StoreKeeper Documentation

Release 0.3.0

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Contents

StoreKeeper is an open source, multilingual warehouse/store management software

> **Warning:** *Project is under development!*

CHAPTER 1

Features

The following features are available:

- User login, logout
- Manage items and its barcodes, units, vendors
- Add/remove items in store
- Able to use barcode reader for collecting items
- Can use barcode printer to create labels

The following features are only available via API now:

- Manage users, handle permissions
- Can make acquisition and stocktaking
- Can crate works and its customers (handle outbound, returned items)

CHAPTER 2

Demo site

You can test the latest development version on our demo server: http://storekeeper-demo.dras.hu/storekeeper

Default username and password: **admin / admin**

CHAPTER 3

Languages

StoreKeeper is building in multilingual approach, therefore it can easily translate to a new language.

- You should create a new `.po` file in your language, then put to `client/po/` directory and create a pull request.
- Or use *Transifex* for online translation: https://www.transifex.com/projects/p/storekeeper/

CHAPTER 4

The Guide

4.1 Setup

4.1.1 Prepare & Run

All commands can run with `package.sh` scripts what you want. All of these scripts has `--help` argument for available getting some info about the current module.

1. Clone repo, or download & extract a release `.tar.gz` file
2. Install all dependencies: `./package.sh -p install`
3. Check the `config/config.yml` for database and other settings
4. Prepare database: `./package.sh upgrade_database`
5. Start server: `./package.sh start`

Now, you can open the WebUI: http://localhost:8000/storekeeper

4.1.2 Details

Basically, the `install` command consists of `preinstall` and `postinstall` parts.

- `preinstall` checks/prepares system components for `postinstall` and `start`. This command has only one dependency, an **DEB** based system (for *apt-get install*).
- `postinstall` checks/prepares external dependencies (e.g. Python, Bower modules).

You can modify installing method with this arguments:

- `--global` makes changes on system instead of virtual environments.
- `--production` installs dependencies for production running only (e.g. did not install unit test framework)

4.2 Upgrade

The upgrade process is under construction, but there are the main steps:

1. Update source code with **git** / extract release `.tar.gz` from GitHub.
2. Update libs and others with `./package.sh -p install`.
3. Follow up config changes based on `config/config.default.yml`.
4. Upgrade database scheme with `./package.sh upgrade_database`.

Note: Proper, seamless upgrade process will be supported between the stable versions!

4.2.1 Upgrade from v0.2.1 to v0.3.0

Changed the database migration framework in **v0.3.0**, therefore have to make some changes by hand:

1. Do common upgrade scenario step-by-step **without** upgrading database *(step 4)*
2. Remove `server/db_repository` directory
3. Run the following SQL commands:

```
        ALTER TABLE item ALTER COLUMN purchase_price SET DEFAULT 0;

        DROP TABLE migrate_version;
        CREATE TABLE alembic_version (version_num character varying(32) NOT NULL);
        -- ALTER TABLE public.alembic_version OWNER TO sql_user_of_storekeeper;
        INSERT INTO alembic_version VALUES ('305c2b0084f');
```

4. Now, upgrade database scheme with `./package.sh upgrade_database`.

Note: Run this commands as StoreKeeper's SQL user or use `ALTER TABLE` to set owner of the new table.

4.3 Client

The UI of **StoreKeeper** will be implemented in AngularStrap.

4.4 Server

The backend of **StoreKeeper** is based on Flask and used several plugins of it.

