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# **Pakettikauppa Documentation**

***Release 0.1.6***

**Porntip Chaibamrung**

**Sep 03, 2023**



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# CHAPTER 1

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## Pakettikauppa

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Client python modules for Pakettikauppa integration

- Free software: MIT license
- Documentation: <https://pakettikauppa.readthedocs.io>.

### 1.1 Features

For merchants

- Search pickup points
- Create shipment included shipping label
- Get shipping label
- Get shipping status
- Get list of additional services
- Get list of shipping methods

For re-seller

- Create customer
- Get list of customers
- Update customer data

## 1.2 Credits

This package was created with [Cookiecutter](#) and the [audreyr/cookiecutter-pypackage](#) project template.

# CHAPTER 2

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## Installation

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### 2.1 Stable release

To install Pakettikauppa, run this command in your terminal:

```
$ pip install pakettikauppa
```

This is the preferred method to install Pakettikauppa, as it will always install the most recent stable release.

If you don't have `pip` installed, this Python installation [guide](#) can guide you through the process.

### 2.2 From sources

The sources for Pakettikauppa can be downloaded from the [Github repo](#).

You can either clone the public repository:

```
$ git clone git://github.com/vilkasgroup/Pakettikauppa
```

Or download the [tarball](#):

```
$ curl -OL https://github.com/vilkasgroup/Pakettikauppa/tarball/master
```

Once you have a copy of the source, you can install it with:

```
$ python setup.py install
```



# CHAPTER 3

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## Usage

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To use Pakettikauppa in a project:

```
import pakettikauppa
```



# CHAPTER 4

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pakettikauppa

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## 4.1 pakettikauppa package

### 4.1.1 Submodules

### 4.1.2 pakettikauppa.merchant module

This is a module for Pakettikauppa integration for merchants to use

**The module provides below functionality:**

1. Get shipping method list
2. Get additional service list
3. Search pickup points
4. Get shipment status
5. Create shipment
6. Get shipping label

```
class pakettikauppa.merchant.PkMerchant (is_test_mode=0, api_key=None, secret=None)
Bases: pakettikauppa.pakettikauppa.Pakettikauppa

create_additional_info_element (root, **dict_data)
    Append additional info element to given root object. :param root: root XML object. :param dict_data: dictionary of additional info text :return:

create_shipment (**kwargs)
    Main function to send a request to Pakettikauppa to create shipment.

    Parameters kwargs – See get_xml_shipment_req_data() function

    Return dict_data See parse_xml_create_shipment_res() function
```

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**create\_shipment\_with\_simple\_data (\*\*kwargs)**

Same as create\_shipment() function expect the input parameter is in shorter format

This API send request data in XML format.

**Parameters kwargs** – see get\_simple\_test\_data\_create\_shipment() function

**Return dict\_data** See parse\_xml\_create\_shipment\_res() function

**generate\_additional\_services\_data (list\_data=None)**

Generate additional services data.

**Parameters list\_data** – list of dictionary of additional services

**Return list\_data** list of formatted dictionary of additional services

**generate\_parcels\_data (list\_data=None)**

Generate parcels data.

**Parameters list\_data** – list of dictionary of parcels

**Return list\_data** list of formatted dictionary of parcels

**get\_additional\_service\_list (language\_code2='EN')**

Get list of additional service for the account

**Parameters language\_code2** – 2 letters of language code. Default value is ‘EN’

**Return list\_data** list of response data

**get\_api\_config (api\_name=None)**

Constructs API configuration

**Parameters api\_name** – string of API name

**Return dict\_data** dictionary of configuration data

**dict\_data keys:** api\_post\_url (string): post URL address api\_key (string): API key api\_secret (string): secret key

**get\_api\_suffix (param)**

Get API suffix for the API name :param api\_name: string of API name :return api\_suffix: string of API suffix

**get\_create\_multi\_parcels\_shipment\_test\_data()**

Main function to generate test data set for create shipment request call.

**Return dict\_data** dictionary of request data

**get\_create\_shipment\_test\_data()**

Main function to generate test data set for create shipment request call.

**Return dict\_data** dictionary of request data

**get\_create\_shipment\_test\_req\_data()**

Generates test data set for create shipment request call.

