   | Description                     |
|------------|--------|---------------------------------|
| session_id | string | ID of previously opened session |

## Global Methods and Types

URI (namespace): <https://pbslave-server.yourdomain.com/Porta/SOAP/Generic>

**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.
- <sup>n</sup> – This property is nillable. It means that the element can be present without its normal content, provided that **xsi:nil="true"** is one of its attributes and this request will be processed specifically.

**Methods****get\_version**

Parameters: **GetVersionRequest**

Return value: **GetVersionResponse**

Realm: administrator

This method allows an API user to get the version of PortaBilling version.

### get\_countries\_list

Parameters: [GetCountriesListRequest](#)

Return value: [GetCountriesListResponse](#)

Realm: administrator, reseller, retail customer, account

This method allows an API user to get the list of countries.

### get\_subdivisions\_list

Parameters: [GetSubdivisionsListRequest](#)

Return value: [GetSubdivisionsListResponse](#)

Realm: administrator, reseller, retail customer, account

This method allows an API user to get country subdivision lists.

## Type Reference

### auth\_info structure

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

### GetVersionRequest structure

Does not include any properties

### GetVersionResponse structure

| Property                    | Type   | Description          |
|-----------------------------|--------|----------------------|
| <u>version</u> <sup>n</sup> | string | PortaBilling version |

### GetCountriesListRequest structure

Does not include any properties

### GetCountriesListResponse structure

| Property                    | Type                                 | Description                 |
|-----------------------------|--------------------------------------|-----------------------------|
| countries_list <sup>n</sup> | Array of <a href="#">CountryInfo</a> | Set of country data records |

**CountryInfo structure**

| Property             | Type   | Description                                             |
|----------------------|--------|---------------------------------------------------------|
| <u>iso_3166_1_a2</u> | string | A two-letter country code defined in ISO 3166-1 alpha-2 |
| <u>name</u>          | string | Country name                                            |

**GetSubdivisionsListRequest structure**

| Property                   | Type   | Description                                             |
|----------------------------|--------|---------------------------------------------------------|
| iso_3166_1_a2 <sup>n</sup> | string | A two-letter country code defined in ISO 3166-1 alpha-2 |

**GetSubdivisionsListResponse structure**

| Property                       | Type                            | Description                             |
|--------------------------------|---------------------------------|-----------------------------------------|
| subdivisions_list <sup>n</sup> | Array of <b>SubdivisionInfo</b> | Set of country subdivision data records |

**SubdivisionInfo structure**

| Property                     | Type   | Description                                                               |
|------------------------------|--------|---------------------------------------------------------------------------|
| <u>i_country_subdivision</u> | int    | A unique ID of country subdivision                                        |
| <u>name</u>                  | string | Subdivision name                                                          |
| <u>iso_3166_1_a2</u>         | string | A two-letter country code defined in ISO 3166-1 alpha-2                   |
| <u>iso_3166_2</u>            | string | A code of a principal subdivision (e.g. <b>province</b> or <b>state</b> ) |

## Access to Destination Information

URI (namespace): <https://pbslave-server.yourdomain.com/Porta/SOAP/Destination>

**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.
- <sup>n</sup> – This property is nillable. It means that the element can be present without its normal content, provided that  `xsi:nil="true"`  is one of its attributes and this request will be processed specifically.

## Methods

### get\_destination\_info

Parameters: [GetDestinationPrefixInfoRequest](#)

Return value: [GetDestinationPrefixInfoResponse](#)

Realm: administrator

This method allows an API user to get information about a destination.

### get\_destination\_list

Parameters: [GetDestinationPrefixListRequest](#)

Return value: [GetDestinationPrefixListResponse](#)

Realm: administrator

This method allows an API user to retrieve the list of destinations.

## Type Reference

### GetDestinationPrefixInfoRequest structure

| Property      | Type | Description                         |
|---------------|------|-------------------------------------|
| <u>i_dest</u> | int  | Unique ID of the destination record |

### GetDestinationPrefixInfoResponse structure

| Property         | Type                                            | Description                                                                 |
|------------------|-------------------------------------------------|-----------------------------------------------------------------------------|
| destination_info | <a href="#">DestinationPrefixInfo</a> structure | Complete information about the destination; for more information, see below |

### DestinationPrefixInfo structure

| Property           | Type                 | Description                                                      |
|--------------------|----------------------|------------------------------------------------------------------|
| <u>i_dest</u>      | int                  | Unique ID of the destination record                              |
| <u>destination</u> | string, max 16 chars | Destination number                                               |
| country            | string               | Country name                                                     |
| subdivision        | string               | Country subdivision                                              |
| description        | string               | Text description for this entry                                  |
| <u>i_group</u>     | int                  | Group ID                                                         |
| dest_type          | string               | Destination type                                                 |
| iso_3166_1_a3      | string               | A three-letter country code defined in ISO 3166-1 <i>alpha-3</i> |

**GetDestinationPrefixListRequest structure**

| Property      | Type                  | Description                                         |
|---------------|-----------------------|-----------------------------------------------------|
| <u>offset</u> | int                   | Number of rows to skip at the beginning of the list |
| <u>limit</u>  | int                   | Number of rows to retrieve                          |
| destination   | string, max. 16 chars | Refers to the pattern of the destination prefix     |

**GetDestinationPrefixListResponse structure**

| Property         | Type                                             | Description                     |
|------------------|--------------------------------------------------|---------------------------------|
| destination_list | Array of <b>DestinationPrefixInfo</b> structures | Set of destination data records |

## Access to Tariff Information

URI (namespace): <https://pbslave-server.yourdomain.com/Porta/SOAP/Tariff>

**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.
- <sup>n</sup> – This property is nillable. It means that the element can be present without its normal content, provided that `xsi:nil="true"` is one of its attributes and this request will be processed specifically.

**Methods****get\_tariff\_info**

Parameters: **GetTariffInfoRequest**

Return value: **GetTariffInfoResponse**

Realm: administrator, reseller

This method allows an API user to get information about a tariff.

**get\_tariff\_list**

Parameters: **GetTariffListRequest**

Return value: **GetTariffListResponse**

Realm: administrator, reseller

This method allows an API user to retrieve the list of tariffs.

## Type Reference

### GetTariffInfoRequest structure

| Property        | Type | Description                    |
|-----------------|------|--------------------------------|
| <u>i_tariff</u> | int  | Unique ID of the tariff record |

### GetTariffInfoResponse structure

| Property    | Type                                 | Description                                                            |
|-------------|--------------------------------------|------------------------------------------------------------------------|
| tariff_info | <a href="#">TariffInfo</a> structure | Complete information about the tariff; for more information, see below |

### TariffInfo structure

| Property                   | Type   | Description                                                          |
|----------------------------|--------|----------------------------------------------------------------------|
| <u>i_tariff</u>            | int    | ID of the tariff record                                              |
| <u>name</u>                | string | Tariff name                                                          |
| period                     | string | Time::Period string                                                  |
| i_offpeak                  | int    | Refers to ID of the off_peak period record                           |
| currency                   | string | Tariff currency                                                      |
| <u>free_sec</u>            | int    | Number of free seconds granted for each call                         |
| connect_fee                | float  | Amount to be charged for each successful call                        |
| login_fee                  | float  | Amount to be charged immediately after the first user authentication |
| description                | string | Tariff description                                                   |
| post_call_surcharge        | float  | Increases the total call cost by the given value                     |
| i_tariff_template_upload   | int    | Refers to ID of the upload template                                  |
| i_tariff_template_download | int    | Refers to ID of download template                                    |
| i_customer                 | int    | ID of Customer Record (managed by)                                   |
| short_description          | string | Short tariff description                                             |

|                  |        |                                                                                                                                                                        |
|------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| routing_ext      | string | Flag that informs if the tariff contains information about the carrier's routing preferences                                                                           |
| volume_based     | string | Flag that informs if the tariff is volume based                                                                                                                        |
| i_dest_group_set | int    | Refers to ID of destination groups                                                                                                                                     |
| rounding         | int    | Quantity of digits after point for rounding                                                                                                                            |
| formula          | string | Call rating formula that applies to new rates                                                                                                                          |
| rating_mode      | string | Rating mode                                                                                                                                                            |
| i_service        | int    | Refers to ID of the service type for which this tariff will be used                                                                                                    |
| type             | string | Designates whom this tariff is applied to.<br>One of the following: <ul style="list-style-type: none"> <li>• Customer</li> <li>• Vendor</li> <li>• Reseller</li> </ul> |
| hidden           | string | Hidden flag                                                                                                                                                            |
| usage_update     | string | Usage update.<br>One of the following: <ul style="list-style-type: none"> <li>• Always</li> <li>• Billable</li> </ul>                                                  |

### GetTariffListRequest structure

| Property      | Type   | Description                                                                                                              |
|---------------|--------|--------------------------------------------------------------------------------------------------------------------------|
| <u>offset</u> | int    | Number of rows to skip at the beginning of the list                                                                      |
| <u>limit</u>  | int    | Number of rows to retrieve                                                                                               |
| search        | string | Search pattern in the name and description of the tariff                                                                 |
| i_customer    | int    | Unique ID of the customer record (managed by)                                                                            |
| i_service     | int    | Unique ID of the service record                                                                                          |
| applied_to    | string | One of the following: <ul style="list-style-type: none"> <li>• Customer</li> <li>• Vendor</li> <li>• Reseller</li> </ul> |

### GetTariffListResponse structure

| Property    | Type                                           | Description                |
|-------------|------------------------------------------------|----------------------------|
| tariff_list | Array of <a href="#">TariffInfo</a> structures | Set of tariff data records |

## Access to Environment Information

URI (namespace): <https://pbslave-server.yourdomain.com/Porta/SOAP/Env>

### 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.
- <sup>n</sup> – This property is nillable. It means that the element can be present without its normal content, provided that `xsi:nil="true"` is one of its attributes and this request will be processed specifically.

## Methods

### get\_env\_info

Parameters: [GetEnvInfoRequest](#)

Return value: [GetEnvInfoResponse](#)

Realm: administrator

This method allows an API user to get an Environment record from the database. The user can get the information about the Environment to which he belongs. Superusers can get information about any Environment.

## Type Reference

### GetEnvInfoRequest structure

Does not include any properties

### GetEnvInfoResponse structure

| Property        | Type                              | Description                                                                                   |
|-----------------|-----------------------------------|-----------------------------------------------------------------------------------------------|
| <u>env_info</u> | <a href="#">EnvInfo</a> structure | Complete information about the Environment; for more information, see <a href="#">EnvInfo</a> |

**EnvInfo structure**

| Property                     | Type          | Description                                                                                     |
|------------------------------|---------------|-------------------------------------------------------------------------------------------------|
| <u>i_env</u>                 | int           | ID of the environment                                                                           |
| <u>name</u>                  | string        | The name of the environment                                                                     |
| <u>description</u>           | string        | A short description for the environment                                                         |
| <u>companyname</u>           | string        | The name of the company                                                                         |
| <u>addr1</u>                 | string        | The 1st line of company's address                                                               |
| <u>addr2</u>                 | string        | The 2nd line of company's address                                                               |
| <u>addr3</u>                 | <u>string</u> | The 3rd line of company's address                                                               |
| <u>addr4</u>                 | <u>string</u> | The 4th line of company's address                                                               |
| <u>iso_3166_1_a2</u>         | <u>string</u> | A two-letter country code defined in ISO 3166-1 alpha-2                                         |
| <u>phone</u>                 | <u>string</u> | Company's phone number                                                                          |
| <u>faxnum</u>                | <u>string</u> | Company's fax number                                                                            |
| <u>email</u>                 | <u>string</u> | Company's primary email address                                                                 |
| <u>web</u>                   | <u>string</u> | Company's web address                                                                           |
| <u>lname</u>                 | <u>string</u> | Proper, legally-recognized form of the company name                                             |
| <u>laddr1</u>                | <u>string</u> | The 1st line of company's address where this company name is legally registered.                |
| <u>laddr2</u>                | string        | The 2nd line of company's address where this company name is legally registered.                |
| <u>lcity</u>                 | string        | City where the company is legally registered                                                    |
| <u>i_country_subdivision</u> | int           | Refers to the ID of province or state where the company is registered                           |
| <u>lzip</u>                  | string        | Postal code for the company's registered location                                               |
| <u>liso_3166_1_a2</u>        | string        | A two-letter country code defined in ISO 3166-1 alpha-2 where the company is legally registered |
| <u>tax_id</u>                | string        | Tax ID                                                                                          |
| <u>iso_4217</u>              | string        | ISO4217 code for company's internal currency                                                    |

|                             |                 |                                                                                                                              |
|-----------------------------|-----------------|------------------------------------------------------------------------------------------------------------------------------|
| <u>i billing period</u>     | int             | ID for billing period; refers to Billing_Period table                                                                        |
| <u>i time zone</u>          | int             | ID for the environment's time zone which global reports for the environment will be generated in; refers to Time_Zones table |
| <u>calls counted time</u>   | <u>dateTime</u> | Calls counted time                                                                                                           |
| <u>billed to</u>            | <u>dateTime</u> | Billed to date                                                                                                               |
| <u>tax info</u>             | string          | Taxation info                                                                                                                |
| <u>cost revenue daily</u>   | <u>dateTime</u> | Cost revenue daily date                                                                                                      |
| <u>cost revenue weekly</u>  | <u>dateTime</u> | Cost revenue weekly date                                                                                                     |
| <u>cost revenue monthly</u> | <u>dateTime</u> | Cost revenue monthly date                                                                                                    |

## Access to Customer Information

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

### 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.
- <sup>n</sup> – This property is nillable. It means that the element can be present without its normal content, provided that `xsi:nil="true"` is one of its attributes and this request will be processed specifically.

## Methods

### get\_customer\_info

Parameters: [GetCustomerInfoRequest](#)

Return value: [GetCustomerInfoResponse](#)

Realm: administrator, reseller, retail customer

This method allows an API user 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: [GetCustomerListResponse](#)

Realm: administrator, reseller

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**

Realm: administrator, reseller

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**

Realm: administrator, reseller

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

### **update\_customer**

Parameters: **UpdateCustomerRequest**

Return value: **AddUpdateCustomerResponse**

Realm: administrator, reseller, retail customer

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

### **delete\_customer**

Parameters: **DeleteCustomerRequest**

Return value: **DeleteCustomerResponse**

Realm: administrator, reseller

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

### **terminate\_customer**

Parameters: **TerminateCustomerRequest**

Return value: **TerminateCustomerResponse**

Realm: administrator, reseller

This method allows an API user to terminate an existing retail customer or reseller.

### **get\_service\_features**

Parameters: **GetCustomerServiceFeaturesRequest**

Return value: **GetCustomerServiceFeaturesResponse**

Realm: administrator, reseller, retail customer

This method allows an API user to access service features data.

### **update\_service\_features**

Parameters: **UpdateCustomerServiceFeaturesRequest**

Return value: **UpdateCustomerServiceFeaturesResponse**

Realm: administrator, reseller, retail customer

This method allows an API user to update settings for customer service features.

### **get\_subscriptions**

Parameters: **GetCustomerSubscriptionsRequest**

Return value: **GetCustomerSubscriptionsResponse**

Realm: administrator, reseller, retail customer

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

### **add\_subscription**

Parameters: **AddCustomerSubscriptionRequest**

Return value: **AddUpdateCustomerSubscriptionResponse**

Realm: administrator, reseller

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**

Realm: administrator, reseller

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**

Realm: administrator, reseller

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**

Realm: administrator, reseller

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**

Realm: administrator, reseller

This method allows an API user to instantly activate a customer's pending subscriptions, where the start date is 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**

Realm: administrator, reseller

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**

Realm: administrator, reseller

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.

### **get\_my\_info**

Parameters: **none**

Return value: **GetMyInfoResponse**

Realm: reseller

This method allows resellers to get information about their own customer info record.

### **get\_payment\_method\_info**

Parameters: **GetCustomerPaymentMethodInfoRequest**

Return value: **GetCustomerPaymentMethodInfoResponse**

Realm: administrator, reseller

This method allows an API user to retrieve information about the payment method (e.g. payment card info) assigned to a customer.

### **get\_abbreviated\_dialing\_number\_list**

Parameters: **GetCustomerAbbreviatedDialingNumberListRequest**

Return value: **GetCustomerAbbreviatedDialingNumberListResponse**

Realm: administrator, reseller, retail customer

This method allows an API user to retrieve an abbreviated number list for a customer.

### **add\_abbreviated\_dialing\_number**

Parameters:

**AddUpdateCustomerAbbreviatedDialingNumberRequest**

Return value:

**AddUpdateCustomerAbbreviatedDialingNumberResponse**

Realm: administrator, reseller, retail customer

This method allows an API user to add an abbreviated dialing number for a customer.

### **update\_abbreviated\_dialing\_number**

Parameters:

**AddUpdateCustomerAbbreviatedDialingNumberRequest**

Return value:

**AddUpdateCustomerAbbreviatedDialingNumberResponse**

Realm: administrator, reseller, retail customer

This method allows an API user to update an existing abbreviated dialing number.

### **delete\_abbreviated\_dialing\_number**

Parameters: **DeleteCustomerAbbreviatedDialingNumberRequest**  
Return value: **DeleteCustomerAbbreviatedDialingNumberResponse**  
Realm: administrator, reseller, retail customer

This method allows an API user to remove an abbreviated dialing number.

### **get\_taxation\_info**

Parameters: **GetCustomerTaxationInfoRequest**  
Return value: **GetCustomerTaxationInfoResponse**  
Realm: administrator, reseller

This method allows an API user to retrieve information about the plug-in module which is used to make tax calculations and its parameters.

### **update\_taxation**

Parameters: **UpdateCustomerTaxationRequest**  
Return value: **UpdateCustomerTaxationResponse**  
Realm: administrator, reseller

This method allows an API user to set which plugin module will be used to make tax calculations and set up parameters that affect taxation.

### **get\_vd\_counter\_list**

Parameters: **GetCustomerVDCounterListRequest**  
Return value: **GetCustomerVDCounterListResponse**  
Realm: administrator, reseller

This method allows an API user to get the information about volume discount counters for the specified customer.

### **get\_cdrs\_retail\_customer**

Parameters: **GetRetailCustomerXDRListRequest**  
Return value: **GetRetailCustomerXDRListResponse**  
Realm: retail customer

This method allows a customer to get the list of his xDRs.

### **get\_dial\_rule\_samples**

Return value: **GetDialRuleSamplesResponse**  
Realm: retail customer

This method allows a customer to get the sample dialing rules.

### **get\_moh\_list\_info**

Parameters: **GetMOHListInfoRequest**  
Return value: **GetMOHListInfoResponse**  
Realm: administrator, retail customer

This method allows an API user to get the list of music on hold entries.

### **get\_extensions\_list**

Parameters: **GetExtensionsListInfoRequest**  
Return value: **GetExtensionsListInfoResponse**  
Realm: retail customer

This method allows a customer to get the list of extensions.

### **get\_huntgroup\_list**

Parameters: **GetHGListInfoRequest**  
Return value: **GetHGListInfoResponse**  
Realm: retail customer

This method allows a customer to get the list of huntgroups.

### **get\_account\_aliases\_list**

Parameters: **GetAllAccAliasesListInfoRequest**  
Return value: **GetAllAccAliasesListInfoResponse**  
Realm: retail customer

This method allows a customer to get the list of account aliases.

### **get\_custom\_fields\_values**

Parameters: **GetCustomerCustomFieldsValuesRequest**  
Return value: **GetCustomerCustomFieldsValuesResponse**  
Realm: administrator, reseller

This method allows an API user to fetch customer's custom fields.

### **update\_custom\_fields\_values**

Parameters: **UpdateCustomerCustomFieldsValuesRequest**  
Return value: **UpdateCustomerCustomFieldsValuesResponse**  
Realm: administrator, reseller

This method allows an API user to modify a customer's custom fields.

### **change\_password**

Parameters: **ChangeCustomerPasswordRequest**

Return value: **ChangePasswordResponse**

Realm: retail customer

This method allows a customer to change his password.

### **get\_transactions\_total\_info**

Parameters: **GetCustomerTransactionsTotalInfoRequest**

Return value: **GetTransactionsTotalInfoResponse**

Realm: retail customer

This method allows a customer to get the list of customer's transactions.

### **add\_customer\_extension**

Parameters: **AddCustomerExtensionRequest**

Return value: **AddUpdateCustomerExtensionResponse**

Realm: retail customer

This method allows a customer to add an extension.

### **update\_customer\_extension**

Parameters: **UpdateCustomerExtensionRequest**

Return value: **AddUpdateCustomerExtensionResponse**

Realm: retail customer

This method allows an API user to modify an extension.

### **delete\_customer\_extension**

Parameters: **DeleteCustomerExtensionRequest**

Return value: **DeleteCustomerExtensionResponse**

Realm: retail customer

This method allows a customer to remove an extension.

### **add\_customer\_huntgroup**

Parameters: **AddCustomerHuntgroupRequest**

Return value: **AddUpdateCustomerHuntgroupResponse**

Realm: retail customer

This method allows a customer to create a huntgroup.

### **update\_customer\_huntgroup**

Parameters: **UpdateCustomerHuntgroupRequest**

Return value: **AddUpdateCustomerHuntgroupResponse**

Realm: retail customer

This method allows a customer to modify a huntgroup.

**delete\_customer\_huntgroup**Parameters: **DeleteCustomerHuntgroupRequest**Return value: **DeleteCustomerHuntgroupResponse**

Realm: retail customer

This method allows a customer to remove a huntgroup.

**get\_customer\_invoices**Parameters: **GetCustomerInvoicesRequest**Return value: **GetCustomerInvoicesResponse**

Realm: retail customer

This method allows a customer to get the list of customer's invoices.

**get\_lines\_activesubscriptions**Parameters: **GetLinesActiveSubscriptionsRequest**Return value: **GetLinesActiveSubscriptionsResponse**

Realm: retail customer

This method allows a customer to get the list of customer lines' subscriptions.

**update\_dialing\_rules**Parameters: **UpdateCustomerDialingRulesRequest**Return value: **UpdateCustomerDialingRulesResponse**

Realm: retail customer

This method allows a customer to modify the customer's dialing rules.