4.4.1 Interfaces

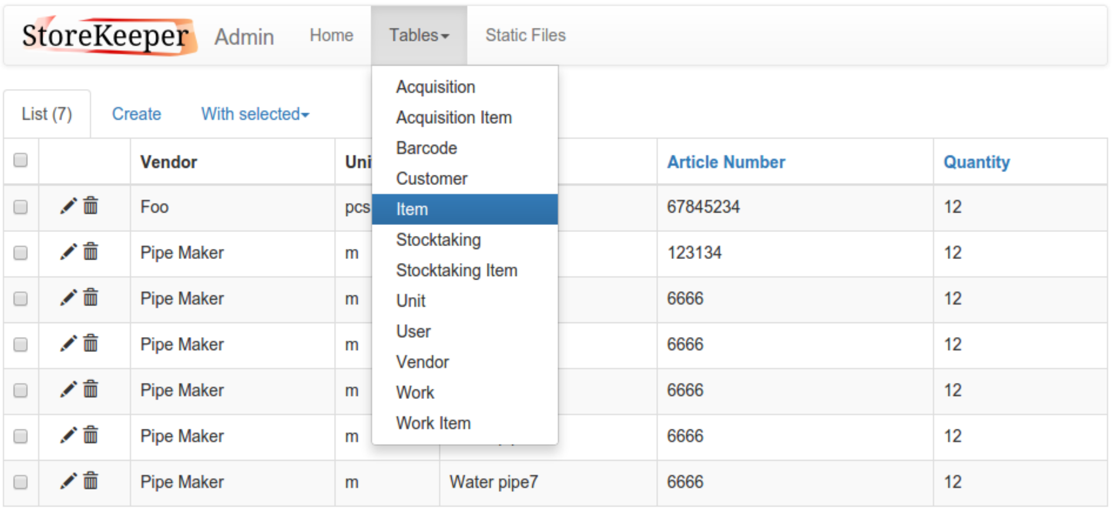
Admin page

StoreKeeper has admin interface (with Flask-Admin), where you can manage database tables and static files directly.

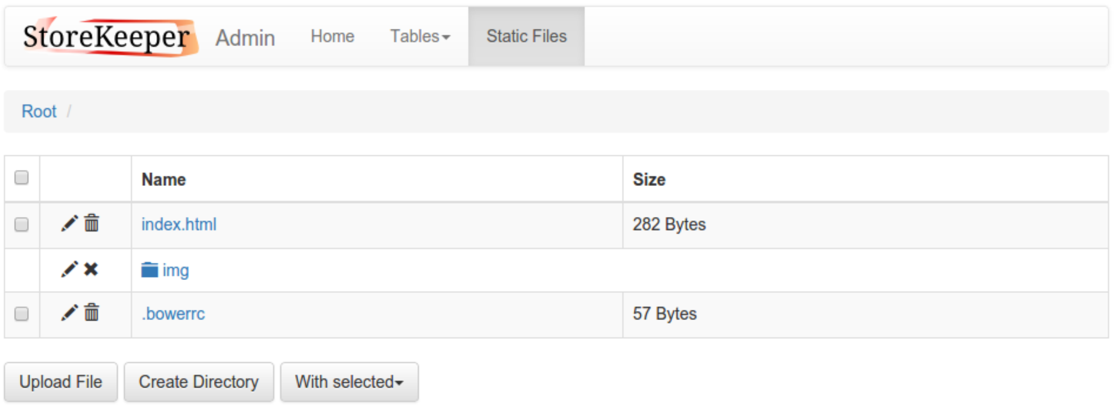
You can reach this on: http://localhost:8000/<name>/admin

Note: Admin page is not available in in production mode.

Interface



		Vendor	Uni		Article Number	Quantity
		Foo	pcs		67845234	12
		Pipe Maker	m		123134	12
		Pipe Maker	m		6666	12
		Pipe Maker	m		6666	12
		Pipe Maker	m		6666	12
		Pipe Maker	m		6666	12
		Pipe Maker	m	Water pipe7	6666	12



		Name	Size
		index.html	282 Bytes
		img	
		.bowerrc	57 Bytes

RPC API

StoreKeeper uses HATEOAS RCP API for communicate server and client side each other. The URLs are prefixed with name of application what you can customize in `server/config.yml`.

Example URL:

```
http://localhost:8000/<name>/api/<command>
```

Endpoints

Acquisitions API endpoint for manage acquisitions.

Data management

`/api/acquisitions`

`GET /storekeeper/api/acquisitions`

List acquisitions

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in

Example request:

```
GET /storekeeper/api/acquisitions HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

[
  {
    "comment": "Maybe missing some items",
    "id": 1,
    "timestamp": "2016-01-07T08:44:32.153473+00:00"
  },
  {
    "comment": null,
    "id": 2,
    "timestamp": "2016-01-07T08:44:32.153530+00:00"
  }
]
```

POST /storekeeper/api/acquisitions

Create acquisition

Status Codes

- 201 Created – no error
- 401 Unauthorized – user was not logged in
- 422 Unprocessable Entity – there is wrong type / missing field

Example request:

```
POST /storekeeper/api/acquisitions HTTP/1.1
Host: localhost:8000
Content-Type: application/json

{
  "comment": "Maybe missing some items"
}
```