**Return dict\_data** dictionary of request data

**get\_one\_additional\_service\_data (\*\*kwargs)**

Generate one additional service data item.

**Parameters kwargs** – contain following keys: ServiceCode: string of additional service code

Specifier: list of dictionary or dictionary of service details. See get\_one\_specifier\_data() function for input format

**Return** `dict_data` dictionary for one additional service

**get\_one\_parcel\_data** (\*\*kwargs)  
Generate one parcel data.

**Parameters** `kwargs` – dictionary contain following keys: Reference: parcel reference PackageType: code of package type Weight: dictionary with ‘weight\_unit’ and ‘value’ key. Volume: dictionary with ‘unit’ and ‘value’ key. InfoCode: Contents: product description ReturnService: return service code ContentLine: dictionary of parcel content data ParcelServices: parcel additional service (optional)

**Return** `dict_data` dictionary of parcel data

**get\_one\_parcel\_service\_data** (\*\*kwargs)  
Generate one parcel service data.

**Parameters** `kwargs` – dictionary of parcel service code, contain following key: ServiceCode: parcel service code - string

**Return** `dict_data` dictionary of one parcel service

**get\_one\_specifier\_data** (\*\*kwargs)  
Generate one specifier data item

**Parameters** `kwargs` – contain following keys: name: attribute name for additional service value: attribute value

**Return** `dict_data` dictionary of one specifier

**get\_pickup\_point\_req\_data** (`api_key`, \*\*kwargs)  
Constructs request data for search pickup point API

#### Parameters

- `api_key` – string of API key
- `kwargs` –

**Kwargs:** postal\_code (string): postal code (mandatory) country\_code2 (string): 2 letters of country code i.e ‘FI’. Default is ‘FI’ street\_address (string): street address service\_provider (string): Limits search to a single service provider, possible values: “Posti”, “Matkahuolto” or “Db Schenker”. Case insensitive values. max\_result (integer): maximum number of search results. Default is 5

**Return** `dict_data` dictionary of request data

**get\_proper\_req\_data\_create\_shipment** (\*\*`simple_dict_data`)  
Generate low lever of request input data for create shipment API.

**Parameters** `simple_dict_data` – see output of `get_simple_test_data_create_shipment()` function

**Return** `dict_data` dictionary of request data

**get\_routing\_key** (`routing_id`)  
Calculate routing key.

**Parameters** `routing_id` – string of routing ID

**Return** `digest_string` digest string of MD5 hash

**get\_shipment\_status** (`tracking_code`)  
Get shipment status from Pakettikauppa.

**Parameters** `tracking_code` – string of tracking code for checking

**Returns**

**get\_shipment\_status\_req\_data** (*tracking\_code*)  
Construct request data for get shipment status API.

**Parameters** **tracking\_code** – string of tracking code

**Return dict\_data** dictionary of request data

**get\_shipping\_label** (\*\*kwargs)  
Get shipping labels from Pakettikauppa. This API send request data in XML format.

**Parameters** **kwargs** – See `get_xml_shipping_label_req_data()` function

**Returns** See `parse_xml_get_shipping_label_res()` function

**get\_shipping\_label\_req\_test\_data** ()  
Generate test request data for getting shipping label.

**Return dict\_data** dictionary

**get\_shipping\_method\_list** (*language\_code2='EN'*)  
Get list of available shipping method for the account

**Parameters** **language\_code2** – 2 letters of language code. Default value is ‘EN’

**Return list\_data** list of response data

**get\_simple\_test\_data\_create\_shipment** ()

Generate more simplify version of request data of create shipment API. Output of this function should then pass to `get_proper_req_data_create_shipment()` function to get right data structure for request input data.

For full version see `get_create_shipment_test_data()` function.