## Type Reference

**GetCustomerInfoRequest structure**

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

| Property   | Type                 | Description                                                                    |
|------------|----------------------|--------------------------------------------------------------------------------|
| i_customer | int                  | 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 PortaBilling® interface, unique in the environment |
| login      | string               | User Name, as specified on web interface.                                      |

**GetCustomerInfoResponse structure**

| Property      | Type                          | Description                                                            |
|---------------|-------------------------------|------------------------------------------------------------------------|
| customer_info | <b>CustomerInfo</b> structure | Complete information about a customer; for more information, see below |

**GetCustomerListRequest structure**

| Property | Type   | Description                                         |
|----------|--------|-----------------------------------------------------|
| offset   | int    | Number of rows to skip at the beginning of the list |
| limit    | int    | Number of rows to retrieve                          |
| name     | string | Refers to the customer name                         |
| i_parent | int    | Unique ID of the reseller who manages the customer  |

**GetCustomerListResponse structure**

| Property      | Type                                    | Description                  |
|---------------|-----------------------------------------|------------------------------|
| customer_list | array of <b>CustomerInfo</b> structures | Set of customer data records |

**CustomerInfo structure**

| Property          | Type                          | Description                                                                      |
|-------------------|-------------------------------|----------------------------------------------------------------------------------|
| i_customer *      | int                           | 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 PortaBilling® interface, unique in the environment   |
| i_customer_type * | int                           | Customer type: 1 (retail customer or subcustomer), 2 (reseller), 3 (distributor) |
| i_parent *        | int                           | 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 * | float (with 5 decimal places) | Customer's initial balance                                                       |
| balance **        | float (with 5 decimal places) | Customer's balance                                                               |

|                   |                      |                                                                                                                                                                 |
|-------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| i_billing_period  | int                  | ID for customer's billing period; refers to Billing_Period table                                                                                                |
| i_acl             | int                  | ID for customer's access level; refers to Access_Levels table                                                                                                   |
| i_routing_plan    | int                  | ID for customer's routing plan; refers to Routing_Plans table<br>Note: it is only applicable to resellers                                                       |
| i_vd_plan         | int                  | ID for customer's discount plan; refers to Volume_Discount_Plans table                                                                                          |
| i_moh             | int                  | ID for customer's "music on hold" option; refers to Music_On_Hold table                                                                                         |
| i_customer_class  | int                  | ID for customer class; refers to Customer_Classes table                                                                                                         |
| i_tariff          | int                  | ID for customer's tariff; refers to Tariffs table; applies to resellers only                                                                                    |
| i_tariff_incoming | int                  | ID for customer's incoming tariff; refers to Tariffs table; applies to resellers only                                                                           |
| i_template        | int                  | 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             | int                  | ID for customer's representative; refers to Representatives table                                                                                               |
| i_time_zone       | int                  | 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     | Customer's salutation                                                                                                                                           |

|           |                         |                                                 |
|-----------|-------------------------|-------------------------------------------------|
|           | max                     |                                                 |
| firstname | string, 25 chars<br>max | Customer's first name                           |
| midinit   | string, 5 chars<br>max  | Customer's middle initial(s)                    |
| lastname  | string, 25 chars<br>max | Customer's last name                            |
| baddr1    | string, 41 chars<br>max | 1st line of customer's address                  |
| baddr2    | string, 41 chars<br>max | 2nd line of customer's address                  |
| baddr3    | string, 41 chars<br>max | 3rd line of customer's address                  |
| baddr4    | string, 41 chars<br>max | 4th line of customer's address                  |
| baddr5    | string, 41 chars<br>max | 5th line of customer's address                  |
| city      | string, 31 chars<br>max | City of customer's address                      |
| state     | string, 21 chars<br>max | Province or state                               |
| zip       | string, 13 chars<br>max | Postal (zip) code                               |
| country   | string, 31 chars<br>max | Country                                         |
| note      | string, 41 chars<br>max | Short note (description)                        |
| faxnum    | string, 21 chars<br>max | Fax number                                      |
| cont1     | string, 41 chars<br>max | Main contact person                             |
| phone1    | string, 21 chars<br>max | Main phone number                               |
| cont2     | string, 41 chars<br>max | Alternative contact person                      |
| phone2    | string, 21 chars<br>max | Alternative phone number                        |
| email     | string, 99 chars<br>max | Email address                                   |
| bcc       | string, 99 chars<br>max | BCC email address                               |
| login     | string, 16 chars<br>max | Customer's login for self-care web interface    |
| password  | string, 16 chars<br>max | Customer's password for self-care web interface |
| tax_id    | string, 16 chars        | Tax ID                                          |

|                        |                               |                                                                                                                                                                                                                                          |
|------------------------|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        | max                           |                                                                                                                                                                                                                                          |
| credit_limit           | float (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        | string (F, S or N)            | <ul style="list-style-type: none"> <li>• F – send full statistics to customer</li> <li>• S – send short statistics</li> <li>• N – do not send statistics</li> </ul> If undefined, the settings defined in the customer class are applied |
| send_invoices *        | string (Y/N )                 | Allow customer to receive invoices; if undefined, the settings defined in the customer class are applied                                                                                                                                 |
| blocked                | string (Y/N )                 | Block customer's calls                                                                                                                                                                                                                   |
| ppm_enabled            | string (Y/N)                  | Allow customer to manage periodic payments on his self-care interface                                                                                                                                                                    |
| drm_enabled            | string (Y/N)                  | Allow customer to manage dialing rules on his self-care interface                                                                                                                                                                        |
| callshop_enabled       | string (Y/N)                  | Enable callshop features on customer's self-care interface                                                                                                                                                                               |
| bp_charge_cc           | string (Y/N)                  | Automatically charge customer's credit card when billing period is closed                                                                                                                                                                |
| bill_status            | string (O, S and C)           | <ul style="list-style-type: none"> <li>• O – customer is open</li> <li>• S – customer is suspended due to an overdue invoice</li> <li>• C – customer is closed due to an unpaid invoice</li> </ul>                                       |
| max_abbreviated_length | int                           | Maximum allowed length of customer's abbreviated numbers; applies to retail customers only                                                                                                                                               |
| discount_rate          | float (with 5 decimal places) | Value of customer's subscription discount; a percentage                                                                                                                                                                                  |
| out_date_format        | string, 16 chars              | Output format for date                                                                                                                                                                                                                   |

|                                |                                               |                                                                                                                 |
|--------------------------------|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
|                                | max                                           | indication on customer's self-care interface                                                                    |
| out_time_format                | string, 16 chars<br>max                       | Output format for time indication                                                                               |
| out_date_time_format           | string, 16 chars<br>max                       | Output format for full date/time indication                                                                     |
| in_date_format                 | string, 16 chars<br>max                       | Input format for date indication                                                                                |
| in_time_format                 | string, 16 chars<br>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                  | <b>DialingRulesInfo</b> structure             | If defined, overrides the cld_translation_rule and cli_in_translation_rule values                               |
| service_features               | array of <b>ServiceFeatureInfo</b> structures | Contains service feature values for the given customer                                                          |
| payment_info                   | string                                        | Payment info to be assigned to the customer being created/updated                                               |
| <u>sale_commission_rate</u>    | float                                         | The commission applied when an account is created or a distributor is assigned (only applicable to distributor) |
| <u>payment_commission_rate</u> | float                                         | The commission applied when payment is entered (only applicable to distributor)                                 |

### DialingRulesInfo structure

| Property | Type   | Description                                         |
|----------|--------|-----------------------------------------------------|
| cc       | string | Country code                                        |
| ac       | string | Area code(s)                                        |
| ia       | int, 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   | string   | International dialing prefix                                                             |
| em   | string   | Emergency numbers; comma-separated list                                                  |
| ex   | string   | Exceptions; comma-separated list                                                         |
| nl   | int      | Local dialing number length                                                              |
| ct   | int, 1   | 1 - convert ANI (CLI) for incoming calls into this dialing format                        |
| cs   | int, 1   | Carrier selection is enabled/disabled for customer                                       |
| csdr | int, 0/1 | Whether to apply the customer dialing rules to a number follows after the selection code |
| css  | int, 0/1 | Whether to strip selection code after the Routing Plan selection or not                  |
| csp  | string   | Pattern or a list of selection codes allowed for the customer                            |
| csps | string   | Allow or reject the destinations dialed without the selection code                       |
| csl  | string   | Local carrier code for stripping Selection Code from CLD                                 |

### ServiceFeatureInfo structure

| Property   | Type                                                     | Description                              |
|------------|----------------------------------------------------------|------------------------------------------|
| name       | string                                                   | Service feature name                     |
| flag_value | string                                                   | Value of corresponding service_flag item |
| attributes | array of <a href="#">ServiceAttributeInfo</a> structures | List of service feature attributes       |

### ServiceAttributeInfo structure

| Property | Type             | Description                                                                                                          |
|----------|------------------|----------------------------------------------------------------------------------------------------------------------|
| name     | string           | Name of service feature                                                                                              |
| values   | array of strings | Values of service attribute; if the attribute accepts a single value, only the first item will be checked/populated. |

### GetCustomerServiceFeaturesRequest structure

| Property   | Type | Description           |
|------------|------|-----------------------|
| i_customer | int  | ID of customer record |

**GetCustomerServiceFeaturesResponse structure**

| Property         | Type                                                   | Description              |
|------------------|--------------------------------------------------------|--------------------------|
| service_features | array of <a href="#">ServiceFeatureInfo</a> structures | List of service features |

**UpdateCustomerServiceFeaturesRequest structure**

| Property         | Type                                                   | Description              |
|------------------|--------------------------------------------------------|--------------------------|
| i_customer       | int                                                    | ID of customer record    |
| service_features | array of <a href="#">ServiceFeatureInfo</a> structures | List of service features |

**UpdateCustomerServiceFeaturesResponse structure**

| Property   | Type | Description           |
|------------|------|-----------------------|
| i_customer | int  | ID of customer record |

**ValidateCustomerInfoRequest structure**

| Property      | Type                         | Description                                                                                                               |
|---------------|------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| customer_info | <a href="#">CustomerInfo</a> | 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 | <a href="#">CustomerInfo</a> | Data about a customer, see <a href="#">CustomerInfo</a> above |

**AddCustomerRequest structure**

| Property      | Type                         | Description                                                                                                                                                                                                                                                                                |
|---------------|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| customer_info | <a href="#">CustomerInfo</a> | 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; default customer class will be set in case if i_customer_class is not defined |

**UpdateCustomerRequest structure**

| Property      | Type                | Description                                                                                                                                                               |
|---------------|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| customer_info | <b>CustomerInfo</b> | 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 | int  | ID of created/modified customer record |

**DeleteCustomerRequest structure**

| Property   | Type | Description                         |
|------------|------|-------------------------------------|
| i_customer | int  | ID of customer record to be deleted |

**DeleteCustomerResponse structure**

| Property | Type | Description                                |
|----------|------|--------------------------------------------|
| success  | int  | 1 in case of success, 0 in case of failure |

**TerminateCustomerRequest structure**

| Property   | Type | Description                            |
|------------|------|----------------------------------------|
| i_customer | int  | ID of customer record to be terminated |

**TerminateCustomerResponse structure**

| Property | Type | Description                                |
|----------|------|--------------------------------------------|
| success  | int  | 1 in case of success, 0 in case of failure |

**GetCustomerSubscriptionsRequest structure**

| Property   | Type | Description           |
|------------|------|-----------------------|
| i_customer | int  | ID of customer record |

**GetCustomerSubscriptionsResponse structure**

| Property      | Type                                                | Description                               |
|---------------|-----------------------------------------------------|-------------------------------------------|
| subscriptions | array of <b>CustomerSubscriptionInfo</b> structures | Set of customer subscription data records |

**AddCustomerSubscriptionRequest structure**

| Property   | Type | Description           |
|------------|------|-----------------------|
| i_customer | int  | ID of customer record |

|                   |                                 |                                                                                                                                                                     |
|-------------------|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| subscription_info | <b>CustomerSubscriptionInfo</b> | 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              | int                             | ID of customer record                                            |
| i_customer_subscription | int                             | ID of customer subscription record to be updated                 |
| subscription_info       | <b>CustomerSubscriptionInfo</b> | Note: i_customer_subscription and i_subscription will be ignored |

### AddUpdateCustomerSubscriptionResponse structure

| Property                | Type | Description                                         |
|-------------------------|------|-----------------------------------------------------|
| i_customer_subscription | int  | ID of created/modified customer subscription record |

### CustomerSubscriptionInfo structure

| Property                   | Type                          | Description                                                                                                                                |
|----------------------------|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| i_customer_subscription ** | int                           | 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              | float (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 **     | string (Y/N)     | Indicates whether the subscription has already been closed                                                                                                                                                                                                                                                              |
| int_status **      | int              | Status of the subscription: <ul style="list-style-type: none"> <li>• 0 – pending</li> <li>• 1 – active</li> <li>• 2 – closed</li> </ul>                                                                                                                                                                                 |
| i_customer         | int              | Unique ID of the customer record                                                                                                                                                                                                                                                                                        |

### CloseDeleteCustomerSubscriptionRequest structure

| Property                | Type | Description                                             |
|-------------------------|------|---------------------------------------------------------|
| i_customer              | int  | ID of customer record                                   |
| i_customer_subscription | int  | ID of customer subscription record to be closed/deleted |

### CloseCustomerSubscriptionResponse structure

| Property                | Type | Description                               |
|-------------------------|------|-------------------------------------------|
| i_customer_subscription | int  | ID of closed customer subscription record |

### DeleteCustomerSubscriptionResponse structure

| Property | Type | Description                                |
|----------|------|--------------------------------------------|
| success  | int  | 1 in case of success, 0 in case of failure |

**ActivateCustomerSubscriptionsRequest**

| Property   | Type | Description           |
|------------|------|-----------------------|
| i_customer | int  | ID of customer record |

**ActivateCustomerSubscriptionsResponse**

| Property | Type | Description                                   |
|----------|------|-----------------------------------------------|
| success  | int  | 1 in case of success,<br>0 in case of failure |

**MakeCustomerTransactionRequest structure**

| Property         | Type                          | Description                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| i_customer       | int                           | ID of customer record                                                                                                                                                                                                                                                                                                                                                                                    |
| action           | string                        | Same as those available on the Maintenance tab of the Customer edit interface, including e-commerce transactions.<br>One of the following: <ul style="list-style-type: none"><li>• Manual charge</li><li>• Manual refund</li><li>• Manual payment</li><li>• Promotional credit</li><li>• e-commerce payment</li><li>• e-commerce refund</li><li>• Authorization only</li><li>• Capture payment</li></ul> |
| amount           | float (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 | int    | 1 – do not send email notifications to this customer,<br>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. |
| h323_conf_id          | string | H323-Conf-ID of transaction                                                                                                                                       |

### MakeCustomerTransactionResponse structure

| Property       | Type                          | Description                      |
|----------------|-------------------------------|----------------------------------|
| balance        | float (with 5 decimal places) | Customer's modified balance      |
| transaction_id | string                        | E-Commerce transaction ID        |
| authorization  | string                        | E-Commerce authorization code    |
| result_code    | string                        | E-Commerce operation result code |
| i_xdr          | int                           | Unique ID of the xdr record      |

### UpdateCustomerPaymentMethodRequest structure

| Property            | Type                                        | Description                          |
|---------------------|---------------------------------------------|--------------------------------------|
| i_customer          | int                                         | ID of customer record                |
| payment_method_info | <a href="#">PaymentMethodInfo</a> structure | Data about payment method; see below |

### UpdateCustomerPaymentMethodResponse structure

| Property      | Type | Description                          |
|---------------|------|--------------------------------------|
| i_credit_card | int  | 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: <ul style="list-style-type: none"> <li>• Cash</li> <li>• Cheque</li> <li>• American Express</li> <li>• Discover</li> <li>• MasterCard</li> <li>• VISA</li> <li>• FirePay</li> <li>• Switch</li> <li>• Check</li> <li>• DirectDebitNL</li> </ul> (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 | int                  | 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                                                                                                                                                                                                                                                                                                                  |

**GetMyInfoResponse structure**

| Property      | Type                          | Description          |
|---------------|-------------------------------|----------------------|
| customer_info | <b>CustomerInfo</b> structure | Reseller information |

**GetCustomerPaymentMethodInfoRequest structure**

| Property   | Type | Description           |
|------------|------|-----------------------|
| i_customer | int  | ID of customer record |

**GetCustomerPaymentMethodInfoResponse structure**

| Property            | Type                               | Description              |
|---------------------|------------------------------------|--------------------------|
| payment_method_info | <b>PaymentMethodInfo</b> structure | PaymentMethodInfo object |

**AbbreviatedDialingNumberInfo structure**

| Property                  | Type   | Description                             |
|---------------------------|--------|-----------------------------------------|
| <u>number to dial</u>     | string | Number to dial                          |
| <u>abbreviated number</u> | string | Abbreviated number                      |
| description <sup>n</sup>  | string | Text description for this entry         |
| i_ab_dialing <sup>n</sup> | int    | ID of abbreviated dialing number record |

**GetCustomerAbbreviatedDialingNumberListRequest structure**

| Property   | Type | Description           |
|------------|------|-----------------------|
| i_customer | int  | ID of customer record |

**GetCustomerAbbreviatedDialingNumberListResponse structure**

| Property                        | Type                                                    | Description                                 |
|---------------------------------|---------------------------------------------------------|---------------------------------------------|
| abbreviated_dialing_number_list | Array of <b>AbbreviatedDialingNumberInfo</b> structures | Array of abbreviated dialing number objects |

**AddUpdateCustomerAbbreviatedDialingNumberRequest structure**

| Property          | Type | Description           |
|-------------------|------|-----------------------|
| <u>i_customer</u> | int  | ID of customer record |

|                                        |                                                  |                                   |
|----------------------------------------|--------------------------------------------------|-----------------------------------|
| <u>abbreviated dialing number info</u> | <b>AbbreviatedDialingNumberInfo</b><br>structure | Abbreviated dialing number object |
|----------------------------------------|--------------------------------------------------|-----------------------------------|

### AddUpdateCustomerAbbreviatedDialingNumberResponse structure

| Property            | Type | Description                             |
|---------------------|------|-----------------------------------------|
| <u>i_ab_dialing</u> | int  | ID of abbreviated dialing number record |

### DeleteCustomerAbbreviatedDialingNumberRequest structure

| Property            | Type | Description                                                                  |
|---------------------|------|------------------------------------------------------------------------------|
| <u>i_ab_dialing</u> | int  | ID of abbreviated dialing number record                                      |
| <u>i_customer</u>   | int  | ID of the customer to whom the abbreviated dialing number record is assigned |

### DeleteCustomerAbbreviatedDialingNumberResponse structure

| Property       | Type | Description                         |
|----------------|------|-------------------------------------|
| <u>success</u> | int  | 1 if success, otherwise SOAP fault. |

### GetCustomerTaxationInfoRequest structure

| Property          | Type | Description           |
|-------------------|------|-----------------------|
| <u>i_customer</u> | int  | ID of customer record |

### GetCustomerTaxationInfoResponse structure

| Property             | Type                             | Description         |
|----------------------|----------------------------------|---------------------|
| <u>taxation_info</u> | <b>TaxationInfo</b><br>structure | TaxationInfo object |

### UpdateCustomerTaxationRequest structure

| Property             | Type                             | Description           |
|----------------------|----------------------------------|-----------------------|
| <u>i_customer</u>    | int                              | ID of customer record |
| <u>taxation_info</u> | <b>TaxationInfo</b><br>structure | TaxationInfo object   |

**UpdateCustomerTaxationResponse structure**

| Property | Type | Description                         |
|----------|------|-------------------------------------|
| success  | int  | 1 if success, 0 in case of failure. |

**TaxationInfo structure**

| Property         | Type                           | Description                    |
|------------------|--------------------------------|--------------------------------|
| processor        | string                         | Taxation Plug-In name          |
| options_vat      | <b>TaxationOptionsVat</b>      | Parameters of VAT plug-in      |
| options_billsoft | <b>TaxationOptionsBillsoft</b> | Parameters of Billsoft plug-in |

**TaxationOptionsVat structure**

| Property | Type         | Description     |
|----------|--------------|-----------------|
| exempt   | string (Y/N) | Exempt from Tax |
| percent  | int          | VAT percentage  |

**TaxationOptionsBillsoft structure**

| Property           | Type   | Description                                                                                                                                                  |
|--------------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| reseller_regulated | string | Reseller's status in the sale; one of the following: <ul style="list-style-type: none"> <li>• Default</li> <li>• Regulated</li> <li>• Unregulated</li> </ul> |
| reseller_voipa     | string | VoIP Taxation; one of the following: <ul style="list-style-type: none"> <li>• Default</li> <li>• Normal</li> <li>• Aggerssive</li> </ul>                     |
| customer_type      | string | Type of the customer; one of the following: <ul style="list-style-type: none"> <li>• Default</li> <li>• Business</li> <li>• Residential</li> </ul>           |
| incorporated_area  | string | Incorporated City Area; one of the following: <ul style="list-style-type: none"> <li>• Default</li> <li>• Inside</li> <li>• Outside</li> </ul>               |
| federal_exempt     | string | Exempt from federal taxes                                                                                                                                    |
| state_exempt       | string | Exempt from state taxes                                                                                                                                      |

|               |        |                          |
|---------------|--------|--------------------------|
| county_exempt | string | Exempt from county taxes |
| local_exempt  | string | Exempt from local taxes  |

### GetCustomerVDCounterListRequest structure

| Property     | Type   | Description                                                                         |
|--------------|--------|-------------------------------------------------------------------------------------|
| i_customer   | int    | Unique ID of the customer record                                                    |
| service_name | string | Service name pattern                                                                |
| dg_name      | string | Destination group name pattern                                                      |
| peak_level   | string | ID of the peak level: 0 (peak period), 1 (off-peak period), 2 (2nd off-peak period) |

### GetCustomerVDCounterListResponse structure

| Property     | Type                 | Description              |
|--------------|----------------------|--------------------------|
| counter_list | Array of CounterInfo | Array of counter objects |

### CounterInfo structure

| Property      | Type   | Description                                       |
|---------------|--------|---------------------------------------------------|
| i_cvd_counter | int    | Unique ID of the customer volume discount counter |
| i_customer    | int    | Unique ID of the customer record                  |
| dg_name       | string | Destination group name                            |
| service_name  | string | Name of the service                               |
| peak_level    | int    | ID of the peak level                              |
| rate_unit     | string | Units                                             |
| counter_value | float  | Value of counter                                  |

### GetRetailCustomerXDRListRequest structure

| Property          | Type     | Description                                         |
|-------------------|----------|-----------------------------------------------------|
| <u>i_customer</u> | int      | Unique ID of the customer record                    |
| i_service         | int      | ID of Service; refers to Services table             |
| limit             | int      | Number of rows to retrieve                          |
| offset            | int      | Number of rows to skip at the beginning of the list |
| <u>from_date</u>  | dateTime | Fetch xDRs with bill_time starting from this date   |
| <u>to_date</u>    | dateTime | Fetch xDRs with bill_time before this date          |
| get_total         | int      | Number of the xDRs                                  |

**GetRetailCustomerXDRListResponse structure**

| Property | Type                            | Description                    |
|----------|---------------------------------|--------------------------------|
| xdr_list | Array of <b>CustomerXDRInfo</b> | Array of customer xDR objects  |
| total    | int                             | The number of the fetched xDRs |

**CustomerXDRInfo structure**

| Property                  | Type     | Description                                                                                                                                                                                                 |
|---------------------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| i_xdr                     | int      | Unique ID of the xdr record                                                                                                                                                                                 |
| account_id                | int      | Unique ID of the account database record                                                                                                                                                                    |
| CLI                       | string   | Calling Line Identification                                                                                                                                                                                 |
| CLD                       | string   | Called Line Identification                                                                                                                                                                                  |
| charged_amount            | float    | Amount charged                                                                                                                                                                                              |
| charged_quantity          | int      | Units charged                                                                                                                                                                                               |
| country                   | string   | Country                                                                                                                                                                                                     |
| subdivision               | string   | Country Subdivision                                                                                                                                                                                         |
| description               | string   | Destination description                                                                                                                                                                                     |
| disconnect_cause          | string   | The code of disconnect cause                                                                                                                                                                                |
| bill_status               | string   | Call bill status                                                                                                                                                                                            |
| disconnect_reason         | string   | Call disconnect reason                                                                                                                                                                                      |
| connect_time              | dateTime | Call connect time                                                                                                                                                                                           |
| unix_connect_time         | int      | Call connect time (expressed in Unix time format - seconds since epoch)                                                                                                                                     |
| disconnect_time           | dateTime | Call disconnect time                                                                                                                                                                                        |
| unix_disconnect_time      | int      | Call disconnect time (expressed in Unix time format - seconds since epoch)                                                                                                                                  |
| bill_time                 | dateTime | Call bill time                                                                                                                                                                                              |
| bit_flags                 | int      | Extended information how the service was used; the integer field that should be treated as a bit-map. Each currently used bit is listed in the Transaction_Flag_Types table (bit_offset indicates position) |
| call_recording_url        | string   | Path to recorded wav files                                                                                                                                                                                  |
| call_recording_server_url | string   | URL to the recording server                                                                                                                                                                                 |

**GetDialRuleSamplesResponse structure**

| Property               | Type                                   | Description                                    |
|------------------------|----------------------------------------|------------------------------------------------|
| dial_rule_samples_list | Array of <b>SampleDialingRulesInfo</b> | Array of <b>SampleDialingRulesInfo</b> objects |

**SampleDialingRulesInfo structure**

| Property       | Type                              | Description                           |
|----------------|-----------------------------------|---------------------------------------|
| i_dialing_rule | int                               | Unique ID of the dialing rule record  |
| name           | string                            | Sample dialing rule name              |
| rule           | string                            | Dialing rule in a string format       |
| description    | string                            | Text description for the dialing rule |
| options        | <b>DialingRulesInfo</b> structure | Sample dialing rule object            |

**GetMOHListInfoRequest structure**

| Property                | Type | Description                      |
|-------------------------|------|----------------------------------|
| i_customer <sup>a</sup> | int  | Unique ID of the customer record |

**GetMOHListInfoResponse structure**

| Property      | Type               | Description     |
|---------------|--------------------|-----------------|
| moh_list_info | <b>MOHListInfo</b> | MOH List object |

**MOHListInfo structure**

| Property                         | Type                               | Description                                 |
|----------------------------------|------------------------------------|---------------------------------------------|
| system_default_i_moh             | int                                | Default system MOH object                   |
| is_moh_update_disabled           | int                                | Indicates whether the MOH update is allowed |
| default_moh_list                 | Array of <b>MOHInfo</b> structures | Default MOH list                            |
| <u>customer defined moh list</u> | Array of <b>MOHInfo</b> structures | Customer defined MOH list                   |
| <u>aggregated moh list</u>       | Array of <b>MOHInfo</b> structures | Aggregated MOH list                         |

**MOHInfo structure**

| Property  | Type   | Description                             |
|-----------|--------|-----------------------------------------|
| i_moh     | int    | Unique ID of the MOH record             |
| name      | string | MOH record name                         |
| converted | string | Indicates whether the MOH was converted |
| tries     | int    |                                         |

**GetExtensionsListInfoRequest structure**

| Property                   | Type | Description                                         |
|----------------------------|------|-----------------------------------------------------|
| <u>i_customer</u>          | int  | Unique ID of the customer record                    |
| limit <sup>n</sup>         | int  | Number of rows to retrieve                          |
| offset <sup>n</sup>        | int  | Number of rows to skip at the beginning of the list |
| detailed_info <sup>n</sup> | int  | Detailed information                                |

**GetExtensionsListInfoResponse structure**

| Property               | Type                                    | Description           |
|------------------------|-----------------------------------------|-----------------------|
| <u>extensions_list</u> | Array of <a href="#">ExtensionsInfo</a> | List of extensions    |
| total <sup>n</sup>     | int                                     | The number of entries |