Example response:

```
HTTP/1.0 201 CREATED
Content-Type: application/json

{
  "comment": "Maybe missing some items",
  "id": 1,
  "timestamp": "2016-01-07T08:44:32.153473+00:00"
}
```

/api/acquisitions/<id>

GET /storekeeper/api/acquisitions/(**int:** *id*)

Get acquisition

Query Parameters

- **id** – ID of selected acquisition for get

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no acquisition

Example request:

```
GET /storekeeper/api/acquisitions/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "comment": "Maybe missing some items",
  "id": 1,
  "timestamp": "2016-01-07T08:44:32.153473+00:00"
}
```

PUT /storekeeper/api/acquisitions/(**int:** *id*)

Update acquisition

Query Parameters

- **id** – ID of selected acquisition for put

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no acquisition
- 422 Unprocessable Entity – there is wrong type / missing field

Example request:

```
PUT /storekeeper/api/acquisitions/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json

{
  "comment": "A box has been damaged"
}
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "comment": "A box has been damaged",
  "id": 1,
  "timestamp": "2016-01-07T08:44:32.153473+00:00"
}
```

DELETE /storekeeper/api/acquisitions/(**int:** *id*)

Delete acquisition

Query Parameters

- **id** – ID of selected acquisition for delete

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no acquisition

Example request:

```
DELETE /storekeeper/api/acquisitions/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

null
```

/api/acquisitions/<id>/items

GET /storekeeper/api/acquisitions/ (**int:** *id*) **/items**

List acquisition items

Query Parameters

- **id** – ID of acquisition

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no item

Example request:

```
GET /storekeeper/api/acquisitions/1/items HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

[
  {
    "id": 1,
    "item": {
      "article_number": "FO213546",
      "id": 2,
      "name": "Pipe",
      "purchase_price": 0.0,
      "quantity": 0.0,
      "unit": {
        "id": 1,
        "unit": "m"
      },
      "vendor": {
        "id": 2,
        "name": "Star Shop Ltd."
      },
      "warning_quantity": 0.0
    },
    "quantity": 132.4
  },
  {
    "id": 2,
    "item": {
      "article_number": "SK132465",
      "id": 1,
      "name": "Spray",
      "purchase_price": 60.4,
      "quantity": 0.0,
      "unit": {
        "id": 2,
        "unit": "pcs"
      },
      "vendor": {
        "id": 1,
        "name": "Heavy Duty Ltd."
      },
      "warning_quantity": 4.0
    },
    "quantity": 32.1
  }
]
```

POST /storekeeper/api/acquisitions/(int: *id*)/items

Create acquisition item

Query Parameters

- **id** – ID of acquisition

Status Codes

- 201 Created – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no item
- 422 Unprocessable Entity – there is wrong type / missing field / can not add one item twice

Example request:

```
POST /storekeeper/api/acquisitions/1/items HTTP/1.1
Host: localhost:8000
Content-Type: application/json

{
  "item": {
    "article_number": "FO213546",
    "id": 2,
    "name": "Pipe",
    "purchase_price": 0.0,
    "quantity": 0.0,
    "unit": {
      "id": 1,
      "unit": "m"
    },
    "vendor": {
      "id": 2,
      "name": "Star Shop Ltd."
    },
    "warning_quantity": 0.0
  },
  "quantity": 132.4
}
```

Example response:

```
HTTP/1.0 201 CREATED
Content-Type: application/json
```

```
{
  "id": 1,
  "item": {
    "article_number": "FO213546",
    "id": 2,
    "name": "Pipe",
    "purchase_price": 0.0,
    "quantity": 0.0,
    "unit": {
      "id": 1,
      "unit": "m"
    },
    "vendor": {
      "id": 2,
      "name": "Star Shop Ltd."
    },
    "warning_quantity": 0.0
  },
  "quantity": 132.4
}
```

`/api/acquisitions/<id>/items`

GET `/storekeeper/api/acquisitions/`(**int:** *id*)`/items/`
int: *item_id* Get acquisition item

Query Parameters

- **id** – ID of acquisition
- **item_id** – ID of selected acquisition item for get