**Return dict\_data** dictionary of request data

**get\_xml\_shipment\_req\_data** (\*\*kwargs)  
Construct XML string of request data for create shipment API

**Parameters** **kwargs** –

**Kwargs:**

**eChannel: dictionary with following keys** ROUTING: see `_create_routing_elements()` function  
Shipment: see `_create_shipment_elements()` function

**Return xml\_string** string of XML request data for create shipment API

**get\_xml\_shipping\_label\_req\_data** (\*\*kwargs)  
Construct XML string request data for getting shipping label

**Parameters** **kwargs** – contains following keys

**eChannel: contains following keys** ROUTING: dictionary of routing data PrintLabel: dictionary of tracking codes

**ROUTING:** Routing.Account: API key Routing.Key: MD5 hash string Routing.Id: could be order id or shop id or combination of both Routing.Name: could be order alias or shop alias or combination of both Routing.Time: string of current datetime with following format ‘%Y%m%d%H%M%S’

**PrintLabel:** responseFormat: expected response data format. Possible values are “File” and “inline”, “File” is default. content: dictionary of tracking code with ‘TrackingCode’ as a key.

**TrackingCode:** could be dictionary with ‘Code’ key or list of dictionary of ‘Code’ key for asking multiple labels  
 Code: string of tracking code

**Return** `xml_string`

**parse\_xml\_create\_shipment\_res** (`xml_string`)

Constructs dictionary from response XML string

**Parameters** `xml_string` – string of XML data

**Return** `dict_data` dictionary of response data

**dict\_data contains following keys:** status (integer): 1 = status OK message (string): response message from Pakettikauppa reference (dictionary): contains two keys: ‘uuid’ and ‘value’ trackingcode (dictionary): contains two keys: ‘tracking\_url’ and ‘value’ (tracking code)

**parse\_xml\_get\_shipping\_label\_res** (`xml_string`)

Construct dictionary from response data.

**Parameters** `xml_string` – XML string of response data

**Returns** `dict_data`: dictionary, contains below keys status (integer): 1 = operation OK message (string): response message PDFContent (string): binary data of PDF content ContentEncoded (boolean): True = PDFContent data is encoded

**search\_pickup\_points** (`**kwargs`)

Main method to search pickup points

**Parameters** `kwargs` – see `get_pickup_point_req_data()` function

**Returns** list of pickup point data

**validate\_input\_params\_create\_shipment** (`**kwargs`)

**validate\_routing\_data** (`**kwargs`)

`pakettikauppa.merchant.create_currency_element` (`root, value=None`)

Append ‘Consignment.Currency’ element to given root object.

**Parameters**

- `root` – root XML element object
- `value` – string of currency code i.e. ‘EUR’

**Returns**

`pakettikauppa.merchant.create_merchandise_value_element` (`root, value=None`)

Append ‘Consignment.Merchandisevalue’ element to given root object.

**Parameters**

- `root` – root XML element object
- `value` – string of merchandise value

**Returns**

`pakettikauppa.merchant.create_product_element` (`root, product_code`)

Append ‘Consignment.Product’ element to given root object.

**Parameters**

- `root` – root XML object
- `product_code` – string of Posti’s product code

**Returns**

```
pakettikauppa.merchant.create_reference_element(root, value=None)
Append 'Consignment.Reference' element to given root object.
```

**Parameters**

- **root** – root XML object
- **value** – string of reference number

**Returns**

```
pakettikauppa.merchant.decode_pdf_content(encoded_pdf_content)
pakettikauppa.merchant.write_pdf_to_file(target_file_path, pdf_content)
```

### 4.1.3 pakettikauppa.pakettikauppa module

Pakettikauppa app

This module provides base functionality for Pakettikauppa integration

```
class pakettikauppa.pakettikauppa.Pakettikauppa(is_test_mode=0)
Bases: object
```

Base class for Pakettikauppa integration.

```
get_api_end_point()
Get API base end point string
```

**Return** `base_end_point` API base end point string

```
get_hash_sha256(secret_key, **kwargs)
Calculate SHA256 digest string.
```

**Parameters**

- **secret\_key** – string of secret key
- **kwargs** – dictionary of parameters for calculation

**Return** `digest_string` digest string

```
get_logger()
Get logger object.
```

**Returns**

```
get_md5_hash(api_key=None, secret_key=None, routing_id=None)
Calculate MD5 digest string.
```

**Parameters**

- **api\_key** – string of API key
- **secret\_key** – string of secret key
- **routing\_id** – string of routing id