**ExtensionsInfo structure**

| Property   | Type   | Description                                                                                                              |
|------------|--------|--------------------------------------------------------------------------------------------------------------------------|
| i_c_ext    | int    | Extension ID; Refers to the <i>Centrex_Group_Extensions</i> table                                                        |
| i_customer | int    | Unique ID of the customer record                                                                                         |
| id         | string | The extension identifier used in dialling                                                                                |
| name       | string | The name of the extension / owner                                                                                        |
| type       | string | One of the following: <ul style="list-style-type: none"> <li>• Account</li> <li>• Group</li> <li>• Unassigned</li> </ul> |
| i_account  | int    | Unique ID of the account record (for <i>type</i> =                                                                       |

|                        |                     |                                                                                                                                                                                                    |
|------------------------|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        |                     | Account). Can only be a regular account, not an alias                                                                                                                                              |
| i_c_group              | int                 | Unique ID of the group record (for <i>type</i> = Group).                                                                                                                                           |
| group_name             | string              | Group name                                                                                                                                                                                         |
| hunt_sequence          | string              | The ringing strategy; one of the following: <ul style="list-style-type: none"> <li>• Order</li> <li>• Random</li> <li>• Simultaneous</li> <li>• LeastUsed</li> </ul>                               |
| hunt_keep_original_cli | String              | Whether to keep the original CLI                                                                                                                                                                   |
| account_id             | string              | Account name                                                                                                                                                                                       |
| bill_status            | string (O, S and C) | <ul style="list-style-type: none"> <li>• O – customer is open</li> <li>• S – customer is suspended due to an overdue invoice</li> <li>• C – customer is closed due to an unpaid invoice</li> </ul> |
| firstname              | string              | Account's first name                                                                                                                                                                               |
| midinit                | string              | Account's middle initial(s)                                                                                                                                                                        |
| lastname               | string              | Account's last name                                                                                                                                                                                |
| cont1                  | string              | Main contact person                                                                                                                                                                                |
| ip_phone_name          | string              | IP phone model                                                                                                                                                                                     |

### GetHGListInfoRequest structure

| Property            | Type | Description                                         |
|---------------------|------|-----------------------------------------------------|
| <u>i_customer</u>   | int  | Unique ID of the customer record                    |
| self_ref            | int  | Reference to huntgroup                              |
| limit <sup>n</sup>  | int  | Number of rows to retrieve                          |
| offset <sup>n</sup> | int  | Number of rows to skip at the beginning of the list |

### GetHGListInfoResponse structure

| Property              | Type                   | Description          |
|-----------------------|------------------------|----------------------|
| <u>huntgroup_list</u> | Array of <b>HGInfo</b> | List of huntgroups   |
| total <sup>n</sup>    | int                    | Number of huntgroups |

**HGInfo structure**

| Property               | Type                                            | Description                                                                                                                                                          |
|------------------------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| i_c_group              | int                                             | Unique ID of the group record (for <i>type</i> = Group).                                                                                                             |
| i_customer             | int                                             | Unique ID of the customer record                                                                                                                                     |
| name                   | string                                          | The name of the owner                                                                                                                                                |
| hunt_sequence          | string                                          | The ringing strategy; one of the following: <ul style="list-style-type: none"> <li>• Order</li> <li>• Random</li> <li>• Simultaneous</li> <li>• LeastUsed</li> </ul> |
| hunt_keep_original_cli | String (Y/N/I)                                  | Whether to keep the original CLI                                                                                                                                     |
| i_c_ext                | int                                             | Extension ID; Refers to the <i>Centrex_Group_Extensions</i> table                                                                                                    |
| id                     | string                                          | Identifier                                                                                                                                                           |
| assigned_extensions    | Array of <a href="#">AssignedExtensionsInfo</a> | List of extensions                                                                                                                                                   |

**AssignedExtensionsInfo structure**

| Property | Type   | Description                                                                                                              |
|----------|--------|--------------------------------------------------------------------------------------------------------------------------|
| i_cg_ext | int    | Primary key in the <i>Centrex_Group_Extensions</i> table – the list of numbers to forward the call to                    |
| i_c_ext  | int    | Extension ID; Refers to the <i>Centrex_Group_Extensions</i> table                                                        |
| type     | string | One of the following: <ul style="list-style-type: none"> <li>• Account</li> <li>• Group</li> <li>• Unassigned</li> </ul> |
| id       | string | The extension identifier used in dialling                                                                                |
| name     | string | The name of the owner                                                                                                    |

**GetAllAccAliasesListInfoRequest structure**

| Property            | Type | Description                                          |
|---------------------|------|------------------------------------------------------|
| <u>i_customer</u>   | int  | Refers to customer record to which the alias belongs |
| limit <sup>n</sup>  | int  | Number of rows to retrieve                           |
| offset <sup>n</sup> | int  | Number of rows to skip at the beginning of the list  |

**GetAllAccAliasesListInfoResponse structure**

| Property                    | Type                                        | Description       |
|-----------------------------|---------------------------------------------|-------------------|
| <u>account_aliases_list</u> | Array of <a href="#">AccAliasesListInfo</a> | List of aliases   |
| total <sup>n</sup>          | int                                         | Number of aliases |

**AccAliasesListInfo structure**

| Property          | Type   | Description                                                                       |
|-------------------|--------|-----------------------------------------------------------------------------------|
| i_master_account  | int    | Unique ID of the main account this alias account is associated with               |
| master_account_id | string | The main account name this alias account is associated with                       |
| i_account         | int    | Unique ID of the alias record                                                     |
| id                | string | ID (PIN) of the account on the PortaBilling® interface, unique in the environment |
| blocked           | string | Block account's calls                                                             |

**GetCustomerCustomFieldsValuesRequest structure**

| Property          | Type | Description                      |
|-------------------|------|----------------------------------|
| <u>i_customer</u> | int  | Unique ID of the customer record |

**GetCustomerCustomFieldsValuesResponse structure**

| Property                          | Type                                            | Description                                         |
|-----------------------------------|-------------------------------------------------|-----------------------------------------------------|
| custom_fields_values <sup>n</sup> | Array of <a href="#">CustomFieldsValuesInfo</a> | List of Custom Fields values for the given customer |

**CustomFieldsValuesInfo structure**

| Property                       | Type   | Description                        |
|--------------------------------|--------|------------------------------------|
| <u>name</u>                    | string | Custom Field name                  |
| <u>text_value</u> <sup>n</sup> | string | Custom Field value                 |
| <u>db_value</u> <sup>n</sup>   | string | Database value of the Custom Field |

**UpdateCustomerCustomFieldsValuesRequest structure**

| Property                                 | Type                                   | Description                                         |
|------------------------------------------|----------------------------------------|-----------------------------------------------------|
| <u>i_customer</u>                        | int                                    | Unique ID of the customer record                    |
| <u>custom_fields_values</u> <sup>n</sup> | Array of <b>CustomFieldsValuesInfo</b> | List of Custom Fields values for the given customer |

**UpdateCustomerCustomFieldsValuesResponse structure**

| Property                                 | Type                                   | Description                                         |
|------------------------------------------|----------------------------------------|-----------------------------------------------------|
| <u>i_customer</u> <sup>n</sup>           | int                                    | Unique ID of the customer record                    |
| <u>custom_fields_values</u> <sup>n</sup> | Array of <b>CustomFieldsValuesInfo</b> | List of Custom Fields values for the given customer |

**ChangeCustomerPasswordRequest structure**

| Property            | Type   | Description                      |
|---------------------|--------|----------------------------------|
| <u>new_password</u> | string | New password                     |
| <u>old_password</u> | string | Old password                     |
| <u>i_customer</u>   | int    | Unique ID of the customer record |

**GetCustomerTransactionsTotalInfoRequest structure**

| Property                          | Type | Description                               |
|-----------------------------------|------|-------------------------------------------|
| <u>i_service</u> <sup>n</sup>     | int  | ID of a service; refers to Services table |
| <u>billing_model</u> <sup>n</sup> | int  | Self-explanatory                          |
| <u>i_customer</u>                 | int  | Unique ID of the customer record          |

**AddCustomerExtensionRequest structure**

| Property          | Type   | Description                      |
|-------------------|--------|----------------------------------|
| <u>i_customer</u> | int    | Unique ID of the customer record |
| <u>id</u>         | string | Extension number                 |

|           |        |                                                  |
|-----------|--------|--------------------------------------------------|
| name      | string | Extension name                                   |
| i_account | int    | Assigned account ID;<br>refers to Accounts table |

### AddUpdateCustomerExtensionResponse structure

| Property       | Type | Description                 |
|----------------|------|-----------------------------|
| <u>i c ext</u> | int  | ID of the created extension |

### UpdateCustomerExtensionRequest structure

| Property               | Type   | Description                                      |
|------------------------|--------|--------------------------------------------------|
| <u>i c ext</u>         | int    | ID of the modified extension                     |
| i_customer             | int    | Unique ID of the customer record                 |
| id                     | string | Extension number                                 |
| name <sup>n</sup>      | string | Extension name                                   |
| i_account <sup>n</sup> | int    | Assigned account ID;<br>refers to Accounts table |

### DeleteCustomerExtensionRequest structure

| Property          | Type | Description                      |
|-------------------|------|----------------------------------|
| <u>i c ext</u>    | int  | ID of the created extension      |
| <u>i_customer</u> | int  | Unique ID of the customer record |

### DeleteCustomerExtensionResponse structure

| Property       | Type | Description                                |
|----------------|------|--------------------------------------------|
| <u>success</u> | int  | 1 in case of success, 0 in case of failure |

### AddCustomerHuntgroupRequest structure

| Property          | Type   | Description                      |
|-------------------|--------|----------------------------------|
| <u>i_customer</u> | int    | Unique ID of the customer record |
| <u>id</u>         | string | Huntgroup number                 |
| <u>name</u>       | string | Huntgroup name                   |

|                |              |                                                                                                                                                                         |
|----------------|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| hunt_sequence  | string       | The ringing strategy;<br>one of the following: <ul style="list-style-type: none"> <li>• Order</li> <li>• Random</li> <li>• Simultaneous</li> <li>• LeastUsed</li> </ul> |
| add_extensions | Array of int | Array of Extension IDs<br>to be added                                                                                                                                   |

### AddUpdateCustomerHuntgroupResponse structure

| Property         | Type | Description                    |
|------------------|------|--------------------------------|
| <u>i c_group</u> | int  | ID of the created<br>huntgroup |

### UpdateCustomerHuntgroupRequest structure

| Property                    | Type         | Description                                                                                                                                                             |
|-----------------------------|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>i c_ext</u>              | int          | ID of the extension                                                                                                                                                     |
| <u>i c_group</u>            | int          | ID of the huntgroup                                                                                                                                                     |
| <u>i_customer</u>           | int          | Unique ID of the<br>customer record                                                                                                                                     |
| id                          | string       | Huntgroup number                                                                                                                                                        |
| name                        | string       | Extension name                                                                                                                                                          |
| hunt_sequence               | string       | The ringing strategy;<br>one of the following: <ul style="list-style-type: none"> <li>• Order</li> <li>• Random</li> <li>• Simultaneous</li> <li>• LeastUsed</li> </ul> |
| add_extensions <sup>a</sup> | Array of int | Array of Extension IDs<br>to be added                                                                                                                                   |
| del_extensions <sup>a</sup> | Array of int | Array of Extension IDs<br>to be removed                                                                                                                                 |

### DeleteCustomerHuntgroupRequest structure

| Property          | Type | Description                         |
|-------------------|------|-------------------------------------|
| <u>i c_group</u>  | int  | ID of the created<br>extension      |
| <u>i c_ext</u>    | int  | ID of the extension                 |
| <u>i_customer</u> | int  | Unique ID of the<br>customer record |

**DeleteCustomerHuntgroupResponse structure**

| Property       | Type | Description                                |
|----------------|------|--------------------------------------------|
| <u>success</u> | int  | 1 in case of success, 0 in case of failure |

**GetCustomerInvoicesRequest structure**

| Property                              | Type     | Description                                         |
|---------------------------------------|----------|-----------------------------------------------------|
| invoice_number                        | string   | Invoice Number - unique identifier of the invoice   |
| i_customer                            | int      | Unique ID of the customer record                    |
| limit                                 | int      | Number of rows to retrieve                          |
| offset <sup>n</sup>                   | int      | Number of rows to skip at the beginning of the list |
| <u>from_date</u> <sup>n</sup>         | dateTime | Fetch invoices dated starting from this date        |
| <u>to_date</u> <sup>n</sup>           | dateTime | Fetch invoices dated before this date               |
| show_void <sup>n</sup>                | int      | Show void invoices                                  |
| only_pay_required <sup>n</sup>        | int      | Show invoices that require payment                  |
| only_last_unpaid_invoice <sup>n</sup> | int      | Show only last unpaid invoice                       |

**GetCustomerInvoicesResponse structure**

| Property                               | Type                                     | Description                 |
|----------------------------------------|------------------------------------------|-----------------------------|
| invoices                               | Array of <b>CustomerInvoicesListInfo</b> | List of customer's invoices |
| total <sup>n</sup>                     | int                                      | Number of invoices          |
| recommended_amount_to_pay <sup>n</sup> | float                                    | Recommended amount to pay   |
| last_due_date <sup>n</sup>             | date                                     | The last due date           |

**CustomerInvoicesListInfo structure**

| Property       | Type | Description                                       |
|----------------|------|---------------------------------------------------|
| is_pdf_exists  | int  | Indicates whether the PDF file exists             |
| invoice_number | int  | Invoice Number - unique identifier of the invoice |

|                     |        |                                                         |
|---------------------|--------|---------------------------------------------------------|
| i_invoice           | int    | Unique ID of the invoice record                         |
| i_customer          | int    | Refers to customer record which the invoice belongs to  |
| issue_date          | date   | Date when the invoice was generated                     |
| period_from         | date   | Start date of the billing period                        |
| period_to           | date   | End date of the billing period                          |
| due_date            | date   | Date by which payment must be received                  |
| i_invoice_status    | int    | Refers to the invoice status record                     |
| invoice_status_desc | string | Invoice status                                          |
| amount_due          | string | Amount the customer is supposed to pay for this period  |
| amount_net          | string | Sum of all charges in this period minus credits/refunds |
| amount_paid         | string | Amount paid by the customer already                     |

### GetLinesActiveSubscriptionsRequest structure

| Property          | Type | Description                      |
|-------------------|------|----------------------------------|
| <u>i_customer</u> | int  | Unique ID of the customer record |

### GetLinesActiveSubscriptionsResponse structure

| Property      | Type                                          | Description                                      |
|---------------|-----------------------------------------------|--------------------------------------------------|
| subscriptions | Array of <a href="#">LineSubscriptionInfo</a> | Set of customer lines' subscription data records |

### LineSubscriptionInfo structure

| Property               | Type   | Description                                                 |
|------------------------|--------|-------------------------------------------------------------|
| i_account              | int    | Assigned account ID; refers to Accounts table               |
| account_id             | string | Name of the account                                         |
| i_account_subscription | int    | ID of account subscription record                           |
| i_subscription         | int    | ID for subscription plan; refers to the Subscriptions table |
| name                   | string | Name of subscription plan,                                  |

|                 |        |                                                                                                                                                                          |
|-----------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                 |        | referenced by the i_subscription attribute                                                                                                                               |
| discount_rate   | float  | Discount rate for the subscription, in percents; if missed or provided undefined, it means that the discount rate defined in the customer information should be applied. |
| start_date      | date   | The subscription activation date (defined in the customer's time zone)                                                                                                   |
| activation_date | date   | Date when the subscription was activated                                                                                                                                 |
| billed_to       | date   | Date to which subscription charges have already been applied                                                                                                             |
| finish_date     | date   | Date when the subscription should be automatically canceled                                                                                                              |
| is_finished     | string | Indicates whether the subscription has already been closed                                                                                                               |
| obligatory      | string | Indicates that the subscription comes from the account's product, and so cannot be closed until the account has this product assigned to it                              |
| int_status      | int    | Status of the subscription: <ul style="list-style-type: none"> <li>• 0 – pending</li> <li>• 1 – active</li> <li>• 2 – closed</li> </ul>                                  |

### UpdateCustomerDialingRulesRequest structure

| Property             | Type                              | Description                      |
|----------------------|-----------------------------------|----------------------------------|
| <u>dialing_rules</u> | <b>DialingRulesInfo</b> structure | Customer's dialing rules         |
| <u>i_customer</u>    | int                               | Unique ID of the customer record |

### UpdateCustomerDialingRulesResponse structure

| Property       | Type | Description                                |
|----------------|------|--------------------------------------------|
| <u>success</u> | int  | 1 in case of success, 0 in case of failure |

## Access to Account Information

URI (namespace): <https://pbslave-server.yourdomain.com/Porta/SOAP/Account>

### 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.

### Methods

#### **get\_account\_info**

Parameters: [GetAccountInfoRequest](#)

Return value: [GetAccountInfoResponse](#)

Realm: administrator, reseller, retail customer, account

This method allows an API user 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](#)

Realm: administrator, reseller, retail customer

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](#)

Realm: administrator, reseller

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: [AddAccountResponse](#)

Realm: administrator, reseller

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

### **update\_account**

Parameters: [UpdateAccountRequest](#)

Return value: [UpdateAccountResponse](#)

Realm: administrator, reseller, retail customer, account

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

### **terminate\_account**

Parameter: [TerminateAccountRequest](#)

Return value: [TerminateAccountResponse](#)

Realm: administrator, reseller

This method allows an API user to terminate an existing account record.

### **get\_alias\_list**

Parameter: [GetAccountAliasListRequest](#)

Return value: [GetAccountAliasListResponse](#)

Realm: administrator, reseller, retail customer, account

This method allows an API user to get a list of aliases.

### **add\_alias**

Parameter: [AddAccountAliasRequest](#)

Return value: [AddAccountAliasResponse](#)

Realm: administrator, reseller

This method allows an API user to add an alias.

### **delete\_alias**

Parameter: [DeleteAccountAliasRequest](#)

Return value: [DeleteAccountAliasResponse](#)

Realm: administrator, reseller

This method allows an API user to remove an alias.

### **get\_service\_features**

Parameters: [GetAccountServiceFeaturesRequest](#)

Return value: [GetAccountServiceFeaturesResponse](#)

Realm: administrator, reseller

This method allows an API user to access service features data

### **update\_service\_features**

Parameters: [UpdateAccountServiceFeaturesRequest](#)

Return value: [UpdateAccountServiceFeaturesResponse](#)

Realm: administrator, reseller, retail customer, account

This method allows an API user to update settings for account service features.

### **get\_xdr\_list**

Parameters: [GetAccountXDRListRequest](#)

Return value: [GetAccountXDRListResponse](#)

Realm: administrator, reseller, retail customer, account

This method retrieves Account XDR records.

### **get\_account\_followme**

Parameters: [GetAccountFollowMeRequest](#)

Return value: [GetAccountFollowMeResponse](#)

Realm: administrator, reseller, retail customer, account

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](#)

Realm: administrator, reseller, retail customer, account

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](#)

Realm: administrator, reseller, retail customer, account

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**

Realm: administrator, reseller, retail customer, account

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**

Realm: administrator, reseller, retail customer, account

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**

Realm: administrator, reseller, retail customer, account

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

### **get\_subscriptions**

Parameters: **GetAccountSubscriptionsRequest**

Return value: **GetAccountSubscriptionsResponse**

Realm: administrator, reseller, retail customer, account

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

### **add\_subscription**

Parameters: **AddAccountSubscriptionRequest**

Return value: **AddUpdateAccountSubscriptionResponse**

Realm: administrator, reseller

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**

Realm: administrator, reseller

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**

Realm: administrator, reseller

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**

Realm: administrator, reseller

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**

Realm: administrator, reseller

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.

### **get\_call\_barring\_options**

Parameters: **GetCallBarringOptionsRequest**

Return value: **GetCallBarringOptionsResponse**

Realm: administrator, reseller, retail customer, account

This method allows an API user to retrieve all available options for account call barring and check their status.

### **update\_call\_barring\_options**

Parameters: **UpdateCallBarringOptionsRequest**

Return value: **UpdateCallBarringOptionsResponse**

Realm: administrator, reseller

This method allows an API user to update options for account call barring, i.e. enable or disable the corresponding items.

### **make\_transaction**

Parameters: **MakeAccountTransactionRequest**

Return value: **MakeAccountTransactionResponse**

Realm: administrator, reseller

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

### **update\_payment\_method**

Parameters: **UpdateAccountPaymentMethodRequest**

Return value: **UpdateAccountPaymentMethodResponse**

Realm: administrator, reseller

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**

Realm: administrator, reseller

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**

Realm: administrator, reseller

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

### **assign\_ua**

Parameters: **AssignUARequest**

Return value: **AssignUAResponse**

Realm: administrator, reseller

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

### **release\_ua**

Parameters: **ReleaseUARequest**

Return value: **ReleaseUResponse**

Realm: administrator, reseller

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

### **move\_account**

Parameters: **MoveAccountRequest**

Return value: **MoveAccountResponse**

Realm: administrator

This method allows an administrator to “move” an account to a different customer. The “movement” is performed in two steps:

- 1) The clone of the target account is created for the appropriate customer;
- 2) The target account is terminated.

### **get\_payment\_method\_info**

Parameters: **GetAccountPaymentMethodInfoRequest**

Return value: **GetAccountPaymentMethodInfoResponse**

Realm: administrator, reseller

This method allows an API user to retrieve information about the payment method (e.g. payment card info) assigned to an account.

### **add\_cp\_condition**

Parameters: **AddCPConditionRequest**

Return value: **AddCPConditionResponse**

Realm: administrator, reseller

This method allows an API user to add a call processing condition.

### **update\_cp\_condition**

Parameters: **UpdateCPConditionRequest**

Return value: **UpdateCPConditionResponse**

Realm: administrator, reseller

This method allows an API user to update an existing call processing condition.

### **get\_cp\_condition\_list**

Parameters: **GetCPConditionListRequest**

Return value: **GetCPConditionListResponse**

Realm: administrator, reseller, retail customer, account

This method allows an API user to retrieve a list of call processing conditions defined for a given customer.

### **add\_cp\_rule**

Parameters: **AddCPRuleRequest**

Return value: **AddCPRuleResponse**

Realm: administrator, reseller

This method allows an API user to create a new call processing rule.

### **delete\_cp\_rule**

Parameters: **DeleteCPRuleRequest**

Return value: **DeleteCPRuleResponse**

Realm: administrator, reseller

This method allows an API user to delete an existing call processing rule.

### **update\_cp\_rule**

Parameters: **UpdateCPRuleRequest**

Return value: **UpdateCPRuleResponse**

Realm: administrator, reseller

This method allows an API user to update an existing call processing rule.

### **get\_cp\_rule\_list**

Parameters: **GetCPRuleListRequest**

Return value: **GetCPRuleListResponse**

Realm: administrator, reseller, retail customer, account

This method allows an API user to retrieve information about defined call processing rules.

### **arrange\_cp\_rules**

Parameters: **ArrangeCPRulesRequest**

Return value: **ArrangeCPRulesResponse**

Realm: administrator, reseller

This method allows an API user to redefine the order in which call processing rules are applied.

### **topup\_account**

Parameters: **TopupAccountRequest**  
Return value: **TopupAccountRequest**  
Realm: administrator, reseller

This method allows an API user to top up an account using voucher.

### **get\_vd\_counter\_list**

Parameters: **GetAccountVDCounterListRequest**  
Return value: **GetAccountVDCounterListResponse**  
Realm: administrator, reseller

This method allows an API user to get the information about volume discount counters for the specified account.

### **get\_custom\_fields\_values**

Parameters: **GetAccountCustomFieldsValuesRequest**  
Return value: **GetAccountCustomFieldsValuesResponse**  
Realm: administrator, reseller

This method allows an API user to fetch an account's custom fields.

### **update\_custom\_fields\_values**

Parameters: **UpdateAccountCustomFieldsValuesRequest**  
Return value: **UpdateAccountCustomFieldsValuesResponse**  
Realm: administrator, reseller

This method allows an API user to modify customer's custom fields.

### **get\_moh\_list\_info**

Parameters: **GetAccountMOHListInfoRequest**  
Return value: **GetAccountMOHListInfoResponse**  
Realm: retail customer, account

This method allows an API user to get the list of account's music on hold entries.

### **get\_full\_vd\_counter\_info**

Parameters: **GetAccountFullVDCounterListInfoRequest**  
Return value: **GetFullVDCounterListInfoResponse**  
Realm: retail customer, account

This method allows an API user to get full information about volume discount counters.

**change\_password**Parameters: **ChangeAccountPasswordRequest**Return value: **ChangePasswordResponse**

Realm: retail customer, account

This method allows an API user to change his password.

**get\_account\_product\_info**Parameters: **GetAccountProductInfoRequest**Return value: **GetProductInfoResponse**

Realm: retail customer, account

This method allows an API user to get the information about the account's product.

**get\_member\_of\_huntgroups\_list**Parameters: **GetMemberOfHuntgroupsList**Return value: **GetHGListInfoResponse**

Realm: retail customer, account

This method allows an API user to get account's huntgroup.