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no acquisition item

Example request:

```
GET /storekeeper/api/acquisitions/1/items/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "id": 1,
  "item": {
    "article_number": "FO213546",
    "id": 2,
    "name": "Pipe",
    "purchase_price": 0.0,
    "quantity": 0.0,
    "unit": {
      "id": 1,
      "unit": "m"
    },
    "vendor": {
      "id": 2,
      "name": "Star Shop Ltd."
    },
    "warning_quantity": 0.0
  },
  "quantity": 132.4
}
```

PUT /storekeeper/api/acquisitions/(**int:** *id*)**/items/**
int: *item_id* Update acquisition item

Query Parameters

- **id** – ID of acquisition
- **item_id** – ID of selected acquisition item for get

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no acquisition item
- 422 Unprocessable Entity – there is wrong type / missing field / can not add one item twice

Example request:

```
PUT /storekeeper/api/acquisitions/1/items/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json

{
  "item": {
    "article_number": "FO213546",
    "id": 2,
    "name": "Pipe",
    "purchase_price": 0.0,
    "quantity": 0.0,
    "unit": {
      "id": 1,
      "unit": "m"
    },
    "vendor": {
      "id": 2,
      "name": "Star Shop Ltd."
    },
    "warning_quantity": 0.0
  },
  "quantity": 132.4
}
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "id": 1,
  "item": {
    "article_number": "FO213546",
    "id": 2,
    "name": "Pipe",
    "purchase_price": 0.0,
    "quantity": 0.0,
    "unit": {
      "id": 1,
      "unit": "m"
    },
    "vendor": {
      "id": 2,
      "name": "Star Shop Ltd."
    },
    "warning_quantity": 0.0
  },
  "quantity": 132.4
}
```

DELETE /storekeeper/api/acquisitions/(**int:** *id*)**/items/**
int: *item_id* Delete acquisition item

Query Parameters

- **id** – ID of acquisition
- **item_id** – ID of selected acquisition item for get

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no acquisition item

Example request:

```
DELETE /storekeeper/api/acquisitions/1/items/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

null
```

Barcodes API endpoint for fetching barcodes.

Data management

/api/barcodes

GET /storekeeper/api/barcodes
List barcodes items

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in

Example request:

```
GET /storekeeper/api/barcodes HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

[
  {
    "barcode": "SKT59368",
    "id": 1,
    "item_id": 1,
    "main": true,
    "master": true,
    "quantity": 32.7
  },
  {
    "barcode": "9843-184125",
    "id": 2,
    "item_id": 1,
    "main": false,
    "master": false,
    "quantity": 1.5
  }
]
```

Config API endpoint for getting client related settings from server config.

Getting config values

`/api/config`

`GET /storekeeper/api/config`
Get server settings

Status Codes

- 200 OK – no error

Example request:

```
GET /storekeeper/api/config HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "app_name": "storekeeper",
  "app_title": "StoreKeeper",
  "currency": "$",
  "debug": false,
  "forced_language": null
}
```

Customers API endpoint for manage customers.

Data management

/api/customers

GET /storekeeper/api/customers

List customers

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in

Example request:

```
GET /storekeeper/api/customers HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

[
  {
    "id": 1,
    "name": "Big Customer Ltd."
  },
  {
    "id": 2,
    "name": "Buy Everything Co."
  }
]
```

POST /storekeeper/api/customers

Create customer

Status Codes

- 201 Created – no error
- 401 Unauthorized – user was not logged in
- 422 Unprocessable Entity – there is wrong type / missing field / customer is already exist

Example request:

```
POST /storekeeper/api/customers HTTP/1.1
Host: localhost:8000
Content-Type: application/json

{
  "name": "Big Customer Ltd."
}
```

Example response:

```
HTTP/1.0 201 CREATED
Content-Type: application/json

{
  "id": 1,
  "name": "Big Customer Ltd."
}
```

/api/customers/<id>

GET /storekeeper/api/customers/ (**int:** *id*)

Get customer

Query Parameters

- **id** – ID of selected customer for get

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no customer

Example request:

```
GET /storekeeper/api/customers/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "id": 1,
  "name": "Big Customer Ltd."
}
```

PUT /storekeeper/api/customers/ (**int:** *id*)

Update customer

Query Parameters

- **id** – ID of selected customer for put

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no customer
- 422 Unprocessable Entity – there is wrong type / missing field / customer is already exist

Example request:

```
PUT /storekeeper/api/customers/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json

{
  "name": "new_foo"
}
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "id": 1,
  "name": "new_foo"
}
```

DELETE /storekeeper/api/customers/(**int:** *id*)

Delete customer

Query Parameters

- **id** – ID of selected customer for delete

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no customer

Example request:

```
DELETE /storekeeper/api/customers/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

null
```

Error API endpoint for getting client side errors to alerting administrator.