**Return** `digest_string` digest string

```
get_post_url(api_suffix=None)
Get API post URL address
```

**Parameters** `api_suffix` – string of API suffix

```

Return api_post_url (string) Post URL
logger = None
parse_res_json_data (res_obj)
    Parse response JSON data (Not yet completely implemented)
        Parameters res_obj – response object
Returns

parse_res_to_list (res_obj=None)
    Parse response object to list data.
        Parameters res_obj – response object
Return list_data list data of response data from Pakettikauppa
send_request (send_method='POST', _api_post_url=None, req_input=None, **headers)
    Send a request to Pakettikauppa.

Parameters
    • send_method – type of request method. Possible value are ‘POST’ and ‘GET’, ‘POST’ is default value.
    • _api_post_url – string of post URL
    • req_input – request input data
    • headers – dictionary of header data
Return res_obj response object

set_logger ()
    Set logger object.

Returns

exception pakettikauppa.pakettikauppa.PakettikauppaException
    Bases: exceptions.Exception

pakettikauppa.pakettikauppa.check_api_name (in_function)
    Validate API name :type in_function: input function

```

#### 4.1.4 pakettikauppa.reseller module

This is a module for Pakettikauppa integration for resellers to use

**The module provides below functionality:**

1. Create customer
2. Update customer
3. Get list of customer
4. De-activate customer

```

class pakettikauppa.reseller.PkReseller (is_test_mode=0, api_key=None, secret=None)
    Bases: pakettikauppa.pakettikauppa.Pakettikauppa

    Pakettikauppa reseller class is mean for reseller.

    accept_payment_service_provider = ('CHECKOUT', 'CREDIT_CARD')

```

**clean\_up\_phone\_data** (*phone\_string=None*)

Remove none-digit data from phone number.

**Parameters** **phone\_string** – string of phone number

**Returns**

**create\_customer** (\*\**kwargs*)

Create customer in Pakettikauppa's system.

**Parameters** **kwargs** – See `get_create_customer_req_data()` function

**Return list\_data** list of response data

**deactivate\_customer** (*customer\_id*)

De-activate customer account in Pakettikauppa's system.

**Parameters** **customer\_id** – Pakettikauppa's customer id

**Return list\_data** list of response data

**get\_api\_config** (*api\_name=None*)

Constructs API configuration

**Parameters** **api\_name** – string of API name

**Return dict\_data** dictionary of configuration data

**dict\_data keys:** api\_post\_url (string): post URL address api\_key (string): API key api\_secret (string): secret key

**get\_api\_suffix** (*param*)

Get API suffix for given API name.

**Parameters** **api\_name** – string of API name

**Return api\_suffix** string of API suffix

**get\_create\_customer\_req\_data** (\*\**kwargs*)

Construct request data for create customer API.

**Parameters** **kwargs** – contains following key name: customer name business\_id: VAT ID payment\_service\_provider: possible values are ‘CHECKOUT’ and ‘CREDIT\_CARD’, can be empty string psp\_merchant\_id: Required if payment\_service\_provider is CHECKOUT. Value is merchant id in the Checkout service. marketing\_name: optional field street\_address: street address post\_office: city name postcode: postal code country: country name phone: phone number email: email address contact\_person\_name: contact person name contact\_person\_phone: contact person phone number contact\_person\_email: contact person email address customer\_service\_phone: customer service phone number customer\_service\_email: customer service email address

**Return dict\_data** dictionary of request data

**get\_customer\_list** ()

Get list of customer for your account.

**Return list\_data** list of response data

**get\_update\_customer\_req\_data** (*customer\_id*, \*\**kwargs*)

Construct request data for updating customer details.

**Parameters**

- **customer\_id** – Pakettikauppa's customer id

- **kwargs** – attributes that you wish to update. See possible keys from `get_create_customer_req_data()`

**Return** `dict_data` dictionary of request data

**update\_customer** (`customer_id=None, **kwargs`)

Update customer details in Pakettikauppa's system.

**Parameters**

- **customer\_id** – Pakettikauppa's customer id
- **kwargs** – attributes that you wish to update. See possible keys from `get_create_customer_req_data()`

**Returns**

#### 4.1.5 Module contents

Top-level package for Pakettikauppa.



# CHAPTER 5

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## Contributing

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Contributions are welcome, and they are greatly appreciated! Every little bit helps, and credit will always be given.