**get\_permitted\_sip\_proxies\_info**Parameters: **GetAccountPermittedProxyInfoRequest**Return value: **GetAccountPermittedProxyInfoResponse**

Realm: retail customer, account

This method allows an API user to get the list of permitted IP addresses for proxying.

**get\_transactions\_total\_info**Parameters: **GetAccountTransactionsTotalInfoRequest**Return value: **GetTransactionsTotalInfoResponse**

Realm: retail customer, account

This method allows an API user to get the list of account's transactions.

## Type Reference

**GetAccountInfoRequest structure**

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

| Property  | Type | Description                              |
|-----------|------|------------------------------------------|
| i_account | int  | Unique ID of the account database record |

|                            |                      |                                                                                   |
|----------------------------|----------------------|-----------------------------------------------------------------------------------|
| or:                        |                      |                                                                                   |
| i_batch                    | int                  | Refers to batch record to which the account belongs                               |
| control_number             | int                  | 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             | int                  | Sequential number of the account in the batch                                     |
| or:                        |                      |                                                                                   |
| id                         | string, 32 chars max | ID (PIN) of the account on the PortaBilling® interface, unique in the environment |
| or:                        |                      |                                                                                   |
| login                      | string               | User Name, as specified on web interface.                                         |
| additional:                |                      |                                                                                   |
| detailed_info <sup>n</sup> | int                  | Detailed information                                                              |

### GetAccountInfoResponse structure

| Property     | Type                                  | Description                                                  |
|--------------|---------------------------------------|--------------------------------------------------------------|
| account_info | <a href="#">AccountInfo</a> structure | Data about an account, see <a href="#">AccountInfo</a> below |

### GetAccountListRequest structure

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

### GetAccountListResponse structure

| Property     | Type                                            | Description                 |
|--------------|-------------------------------------------------|-----------------------------|
| account_list | array of <a href="#">AccountInfo</a> structures | Set of account data records |

**AccountInfo structure**

| Property             | Type                          | Description                                                                                                                                                                                                                    |
|----------------------|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| i_account *          | int                           | Unique ID of account database record                                                                                                                                                                                           |
| id                   | string, 32 chars max          | ID (PIN) of the account on the PortaBilling® interface, unique in the environment                                                                                                                                              |
| billing_model *      | int                           | -1 - Debit account type<br>0 - Recharge voucher account type<br>1 - Credit account type<br>2 - Alias                                                                                                                           |
| i_customer *         | int                           | Refers to customer record to which the account belongs                                                                                                                                                                         |
| i_batch              | int                           | 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 *     | int                           | 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 *    | float (with 5 decimal places) | Initial balance of the account                                                                                                                                                                                                 |
| balance **           | float (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 **           | float (with 5 decimal places) | Amount refunded to the account owner                                                                                                                                                                                           |

|                            |                               |                                                                                                  |
|----------------------------|-------------------------------|--------------------------------------------------------------------------------------------------|
| non_call_related_charges** | float (with 5 decimal places) | Charges not directly 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                  | int                           | 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                  | int                           | ID for account's product; refers to Products table                                               |
| i_routing_plan             | int                           | ID for account's routing plan; refers to Routing_Plans table                                     |
| i_acl                      | int                           | ID for account's access level; refers to Access_Levels table                                     |
| i_vd_plan                  | int                           | ID for account's discount plan; refers to Volume_Discount_Plans table                            |
| i_moh                      | int                           | ID for account's "music on hold" option; refers to Music_On_Hold table                           |
| ua_profile_id              | int                           | ID for UA profile                                                                                |
| i_time_zone                | int                           | 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<br>max  | Proffered IVR language           |
| service_flags    | string, 32 chars<br>max | Account's call features settings |
| companyname      | string, 41 chars<br>max | Account's company name           |
| salutation       | string, 15 chars<br>max | Account's salutation             |
| firstname        | string, 25 chars<br>max | Account's first name             |
| midinit          | string, 5 chars<br>max  | Account's middle initial(s)      |
| lastname         | string, 25 chars<br>max | Account's last name              |
| baddr1           | string, 41 chars<br>max | 1st line of account's address    |
| baddr2           | string, 41 chars<br>max | 2nd line of account's address    |
| baddr3           | string, 41 chars<br>max | 3rd line of account's address    |
| baddr4           | string, 41 chars<br>max | 4th line of account's address    |
| baddr5           | string, 41 chars<br>max | 5th line of account's address    |
| city             | string, 31 chars<br>max | City of account's address        |
| state            | string, 21 chars<br>max | Province or state                |
| zip              | string, 13 chars<br>max | Postal (zip) code                |
| country          | string, 31 chars<br>max | Country                          |
| note             | string, 41 chars<br>max | Short note (description)         |
| faxnum           | string, 21 chars<br>max | Fax number                       |
| cont1            | string, 41 chars<br>max | Main contact person              |
| phone1           | string, 21 chars<br>max | Main phone number                |
| cont2            | string, 41 chars<br>max | Alternative contact person       |
| phone2           | string, 21 chars<br>max | Alternative phone number         |
| subscriber_email | string, 99 chars<br>max | Subscriber's email address       |

|                      |                               |                                                                                                                                                                                                                                                   |
|----------------------|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| login                | string, 64 chars max          | Account's login for self-care web interface. Can include only digits, letters and the following symbols: "@", "-", "_", ".". Minimum value length is 4; maximum is 64 symbols.                                                                    |
| password             | string, 16 chars max          | Account's password for self-care web interface                                                                                                                                                                                                    |
| h323_password        | string, 255 chars max         | VoIP password used to authenticate calls made using the account                                                                                                                                                                                   |
| email                | string, 128 chars max         | email address associated with the account                                                                                                                                                                                                         |
| credit_limit         | float (with 5 decimal places) | Account's credit limit value; 0 if undefined                                                                                                                                                                                                      |
| blocked              | string (Y/N)                  | Block account's calls                                                                                                                                                                                                                             |
| um_enabled           | string (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: <ul style="list-style-type: none"> <li>• N - No forwarding</li> <li>• Y - Follow-me</li> <li>• F - Advanced forwarding</li> <li>• U - Forward to SIP URI</li> <li>• C - Forward to CLD</li> </ul> |
| ecommerce_enabled    | string (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 **      | string                                        | <ul style="list-style-type: none"> <li>• O - account is open</li> <li>• C - account is terminated</li> </ul> |
| i_master_account ** | int                                           | The main account this alias account is associated with                                                       |
| password_timestamp* | dateTime                                      | Date the password was changed.                                                                               |
| customer_name **    | string                                        | The name of the customer this account is under.                                                              |
| bcc*                | string                                        | BCC email address                                                                                            |
| service_features    | array of <b>ServiceFeatureInfo</b> structures | Contains account service feature settings.                                                                   |

### GetAccountServiceFeaturesRequest structure

| Property  | Type | Description          |
|-----------|------|----------------------|
| i_account | int  | ID of account record |

### GetAccountServiceFeaturesResponse structure

| Property  | Type | Description          |
|-----------|------|----------------------|
| i_account | int  | ID of account record |

### UpdateAccountServiceFeaturesRequest structure

| Property         | Type                                          | Description              |
|------------------|-----------------------------------------------|--------------------------|
| i_account        | int                                           | ID of account record     |
| service_features | array of <b>ServiceFeatureInfo</b> structures | List of service features |

### UpdateAccountServiceFeaturesResponse structure

| Property  | Type | Description          |
|-----------|------|----------------------|
| i_account | int  | ID of account record |

### ValidateAccountInfoRequest structure

| Property     | Type               | Description                                                                                                             |
|--------------|--------------------|-------------------------------------------------------------------------------------------------------------------------|
| account_info | <b>AccountInfo</b> | 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 | <a href="#">AccountInfo</a> | Data about an account, see <a href="#">AccountInfo</a> above |

**AddAccountRequest structure**

| Property     | Type                         | Description                                                 |
|--------------|------------------------------|-------------------------------------------------------------|
| account_info | <a href="#">Account Info</a> | Note: i_account will be ignored; most fields may be omitted |

**UpdateAccountRequest structure**

| Property     | Type                        | Description                                                                                 |
|--------------|-----------------------------|---------------------------------------------------------------------------------------------|
| account_info | <a href="#">AccountInfo</a> | Note: i_account is a mandatory field; only fields requiring modification should be provided |

**AddUpdateAccountResponse structure**

| Property  | Type | Description                           |
|-----------|------|---------------------------------------|
| i_account | int  | ID of created/modified account record |

**TerminateAccountRequest structure**

| Property  | Type | Description              |
|-----------|------|--------------------------|
| i_account | int  | ID of the account record |

**TerminateAccountResponse structure**

| Property | Type | Description                                |
|----------|------|--------------------------------------------|
| success  | int  | 1 in case of success, 0 in case of failure |

**GetAccountFollowMeRequest structure**

| Property  | Type | Description              |
|-----------|------|--------------------------|
| i_account | int  | ID of the account record |

**GetAccountFollowMeResponse structure**

| Property         | Type                                                   | Description                                           |
|------------------|--------------------------------------------------------|-------------------------------------------------------|
| followme_info    | <a href="#">FollowMeInfo</a> structure                 | Follow-me settings associated with the account        |
| followme_numbers | array of <a href="#">FollowMeNumberInfo</a> structures | List of follow-me numbers associated with the account |

**UpdateAccountFollowMeRequest structure**

| Property      | Type                                   | Description                                    |
|---------------|----------------------------------------|------------------------------------------------|
| i_account     | int                                    | ID of the account record                       |
| followme_info | <a href="#">FollowMeInfo</a> structure | Follow-me settings associated with the account |

**UpdateAccountFollowMeResponse structure**

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

**FollowMeInfo structure**

| Property       | Type                      | Description                                                                                                                                                                                |
|----------------|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| i_account *    | int                       | ID of the account database record                                                                                                                                                          |
| i_follow_me ** | int                       | ID of the follow-me database record                                                                                                                                                        |
| mode           | string (default is Never) | <b>Deprecated:</b> See <a href="#">Using Service Feature Methods to Change FollowMe Settings</a> in the Appendix.                                                                          |
| sequence       | string (default is Order) | Order of use of numbers: <ul style="list-style-type: none"> <li>• <b>Order</b> - as listed</li> <li>• <b>Random</b> - random order</li> <li>• <b>Simultaneous</b> - all at once</li> </ul> |
| timeout        | int (between 0 and 999)   | Timeout, in seconds                                                                                                                                                                        |

**FollowMeNumberInfo structure**

| Property              | Type | Description                                |
|-----------------------|------|--------------------------------------------|
| i_account *           | int  | ID of the account database record          |
| i_follow_me **        | int  | ID of the follow-me database record        |
| i_follow_me_number ** | int  | ID of the follow-me number database record |

|                    |                                    |                                                                                                                                                                                  |
|--------------------|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name               | string, 32 chars max               | Symbolic name of entry                                                                                                                                                           |
| timeout            | int (between 0 and 90; default 15) | Number timeout, in seconds                                                                                                                                                       |
| redirect_number    | string, 32 chars max               | Destination of number                                                                                                                                                            |
| period             | string, 255 chars max              | Period during which number can be used                                                                                                                                           |
| period_description | string, 64K chars max              | Verbal description of the period seen by interface user                                                                                                                          |
| active             | string (Y/N)                       | Defines use of follow-me number                                                                                                                                                  |
| i_follow_order **  | int                                | 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  | string (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 |

|                   |                |                                                                                                                                                                                                                                                                                                                                               |
|-------------------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| keep_original_cli | string (Y/N/I) | <ul style="list-style-type: none"> <li>• Y - a call is forwarded with the phone number and the name of the original caller.</li> <li>• N - a call is forwarded with the phone number and the name of the forwarder.</li> <li>• I - the phone number of the caller and the forwarder name are put in the CLI of the forwarded call.</li> </ul> |
|-------------------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### AddFollowMeNumberRequest structure

| Property    | Type                                         | Description                                                 |
|-------------|----------------------------------------------|-------------------------------------------------------------|
| number_info | <a href="#">FollowMeNumberInfo</a> structure | Follow-me number to be added to account's follow-me entries |

### UpdateFollowMeNumberRequest structure

| Property                  | Type                                         | Description                                                 |
|---------------------------|----------------------------------------------|-------------------------------------------------------------|
| <u>i_follow_me_number</u> | int                                          | ID of follow-me number database record to be updated        |
| <u>number_info</u>        | <a href="#">FollowMeNumberInfo</a> structure | Follow-me number to be added to account's follow-me entries |

### AddUpdateFollowMeNumberResponse structure

| Property                  | Type | Description                            |
|---------------------------|------|----------------------------------------|
| <u>i_follow_me_number</u> | int  | ID of follow-me number database record |

### DeleteFollowMeNumberRequest structure

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

**DeleteFollowMeNumberResponse structure**

| Property | Type | Description                                                                                          |
|----------|------|------------------------------------------------------------------------------------------------------|
| success  | int  | <ul style="list-style-type: none"> <li>1 in case of success</li> <li>0 in case of failure</li> </ul> |

**ArrangeFollowMeNumbersRequest structure**

| Property  | Type         | Description                                                                                                                                               |
|-----------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| i_account | int          | ID of the account record                                                                                                                                  |
| numbers   | array of int | 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  | int  | <ul style="list-style-type: none"> <li>1 in case of success</li> <li>0 in case of failure</li> </ul> |

**GetAccountSubscriptionsRequest structure**

| Property  | Type | Description          |
|-----------|------|----------------------|
| i_account | int  | ID of account record |

**GetAccountSubscriptionsResponse structure**

| Property      | Type                                                        | Description                              |
|---------------|-------------------------------------------------------------|------------------------------------------|
| subscriptions | array of <a href="#">AccountSubscriptionInfo</a> structures | Set of account subscription data records |

**AddAccountSubscriptionRequest structure**

| Property          | Type                                    | Description                                                                                                                                                             |
|-------------------|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| i_account         | int                                     | ID of account record                                                                                                                                                    |
| subscription_info | <a href="#">AccountSubscriptionInfo</a> | Note:<br>i_account_subscription will be ignored;<br>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              | int                             | ID of account record                                               |
| i_account_subscription | int                             | ID of account subscription record to be updated                    |
| subscription_info      | <b>AccountSubscription Info</b> | Note:<br>i_account_subscription and i_subscription will be ignored |

**AddUpdateAccountSubscriptionResponse structure**

| Property               | Type | Description                                        |
|------------------------|------|----------------------------------------------------|
| i_account_subscription | int  | ID of created/modified account subscription record |

**AccountSubscriptionInfo structure**

| Property                  | Type                          | Description                                                                                                                                                                                                                                                                                                             |
|---------------------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| i_account_subscription ** | int                           | Unique ID of the account 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 the subscription plan, referenced by the i_subscription attribute                                                                                                                                                                                                                                               |
| discount_rate             | float (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 **      | string (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 **     | string (Y/N)     | Indicates whether the subscription has already been closed                                                                                  |
| int_status **      | int              | Status of the subscription: <ul style="list-style-type: none"> <li>• 0 – pending</li> <li>• 1 – active</li> <li>• 2 – closed</li> </ul>     |

### CloseDeleteAccountSubscriptionRequest structure

| Property               | Type | Description                                            |
|------------------------|------|--------------------------------------------------------|
| i_account              | int  | ID of account record                                   |
| i_account_subscription | int  | ID of account subscription record to be closed/deleted |

### CloseAccountSubscriptionResponse structure

| Property               | Type | Description                              |
|------------------------|------|------------------------------------------|
| i_account_subscription | int  | ID of closed account subscription record |

### DeleteAccountSubscriptionResponse structure

| Property | Type | Description                                   |
|----------|------|-----------------------------------------------|
| success  | int  | 1 in case of success,<br>0 in case of failure |

### ActivateAccountSubscriptionsRequest

| Property  | Type | Description          |
|-----------|------|----------------------|
| i_account | int  | ID of account record |

**ActivateAccountSubscriptionsResponse**

| Property | Type | Description                                   |
|----------|------|-----------------------------------------------|
| success  | int  | 1 in case of success,<br>0 in case of failure |

**CallBarringRuleInfo structure**

| Property         | Type   | Description                            |
|------------------|--------|----------------------------------------|
| i_cp_condition   | int    | Unique ID of call barring rule         |
| name             | string | Call barring rule name                 |
| rule_description | string | User-friendly description of this rule |
| state            | string | 'Y' if enabled, 'N' if disabled        |

**GetCallBarringOptionsRequest structure**

| Property  | Type | Description          |
|-----------|------|----------------------|
| i_account | int  | ID of account record |

**GetCallBarringOptionsResponse structure**

| Property | Type                                                 | Description          |
|----------|------------------------------------------------------|----------------------|
| options  | array of<br><b>CallBarringRuleInfo</b><br>structures | Call barring options |

**UpdateCallBarringOptionsRequest structure**

| Property  | Type                                                 | Description          |
|-----------|------------------------------------------------------|----------------------|
| i_account | int                                                  | ID of account record |
| options   | array of<br><b>CallBarringRuleInfo</b><br>structures | Call barring options |

**UpdateCallBarringOptionsResponse**

| Property | Type | Description                                   |
|----------|------|-----------------------------------------------|
| success  | int  | 1 in case of success,<br>0 in case of failure |

**MakeAccountTransactionRequest structure**

| Property  | Type                                                                                                                      | Description                                                                               |
|-----------|---------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| i_account | int                                                                                                                       | ID of account record                                                                      |
| action    | string<br>one of the following:<br><ul style="list-style-type: none"> <li>Manual charge</li> <li>Manual refund</li> </ul> | Same as those available on the Maintenance tab of the Customer edit interface, except for |

|                       |                                                                                              |                                                                                                                                                                                       |
|-----------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       | <ul style="list-style-type: none"> <li>Manual payment</li> <li>Promotional credit</li> </ul> | e-commerce transactions                                                                                                                                                               |
| amount                | float (with 5 decimal places)                                                                | Amount by which the customer's balance will increase / decrease<br>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 | int                                                                                          | 1 – do not send email notifications to this customer,<br>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.                     |
| h323_conf_id          | string                                                                                       | H323-Conf-ID of transaction                                                                                                                                                           |

### MakeAccountTransactionResponse structure

| Property       | Type                          | Description                   |
|----------------|-------------------------------|-------------------------------|
| balance        | float (with 5 decimal places) | Modified account balance      |
| transaction_id | string                        | E-Commerce transaction ID     |
| authorization  | string                        | E-Commerce authorization code |
| result_code    | string                        | E-Commerce operation          |

|       |     |                             |
|-------|-----|-----------------------------|
|       |     | result code                 |
| i_xdr | int | Unique ID of the xdr record |

### UpdateAccountPaymentMethodRequest structure

| Property            | Type                              | Description                                                                                 |
|---------------------|-----------------------------------|---------------------------------------------------------------------------------------------|
| i_account           | int                               | ID of account record                                                                        |
| payment_method_info | <a href="#">PaymentMethodInfo</a> | Data about payment method; see <a href="#">Access to Customer Information</a> section above |

### UpdateAccountPaymentMethodResponse structure

| Property      | Type | Description                          |
|---------------|------|--------------------------------------|
| i_credit_card | int  | ID of modified payment method record |

### GetSipStatusRequest structure

| Property  | Type | Description          |
|-----------|------|----------------------|
| i_account | int  | ID of account record |

### GetSipStatusResponse structure

| Property   | Type                          | Description                                                                           |
|------------|-------------------------------|---------------------------------------------------------------------------------------|
| sip_status | int                           | 1 – online (account is used by SIP UA to register with the SIP server)<br>0 – offline |
| sip_info   | <a href="#">SipStatusInfo</a> | 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      | int    | 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      | int    | 1 - UA behind NAT                                                                             |

|               |                         |                                                 |
|---------------|-------------------------|-------------------------------------------------|
| expires       | dateTime,<br>ISO format | Date and time this registration will expire     |
| last_modified | dateTime,<br>ISO format | Date and time the register request was received |

**GetUAInfoRequest structure**

| Property  | Type | Description          |
|-----------|------|----------------------|
| i_account | int  | ID of account record |

**GetUAInfoResponse structure**

| Property     | Type   | Description                             |
|--------------|--------|-----------------------------------------|
| i_ua         | int    | ID of UA record; refers to the UA table |
| name         | string | Name of UA                              |
| mac          | string | MAC address of UA                       |
| port         | int    | 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   | int  | ID of account record                                                                                   |
| i_ua        | int  | ID of UA record                                                                                        |
| <u>port</u> | int  | UA port used by this account<br>Note: if the type of UA is PortaPhone, the port field is not mandatory |

**AssignUAResponse structure**

| Property | Type | Description                                   |
|----------|------|-----------------------------------------------|
| success  | int  | 1 in case of success,<br>0 in case of failure |

**ReleaseUARequest structure**

| Property  | Type | Description          |
|-----------|------|----------------------|
| i_account | int  | ID of account record |

**ReleaseUAResponse structure**

| Property | Type | Description                                   |
|----------|------|-----------------------------------------------|
| success  | int  | 1 in case of success,<br>0 in case of failure |

**GetAccountXDRListRequest structure**

| Property         | Type     | Description                                       |
|------------------|----------|---------------------------------------------------|
| i_account        | int      | ID of account record                              |
| i_service        | int      | ID of Service; refers to Services table           |
| limit            | int      | Number of rows to retrieve                        |
| offset           | int      | Number of rows to skip at beginning of list       |
| <u>from_date</u> | dateTime | Fetch xDRs with bill_time starting from this date |
| <u>to_date</u>   | dateTime | Fetch xDRs with bill_time before this date        |

**GetAccountXDRListResponse structure**

| Property | Type                              | Description  |
|----------|-----------------------------------|--------------|
| xdr_list | array of <b>XDRInfo</b> structure | List of XDRs |

**XDRInfo structure**

| Property             | Type     | Description                                                                 |
|----------------------|----------|-----------------------------------------------------------------------------|
| i_xdr                | int      | ID of XDR record                                                            |
| CLI                  | string   | Calling Line Identification                                                 |
| CLD                  | string   | Called Line Identification                                                  |
| charged_amount       | float    | Amount charged                                                              |
| charged_quantity     | int      | Units charged                                                               |
| country              | string   | Country                                                                     |
| subdivision          | string   | Country Subdivision                                                         |
| description          | string   | Destination description                                                     |
| disconnect_cause     | string   | The code of disconnect cause                                                |
| disconnect_reason    | string   | Call disconnect reason                                                      |
| bill_status          | string   | Call bill status                                                            |
| connect_time         | dateTime | Call connect time                                                           |
| unix_connect_time    | int      | Call connect time (expressed in> Unix time format - seconds since epoch)    |
| disconnect_time      | dateTime | Call disconnect time                                                        |
| unix_disconnect_time | int      | Call disconnect time (expressed in> Unix time format - seconds since epoch) |
| bill_time            | dateTime | Call bill time                                                              |

**AliasInfo structure**

| Property | Type   | Description |
|----------|--------|-------------|
| id       | string | Alias ID    |

|                  |        |                                 |
|------------------|--------|---------------------------------|
| i_master_account | int    | ID of parent account record     |
| blocked          | string | Block account's calls           |
| i_account        | int    | Unique ID of an account (alias) |

**AddAccountAliasRequest structure**

| Property   | Type                                | Description       |
|------------|-------------------------------------|-------------------|
| alias_info | <a href="#">AliasInfo</a> structure | Alias information |

**AddAccountAliasResponse structure**

| Property | Type | Description                |
|----------|------|----------------------------|
| success  | int  | 1 if success, 0 if failure |

**GetAccountAliasListRequest structure**

| Property  | Type | Description          |
|-----------|------|----------------------|
| i_account | int  | ID of account record |

**GetAccountAliasListResponse structure**

| Property   | Type                                          | Description     |
|------------|-----------------------------------------------|-----------------|
| alias_list | array of <a href="#">AliasInfo</a> structures | List of aliases |

**DeleteAccountAliasRequest structure**

| Property   | Type                                | Description       |
|------------|-------------------------------------|-------------------|
| alias_info | <a href="#">AliasInfo</a> structure | Alias information |

**DeleteAccountAliasResponse structure**

| Property | Type | Description                |
|----------|------|----------------------------|
| success  | int  | 1 if success, 0 if failure |

**MoveAccountRequest structure**

| Property   | Type   | Description                                       |
|------------|--------|---------------------------------------------------|
| i_account  | int    | ID of account to be moved                         |
| i_customer | int    | ID of customer to move account to                 |
| batch_name | string | Name of the batch to put the account record into. |

**MoveAccountResponse structure**

| Property      | Type | Description       |
|---------------|------|-------------------|
| old_i_account | int  | Old ID of account |
| i_account     | int  | New ID of account |

|          |                  |                                  |
|----------|------------------|----------------------------------|
| warnings | Array of Strings | Warnings accumulated during move |
|----------|------------------|----------------------------------|

**GetAccountPaymentMethodInfoRequest structure**

| Property  | Type | Description          |
|-----------|------|----------------------|
| i_account | int  | ID of account record |