Push error messages

/api/error

POST /storekeeper/api/error

Receive client side errors and forward to logfile / email / syslog (what specified in config)

Status Codes

- 201 Created – no error
- 401 Unauthorized – user was not logged in
- 422 Unprocessable Entity – there is wrong type / missing field

Example request:

```
POST /storekeeper/api/error HTTP/1.1
Host: localhost:8000
Content-Type: application/json

{
  "message": "foo is not defined",
  "name": "ReferenceError",
  "stack": "ReferenceError: foo is not defined\n    at Scope.printLabel (http://.../store
}
```

Example response:

```
HTTP/1.0 201 CREATED
Content-Type: application/json

null
```

Items API endpoint for manage items.

Data management

/api/items

GET /storekeeper/api/items

List items

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in

Example request:

```
GET /storekeeper/api/items HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

[
  {
    "article_number": "SK132465",
    "id": 1,
    "name": "Spray",
    "purchase_price": 60.4,
    "quantity": 0.0,
    "unit": {
      "id": 2,
      "unit": "pcs"
    },
    "vendor": {
      "id": 1,
      "name": "Heavy Duty Ltd."
    },
    "warning_quantity": 4.0
  },
  {
    "article_number": "FO213546",
    "id": 2,
    "name": "Pipe",
    "purchase_price": 0.0,
    "quantity": 0.0,
    "unit": {
      "id": 1,
      "unit": "m"
    },
    "vendor": {
      "id": 2,
      "name": "Star Shop Ltd."
    },
    "warning_quantity": 0.0
  }
]
```

POST /storekeeper/api/items

Create item

Status Codes

- 201 Created – no error

- 401 Unauthorized – user was not logged in
- 422 Unprocessable Entity – there is wrong type / missing field

Example request:

```
POST /storekeeper/api/items HTTP/1.1
Host: localhost:8000
Content-Type: application/json

{
  "article_number": "sk132465",
  "name": "Spray",
  "purchase_price": 60.4,
  "unit": {
    "id": 2,
    "unit": "pcs"
  },
  "vendor": {
    "id": 1,
    "name": "Heavy Duty Ltd."
  },
  "warning_quantity": 4.0
}
```

Example response:

```
HTTP/1.0 201 CREATED
Content-Type: application/json

{
  "article_number": "SK132465",
  "id": 1,
  "name": "Spray",
  "purchase_price": 60.4,
  "quantity": 0.0,
  "unit": {
    "id": 2,
    "unit": "pcs"
  },
  "vendor": {
    "id": 1,
    "name": "Heavy Duty Ltd."
  },
  "warning_quantity": 4.0
}
```

/api/items/search

GET /storekeeper/api/items/search

Search in items and barcodes

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in

Example request:

```
GET /storekeeper/api/items/search?expression=sk&limit=6 HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

[
  {
    "barcode": "SK586936",
    "item_id": 326,
    "quantity": 1,
    "type": "barcode"
  },
  {
    "article_number": "SE180826",
    "item_id": 309,
    "name": "Skate",
    "type": "item",
    "vendor": "Import"
  }
]
```

/api/items/<id>

GET /storekeeper/api/items/(**int:** *id*)

Get item

Query Parameters

- **id** – ID of selected item for get

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no item

Example request:

```
GET /storekeeper/api/items/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "article_number": "SK132465",
  "id": 1,
  "name": "Spray",
  "purchase_price": 60.4,
  "quantity": 0.0,
  "unit": {
    "id": 2,
    "unit": "pcs"
  },
  "vendor": {
    "id": 1,
    "name": "Heavy Duty Ltd."
  },
  "warning_quantity": 4.0
}
```

PUT /storekeeper/api/items/ (**int:** *id*)
Update item

Query Parameters

- **id** – ID of selected item for put

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no item
- 422 Unprocessable Entity – there is wrong type / missing field