You can contribute in many ways:

### 5.1 Types of Contributions

#### 5.1.1 Report Bugs

Report bugs at <https://github.com/vilkasgroup/Pakettikauppa/issues>.

If you are reporting a bug, please include:

- Your operating system name and version.
- Any details about your local setup that might be helpful in troubleshooting.
- Detailed steps to reproduce the bug.

#### 5.1.2 Fix Bugs

Look through the GitHub issues for bugs. Anything tagged with “bug” and “help wanted” is open to whoever wants to implement it.

#### 5.1.3 Implement Features

Look through the GitHub issues for features. Anything tagged with “enhancement” and “help wanted” is open to whoever wants to implement it.

### 5.1.4 Write Documentation

Pakettikauppa could always use more documentation, whether as part of the official Pakettikauppa docs, in docstrings, or even on the web in blog posts, articles, and such.

### 5.1.5 Submit Feedback

The best way to send feedback is to file an issue at <https://github.com/vilkasgroup/Pakettikauppa/issues>.

If you are proposing a feature:

- Explain in detail how it would work.
- Keep the scope as narrow as possible, to make it easier to implement.
- Remember that this is a volunteer-driven project, and that contributions are welcome :)

## 5.2 Get Started!

Ready to contribute? Here's how to set up *Pakettikauppa* for local development.

1. Fork the *Pakettikauppa* repo on GitHub.
2. Clone your fork locally:

```
$ git clone git@github.com:vilkasgroup/Pakettikauppa.git
```

3. Install your local copy into a virtualenv. Assuming you have virtualenvwrapper installed, this is how you set up your fork for local development:

```
$ mkvirtualenv Pakettikauppa
$ cd Pakettikauppa/
$ python setup.py develop
```

4. Create a branch for local development:

```
$ git checkout -b name-of-your-bugfix-or-feature
```

Now you can make your changes locally.

5. When you're done making changes, check that your changes pass flake8 and the tests, including testing other Python versions with tox:

```
$ flake8 pakettikauppa tests
$ python setup.py test or py.test
$ tox
```

To get flake8 and tox, just pip install them into your virtualenv.

6. Commit your changes and push your branch to GitHub:

```
$ git add .
$ git commit -m "Your detailed description of your changes."
$ git push origin name-of-your-bugfix-or-feature
```

7. Submit a pull request through the GitHub website.

## 5.3 Pull Request Guidelines

Before you submit a pull request, check that it meets these guidelines:

1. The pull request should include tests.
2. If the pull request adds functionality, the docs should be updated. Put your new functionality into a function with a docstring, and add the feature to the list in README.rst.
3. The pull request should work for Python 2.6, 2.7, 3.3, 3.4 and 3.5, and for PyPy. Check [https://travis-ci.org/vilkasgroup/Pakettikauppa/pull\\_requests](https://travis-ci.org/vilkasgroup/Pakettikauppa/pull_requests) and make sure that the tests pass for all supported Python versions.

## 5.4 Tips

To run a subset of tests:

```
$ python -m unittest tests.test_pakettikauppa
```



# CHAPTER 6

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## Credits

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### 6.1 Development Lead

- Porntip Chaibamrung <[tipi@vilkas.fi](mailto:tipi@vilkas.fi)>

### 6.2 Contributors

None yet. Why not be the first?



# CHAPTER 7

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## History

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### 7.1 0.1.6 (2019-05-07)

- Updated pip and tox in ‘requirements\_dev.txt’ file.
- Updated Pipfile.lock

### 7.2 0.1.5 (2019-04-02)

- Fixed security issue in urllib3 package version in Pipfile.

### 7.3 0.1.4 (2019-04-02)

- Fixed security issue in Jinja2 package version in Pipfile.

### 7.4 0.1.3 (2019-04-02)

- Update version number due to changes in ‘requirements\_dev.txt’ file

### 7.5 0.1.2 (2019-07-01)

- Fix Pip files and requirement files for fixing security issue in pyyaml module

## 7.6 0.1.1 (2018-11-02)

- Fix related Pip files for requests module
- Fixed test data generating function in merchant.py
- Fixed tracking code for testing in test\_get\_shipping\_label.py

## 7.7 0.1.0 (2018-01-22)

- First release on PyPI.

# CHAPTER 8

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## Indices and tables

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## Index

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