**GetAccountPaymentMethodInfoResponse structure**

| Property            | Type                                        | Description              |
|---------------------|---------------------------------------------|--------------------------|
| payment_method_info | <a href="#">PaymentMethodInfo</a> structure | PaymentMethodInfo object |

**CPCConditionInfo structure**

| Property       | Type                                                       | Description                                                                                                                    |
|----------------|------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| i_account      | int                                                        | ID of account record                                                                                                           |
| i_cp_condition | int                                                        | ID of call processing condition record                                                                                         |
| type           | string                                                     | One of the following: <ul style="list-style-type: none"> <li>• ToNumber</li> <li>• FromNumber</li> <li>• TimeWindow</li> </ul> |
| name           | string                                                     | Name of condition                                                                                                              |
| numbers        | Array of <a href="#">CPCConditionNumberInfo</a> structures | Used by ToNumber and FromNumber condition types                                                                                |
| time_window    | <a href="#">CPCConditionTimeWindowInfo</a> structure       | Used by TimeWindow condition type                                                                                              |
| is_used        | string                                                     | Read-only – whether the condition is used in a rule (Y/N)                                                                      |

**CPCConditionTimeWindowInfo structure**

| Property    | Type   | Description           |
|-------------|--------|-----------------------|
| period      | string | Time::Period string   |
| description | string | Description of period |

**CPCConditionNumberInfo structure**

| Property | Type   | Description                       |
|----------|--------|-----------------------------------|
| number   | string | Phone number                      |
| onnet    | string | Whether the number is onnet (Y/N) |

**CPRuleInfo structure**

| Property                   | Type   | Description                                                                                  |
|----------------------------|--------|----------------------------------------------------------------------------------------------|
| i_cp_rule                  | int    | ID of call processing condition record                                                       |
| i_account                  | int    | ID of account record                                                                         |
| from_number_i_cp_condition | int    | ID of FromNumber call processing condition                                                   |
| to_number_i_cp_condition   | int    | ID of ToNumber call processing condition                                                     |
| time_window_i_cp_condition | int    | ID of TimeWindow call processing condition                                                   |
| order_number               | int    | Read-only – ordinal number for this rule in the rule set                                     |
| is_active                  | string | Whether rule is enabled (Y/N)                                                                |
| action                     | int    | Action (for how to make the correct value, see the Service Features example in the Appendix) |

**AddCPConditionRequest structure**

| Property          | Type                              | Description                         |
|-------------------|-----------------------------------|-------------------------------------|
| cp_condition_info | <b>CPCConditionInfo</b> structure | Call processing condition structure |

**AddCPConditionResponse structure**

| Property       | Type | Description                            |
|----------------|------|----------------------------------------|
| i_cp_condition | int  | ID of call processing condition record |

**UpdateCPConditionRequest structure**

| Property          | Type                              | Description                         |
|-------------------|-----------------------------------|-------------------------------------|
| cp_condition_info | <b>CPCConditionInfo</b> structure | Call processing condition structure |

**UpdateCPConditionResponse structure**

| Property       | Type | Description                           |
|----------------|------|---------------------------------------|
| i_cp_condition | int  | ID of call processing condition entry |

**GetCPConditionListRequest structure**

| Property  | Type   | Description                                                                                                              |
|-----------|--------|--------------------------------------------------------------------------------------------------------------------------|
| i_account | int    | ID of account record                                                                                                     |
| type      | string | One of the following: <ul style="list-style-type: none"> <li>FromNumber</li> <li>ToNumber</li> <li>TimeWindow</li> </ul> |

**GetCPConditionListResponse structure**

| Property          | Type                                       | Description                         |
|-------------------|--------------------------------------------|-------------------------------------|
| cp_condition_list | Array of <b>CPConditionInfo</b> structures | Array of CPConditionInfo structures |

**AddCPRuleRequest structure**

| Property     | Type                        | Description                                                                 |
|--------------|-----------------------------|-----------------------------------------------------------------------------|
| cp_rule_info | <b>CPRuleInfo</b> structure | Call processing rule info structure<br>Note: i_account is a mandatory field |

**AddCPRuleResponse structure**

| Property  | Type | Description                       |
|-----------|------|-----------------------------------|
| i_cp_rule | int  | ID of call processing rule record |

**DeleteCPRuleRequest structure**

| Property  | Type | Description                       |
|-----------|------|-----------------------------------|
| i_cp_rule | int  | ID of call processing rule record |

**DeleteCPRuleResponse structure**

| Property | Type | Description               |
|----------|------|---------------------------|
| success  | int  | 1 – success<br>0 – failed |

**UpdateCPRuleRequest structure**

| Property     | Type                        | Description                                                            |
|--------------|-----------------------------|------------------------------------------------------------------------|
| cp_rule_info | <b>CPRuleInfo</b> structure | Call processing rule info structure<br>Note: i_account will be ignored |

**UpdateCPRuleResponse structure**

| Property  | Type | Description                       |
|-----------|------|-----------------------------------|
| i_cp_rule | int  | ID of call processing rule record |

**GetCPRuleListRequest structure**

| Property  | Type | Description          |
|-----------|------|----------------------|
| i_account | int  | ID of account record |

**GetCPRuleListResponse structure**

| Property          | Type                                           | Description                    |
|-------------------|------------------------------------------------|--------------------------------|
| cp_condition_list | Array of <a href="#">CPRuleInfo</a> structures | Array of CPRuleInfo structures |

**ArrangeCPRulesRequest structure**

| Property  | Type         | Description                           |
|-----------|--------------|---------------------------------------|
| i_account | int          | ID of account record                  |
| rules     | Array of int | Array of IDs of CPRuleInfo structures |

**ArrangeCPRulesResponse structure**

| Property | Type | Description               |
|----------|------|---------------------------|
| success  | int  | 1 – success<br>0 – failed |

**TopupAccountRequest structure**

| Property     | Type                                  | Description                                                                                  |
|--------------|---------------------------------------|----------------------------------------------------------------------------------------------|
| account_info | <a href="#">AccountInfo</a> structure | Data about an account, see <a href="#">AccountInfo</a> above<br>Note: only i_account is used |
| voucher_info | <a href="#">VoucherInfo</a> structure | Information about voucher, see <a href="#">VoucherInfo</a> below                             |

**TopupAccountResponse structure**

| Property | Type  | Description                                         |
|----------|-------|-----------------------------------------------------|
| amount   | float | Amount by which the account's balance will increase |
| balance  | float | The current amount of the account's balance         |

**VoucherInfo structure**

| Property | Type   | Description       |
|----------|--------|-------------------|
| id       | string | ID of the voucher |

**GetAccountVDCounterListRequest structure**

| Property     | Type   | Description                                                                         |
|--------------|--------|-------------------------------------------------------------------------------------|
| i_account    | int    | Unique ID of the account record                                                     |
| service_name | string | Service name pattern                                                                |
| dg_name      | string | Destination group name pattern                                                      |
| peak_level   | string | ID of the Peak Level: 0 (peak period), 1 (off-peak period), 2 (2nd off-peak period) |

**GetAccountVDCounterListResponse structure**

| Property     | Type                                            | Description              |
|--------------|-------------------------------------------------|--------------------------|
| counter_list | Array of <a href="#">CounterInfo</a> structures | Array of counter objects |

**CounterInfo structure**

| Property      | Type   | Description                                      |
|---------------|--------|--------------------------------------------------|
| i_avd_counter | int    | Unique ID of the account volume discount counter |
| i_account     | int    | Unique ID of the account record                  |
| dg_name       | string | Destination group name                           |
| service_name  | string | Name of the service                              |
| peak_level    | int    | ID of the Peak Level                             |
| rate_unit     | string | Units                                            |
| counter_value | float  | Value of counter                                 |

**GetAccountCustomFieldsValuesRequest structure**

| Property         | Type | Description                     |
|------------------|------|---------------------------------|
| <u>i_account</u> | int  | Unique ID of the account record |

**GetAccountCustomFieldsValuesResponse structure**

| Property                          | Type                                                       | Description                                        |
|-----------------------------------|------------------------------------------------------------|----------------------------------------------------|
| custom_fields_values <sup>n</sup> | Array of <a href="#">CustomFieldsValuesInfo</a> structures | List of Custom Fields values for the given account |

**CustomFieldsValuesInfo structure**

| Property                       | Type   | Description                        |
|--------------------------------|--------|------------------------------------|
| <u>name</u>                    | string | Custom Field name                  |
| <u>text_value</u> <sup>n</sup> | string | Custom Field value                 |
| <u>db_value</u> <sup>n</sup>   | string | Database value of the Custom Field |

**UpdateAccountCustomFieldsValuesRequest structure**

| Property                                 | Type                                              | Description                                        |
|------------------------------------------|---------------------------------------------------|----------------------------------------------------|
| <u>i_account</u>                         | int                                               | Unique ID of the account record                    |
| <u>custom_fields_values</u> <sup>n</sup> | Array of <b>CustomFieldsValuesInfo</b> structures | List of Custom Fields values for the given account |

**UpdateAccountCustomFieldsValuesResponse structure**

| Property                                 | Type                                              | Description                                        |
|------------------------------------------|---------------------------------------------------|----------------------------------------------------|
| <u>i_account</u> <sup>n</sup>            | int                                               | Unique ID of the account record                    |
| <u>custom_fields_values</u> <sup>n</sup> | Array of <b>CustomFieldsValuesInfo</b> structures | List of Custom Fields values for the given account |

**GetAccountMOHListInfoRequest structure**

| Property         | Type | Description                     |
|------------------|------|---------------------------------|
| <u>i_account</u> | int  | Unique ID of the account record |

**GetAccountMOHListInfoResponse structure**

| Property             | Type                                | Description             |
|----------------------|-------------------------------------|-------------------------|
| <u>moh_list_info</u> | <b>AccountMOHListInfo</b> structure | Account MOH List object |

**AccountMOHListInfo structure**

| Property                      | Type                    | Description                                 |
|-------------------------------|-------------------------|---------------------------------------------|
| <u>system_default_i_moh</u>   | int                     | Default system MOH object                   |
| <u>is_moh_update_disabled</u> | int                     | Indicates whether the MOH update is allowed |
| <u>default_moh_list</u>       | Array of <b>MOHInfo</b> | Default MOH list                            |

|                          |                                    |                                                         |
|--------------------------|------------------------------------|---------------------------------------------------------|
|                          | structures                         |                                                         |
| account_defined_moh_list | Array of <b>MOHInfo</b> structures | MOH list defined by the account                         |
| aggregated_moh_list      | Array of <b>MOHInfo</b> structures | Default MOH list joined with Account's defined MOH list |

**GetAccountFullVDCounterListInfoRequest structure**

| Property         | Type | Description                     |
|------------------|------|---------------------------------|
| <u>i_account</u> | int  | Unique ID of the account record |

**GetFullVDCounterListInfoResponse structure**

| Property                  | Type                                       | Description                      |
|---------------------------|--------------------------------------------|----------------------------------|
| counter_list <sup>n</sup> | Array of <b>FullCounterInfo</b> structures | List of volume discount counters |

**FullCounterInfo structure**

| Property            | Type   | Description                    |
|---------------------|--------|--------------------------------|
| dg_name             | string | Destination group name pattern |
| service_name        | string | Name of the service            |
| peak_level          | string | ID of the peak level           |
| threshold           | string | Threshold value                |
| used                | string | Used discount amount           |
| remaining           | string | Remaining discount amount      |
| discount_level      | string | Current discount value         |
| next_discount_level | string | Next discount value            |
| discount_info       | string | Information about discount     |

**ChangeAccountPasswordRequest structure**

| Property            | Type   | Description                     |
|---------------------|--------|---------------------------------|
| <u>new_password</u> | string | New password                    |
| <u>old_password</u> | string | Old password                    |
| <u>i_account</u>    | int    | Unique ID of the account record |

**ChangePasswordResponse structure**

| Property       | Type | Description                |
|----------------|------|----------------------------|
| <u>success</u> | int  | 1 in case of success, 0 in |

|        |                                                    |                   |
|--------|----------------------------------------------------|-------------------|
|        |                                                    | case of failure   |
| errors | <b>ChangePasswordResponseErrMessages</b> structure | Error explanation |

### ChangePasswordResponseErrMessages structure

| Property     | Type   | Description        |
|--------------|--------|--------------------|
| new_password | string | New password error |
| old_password | string | Old password error |

### GetAccountProductInfoRequest structure

| Property         | Type | Description                     |
|------------------|------|---------------------------------|
| <u>i_account</u> | int  | Unique ID of the account record |

### GetProductInfoResponse structure

| Property                         | Type                         | Description         |
|----------------------------------|------------------------------|---------------------|
| <u>product_info</u> <sup>n</sup> | <b>ProductInfo</b> structure | Product data record |

### GetMemberOfHuntgroupsList structure

| Property         | Type | Description                     |
|------------------|------|---------------------------------|
| <u>i_account</u> | int  | Unique ID of the account record |

### GetAccountPermittedProxyInfoRequest structure

| Property         | Type | Description                     |
|------------------|------|---------------------------------|
| <u>i_account</u> | int  | Unique ID of the account record |

### GetAccountPermittedProxyInfoResponse structure

| Property                           | Type                                               | Description                                            |
|------------------------------------|----------------------------------------------------|--------------------------------------------------------|
| is_add_new_sip_proxy_allowed       | int                                                | Indicates whether the adding of a new proxy is allowed |
| permitted_sip_proxies <sup>n</sup> | Array of <b>PermittedSipProxiesInfo</b> structures | List of permitted SIP proxies                          |

**PermittedSipProxiesInfo structure**

| Property   | Type   | Description       |
|------------|--------|-------------------|
| proxy_name | string | Name of the proxy |

**GetAccountTransactionsTotalInfoRequest structure**

| Property               | Type     | Description                             |
|------------------------|----------|-----------------------------------------|
| <u>i_account</u>       | int      | Unique ID of the account record         |
| i_service <sup>n</sup> | int      | ID of Service; refers to Services table |
| <u>from_date</u>       | dateTime | Get transactions made after this date   |
| <u>to_date</u>         | dateTime | Get transactions made before this date  |

**GetTransactionsTotalInfoResponse structure**

| Property                      | Type                           | Description                                                 |
|-------------------------------|--------------------------------|-------------------------------------------------------------|
| count                         | int                            | Total transactions                                          |
| sessions_count                | int                            | Total sessions                                              |
| total_amount                  | int                            | Total transaction amount                                    |
| iso_4217                      | string                         | Transaction currency                                        |
| total_info                    | Array of <b>TotalTransInfo</b> | List of transaction total values                            |
| per_service_info <sup>n</sup> | Array of <b>PerServiceInfo</b> | List of objects containing information on per service basis |

**PerServiceInfo structure**

| Property         | Type   | Description                         |
|------------------|--------|-------------------------------------|
| charged_time     | int    | Time charged                        |
| charged_amount   | float  | Amount charged                      |
| charged_quantity | int    | Units charged                       |
| total_sessions   | int    | Self-explanatory                    |
| total            | int    | Self-explanatory                    |
| name             | string | Service name                        |
| unit             | string | Units                               |
| rating_base      | string | Self-explanatory                    |
| rate_unit        | string | Units (e.g. USD, messages, minutes) |
| rating_base_unit | string | Self-explanatory                    |
| ratio            | int    | Self-explanatory                    |
| i_service        | int    | ID of a service; refers to          |

|                |     |                      |
|----------------|-----|----------------------|
|                |     | Services table       |
| i_service_type | int | ID of a service type |

### TotalTransInfo structure

| Property | Type   | Description      |
|----------|--------|------------------|
| name     | string | Self-explanatory |
| value    | float  | Self-explanatory |

## Access to DID Inventory Information

URI (namespace): <https://pbslave-server.yourdomain.com/Porta/SOAP/DID>

### Methods

#### get\_vendor\_batch\_list

Parameters: [GetVendorBatchListRequest](#)

Return value: [GetVendorBatchListResponse](#)

Realm: administrator, reseller

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](#)

Realm: administrator, reseller

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](#)

Realm: administrator, reseller

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

#### reserve\_number

Parameters: [ReserveDIDNumberRequest](#)

Return value: [ReserveDIDNumberResponse](#)

Realm: administrator, reseller

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.

Note: before the reservation, this method checks that the number was not already reserved during the specified interval.

### release\_number

Parameters: [ReleaseDIDNumberRequest](#)

Return value: [ReleaseDIDNumberResponse](#)

Realm: administrator, reseller

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                                                                                                                                                         |
| owner_batch           | int    | ID of owner batch record; the list will include only those vendor batches containing DID numbers included in this particular owner batch                                                         |
| reserve_term          | int    | 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                 | int    | Number of rows to retrieve                                                                                                                                                                       |
| offset                | int    | Number of rows to skip at beginning of list                                                                                                                                                      |

### GetVendorBatchListResponse structure

| Property          | Type                                     | Description                 |
|-------------------|------------------------------------------|-----------------------------|
| vendor_batch_list | array of <a href="#">VendorBatchInfo</a> | Set of vendor batch records |

|  |            |  |
|--|------------|--|
|  | structures |  |
|--|------------|--|

**VendorBatchInfo structure**

| Property              | Type   | Description                      |
|-----------------------|--------|----------------------------------|
| i_dv_batch            | int    | 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                                                                                                                                                    |
| owner_batch           | int    | 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          | int    | Number of seconds to check for reserved status; the list will include only those DID numbers that were reserved more than reserve_term seconds ago (or were not reserved at all) |
| usage                 | string | <ul style="list-style-type: none"> <li>• U – used (assigned to an account)</li> <li>• F – not used</li> <li>• A – all (default value)</li> </ul>                                 |
| limit                 | int    | Number of rows to retrieve                                                                                                                                                       |
| offset                | int    | Number of rows to skip at beginning of list                                                                                                                                      |

**GetDIDNumberListResponse structure**

| Property        | Type                                     | Description               |
|-----------------|------------------------------------------|---------------------------|
| did_number_list | array of <b>DIDNumberInfo</b> structures | Set of DID number records |

**DIDNumberInfo structure**

| Property          | Type                     | Description                                                                                               |
|-------------------|--------------------------|-----------------------------------------------------------------------------------------------------------|
| i_did_number      | int                      | 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                                               |
|-------------|-----------------------------------------|-----------------------------------------------------------|
| number_info | <a href="#">DIDNumberInfo</a> structure | Data for account; see <a href="#">DIDNumberInfo</a> above |

**ReserveDIDNumberRequest structure**

| Property     | Type   | Description                                                                                                                                                                                                    |
|--------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| number       | string | DID number to reserve                                                                                                                                                                                          |
| reserve_term | int    | Interval in seconds that is used to check that the number was not already reserved during this interval. And in such a way prevent the reservation of numbers that were reserved less than specified time ago. |

**ReserveDIDNumberResponse structure**

| Property  | Type                    | Description               |
|-----------|-------------------------|---------------------------|
| success   | int                     | 1 – success<br>0 – failed |
| timestamp | string (Unix timestamp) | Time stamp of reservation |

**ReleaseDIDNumberRequest structure**

| Property         | Type                    | Description                                      |
|------------------|-------------------------|--------------------------------------------------|
| number           | string                  | DID number to release                            |
| <u>timestamp</u> | string (Unix timestamp) | Time stamp of previous reservation to be checked |

**ReleaseDIDNumberResponse structure**

| Property | Type | Description               |
|----------|------|---------------------------|
| success  | int  | 1 – success<br>0 – failed |

## Access to UA Inventory Information

URI (namespace): <https://pbslave-server.yourdomain.com/Porta/SOAP/UA>

### Methods

#### [get\\_ua\\_list](#)

Parameters: [GetUAListRequest](#)

Return value: [GetUAListResponse](#)

Realm: administrator, reseller

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.

#### [add\\_ua](#)

Parameters: [AddUARequest](#)

Return value: [AddUAResponse](#)

Realm: administrator, reseller

This method allows an API user to add a new UA device (IP phone) to the IP phone inventory.

#### [delete\\_ua](#)

Parameters: [DeleteUARequest](#)

Return value: [DeleteUAResponse](#)

Realm: administrator, reseller

This method allows an API user to delete a UA device, provided that it is not being used by any account.

### Type Reference

#### [GetUAListRequest](#) structure

| Property     | Type   | Description                                                                  |
|--------------|--------|------------------------------------------------------------------------------|
| name         | string | 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 | <ul style="list-style-type: none"><li>U – used (at least one port)</li></ul> |

|        |     |                                                                                                                                                      |
|--------|-----|------------------------------------------------------------------------------------------------------------------------------------------------------|
|        |     | <ul style="list-style-type: none"> <li>• C – completely used (all ports)</li> <li>• F – not used</li> <li>• A – any state (default value)</li> </ul> |
| limit  | int | Number of rows to retrieve                                                                                                                           |
| offset | int | Number of rows to skip at beginning of list                                                                                                          |

**GetUaListResponse structure**

| Property | Type                                       | Description       |
|----------|--------------------------------------------|-------------------|
| ua_list  | array of <a href="#">UAInfo</a> structures | Set of UA records |

**AddUaRequest structure**

| Property | Type                             | Description |
|----------|----------------------------------|-------------|
| ua_info  | <a href="#">UAInfo</a> structure | UA record   |

**AddUaResponse structure**

| Property | Type | Description     |
|----------|------|-----------------|
| i_ua     | int  | ID of UA record |

**DeleteUaRequest structure**

| Property | Type | Description     |
|----------|------|-----------------|
| i_ua     | int  | ID of UA record |

**DeleteUaResponse structure**

| Property | Type | Description                            |
|----------|------|----------------------------------------|
| success  | int  | 1 if operation is successful, 0 if not |

**UAInfo structure**

| Property     | Type   | Description                          |
|--------------|--------|--------------------------------------|
| i_ua         | int    | ID of UA record                      |
| name         | string | UA name                              |
| type         | string | UA type                              |
| i_ua_type    | int    | ID of UA type                        |
| description  | string | UA description                       |
| mac          | string | UA MAC address                       |
| inventory_id | string | UA inventory ID                      |
| profile      | string | UA Provisioning Profile              |
| port         | string | UA port used by this account         |
| ascii_key    | string | ASCII Key                            |
| i_customer   | int    | ID of customer record (if managed by |

|               |        |                              |
|---------------|--------|------------------------------|
|               |        | reseller)                    |
| ua_profile_id | string | ID of UA profile             |
| used          | string | Flag that indicates UA usage |
| notepad       | string | UA notepad                   |

## Access to Product Information

URI (namespace): <https://pbslave-server.yourdomain.com/Porta/SOAP/Product>

### Key

- \* - A value can be entered for this property only when inserting new records, and cannot be changed later.
- \*\* - This property is read-only; 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.
- <sup>n</sup> – This property is nillable. It means that the element can be present without its normal content, provided that `xsi:nil="true"` is one of its attributes and this request will be processed specifically.

## Methods

### get\_product\_list

Parameters: [GetProductListRequest](#)

Return value: [GetProductListResponse](#)

Realm: administrator, reseller

This method allows an API user to get a list of products.

### get\_product\_info

Parameters: [GetProductInfoRequest](#)

Return value: [GetProductInfoResponse](#)

Realm: administrator, reseller

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

## Type Reference

### ProductInfo structure

| Property               | Type | Description          |
|------------------------|------|----------------------|
| i_product <sup>n</sup> | int  | ID of product record |

|                                         |        |                                                                                                              |
|-----------------------------------------|--------|--------------------------------------------------------------------------------------------------------------|
| default_i_acl <sup>n</sup>              | int    | Which ACL should be assigned to new accounts created with this product.                                      |
| Subscription_host <sup>n</sup>          | string | Self-explanatory                                                                                             |
| breakage <sup>n</sup>                   | float  | Used in Account Management to obtain a summary of .depleted. (practically unusable) accounts.                |
| Maintenance_fee <sup>n</sup>            | float  | Amount to charge any account using this product according to the schedule defined by the maintenance period. |
| Info_url <sup>n</sup>                   | string | URL to an external website describing product features.                                                      |
| I_vd_plan <sup>n</sup>                  | int    | ID of volume discount plan                                                                                   |
| validation_module <sup>n</sup>          | string | Self-explanatory                                                                                             |
| name <sup>n</sup>                       | string | Product name                                                                                                 |
| description <sup>n</sup>                | string | Product description                                                                                          |
| maintenance_effective_from <sup>n</sup> | date   | Defines when maintenance fee starts to be applied.                                                           |
| Subscription_http_referer <sup>n</sup>  | string | Self-explanatory                                                                                             |
| maintenance_period <sup>n</sup>         | string | Defines how often to apply maintenance fee.                                                                  |
| Continue_uri <sup>n</sup>               | string | Self-explanatory                                                                                             |
| hidden <sup>n</sup>                     | string | Self-explanatory                                                                                             |
| i_customer <sup>n</sup>                 | int    | Managed by                                                                                                   |
| iso_4217 <sup>n</sup>                   | string | Product currency                                                                                             |

### GetProductListRequest structure

| Property   | Type   | Description                                                                                                     |
|------------|--------|-----------------------------------------------------------------------------------------------------------------|
| i_customer | int    | ID of customer (reseller) record; if specified, the product list will be filtered by the corresponding reseller |
| iso_4217   | string | Product currency                                                                                                |
| offset     | int    | Number of rows to skip at beginning of list                                                                     |
| limit      | int    | Number of rows to retrieve                                                                                      |

### GetProductListResponse structure

| Property     | Type                                            | Description                 |
|--------------|-------------------------------------------------|-----------------------------|
| product_list | Array of <a href="#">ProductInfo</a> structures | Set of product data records |

### GetProductInfoRequest structure

| Property  | Type   | Description                                                   |
|-----------|--------|---------------------------------------------------------------|
| i_product | int    | ID of product record                                          |
| name      | string | Name of product, or part of the name. Use % sign as wildcard. |

### GetProductInfoResponse structure

| Property     | Type                                  | Description         |
|--------------|---------------------------------------|---------------------|
| product_info | <a href="#">ProductInfo</a> structure | Product data record |

## Access to Rate Information

URI (namespace): <https://pbslave-server.yourdomain.com/Porta/SOAP/Rate>

### Methods

#### [add\\_rate](#)

Parameters: [AddRateRequest](#)

Return value: [AddRateResponse](#)

Realm: administrator, reseller

This method allows an API user (administrator or reseller) to add a new rate for a destination.