Example request:

```
PUT /storekeeper/api/items/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json

{
  "article_number": "sk132465",
  "name": "Spray",
  "purchase_price": 60.4,
  "unit": {
    "id": 2,
    "unit": "pcs"
  },
  "vendor": {
    "id": 1,
    "name": "Heavy Duty Ltd."
  },
  "warning_quantity": 4.0
}
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "article_number": "SK132465",
  "id": 1,
  "name": "Spray",
  "purchase_price": 60.4,
  "quantity": 0.0,
  "unit": {
    "id": 2,
    "unit": "pcs"
  },
  "vendor": {
    "id": 1,
    "name": "Heavy Duty Ltd."
  },
  "warning_quantity": 4.0
}
```

DELETE /storekeeper/api/items/ (**int:** *id*)
Delete item

Query Parameters

- **id** – ID of selected item for delete

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no item

Example request:

```
DELETE /storekeeper/api/items/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

null
```

/api/items/<id>/barcodes

GET /storekeeper/api/items/ (**int:** *id*) **/barcodes**

List barcodes.

Query Parameters

- **id** – ID of item

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no item

Example request:

```
GET /storekeeper/api/items/1/barcodes HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

[
  {
    "barcode": "SKT08267",
    "id": 1,
    "main": true,
    "master": true,
    "quantity": 32.7
  },
  {
    "barcode": "9843-184125",
    "id": 2,
    "main": false,
    "master": false,
    "quantity": 1.5
  }
]
```

POST /storekeeper/api/items/ (**int:** *id*) **/barcodes**

Create barcode (if missing `barcode` then server will generate one)

Query Parameters

- **id** – ID of item

Status Codes

- 201 Created – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no item
- 422 Unprocessable Entity – there is wrong type / missing field / can not add one barcode twice / can not generate unique new barcode / can not set non-main barcode as master barcode / can not set more than one master barcode to an item

Example request:

```
POST /storekeeper/api/items/1/barcodes HTTP/1.1
Host: localhost:8000
Content-Type: application/json

{
  "barcode": "SKT08267",
  "master": true,
  "quantity": 32.7
}
```

Example response:

```
HTTP/1.0 201 CREATED
Content-Type: application/json

{
  "barcode": "SKT08267",
  "id": 1,
  "main": true,
  "master": true,
  "quantity": 32.7
}
```

/api/items/<id>/barcodes/<id>

GET /storekeeper/api/items/(**int:** *item_id*)**/barcodes/**
int: *id* Get barcode

Query Parameters

- **id** – ID of selected barcode for get
- **item_id** – ID of item

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no barcode

Example request:

```
GET /storekeeper/api/items/1/barcodes/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "barcode": "SKT08267",
  "id": 1,
  "main": true,
  "master": true,
  "quantity": 32.7
}
```

PUT /storekeeper/api/items/(int: *item_id*)/barcodes/
int: *id* Update barcode

Query Parameters

- **id** – ID of selected barcode for put
- **item_id** – ID of item

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no barcode
- 422 Unprocessable Entity – there is wrong type / missing field / can not add one barcode twice / can not set non-main barcode as master barcode / can not set more than one master barcode to an item

Example request:

```
PUT /storekeeper/api/items/1/barcodes/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json

{
  "barcode": "SKT08267",
  "master": true,
  "quantity": 32.7
}
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "barcode": "SKT08267",
  "id": 1,
  "main": true,
  "master": true,
  "quantity": 32.7
}
```

DELETE /storekeeper/api/items/(int: *item_id*)/barcodes/
int: *id* Delete barcode

Query Parameters

- **id** – ID of selected barcode for delete
- **item_id** – ID of item

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no barcode

Example request:

```
DELETE /storekeeper/api/items/1/barcodes/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

null
```

Commands

/api/items/<id>/barcodes/<id>/print

GET /storekeeper/api/items/ (**int:** *item_id*) **/barcodes/int:** *id* **/print** Generate barcode label to PDF with some details, and starts downloading that.

Query Parameters

- **id** – ID of selected barcode for get
- **item_id** – ID of item

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no barcode

Example request:

```
GET /storekeeper/api/items/1/barcodes/1/print HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/pdf
Content-Disposition: attachment; filename=label__SK642031__4f0ff51c73703295643a325e55bc7e
Content-Length: 11234

<file content>
```

PUT /storekeeper/api/items/ (**int:** *item_id*) **/barcodes/int:** *id* **/print** Print barcode label with some details

Query Parameters

- **id** – ID of selected barcode for get
- **item_id** – ID of item

Status Codes

- 200 OK – no error
- 400 Bad Request – missing pycups python3 module

- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no barcode
- 422 Unprocessable Entity – there is wrong type / missing field

Example request:

```
PUT /storekeeper/api/items/1/barcodes/1/print HTTP/1.1
Host: localhost:8000
Content-Type: application/json

{
  "copies": 3
}
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

null
```

Session API endpoint for manage the current session.