#### [update\\_rate](#)

Parameters: [UpdateRateRequest](#)

Return value: [UpdateRateResponse](#)

Realm: administrator, reseller

This method allows an API user to update an existing rate for a destination.

#### [add\\_rate\\_group](#)

Parameters: [AddRateGroupRequest](#)

Return value: **AddRateGroupResponse**

Realm: administrator, reseller

This method allows an API user (administrator or reseller) to add a new rate for every destination in a destination group.

### **update\_rate\_group**

Parameters: **UpdateRateGroupRequest**

Return value: **UpdateRateGroupResponse**

Realm: administrator, reseller

This method allows an API user to update the existing rate for every destination in a destination group.

### **get\_rate\_info**

Parameters: **GetRateInfoRequest**

Return value: **GetRateInfoResponse**

Realm: administrator, reseller

This method allows an API user to get information about a rate.

### **get\_rate\_list**

Parameters: **GetRateListRequest**

Return value: **GetRateListResponse**

Realm: administrator, reseller

This method allows an API user to retrieve the list of rates.

## **Type Reference**

### **AddRateRequest structure**

| Property  | Type            | Description      |
|-----------|-----------------|------------------|
| rate_info | <b>RateInfo</b> | Rate data record |

### **AddRateResponse structure**

| Property | Type | Description                   |
|----------|------|-------------------------------|
| i_rate   | int  | ID of the rate record created |

### **AddRateGroupRequest structure**

| Property     | Type            | Description                 |
|--------------|-----------------|-----------------------------|
| i_dest_group | int             | ID of the destination group |
| rate_info    | <b>RateInfo</b> | Rate data record            |

**AddRateGroupResponse structure**

| Property    | Type         | Description                     |
|-------------|--------------|---------------------------------|
| i_rate_list | Array of Int | List of ID of the rates created |

**UpdateRateRequest structure**

| Property  | Type                     | Description      |
|-----------|--------------------------|------------------|
| rate_info | <a href="#">RateInfo</a> | Rate data record |

**UpdateRateResponse structure**

| Property | Type | Description                    |
|----------|------|--------------------------------|
| i_rate   | int  | ID of the modified rate record |

**UpdateRateGroupRequest structure**

| Property     | Type                     | Description                 |
|--------------|--------------------------|-----------------------------|
| i_dest_group | int                      | ID of the destination group |
| rate_info    | <a href="#">RateInfo</a> | Rate data record            |

**UpdateRateGroupResponse structure**

| Property    | Type         | Description                      |
|-------------|--------------|----------------------------------|
| i_rate_list | Array of Int | List of ID of the modified rates |

**RateInfo structure**

| Property                      | Type     | Description                                             |
|-------------------------------|----------|---------------------------------------------------------|
| <u>i_tariff</u>               | int      | ID of the tariff record                                 |
| <u>i_dest</u>                 | int      | ID of the destination record                            |
| <u>i_rate</u>                 | int      | ID of the rate record (mandatory for update operations) |
| <u>i_offpeak</u> <sup>n</sup> | int      | ID of the off-peak record                               |
| <u>interval 1</u>             | int      | First billing interval                                  |
| <u>interval n</u>             | int      | Next billing interval                                   |
| <u>price 1</u>                | float    | Price for first interval                                |
| <u>price n</u>                | float    | Price for next interval                                 |
| <u>op_interval 1</u>          | int      | First billing interval for off-peak time                |
| <u>op_interval n</u>          | int      | Next billing interval for off-peak time                 |
| <u>op_price 1</u>             | float    | Price for first interval for off-peak time              |
| <u>op_price n</u>             | float    | Price for next interval for off-peak time               |
| <u>effective_from</u>         | dateTime | Defines when the rate starts to be applied              |
| <u>inactive_from</u>          | dateTime | Defines when the rate stops to be                       |

|                             |        |                                                                                                            |
|-----------------------------|--------|------------------------------------------------------------------------------------------------------------|
|                             |        | applied                                                                                                    |
| effective_immediately       | string | Defines that the rate starts to be applied immediately (if value is “Y” - effective_from field is ignored) |
| hidden                      | string | Indicates that the rate is excessive and may be omitted when making a list of rates                        |
| discontinued                | string | Indicates that rate is discontinued                                                                        |
| forbidden                   | string | Indicates that no calls are authorized for the particular destination                                      |
| preference                  | int    | Routing priority                                                                                           |
| huntstop                    | string | Indicates whether huntstop is set or not                                                                   |
| formula                     | string | Indicates if this rate uses a call rating formula                                                          |
| route_category              | int    | ID of route category                                                                                       |
| op_route_category           | int    | ID of route category for off-peak period                                                                   |
| op_preference               | int    | Routing priority for off-peak period                                                                       |
| op_huntstop                 | string | Indicates whether huntstop for off-peak period is set or not                                               |
| i_rate_formula <sup>a</sup> | int    |                                                                                                            |
| reverse_rating              | string | Indicates whether rate is marked reverse or not                                                            |
| special_price_1             | float  | Special price for first interval                                                                           |
| special_price_n             | float  | Special price for next interval                                                                            |
| i_dest_group <sup>a</sup>   | int    | ID of the destination group                                                                                |

### GetRateInfoRequest structure

| Property      | Type | Description                  |
|---------------|------|------------------------------|
| <u>i_rate</u> | int  | Unique ID of the rate record |

### GetRateInfoResponse structure

| Property  | Type                               | Description                                                                             |
|-----------|------------------------------------|-----------------------------------------------------------------------------------------|
| rate_info | <a href="#">RateInfo</a> structure | Complete information about the rate; for more information, see <a href="#">RateInfo</a> |

### GetRateListRequest structure

| Property      | Type | Description                                         |
|---------------|------|-----------------------------------------------------|
| <u>offset</u> | int  | Number of rows to skip at the beginning of the list |

|                 |        |                                                                                                                                                                                                            |
|-----------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>limit</u>    | int    | Number of rows to retrieve                                                                                                                                                                                 |
| <u>i tariff</u> | int    | Unique ID of the tariff; refers to Tariffs table                                                                                                                                                           |
| effective_from  | string | The filter that allows viewing rates depending on their Effective From date.<br>One of the following: <ul style="list-style-type: none"><li>• before</li><li>• after</li><li>• now</li><li>• all</li></ul> |
| type            | string | The type of search.<br>One of the following: <ul style="list-style-type: none"><li>• number</li><li>• prefix</li></ul><br>Default: 'prefix'                                                                |
| destination     | string | The pattern of the destination prefix                                                                                                                                                                      |

### GetRateListResponse structure

| Property  | Type                                         | Description              |
|-----------|----------------------------------------------|--------------------------|
| rate_list | Array of <a href="#">RateInfo</a> structures | Set of rate data records |

## Access to Representative Information

URI (namespace):

<https://pbslave-server.yourdomain.com/Porta/SOAP/Representative>

### Methods

#### [get\\_representative\\_info](#)

Parameters: [GetRepresentativeInfoRequest](#)

Return value: [GetRepresentativeInfoResponse](#)

Realm: administrator, reseller

This method allows an API user (administrator or reseller) to get a representative record from the database.

#### [get\\_representative\\_list](#)

Parameters: [GetRepresentativeListRequest](#)

Return value: **GetRepresentativeListResponse**

Realm: administrator, reseller

This method allows an API user to get a list of representative records.

## Type Reference

### GetRepresentativeInfoRequest structure

| Property | Type   | Description                                                                          |
|----------|--------|--------------------------------------------------------------------------------------|
| i_rep    | int    | Unique ID of the representative record                                               |
| name     | string | Name of the representative on the PortaBilling® interface, unique in the environment |

### GetRepresentativeInfoResponse structure

| Property            | Type                      | Description                                 |
|---------------------|---------------------------|---------------------------------------------|
| representative_info | <b>RepresentativeInfo</b> | Complete information about a representative |

### GetRepresentativeListRequest structure

| Property   | Type   | Description                                                    |
|------------|--------|----------------------------------------------------------------|
| offset     | int    | Starting position for the representative list                  |
| limit      | int    | Limit of representatives (maximum quantity of representatives) |
| name       | string | Refers to the name of the representative                       |
| i_customer | int    | ID of the reseller who manages the representative              |

### GetRepresentativeListResponse structure

| Property            | Type                                          | Description             |
|---------------------|-----------------------------------------------|-------------------------|
| representative_list | array of <b>RepresentativeInfo</b> structures | List of representatives |

### RepresentativeInfo structure

| Property | Type | Description                            |
|----------|------|----------------------------------------|
| i_rep    | int  | Unique ID of the representative record |

|             |        |                                                                                      |
|-------------|--------|--------------------------------------------------------------------------------------|
| refnum      | string | Reference number                                                                     |
| initials    | string | Initials of the representative                                                       |
| name        | string | Name of the representative on the PortaBilling® interface, unique in the environment |
| iso_4217    | string | ISO4217 code for currency in which the representative is billed                      |
| i_acl       | int    | ID for representative's access level; refers to Access_Levels table                  |
| i_time_zone | int    | ID for representative's time zone; refers to Time_Zones table                        |
| i_lang      | string | Code for representative's web language; refers to Locale_Language table              |
| companyname | string | Representative's company name                                                        |
| salutation  | string | Representative's salutation                                                          |
| firstname   | string | Representative's first name                                                          |
| midinit     | string | Representative's middle initial(s)                                                   |
| lastname    | string | Representative's last name                                                           |
| baddr1      | string | 1st line of representative's address                                                 |
| baddr2      | string | 2nd line of representative's address                                                 |
| baddr3      | string | 3rd line of representative's address                                                 |
| baddr4      | string | 4th line of representative's address                                                 |
| baddr5      | string | 5th line of representative's address                                                 |
| city        | string | City of representative's address                                                     |
| state       | string | Province or state                                                                    |
| zip         | string | Postal (zip) code of the representative's address                                    |
| country     | string | Country of the representative's address                                              |
| faxnum      | string | Fax number                                                                           |
| cont1       | string | Main contact person                                                                  |
| phone1      | string | Main phone number                                                                    |
| cont2       | string | Alternative contact person                                                           |
| phone2      | string | Alternative phone number                                                             |
| email       | string | Email address                                                                        |
| login       | string | The representative's login for self-care web interface                               |
| password    | string | The representative's password for self-care web interface                            |

|                      |        |                                                                     |
|----------------------|--------|---------------------------------------------------------------------|
| tax_id               | string | Tax ID                                                              |
| out_date_format      | string | Output format for date indication on customer's self-care interface |
| out_time_format      | string | Output format for time indication                                   |
| out_date_time_format | string | Output format for full date/time indication                         |
| in_date_format       | string | Input format for date indication                                    |
| in_time_format       | string | Input format for time indication                                    |
| i_customer           | int    | ID of the reseller who manages this representative                  |
| hidden               | string | Hidden                                                              |

## Access to Invoice Information

URI (namespace): <https://pbslave-server.yourdomain.com/Porta/SOAP/Invoice>

### Methods

#### [get\\_invoice\\_info](#)

Parameters: [GetInvoiceInfoRequest](#)

Return value: [GetInvoiceInfoResponse](#)

Realm: administrator, reseller

This method allows an API user to get an invoice record from the database.

#### [get\\_invoice\\_list](#)

Parameters: [GetInvoiceListRequest](#)

Return value: [GetInvoiceListResponse](#)

Realm: administrator, reseller

This method allows an API user to get a list of invoice records.

### Type Reference

#### [GetInvoiceInfoRequest](#) structure

| Property       | Type | Description                                       |
|----------------|------|---------------------------------------------------|
| i_invoice      | int  | Unique ID of the invoice record                   |
| invoice_number | int  | Invoice Number – unique identifier of the invoice |

**GetInvoiceInfoResponse structure**

| Property     | Type                        | Description                   |
|--------------|-----------------------------|-------------------------------|
| invoice_info | <a href="#">InvoiceInfo</a> | Information about the invoice |

**GetInvoiceListRequest structure**

| Property       | Type | Description                                                                       |
|----------------|------|-----------------------------------------------------------------------------------|
| offset         | int  | Starting position for the invoice list                                            |
| limit          | int  | Limit of invoices (maximum quantity of invoices)                                  |
| invoice_number | int  | Refers to Invoice Number – unique identifier of the invoice                       |
| i_customer     | int  | Unique ID of the customer the invoice belongs to                                  |
| i_parent       | int  | Unique ID of the reseller (to get invoices for all subcustomers of this reseller) |

**GetInvoiceListResponse structure**

| Property     | Type                                           | Description      |
|--------------|------------------------------------------------|------------------|
| invoice_list | array of <a href="#">InvoiceInfo</a> structure | List of invoices |

**InvoiceInfo structure**

| Property       | Type                 | Description                                                       |
|----------------|----------------------|-------------------------------------------------------------------|
| i_invoice      | int                  | Unique ID of the invoice record                                   |
| invoice_number | int                  | Invoice Number - unique identifier of the invoice                 |
| i_customer     | int                  | Refers to customer record to which the invoice belongs            |
| issue_date     | date, ISO format     | Date when the invoice was generated                               |
| period_from    | dateTime, ISO format | Start date of the billing period                                  |
| period_to      | dateTime, ISO format | End date of the billing period                                    |
| i_payment_term | int                  | Refers to the description of the payment term                     |
| amount_net     | float                | Sum of all charges in this period minus credits/refunds           |
| amount_due     | float                | Amount the customer is supposed to pay for this period            |
| closed         | string               | Indicates whether the invoice is closed (sent to the customer) or |

|                      |                  |                                                                                                                                     |
|----------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------|
|                      |                  | not                                                                                                                                 |
| previous_balance     | float            | Previous balance. Balance reported in the last invoice                                                                              |
| payments             | float            | Payments. Sum of all charges                                                                                                        |
| subscriptions        | float            | Subscription fee                                                                                                                    |
| manual_charges       | float            | Manual charges. Non-service related charges                                                                                         |
| taxes                | float            | Calculated taxes. Amount of taxes for this period                                                                                   |
| calls                | float            | Service charges (e.g. call charges)                                                                                                 |
| new_style            | int              | Defines whether the invoice includes the previous balance or not                                                                    |
| due_date             | date, ISO format | Date by which payment must be received                                                                                              |
| i_invoice_status     | int              | Refers to the invoice status record                                                                                                 |
| amount_paid          | float            | Amount paid by the customer already                                                                                                 |
| last_notific_date    | date, ISO format | Date the invoice was first sent to the customer                                                                                     |
| last_resend_date     | date, ISO format | Last resend date. Date the invoice was resent to the customer                                                                       |
| last_recollect_date  | date, ISO format | Last recollect date. Date the collection attempt was made (attempt to charge the customer's credit card on file for the amount due) |
| last_warning_date    | date, ISO format | Last warning date. Date the notification email was sent to the customer informing about service suspension                          |
| last_suspension_date | date, ISO format | Last suspension date. Date the customer was suspended after an invoice became overdue                                               |
| last_closing_date    | date, ISO format | Last closing date. Date the customer's account was closed after an invoice became overdue                                           |
| tax_method           | int              | Taxation method                                                                                                                     |
| i_billing_processor  | int              | Refers to Billing Processor record                                                                                                  |
| prior_balance        | float            | Prior Balance                                                                                                                       |
| prior_balance_paid   | float            | Prior Balance Paid                                                                                                                  |
| customer_name        | string           | Customer name to which the invoice belongs                                                                                          |
| invoice_status       | string           | Invoice status                                                                                                                      |
| i_parent             | int              | Unique ID of the reseller (for subcustomer)                                                                                         |

# Access to Customer Class Information

URI (namespace): <https://pbslave-server.yourdomain.com/Porta/SOAP/CustomerClass>

## Methods

### [get\\_customer\\_class\\_list](#)

Parameters: [GetCustomerClassListRequest](#)  
Return value: [GetCustomerClassListResponse](#)  
Realm: administrator, reseller

This method allows an API user to get a list of customer class records.

### [get\\_default\\_customer\\_class](#)

Parameters: [GetDefaultCustomerClassRequest](#)  
Return value: [GetDefaultCustomerClassResponse](#)  
Realm: administrator, reseller

This method allows an API user to get information about the default customer class records.

### [get\\_customer\\_class\\_info](#)

Parameters: [GetCustomerClassInfoRequest](#)  
Return value: [GetCustomerClassInfoResponse](#)  
Realm: administrator, reseller

This method allows an API user to get information about the customer class records.

## Type Reference

### [GetCustomerClassListRequest](#) structure

| Property   | Type   | Description                                                    |
|------------|--------|----------------------------------------------------------------|
| i_customer | int    | ID of the reseller who manages the customer class              |
| search     | string | Search pattern in the name and description of a customer class |

**GetCustomerClassListResponse structure**

| Property            | Type                                                  | Description              |
|---------------------|-------------------------------------------------------|--------------------------|
| customer_class_list | array of <a href="#">CustomerClassInfo</a> structures | List of customer classes |

**GetDefaultCustomerClassRequest structure**

| Property   | Type | Description                                                                                         |
|------------|------|-----------------------------------------------------------------------------------------------------|
| i_customer | int  | ID of the reseller managing the customer class (undefined in case of Managed By Administrator only) |

**GetDefaultCustomerClassResponse structure**

| Property            | Type                              | Description                                       |
|---------------------|-----------------------------------|---------------------------------------------------|
| customer_class_info | <a href="#">CustomerClassInfo</a> | Complete information about customer class records |

**CustomerClassInfo structure**

| Property         | Type   | Description                                                                              |
|------------------|--------|------------------------------------------------------------------------------------------|
| i_customer_class | int    | Unique ID of the customer class record                                                   |
| name             | string | The name of the customer class on the PortaBilling® interface, unique in the environment |
| i_customer       | int    | ID of the reseller who manages the customer class                                        |
| description      | string | The customer class description                                                           |
| i_template       | int    | ID for customer's invoice template; refers to Templates table                            |
| i_payment_term   | int    | Refers to the description of the payment term                                            |
| grace_period     | int    | Invoice grace period, i.e. how many days after invoice generation payment is expected    |
| notific_days     | string | Invoice notification intervals                                                           |
| resend_days      | string | Invoice re-send intervals                                                                |
| recollect_days   | string | Re-collect intervals                                                                     |
| warning_days     | int    | Warning intervals                                                                        |

|                     |        |                                                                                                              |
|---------------------|--------|--------------------------------------------------------------------------------------------------------------|
| suspension_days     | int    | In how many days after the due date the customer's services will be suspended if the invoice is still unpaid |
| closing_days        | int    | In how many days after the due date the customer's account will be closed if the invoice is still unpaid     |
| bp_charge_cc        | string | Automatically charge customer's credit card when a billing period is closed                                  |
| i_billing_processor | int    | Refers to Billing Processor record                                                                           |
| tax_info            | string | Taxation info                                                                                                |
| send_invoices       | string | Defines whether an invoice should be automatically sent to the customer as soon as it is created             |
| send_statistics     | string | Defines what kind of xDR statistics should be delivered to the customer by email                             |
| default_class       | string | Flag that designates default customer class                                                                  |
| managed_by          | string | The name of the reseller who manages the customer class                                                      |

### GetCustomerClassInfoRequest structure

| Property         | Type                              | Description                                       |
|------------------|-----------------------------------|---------------------------------------------------|
| i_customer_class | <a href="#">CustomerClassInfo</a> | Complete information about customer class records |

### GetCustomerClassInfoResponse structure

| Property            | Type                              | Description                                       |
|---------------------|-----------------------------------|---------------------------------------------------|
| customer_class_info | <a href="#">CustomerClassInfo</a> | Complete information about customer class records |

## Access to Discount Plan Information

URI (namespace): <https://pbslave-server.yourdomain.com/Porta/SOAP/DiscountPlan>

## Methods

### get\_discount\_list

Parameters: [GetDiscountListRequest](#)

Return value: [GetDiscountListResponse](#)

Realm: administrator, reseller

This method allows an API user to get the information about discounts for the specified volume discount plan.

### get\_vd\_threshold\_list

Parameters: [GetVDThresholdListRequest](#)

Return value: [GetVDThresholdListResponse](#)

Realm: administrator, reseller

This method allows an API user to get the information about thresholds (discount scheme) for the specified discount record.

## Type Reference

### GetDiscountListRequest structure

| Property     | Type   | Description                                                                         |
|--------------|--------|-------------------------------------------------------------------------------------|
| i_vd_plan    | int    | ID of the volume discount plan                                                      |
| service_name | string | Service name pattern                                                                |
| dg_name      | string | Destination group name pattern                                                      |
| peak_level   | int    | ID of the peak level: 0 (peak period), 1 (off-peak period), 2 (2nd off-peak period) |

### GetDiscountListResponse structure

| Property      | Type                                  | Description                      |
|---------------|---------------------------------------|----------------------------------|
| discount_list | Array of <a href="#">DiscountInfo</a> | Array of the discount structures |

### DiscountInfo structure

| Property     | Type   | Description                                                                        |
|--------------|--------|------------------------------------------------------------------------------------|
| i_vd_dg      | int    | Unique ID of the volume discount record (volume discount destination group record) |
| i_vd_plan    | int    | ID of the discount plan                                                            |
| dg_name      | string | Destination group name                                                             |
| service_name | string | Name of the service                                                                |

|            |        |                                     |
|------------|--------|-------------------------------------|
| peak_level | int    | ID of the peak level                |
| rate_unit  | string | Units (e.g. USD, messages, minutes) |
| exclusive  | string | Exclusive flag value                |

**GetVDThresholdListRequest structure**

| Property | Type | Description                                                                 |
|----------|------|-----------------------------------------------------------------------------|
| i_vd_dg  | int  | ID of the volume discount record (volume discount destination group record) |

**GetVDThresholdListResponse structure**

| Property       | Type                                     | Description                                    |
|----------------|------------------------------------------|------------------------------------------------|
| threshold_list | Array of <a href="#">VDThresholdInfo</a> | Array of the volume discount threshold objects |

**VDThresholdInfo structure**

| Property           | Type   | Description                                                                      |
|--------------------|--------|----------------------------------------------------------------------------------|
| i_vd_threshold     | int    | Unique ID of the volume discount threshold record                                |
| i_vd_dg            | int    | ID of the volume discount record (volume discount destination group record)      |
| notify_if_exceeded | string | Flag which indicates the status of notification if threshold is exceeded         |
| alter_service      | string | Alter service value                                                              |
| threshold_value    | string | Threshold value                                                                  |
| discount           | float  | Discount value (in percent %)                                                    |
| xdr_split          | string | Flag that shows whether the threshold record is marked as splitting (Split xDRs) |

# 3. PortaUM XML API

## Access to API

Proxy (server address): <https://pum-server.yourdomain.com:8443/soap.fcgi>

URI (namespace): <https://pum-server.yourdomain.com/UM/SOAP/>



Please replace the **pum-server.yourdomain.com** with the actual hostname of your PortaUM® server.

## 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, the accuracy of any other fields in the response cannot be guaranteed, and you should only use the fault sub-elements to identify the error. Currently, these sub-elements are as follows:

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

## WSDL

Each PortaUM® installation has its own set of WSDL documents available for download from the web server. Assuming the name of the Admin server is `pum-server.yourdomain.com`, these documents can be downloaded from:

- <https://pum-server.yourdomain.com:8443/wsdl.fcgi?get=Types.xsd>
- <https://pum-server.yourdomain.com:8443/wsdl.fcgi?get=Voicemail.xsd>
- <https://pum-server.yourdomain.com:8443/wsdl.fcgi?get=DialDirectory.xsd>
- <https://pum-server.yourdomain.com:8443/wsdl.fcgi?get=Queues.xsd>
- <https://pum-server.yourdomain.com:8443/wsdl.fcgi?get=AutoAttendant.xsd>

All SOAP requests are handled via an SSL connection. By default, PortaUM® installations contain a self-signed certificate that provides the

means to encrypt data. However, since this certificate's authenticity cannot be validated, you may experience some problems when connecting to an SSL site. In that 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.

## Establishing an Authenticated Session

**URI:** <https://pum-server.yourdomain.com/UM/SOAP/Session>

### Methods

#### login

Parameters: [LoginRequest](#)

Return value: [LoginResponse](#)

Checks the validity of login and password and returns session\_id on success. A SOAP fault is generated on failure.

#### logout

Parameters: [LogoutRequest](#)

Return value: [LogoutResponse](#)

Terminates the session. You should call logout() to terminate the session properly.

### Type Reference

#### LoginRequest structure

| Property | Type                 | Description                                                |
|----------|----------------------|------------------------------------------------------------|
| login    | string, 32 char max  | Account ID specified on web interface.                     |
| domain   | string               | Domain matched to environment that the account belongs to. |
| password | string, 16 chars max | Password specified on web interface.                       |

**LoginResponse structure**

| Property   | Type                 | Description                 |
|------------|----------------------|-----------------------------|
| session_id | string, 32 chars max | ID of newly opened session. |

**LogoutRequest structure**

| Property | Type | Description |
|----------|------|-------------|
| -        | -    | -           |

**LogoutResponse structure**

| Property | Type | Description                                 |
|----------|------|---------------------------------------------|
| success  | int  | 1 in case of success, 0 in case of failure. |

## Global Methods and Types

### Type Reference

The structure below is used to pass authentication data to the SOAP method. There are two possible ways to authenticate a SOAP request: create a session and pass session\_id in auth\_info, or pass all the required credentials (login/domain/password) in every SOAP request.

**auth\_info structure**

| Property          | Type                 | Description                                  |
|-------------------|----------------------|----------------------------------------------|
| login             | string, 32 chars max | Account ID specified on web interface.       |
| domain            | string               | Self-explanatory                             |
| password          | string, 16 chars max | Password specified on web interface.         |
| or alternatively: |                      |                                              |
| session_id        | string, 32 chars max | Unique ID of previously opened SOAP session. |

# Access to Voicemail Settings

**URI:** <https://pum-server.yourdomain.com/UM/SOAP/Voicemail>

## 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 as an empty value later) are underlined.

## Methods

### get\_vm\_settings

Parameters: [GetVMSettingsRequest](#)

Return value: [GetVMSettingsResponse](#)

This method allows an API user (account) to get general voicemail settings from the PortaUM® database.

### set\_vm\_settings

Parameters: [SetVMSettingsRequest](#)

Return value: [SetVMSettingsResponse](#)

This method allows an API user (account) to set general voicemail settings in the PortaUM® database.

### get\_vm\_greeting

Parameters: [GetVMGreetingRequest](#)

Return value: [GetVMGreetingResponse](#)

This method allows an API user (account) to get the sound prompt for a specified greeting from the PortaUM® database. The sound file is returned in a MIME attachment.

### set\_vm\_greeting

Parameters: [SetVMGreetingRequest](#)

Return value: [SetVMGreetingResponse](#)

This method allows an API user (account) to set the sound prompt for a specified greeting type. The sound file is sent in a MIME attachment.

## Type Reference

### GetVMSettingsRequest structure

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

| Property | Type | Description |
|----------|------|-------------|
| -        | -    | -           |

### GetVMSettingsResponse structure

| Property    | Type              | Description                                            |
|-------------|-------------------|--------------------------------------------------------|
| vm_settings | <b>VMSettings</b> | Complete information about general voicemail settings. |

### SetVMSettingsRequest structure

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

| Property    | Type              | Description                                            |
|-------------|-------------------|--------------------------------------------------------|
| vm_settings | <b>VMSettings</b> | Complete information about general voicemail settings. |

### SetVMSettingsResponse structure

| Property          | Type | Description           |
|-------------------|------|-----------------------|
| vm_settings_saved | int  | 1 in case of success. |

### VMSettings structure

| Property      | Type   | Description                                                                                                                                                                       |
|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| mode          | string | Voicemail mode: <ul style="list-style-type: none"> <li>voicemail – record a voicemail;</li> <li>auto_attendant – launch account-configured auto attendant.</li> </ul>             |
| password      | string | Password for accessing voicemail via IVR.                                                                                                                                         |
| password_ask  | string | <ul style="list-style-type: none"> <li>yes – ask for password when accessing voicemail via IVR;</li> <li>no – don't ask for password when accessing voicemail via IVR.</li> </ul> |
| prompt_levels | string | PortaUM® offers three voice prompt settings in                                                                                                                                    |

|                  |                       |                                                                                                                                                                                           |
|------------------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                  |                       | each supported language: <ul style="list-style-type: none"> <li>• standard;</li> <li>• extended;</li> <li>• rapid.</li> </ul>                                                             |
| announce_dt      | string                | Announce the date and time when each voicemail was sent. Values: <ul style="list-style-type: none"> <li>• yes;</li> <li>• no.</li> </ul>                                                  |
| auto_play        | string                | Auto-play new voicemail(s) when a call to voicemail is established. Values: <ul style="list-style-type: none"> <li>• yes;</li> <li>• no.</li> </ul>                                       |
| greetings        | string                | Type of greeting for users wishing to leave a voicemail. Values: <ul style="list-style-type: none"> <li>• standard;</li> <li>• extended;</li> <li>• personal;</li> <li>• name.</li> </ul> |
| fax_file         | string                | Format for received faxes: <ul style="list-style-type: none"> <li>• multi_png;</li> <li>• multi_tiff;</li> <li>• pdf;</li> <li>• tiff.</li> </ul>                                         |
| ext_email        | string, max 128 chars | External email for forwarding, copying, and notifying.                                                                                                                                    |
| ext_email_action | string                | Action for external email: <ul style="list-style-type: none"> <li>• none;</li> <li>• forward;</li> <li>• notify;</li> <li>• copy.</li> </ul>                                              |

### GetVMGreetingRequest structure

| Property      | Type   | Description                                                                                                                      |
|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------|
| greeting_type | string | Values: <ul style="list-style-type: none"> <li>• standard;</li> <li>• extended;</li> <li>• personal;</li> <li>• name.</li> </ul> |

**GetVMGreetingResponse structure**

| Property | Type   | Description                                                          |
|----------|--------|----------------------------------------------------------------------|
| filename | string | Filename of greeting attached to SOAP response in a MIME attachment. |

**SetVMGreetingRequest structure**

| Property      | Type   | Description                                                                                                                |
|---------------|--------|----------------------------------------------------------------------------------------------------------------------------|
| greeting_type | string | Values: <ul style="list-style-type: none"><li>• standard;</li><li>• extended;</li><li>• personal;</li><li>• name</li></ul> |
| filename      | string | Filename of greeting attached to SOAP request in a MIME attachment.                                                        |

**SetVMGreetingResponse structure**

| Property | Type | Description           |
|----------|------|-----------------------|
| success  | int  | 1 in case of success. |

## Auto Attendant Configuration

**URI:** <https://pum-server.yourdomain.com/UM/SOAP/AutoAttendant>

### Methods

**get\_menu\_list**

Parameters: **GetMenuListRequest**

Return value: **GetMenuListResponse**

This method allows an API user (account) to get a list of all configured auto attendant menus.

**update\_menu**

Parameters: **UpdateMenuRequest**

Return value: **UpdateMenuResponse**

This method allows an API user (account) to update the settings of a separate auto attendant menu.

### **create\_menu**

Parameters: **CreateMenuRequest**

Return value: **CreateMenuResponse**

This method allows an API user (account) to create an auto attendant menu.

### **del\_menu**

Parameters: **DelMenuRequest**

Return value: **DelMenuResponse**

This method allows an API user (account) to delete an auto attendant menu.

### **set\_menu\_prompt**

Parameters: **SetMenuPromptRequest**

Return value: **SetMenuPromptResponse**

This method allows an API user (account) to set (record) separate prompt for selected auto attendant menu. The sound file is sent in a MIME attachment to the SOAP request.

### **get\_menu\_prompt**

Parameters: **GetMenuPromptRequest**

Return value: **GetMenuPromptResponse**

This method allows an API user (account) to get a separate prompt from the selected auto attendant menu. The sound file is sent in a MIME attachment to the SOAP request.

### **get\_menu\_transition\_list**

Parameters: **GetMenuTransitionListRequest**

Return value: **GetMenuTransitionListResponse**

This method allows an API user (account) to get a list of auto attendant menu transitions.

### **set\_menu\_transition**

Parameters: **SetMenuTransitionRequest**

Return value: **SetMenuTransitionListResponse**

This method allows an API user (account) to set auto attendant menu transitions. The transition prompt should be sent in a MIME attachment.

**get\_menu\_transition\_prompt**Parameters: **GetMenuTransitionPromptRequest**Return value: **GetMenuTransitionPromptResponse**

This method allows an API user (account) to get an auto attendant menu transition prompt. The prompt is sent in a MIME attachment.

**Type Reference****GetMenuListRequest structure**

| Property | Type | Description |
|----------|------|-------------|
| -        | -    | -           |

**GetMenuListResponse structure**

| Property  | Type                                         | Description                   |
|-----------|----------------------------------------------|-------------------------------|
| menu_list | array of <a href="#">MenuInfo</a> structures | List of auto attendant menus. |

**UpdateMenuRequest structure**

| Property  | Type                     | Description               |
|-----------|--------------------------|---------------------------|
| menu_info | <a href="#">MenuInfo</a> | Auto attendant menu data. |

**UpdateMenuResponse structure**

| Property | Type | Description                       |
|----------|------|-----------------------------------|
| i_menu   | int  | Unique ID of updated menu record. |

**CreateMenuRequest structure**

| Property  | Type                     | Description               |
|-----------|--------------------------|---------------------------|
| menu_info | <a href="#">MenuInfo</a> | Auto attendant menu data. |

**CreateMenuResponse structure**

| Property | Type | Description                       |
|----------|------|-----------------------------------|
| i_menu   | int  | Unique ID of created menu record. |

**DelMenuRequest structure**

| Property | Type | Description                      |
|----------|------|----------------------------------|
| i_menu   | int  | Unique ID of deleted menu record |

**DelMenuResponse structure**

| Property | Type | Description                                |
|----------|------|--------------------------------------------|
| i_menu   | int  | Unique ID of deleted menu database record. |

**MenuInfo structure**

| Property          | Type                  | Description                                                                                                                                           |
|-------------------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| i_menu*           | int                   | Unique ID of menu record (required for the update_menu and del_menu methods).                                                                         |
| name              | string, max 64 chars  | <b>Unique</b> within one account menu name; 'ROOT' name is reserved for the root menu, which always exists.                                           |
| period            | string, max 255 chars | Period in special format (see appendix).                                                                                                              |
| period_desc       | string, max 255 chars | Description of period in a form understandable by end-users.                                                                                          |
| msg_disabled_type | string                | 'Unavailable' prompt type – standard or recorded by user.<br>Values: <ul style="list-style-type: none"> <li>• standard;</li> <li>• custom.</li> </ul> |
| msg_timeout_type  | string                | 'Timeout' prompt type – standard or recorded by user.<br>Values: <ul style="list-style-type: none"> <li>• standard;</li> <li>• custom.</li> </ul>     |
| msg_intro_set     | int                   | 1 if 'Intro' prompt recorded; otherwise 0.                                                                                                            |
| msg_menu_set      | int                   | 1 if 'Menu' prompt recorded; otherwise 0.                                                                                                             |
| msg_disabled_set  | int                   | 1 if 'Unavailable' prompt recorded; otherwise 0.                                                                                                      |
| msg_timeout_set   | int                   | 1 if 'Timeout' prompt recorded; otherwise 0.                                                                                                          |

**SetMenuPromptRequest structure**

| Property    | Type   | Description                                                                              |
|-------------|--------|------------------------------------------------------------------------------------------|
| i_menu      | int    | Unique ID of updated menu record.                                                        |
| prompt_type | string | Prompt type: <ul style="list-style-type: none"> <li>• intro;</li> <li>• menu;</li> </ul> |

|        |        |                                                                               |
|--------|--------|-------------------------------------------------------------------------------|
|        |        | <ul style="list-style-type: none"> <li>disabled;</li> <li>timeout.</li> </ul> |
| prompt | string | Filename of prompt sent in a MIME attachment to the SOAP request.             |

**SetMenuPromptResponse structure**

| Property | Type | Description                       |
|----------|------|-----------------------------------|
| i_menu   | int  | Unique ID of updated menu record. |

**GetMenuPromptRequest structure**

| Property    | Type   | Description                                                                                                               |
|-------------|--------|---------------------------------------------------------------------------------------------------------------------------|
| i_menu      | int    | Unique ID of menu record.                                                                                                 |
| prompt_type | string | Prompt type: <ul style="list-style-type: none"> <li>intro;</li> <li>menu;</li> <li>disabled;</li> <li>timeout.</li> </ul> |

**GetMenuPromptResponse structure**

| Property | Type   | Description                                                        |
|----------|--------|--------------------------------------------------------------------|
| prompt   | string | Filename of prompt sent in a MIME attachment to the SOAP response. |

**GetMenuTransitionListRequest structure**

| Property | Type | Description               |
|----------|------|---------------------------|
| i_menu   | int  | Unique ID of menu record. |

**GetMenuTransitionListResponse structure**

| Property        | Type                                               | Description                                           |
|-----------------|----------------------------------------------------|-------------------------------------------------------|
| transition_list | array of <a href="#">TransitionInfo</a> structures | Set of transitions for specified auto attendant menu. |

**SetMenuTransitionRequest structure**

| Property        | Type                           | Description                        |
|-----------------|--------------------------------|------------------------------------|
| i_menu          | int                            | Unique ID of the menu record.      |
| transition_info | <a href="#">TransitionInfo</a> | Properties of the menu transition. |

**SetMenuTransitionResponse structure**

| Property | Type | Description                           |
|----------|------|---------------------------------------|
| success  | int  | 1 in case of success,<br>0 if failed. |

**GetMenuTransitionPromptRequest structure**

| Property | Type   | Description                                                                       |
|----------|--------|-----------------------------------------------------------------------------------|
| i_menu   | int    | Unique ID of menu record.                                                         |
| event    | string | Transition event; see allowed values in <a href="#">TransitionInfo</a> structure. |

**GetMenuTransitionPromptResponse structure**

| Property | Type   | Description                                                       |
|----------|--------|-------------------------------------------------------------------|
| prompt   | string | Filename of prompt sent in a MIME attachment to the SOAP request. |

**TransitionInfo structure**

| Property | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| event    | string | Transition event. Values: '0','1','2','3','4','5','6','7','8','9','*','#','Timeout','Not Active','f'.                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| action   | string | Performed action. Values: <ul style="list-style-type: none"> <li>• Disabled – no action;</li> <li>• Directory – launch ‘Dial Directory’ IVR ;</li> <li>• Queue – launch ‘Call Queue’ IVR for queue specified in ‘target_i_queue’;</li> <li>• Transfer – transfer to preconfigured number specified in ‘destination’ field;</li> <li>• TransferE164 – transfer to E164 number specified in ‘destination’ field;</li> <li>• Voicemail – launch voicemail recording;</li> <li>• Menu – go to the auto attendant menu specified in ‘target_i_menu’;</li> </ul> |

|                |                       |                                                                                                                               |
|----------------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------|
|                |                       | <ul style="list-style-type: none"> <li>Extension – transfer to extension dialed by user.</li> </ul>                           |
| target_i_menu  | int                   | Unique ID of auto attendant menu record.                                                                                      |
| target_i_queue | int                   | Unique ID of call queue record.                                                                                               |
| destination    | string, max. 32 chars | Destination for 'Transfer', 'TransferE164' action.                                                                            |
| play_prompt    | string                | Play or do not play user-recorded prompt before action. Value: <ul style="list-style-type: none"> <li>Y</li> <li>N</li> </ul> |
| prompt_set     | int                   | 1 if user-recorded prompt set.                                                                                                |
| prompt         | string                | Filename for user-recorded prompt sent in a MIME attachment (only for the set_menu_transition method).                        |

## Call Queue Configuration

**URI:** <https://pum-server.yourdomain.com/UM/SOAP/Queues>

### Methods

#### **get\_queue\_list**

Parameters: **GetQueueListRequest**

Return value: **GetQueueListResponse**

This method allows an API user (account) to get a list of all configured call queues.

#### **create\_queue**

Parameters: **CreateQueueRequest**

Return value: **CreateQueueResponse**

This method allows an API user (account) to create a call queue with user-recorded MOH attached to the SOAP request via a MIME attachment.

#### **update\_queue**

Parameters: **UpdateQueueRequest**

Return value: **UpdateQueueResponse**

This method allows an API user (account) to update call queue data and set a user-recorded MOH attached to the SOAP request via a MIME attachment.

### get\_queue

Parameters: [GetQueueRequest](#)

Return value: [GetQueueResponse](#)

This method allows an API user (account) to get call queue data with MOH sent via a MIME attachment.

### del\_queue

Parameters: [DelQueueRequest](#)

Return value: [DelQueueResponse](#)

This method allows an API user (account) to delete a call queue.

### GetQueueListRequest structure

| Property | Type | Description |
|----------|------|-------------|
| -        | -    | -           |

### GetqueueListResponse structure

| Property  | Type                                          | Description          |
|-----------|-----------------------------------------------|----------------------|
| menu_list | array of <a href="#">QueueInfo</a> structures | List of call queues. |

### CreateQueueRequest structure

| Property   | Type                      | Description      |
|------------|---------------------------|------------------|
| queue_info | <a href="#">QueueInfo</a> | Call queue data. |

### CreateQueueResponse structure

| Property | Type | Description                     |
|----------|------|---------------------------------|
| i_queue  | int  | Unique ID of call queue record. |

### UpdateQueueRequest structure

| Property   | Type                      | Description      |
|------------|---------------------------|------------------|
| queue_info | <a href="#">QueueInfo</a> | Call queue data. |

### UpdateQueueResponse structure

| Property | Type | Description                     |
|----------|------|---------------------------------|
| i_queue  | int  | Unique ID of call queue record. |

**GetQueueRequest structure**

| Property | Type | Description                     |
|----------|------|---------------------------------|
| i_queue  | int  | Unique ID of call queue record. |

**GetQueueResponse structure**

| Property   | Type             | Description      |
|------------|------------------|------------------|
| queue_info | <b>QueueInfo</b> | Call queue data. |

**DelQueueRequest structure**

| Property | Type | Description                             |
|----------|------|-----------------------------------------|
| i_queue  | int  | Unique ID of deleted call queue record. |

**DelQueueResponse structure**

| Property | Type | Description                             |
|----------|------|-----------------------------------------|
| i_queue  | int  | Unique ID of deleted call queue record. |

**QueueInfo structure**

| Property         | Type                 | Description                                                                                                     |
|------------------|----------------------|-----------------------------------------------------------------------------------------------------------------|
| queue_id*        | int                  | Unique ID of call queue record.                                                                                 |
| name             | string, max 64 chars | <b>Unique</b> call queue name (for one account).                                                                |
| destination      | string, max 32 chars | Destination number for call queue.                                                                              |
| capacity         | int                  | Number of simultaneous calls that can be serviced by queue destination number.                                  |
| average_duration | int                  | Average call duration in seconds.                                                                               |
| moh_set          | int                  | 1 if user-recorded MOH set.                                                                                     |
| moh              | string               | Filename for user-recorded MOH sent in a MIME attachment (used only in the create_queue, update_queue methods). |

# Dial Directory Configuration

**URI:** <https://pum-server.yourdomain.com/UM/SOAP/DialDirectory>

## Methods

### **get\_dir\_info**

Parameters: **GetDirInfoRequest**

Return value: **GetDirInfoResponse**

This method allows an API user (account) to get a list of dial directory entries and general dial directory settings.

### **update\_dir\_info**

Parameters: **UpdateDirInfoRequest**

Return value: **UpdateDirInfoResponse**

This method allows an API user (account) to update general dial directory settings.

### **get\_dir\_entry**

Parameters: **GetDirEntryRequest**

Return value: **GetDirEntryResponse**

This method allows an API user (account) to get a dial directory entry with prompt data sent via a MIME attachment to the SOAP response.

### **del\_dir\_entry**

Parameters: **DelDirEntryRequest**

Return value: **DelDirEntryResponse**

This method allows an API user (account) to delete an entry in the dial directory.

### **update\_dir\_entry**

Parameters: **UpdateDirEntryRequest**

Return value: **UpdateDirEntryResponse**

This method allows an API user (account) to update an entry in the dial directory. The entry prompt for should be sent in a MIME attachment to the SOAP request.

**create\_dir\_entry**Parameters: **CreateDirEntryRequest**Return value: **CreateDirEntryResponse**

This method allows an API user (account) to create a new entry in the dial directory. The entry prompt for should be sent in a MIME attachment to the SOAP request.

**DirectoryInfo structure**

| Property     | Type   | Description                                                                                                                                                 |
|--------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| intro        | string | Which 'intro' prompt to play: PortaUM® built-in, or user-recorded. Values: <ul style="list-style-type: none"> <li>• standard;</li> <li>• custom.</li> </ul> |
| intro_custom | string | Filename for user-recorded prompt sent in a MIME attachment.                                                                                                |
| no_abbr_num  | string | Values: <ul style="list-style-type: none"> <li>• Y</li> <li>• N</li> </ul>                                                                                  |

**DirEntryInfo structure**

| Property           | Type                 | Description                                                                                                           |
|--------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------|
| i_entry            | int                  | Unique ID of dial directory entry.                                                                                    |
| active             | string               | Is this dial directory entry active? Values: <ul style="list-style-type: none"> <li>• Y</li> <li>• N</li> </ul>       |
| abbreviated_number | string, max 15 chars | Abbreviated number that can be used instead of dial directory entry matching via 'lastname'.                          |
| number_to_dial     | string, max 32 chars | Number to be dialed.                                                                                                  |
| lastname           | string, max 25 chars | Last name whose first 3 letters are used to match the dial directory entry (via standard telephone keyboard mapping). |
| description        | string, max 64 chars | Directory entry description.                                                                                          |
| prompt_set         | int                  | 1 if user-recorded prompt set, otherwise 0.                                                                           |

|        |        |                                                                                                                 |
|--------|--------|-----------------------------------------------------------------------------------------------------------------|
| prompt | string | Filename for user-recorded MOH sent in a MIME attachment (only for create_dir_entry, update_dir_entry methods). |
|--------|--------|-----------------------------------------------------------------------------------------------------------------|

**GetDirInfoRequest structure**

| Property | Type | Description |
|----------|------|-------------|
| -        | -    | -           |

**GetDirInfoResponse structure**

| Property       | Type                                             | Description                      |
|----------------|--------------------------------------------------|----------------------------------|
| directory_info | <a href="#">DirectoryInfo</a>                    | Dial directory general settings. |
| dir_entry_list | array of <a href="#">DirEntryInfo</a> structures | List of dial directory entries.  |

**UpdateDirInfoRequest structure**

| Property       | Type                          | Description                      |
|----------------|-------------------------------|----------------------------------|
| directory_info | <a href="#">DirectoryInfo</a> | Dial directory general settings. |

**UpdateDirInfoResponse structure**

| Property | Type | Description                           |
|----------|------|---------------------------------------|
| success  | int  | 1 in case of success,<br>0 if failed. |

**GetDirEntryRequest structure**

| Property | Type | Description                        |
|----------|------|------------------------------------|
| i_entry  | int  | Unique ID of dial directory entry. |

**GetDirEntryResponse structure**

| Property       | Type                         | Description                             |
|----------------|------------------------------|-----------------------------------------|
| dir_entry_info | <a href="#">DirEntryInfo</a> | Information about dial directory entry. |

**DelDirEntryRequest structure**

| Property | Type | Description                        |
|----------|------|------------------------------------|
| i_entry  | int  | Unique ID of dial directory entry. |

**DelDirEntryResponse structure**

| Property | Type | Description                        |
|----------|------|------------------------------------|
| i_entry  | int  | Unique ID of dial directory entry. |

**UpdateDirEntryRequest structure**

| Property       | Type                         | Description                             |
|----------------|------------------------------|-----------------------------------------|
| dir_entry_info | <a href="#">DirEntryInfo</a> | Information about dial directory entry. |

**UpdateDirEntryResponse structure**

| Property | Type | Description                        |
|----------|------|------------------------------------|
| i_entry  | int  | Unique ID of dial directory entry. |

**CreateDirEntryRequest structure**

| Property       | Type                         | Description                             |
|----------------|------------------------------|-----------------------------------------|
| dir_entry_info | <a href="#">DirEntryInfo</a> | Information about dial directory entry. |

**CreateDirEntryResponse structure**

| Property | Type | Description                        |
|----------|------|------------------------------------|
| i_entry  | int  | Unique ID of dial directory entry. |

# 4. 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'
Message-Authenticator = '5300D5B1B2C72987A60D5C6167B28C31'
```

### Authentication reject response

```
Message-Authenticator = '8610D5B0BDC33987A60D5C6167B28C2A'
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'
Message-Authenticator = '73676461726768656172617364667364'
```

### 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
Message-Authenticator = '7600D5B0BDC33987A60D5C6167B28B3B'
```

## 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'
Message-Authenticator = '6C6860587274337136146B6835322C82'

```

### 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
Message-Authenticator = '5B1420587274337136146B6835322D24'

```

### 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'
Message-Authenticator = '2B1560587274337136146B6835322A12'

```

### 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
Message-Authenticator = '1256D5B0BDC33987A60D5C6167B225D5'

```

### 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-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-conf-id            = '39AE126B CD4D11DB 958E0014 1C3F6886'
call-id                 = '4A65E46C-CD4D11DB-886EDEBF-7AF0CBAB@164.9.9.100'
h323-incoming-conf-id   = '39AE126B CD4D11DB 958E0014 1C3F6886'
h323-ivr-out            = 'PortaBilling_Original_CLD:6045551600'
h323-ivr-out            = 'PortaBilling_Seed:18879071672'
h323-remote-address     = '164.9.9.101'
remote-media-address    = '164.9.9.101'

```

## 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-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-conf-id        = '39AE126B CD4D11DB 958E0014 1C3F6886'
h323-incoming-conf-id = '39AE126B CD4D11DB 958E0014 1C3F6886'
h323-ivr-out        = 'PortaBilling_Session:unlock'
h323-ivr-out         = 'Tariff:Unknown'
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     = 'be88ab3a0c6fdddb2b90dc54cf7e291'
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:rtp_same_nat=1;NAT'
h323-ivr-out        = 'PortaBilling_Seed:1058711856'
NAS-Port            = '5060'
Message-Authenticator = '1256D5B0BDC33987A60D5C6167B225D5'

```

### Authorization Response

```

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
h323-ivr-in          = PortaBilling_Routing:@;g-hunt=seq
h323-ivr-in          = PortaBilling_Routing: @;g-
hunt=skip;expires=300;rtp=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
Message-Authenticator = '1D3D5B0BDC12887A60D2C5167B15C2'

```

## 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"
Message-Authenticator = '84C47B0BDC12887A60D2C5167C740A'

```

### 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_
progress=13"
h323-ivr-out         = "PortaBilling_Seed:4094388346"
Message-Authenticator = '12C47B0B16412247A60D2C5167C718C'

```

### 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    = "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    = "11:34:30.677 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'
Message-Authenticator = '52C47B0B16412147A60D2C5167C718D'

```

### 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
Message-Authenticator = '1CD6D5B0BDC33987A60D5C6167B22517'

```

### 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
```

## Music Download Service Requests

### Authorization Request

```
NAS-IP-Address      = '192.168.100.50'
User-Name           = '0101'
Password            = 'secret'
Called-Station-Id   = 'JAZZ'
h323-conf-id        = 'A5D3B74C D26411DC 98D5001D 090C82FA'
h323-ivr-out        = 'Service-Identifier:QUANTITY'
Message-Authenticator = '7CD9D5B0BDC33987A60D5C6167B12C55'
```

### Authorization Response (for credit account without credit limit)

```
h323-billing-model  = 0
h323-ivr-in         = Tariff:Music Account
h323-ivr-in         = PortaBilling_CompleteNumber:JAZZ
h323-ivr-in         = PortaBilling_Auth_CLD:JAZZ
h323-return-code    = 13
h323-currency       = USD
h323-preferred-lang = en
Message-Authenticator = '1D86D5B0BDC33987A60D5C6167B13D91'
```

### Authorization Response (for debit account)

```
h323-billing-model  = 1
h323-ivr-in         = Tariff:Music Account
h323-ivr-in         = DURATION:10
h323-ivr-in         = PortaBilling_CompleteNumber:JAZZ
h323-ivr-in         = PortaBilling_Auth_CLD:JAZZ
h323-return-code    = 0
h323-currency       = USD
h323-credit-time    = 10
h323-preferred-lang = en
```

### Accounting Request

```
NAS-IP-Address      = '192.168.100.50'
User-Name           = '0101'
Called-Station-Id   = 'JAZZ'
Acct-Status-Type    = 'Stop'
h323-call-origin    = 'originate'
h323-call-type      = 'Telephony'
```

```

h323-setup-time      = '07:18:35.965 GMT Mon Feb 6 2008'
h323-connect-time    = '07:18:43.965 GMT Mon Feb 6 2008'
h323-disconnect-time = '08:11:38.965 GMT Mon Feb 6 2008'
h323-disconnect-cause = '0'
h323-conf-id         = 'A5D3B74C D26411DC 98D5001D 090C82FA'
Acct-Session-Id      = 'da6b76'
Acct-Session-Time    = '3175'
h323-ivr-out         = 'Service-Identifier:QUANTITY'
h323-ivr-out         = 'Used-Service-Unit:1'

```

## Example of script for PortaBilling SOAP communication

```

#!/usr/bin/perl

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

binmode(STDOUT, ':utf8');

my $proxy_host = 'https://127.0.0.1'; # Porta-Billing Admin Server
my $proxy_port = '443';

my $login = 'pb-root';
my $password = 'pb-root';

my $uri_base = 'http://portaone.com/Porta/SOAP';
my $proxy     = "$proxy_host:$proxy_port/soap/";

my %uris = (
    'Session' => "$uri_base/Session",
    'Account'  => "$uri_base/Account",
    'Customer' => "$uri_base/Customer",
);

sub fault_handler {
    my ($soap, $res) = @_;
    die "SOAP Fault: $!, " . (ref $res ? $res->faultstring
                                : $soap->transport->status)
        ;
}

my $session_service = SOAP::Lite
    ->uri($uris{'Session'})
    ->proxy($proxy)
    ->on_fault(\&fault_handler)
    ;

my $customer_service = SOAP::Lite
    ->uri($uris{'Customer'})
    ->proxy($proxy)
    ->on_fault(\&fault_handler)
    ;

my $account_service = SOAP::Lite
    ->uri($uris{'Account'})
    ->proxy($proxy)
    ->on_fault(\&fault_handler)
    ;

# required to support dateTime type

```

```

$session_service->serializer()
->xmlschema('http://www.w3.org/2001/XMLSchema');
$customer_service->serializer()
->xmlschema('http://www.w3.org/2001/XMLSchema');
$account_service->serializer()
->xmlschema('http://www.w3.org/2001/XMLSchema');

my $LoginResponse = $session_service->login($login, $password);

my $session_id = $LoginResponse->result();

print "Logged in with session $session_id\n";

my $header = SOAP::Header->name('auth_info')
->value({ session_id => $session_id })
;
eval {
my $GetCustomerInfoRequest = {
    i_customer => 1
};

my $GetCustomerInfoResponse
    = $customer_service->get_customer_info(
        $header, $GetCustomerInfoRequest
    )->result;

if (! $GetCustomerInfoResponse->{'customer_info'}) {
    die "No customer found\n";
}
my $CustomerInfo = $GetCustomerInfoResponse->{'customer_info'};

print "Customer Name: $CustomerInfo->{'name'}\n"
    . "E-Mail: $CustomerInfo->{'email'}\n"
    . "Balance: $CustomerInfo->{'balance'} "
    . $CustomerInfo->{'iso_4217'} . "\n"
    ;

# listing accounts under this customer.
my $has_more_accounts = 1;
my $limit = 5;
my $offset = 0;

ACCOUNT_LIST:
while ($has_more_accounts) {
    my $GetAccountListRequest = {
        i_customer => 1,
        limit      => $limit,
        offset     => $offset
    };

    my $GetAccountListResponse
        = $account_service->get_account_list(
            $header, $GetAccountListRequest
        )->result;

    if (! $GetAccountListResponse->{'account_list'}) {
        last ACCOUNT_LIST;
    }

    my $account_list = $GetAccountListResponse->{'account_list'};

    if (@$account_list < $limit) {
        $has_more_accounts = 0;
    }

    for my $AccountInfo (@$account_list) {
        print " Account ID: $AccountInfo->{'id'}\n"
            . "      Balance: $AccountInfo->{'balance'}"
            . " $AccountInfo->{'iso_4217'}\n"
            ;
    }
}

```

```
        $offset += $limit;
    }
};
if ($?) {
    print "An error occurred: $?\n";
}

# logging out is required
$session_service->logout($session_id);

exit 0;
```

# Using Service Feature Methods to Change FollowMe Settings

```
#!/usr/bin/perl

use strict;
use warnings;
use SOAP::Lite;
use Carp;

# Configuration block

my $uri_base = 'http://portabox.local.com/Porta/SOAP';
my $proxy_host = 'portabox.local.com';
my $proxy_port = '443';

my $login = 'pb-root';
my $password = 'pb-root';

my $i_account = 636;

# End of configuration block

my %uris = (
    Session => "$uri_base/Session",
    Account => "$uri_base/Account",
);

my $proxy = "https://$proxy_host:$proxy_port/soap/";

my $FM_REJECT = 0;
my $FM_RING = 0x1;
my $FM_FORWARD = 0x2;
my $FM_VOICEMAIL = 0x4;

my %fm_modes = (
    $FM_REJECT => 'Reject all calls',
    $FM_RING => 'Ring',
    $FM_FORWARD => 'Forward',
    $FM_VOICEMAIL => 'Voicemail',
);

sub fm_decode {
    my ($value) = @_;

    my @response_set;

    for my $fm_mode (sort keys %fm_modes) {
        if ($fm_mode & $value) {
            push(@response_set, $fm_modes{$fm_mode});
        }
    }

    my $result = join(' ', @response_set);

    return $result;
}

sub fm_encode {
    my (@values) = @_;

    my $result = 0;

    for my $value (@values) {
        if (! exists $fm_modes{$value}) {
            croak "Unknown Follow Me Mode: $value";
        }

        $result |= $value;
    }
}
```

```

    }
    return $result;
}

sub fault_handler {
    my ($soap, $res) = @_;

    my $message = 'Unknown Error';

    if (ref ($res)) {
        $message = "Remote SOAP Fault: " . $res->faultstring();
    }
    else {
        $message = "Transport Fault: " . $soap->transport->status();
    }

    croak $message;
}

my $session_srv = SOAP::Lite
    ->uri($uris{Session})
    ->proxy($proxy)
    ->on_fault(\&fault_handler)
    ;

my $account_srv = SOAP::Lite
    ->uri($uris{Account})
    ->proxy($proxy)
    ->on_fault(\&fault_handler)
    ;

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

print "Logged in ($login|$session_id)\n";

my $auth_info = SOAP::Header
    ->name('auth_info')
    ->value({ session_id => $session_id }
    );

my $GetAccountServiceFeaturesRequest = {
    i_account => $i_account,
};

# Current settings
my $GetAccountServiceFeaturesResponse
    = $account_srv->get_service_features(
        $auth_info,
        $GetAccountServiceFeaturesRequest,
    )->result();

my $service_features = $GetAccountServiceFeaturesResponse-
>{service_features};

my $sf_default_action;

SERVICE_FEATURE_ITEM:
for my $service_feature (@{$service_features}) {
    if ($service_feature->{name} eq 'default_action') {
        $sf_default_action = $service_feature;
        last SERVICE_FEATURE_ITEM;
    }
}

if (! $sf_default_action) {
    print "No Default Action set\n";
}
else {
    print "Default Action setting: ",
        fm_decode($sf_default_action->{flag_value}), "\n";
}

```

```

}

my $UpdateAccountServiceFeaturesRequest = {
    i_account => $i_account,
    service_features => [
        {
            name => 'default_action',
            flag_value => fm_encode($FM_RING, $FM_FORWARD),
        }
    ]
};

my $UpdateAccountServiceFeaturesResponse
= $account_srv->update_service_features(
    $auth_info,
    $UpdateAccountServiceFeaturesRequest
)->result();

$GetAccountServiceFeaturesResponse
= $account_srv->get_service_features(
    $auth_info,
    $GetAccountServiceFeaturesRequest,
)->result();

$service_features = $GetAccountServiceFeaturesResponse-
>{service_features};

SERVICE_FEATURE_ITEM_2:
for my $service_feature (@{$service_features}) {
    if ($service_feature->{name} eq 'default_action') {
        print "Default Action settings: ",
            fm_decode($service_feature->{flag_value}),
            "\n"
        ;
    }
    last SERVICE_FEATURE_ITEM_2;
}

exit 0;

```

## Definition of “Time Period”

A time period is specified as a string in the following format:

***sub-period[, sub-period...]***

A sub-period takes the following form:

***scale {range [range ...]} [scale {range [range ...]}]***

The scale must be one of nine different options (or their equivalent codes):

| Scale | Scale Code | Valid Range Values                                                 |
|-------|------------|--------------------------------------------------------------------|
| year  | yr         | n – where n is an integer 0<=n<=99 or n>=1970                      |
| month | mo         | 1-12 or jan, feb, mar, apr, may, jun, jul, aug, sep, oct, nov, dec |
| week  | wk         | 1-6                                                                |
| yday  | yd         | 1-365                                                              |
| mday  | md         | 1-31                                                               |
| wday  | wd         | 1-7 or su, mo, tu, we, th, fr, sa                                  |

|        |     |                                            |
|--------|-----|--------------------------------------------|
| hour   | hr  | 0-23 or 12am 1am-11am 12noon 12pm 1pm-11pm |
| minute | min | 0-59                                       |
| second | sec | 0-59                                       |

The same scale type may be specified multiple times. Additional scales simply extend the range defined by previous scales of the same type.

The range of a given scale must be a valid value in the form

**v**

or

**v-v**

In the range specification **v-v**, if the second value is larger than the first, the range wraps around unless the scale specification is “year”. Year does not wrap because a year is never really reset, rather it just changes by increments. Ignoring that fact that led to the dreaded Y2K nightmare, when a year rolls over from 99 to 00, it has really rolled over one century, not gone back a century. Time period supports the ambiguous two digit year notation because it is so widespread. However, two-digit notation is converted to four digits by prepending the first two digits of the current year. In the case of 99-1972, the 99 is translated to whatever the current century is (probably the 20th), and so the range 99-1972 is treated as 1972-1999. For the 21st century, the range would then be 1972-2099.

In any case, if **v-v** is 9-2, and the scale is month, September, October, November, December, January, and February are the months specified by the range (9-2 is the same as Sep-Feb). If **v-v** is 2-9, then the valid months are February, March, April, May, Jun, July, August, and September.

**v** is not a point in time. For the hour scale, 9 specifies the time period from 9:00:00 am to 9:59:59 am. This is what most people would call 9-10. In other words, **v** is discrete in its time scale. 9 changes to 10 when 9:59:59 changes to 10:00:00, but 9 is the period from 9:00:00 to 9:59:59. Just before 9:00:00, **v** was 8.

Note that there can be a white space anywhere, and case is unimportant. Note also that scales must be specified either in long form (year, month, week, etc.) or in code form (yr, mo, wk, etc.). Scale forms in a period statement may be mixed.

Furthermore, when using letters to specify ranges, only the first two (for weekdays) or the first three (for months) are significant. January is a valid specification for Jan, and Sunday is a valid specification for su. Sun is also valid for su.

#### PERIOD EXAMPLES:

To specify a time period from Monday through Friday, 9am to 5pm, use the following period:

**wd {Mon-Fri} hr {9am-4pm}**

When specifying a range using “-”, it is best to think of “-” as meaning “through”, i.e. 9am through 4pm, which is the time interval ending just before 5pm. To specify a time period from 9am to 5pm on

Monday, Wednesday, and Friday and from 9am to 3pm on Tuesday and Thursday, use the following period:

**wd {Mon Wed Fri} hr {9am-4pm}, wd{Tue Thu} hr {9am-2pm}**

To specify a time period that extends from Monday to Friday, 9am to 5pm, but alternates the weeks in a month, use the following period:

**wk {1 3 5} wd {Mon Wed Fri} hr {9am-4pm}**

For a period that specifies the winter:

**mo {Nov-Feb}**

The next example is equivalent to the previous one:

**mo {Jan-Feb Nov-Dec}**

as is:

**mo {jan feb nov dec}**

or also:

**mo {Jan Feb}, mo {Nov Dec}**

and this, too:

**mo {Jan Feb} mo {Nov Dec}**

To specify a period of every other half-hour, use something like this:

**minute {0-29}**

To specify the morning, use this:

**hour {12am-11am}**

Remember that 11am is not 11:00:00am, but rather 11:00:00am - 11:59:59am.

5-second blocks could be a “fun” period to specify:

**sec {0-4 10-14 20-24 30-34 40-44 50-54}**

To specify every first half-hour on alternating weekdays, and the second half-hour during the rest of the week, use the following period:

**wd {1 3 5 7} min {0-29}, wd {2 4 6} min {30-59}**

## Sample Script for PortaUM SOAP Communication

```
#!/perl -w
use strict;
#use SOAP::Lite +trace => 'debug';
use SOAP::Lite;
use MIME::Entity;
use Data::Dumper;

##### prepare
#####
my $soap_sess = SOAP::Lite
-> uri('https://localhost/UM/SOAP/Session')
-> proxy('https://pum-host:8443/soap.fcgi')
-> on_fault( sub {
    my($soap, $res) = @_;
    print ("SOAP error:". (ref $res ? $res->faultstring : $soap->transport->status . "/" . $res));
});

my $soap_test = SOAP::Lite
-> uri('https://localhost/UM/SOAP/Voicemail')
-> proxy('https://pum-host:8443/soap.fcgi')
```

```

-> on_fault( sub {
    my($soap, $res) = @_;
    print ("SOAP error:". (ref $res ? $res->faultstring : $soap->transport->status . "/" . $res));
});

my $soap_queue = SOAP::Lite
-> uri('https://localhost/UM/SOAP/Queues')
-> proxy('https://pum-host:8443/soap.fcgi')
-> on_fault( sub {
    my($soap, $res) = @_;
    print ("SOAP error:". (ref $res ? $res->faultstring : $soap->transport->status . "/" . $res));
});

my $soap_dial_dir = SOAP::Lite
-> uri('https://localhost/UM/SOAP/DialDirectory')
-> proxy('https://pum-host:8443/soap.fcgi')
-> on_fault( sub {
    my($soap, $res) = @_;
    print ("SOAP error:". (ref $res ? $res->faultstring : $soap->transport->status . "/" . $res));
});

my $soap_aa = SOAP::Lite
-> uri('https://localhost/UM/SOAP/AutoAttendant')
-> proxy('https://pum-host:8443/soap.fcgi')
-> on_fault( sub {
    my($soap, $res) = @_;
    print ("SOAP error:". (ref $res ? $res->faultstring : $soap->transport->status . "/" . $res));
});

my $authInfo = $soap_sess->login({
    'login' => '88881',
    'domain' => 'pum.somedomain.com',
    'password' => 'test123'})->result();
$authInfo = SOAP::Header->name( 'auth_info' => {
    'session_id' => $authInfo->{'session_id'}
});
my $authInfo_nosess = SOAP::Header->name( 'auth_info' => {
    'login' => '88881',
    'domain' => 'pum.somedomain.com',
    'password' => 'test123'
});

#####
#####
my $res;
#example of accessing SOAP module without establishing session
$res = $soap_test->get_vm_settings($authInfo_nosess)->result();
print Dumper($res);
$res = $soap_test->set_vm_settings($authInfo,
    {'vm_settings' =>
        {
            'password' => '777',
            'ext_email' => 'sergey.pavlov@gmail.com',
            'auto_play' => 'no',
            'announce_dt' => 'no'
        }
    })->result();
print "set_vm_settings done\n";
my $sent = MIME::Entity->build(
    'Filename' => 'wellcome.au',
    'Type' => 'audio/basic',
    'Encoding' => 'base64',
    'Path' => '/home/porta-um/apache/prompts/en/personal_ivr/frw_select_order.au',
);

my @parts = ($sent);
$res = $soap_test->parts(@parts)->set_vm_greeting($authInfo,
    {'greeting_info' =>
        {
            'greeting_type' => 'name',
            'filename' => 'wellcome.au'
        }
    })->result();
print "set_vm_greeting done\n";

```

```

$res = $soap_test->get_vm_greeting($authInfo,
    {
        'greeting_type' => 'name',
    })->result();
print "get_vm_greeting done\n";
##### Call Queues #####
$res = $soap_queue->get_queue_list($authInfo)->result();
print "get_queues done\n";
print Dumper($res);

$res = $soap_queue->parts(@parts)->create_queue($authInfo,
    { 'queue_info' => {
        'name' => 'aaabbbccc',
        'destination' => '191919',
        'capacity' => '10',
        'average_duration'=> '15',
        'moh' => 'wellcome.au'
    } })->result();
print "create_queue done\n";
print Dumper($res);
my $i_q = $res->{'i_queue'};

$res = $soap_queue->get_queue_list($authInfo)->result();
print "get_queues done\n";
print Dumper($res);
$res = $soap_queue->parts(@parts)->update_queue($authInfo,
    { 'queue_info' => {
        'i_queue' => $i_q,
        'name' => 'ccdddeee',
        'destination' => '7777777',
        'capacity' => '10',
        'average_duration'=> '15',
        'moh' => 'wellcome.au'
    } })->result();
print "update_queue done\n";
$res = $soap_queue->del_queue($authInfo,
    {
        'i_queue'=> $i_q,
    })->result();
print "del_queue done\n";
print Dumper($res);
##### Dial Directory #####
$res = $soap_dial_dir->get_dir_info($authInfo)->result();
print "get_directory_list done\n";
print Dumper($res);

$res = $soap_dial_dir->parts(@parts)->create_dir_entry($authInfo,
    {
        'dir_entry_info' => {
            'active' => 'Y',
            'abbreviated_number'=> '1787896',
            'number_to_dial' => '111111',
            'lastname' => 'LName',
            'description' => 'desc foo',
            'prompt' => 'wellcome.au'
        }
    } )->result();
print "create_dir_entry done\n";
print Dumper($res);
my $i_entry = $res->{'i_entry'};
$res = $soap_dial_dir->parts(@parts)->update_dir_entry($authInfo,
    {
        'dir_entry_info' => {
            'i_entry' => $i_entry,
            'active' => 'Y',
            'abbreviated_number'=> '99',
            'number_to_dial' => '565656',
            'lastname' => 'LastName',
            'description' => 'desc333',
            'prompt' => 'wellcome.au'
        }
    }

```

```

    }->result();
    print "update_dir_entry done\n";
    $res = $soap_dial_dir->get_dir_entry($authInfo, {'i_entry' => $i_entry} )->result();
    print "get_dir_entry done\n";
    print Dumper($res);

    $res = $soap_dial_dir->del_dir_entry($authInfo,
        {'i_entry' => $res->{'dir_entry_info'}->{'i_entry'}})->result();
    print "del_dir_entry done\n";
    print Dumper($res);

##### Auto Attendant #####

    $res = $soap_aa->get_menu_list($authInfo)->result();
    if (!$res) {
        print "get_menu_list failed\n";
    }
    print "get_menu_list done\n";
    print Dumper($res);
    my $root_i_menu;
    foreach my $menu (@{$res->{'menu_list'}}) {
        if ($menu->{'name'} eq 'ROOT') {
            $root_i_menu = $menu->{'i_menu'};
            last;
        }
    }

    $res = $soap_aa->parts(@parts)->set_menu_prompt($authInfo,
        {
            'i_menu'      => $root_i_menu,
            'prompt_type' => 'intro',
            'prompt'      => 'welcome.au'
        })->result();
    print "set_menu_prompt done\n";
    print Dumper($res);

    $res = $soap_aa->set_menu_transition($authInfo,
        {
            'transition_info' => {
                'i_menu' => $root_i_menu,
                'event' => '0',
                'action' => 'Transfer',
                'destination' => '5555',
            }
        })->result();
    print "set_menu_transition done\n";
    print Dumper($res);

    $res = $soap_aa->get_menu_transition_list($authInfo,
        {
            'i_menu' => $root_i_menu,
        })->result();
    print "get_menu_transition_list done\n";
    print Dumper($res);

    $res = $soap_aa->get_menu_prompt($authInfo,
        {
            'i_menu'      => $root_i_menu,
            'prompt_type' => 'intro',
        })->result();
    print "get_menu_prompt done\n";
    print Dumper($res);

    $res = $soap_aa->create_menu($authInfo,
        { 'menu_info' => {
            'name'      => 'AABBBCCC',
            'period'    => 'hr{0-11}',
            'period_desc' => 'Some period',
            'msg_timeout_type' => 'standard'
        }
        })->result();
    print "create_menu done\n";

```

```
print Dumper($res);
my $new_i_menu=$res->{'i_menu'};

$res = $soap_aa->update_menu($authInfo,
{ 'menu_info' => {
    'i_menu'    => $new_i_menu,
    'name'      => 'DDDEEFF',
    'period'    => 'hr{0-2}',
    'period_desc' => 'New period',
  }
})->result();
print "update_menu done\n";
print Dumper($res);

$res = $soap_aa->get_menu_list($authInfo)->result();
print "get_menu_list done\n";
print Dumper($res);

$res = $soap_aa->del_menu($authInfo,
{ 'i_menu' => $new_i_menu })->result();
print "del_menu done\n";
print Dumper($res);

$res = $soap_sess->logout($authInfo)->result();
print "logout done\n";
print Dumper($res);
```