Session management

/api/session

GET /storekeeper/api/session
Get current session

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in

Example request:

```
GET /storekeeper/api/session HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "admin": true,
  "disabled": false,
  "email": "admin@test.com",
  "id": 1,
  "username": "admin"
}
```

POST /storekeeper/api/session
Login user

Status Codes

- 201 Created – no error
- 401 Unauthorized – bad authentication data or user is disabled

- 422 Unprocessable Entity – there is wrong type / missing field

Example request:

```
POST /storekeeper/api/session HTTP/1.1
Host: localhost:8000
Content-Type: application/json

{
  "password": "secret",
  "remember": false,
  "username": "admin"
}
```

Example response:

```
HTTP/1.0 201 CREATED
Content-Type: application/json

{
  "admin": true,
  "disabled": false,
  "email": "admin@test.com",
  "id": 1,
  "username": "admin"
}
```

DELETE /storekeeper/api/session

Logout user

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in

Example request:

```
DELETE /storekeeper/api/session HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

null
```

Stocktakings API endpoint for manage stocktaking results.

Data management

/api/stocktakings

GET /storekeeper/api/stocktakings

List stocktakings

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in

Example request:

```
GET /storekeeper/api/stocktakings HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

[
  {
    "close_timestamp": null,
    "close_user": {
      "admin": null,
      "disabled": null,
      "email": null,
      "id": null,
      "username": null
    },
    "comment": "Maybe missing some items",
    "id": 1,
    "timestamp": "2016-01-07T08:44:32.153564+00:00"
  },
  {
    "close_timestamp": null,
    "close_user": {
      "admin": null,
      "disabled": null,
      "email": null,
      "id": null,
      "username": null
    },
    "comment": null,
    "id": 2,
    "timestamp": "2016-01-07T08:44:32.153586+00:00"
  }
]
```

`POST /storekeeper/api/stocktakings`

Create stocktaking

Status Codes

- 201 Created – no error
- 401 Unauthorized – user was not logged in
- 422 Unprocessable Entity – there is wrong type / missing field

Example request:

```
POST /storekeeper/api/stocktakings HTTP/1.1
Host: localhost:8000
Content-Type: application/json

{
  "comment": "Maybe missing some items"
}
```

Example response:

```
HTTP/1.0 201 CREATED
Content-Type: application/json

{
  "close_timestamp": null,
  "close_user": {
    "admin": null,
    "disabled": null,
    "email": null,
    "id": null,
    "username": null
  },
  "comment": "Maybe missing some items",
  "id": 1,
  "timestamp": "2016-01-07T08:44:32.153564+00:00"
}
```

/api/stocktakings/<id>

GET /storekeeper/api/stocktakings/ (**int:** *id*)

Get stocktaking

Query Parameters

- **id** – ID of selected stocktaking for get

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no stocktaking

Example request:

```
GET /storekeeper/api/stocktakings/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "close_timestamp": null,
  "close_user": {
    "admin": null,
    "disabled": null,
    "email": null,
    "id": null,
    "username": null
  },
  "comment": "Maybe missing some items",
  "id": 1,
  "timestamp": "2016-01-07T08:44:32.153564+00:00"
}
```

PUT /storekeeper/api/stocktakings/ (**int:** *id*)

Update stocktaking

Query Parameters

- **id** – ID of selected stocktaking for put

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in

- 404 Not Found – there is no stocktaking
- 422 Unprocessable Entity – there is wrong type / missing field

Example request:

```
PUT /storekeeper/api/stocktakings/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json

{
  "comment": "A box has been damaged"
}
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "close_timestamp": null,
  "close_user": {
    "admin": null,
    "disabled": null,
    "email": null,
    "id": null,
    "username": null
  },
  "comment": "A box has been damaged",
  "id": 1,
  "timestamp": "2016-01-07T08:44:32.153564+00:00"
}
```

DELETE /storekeeper/api/stocktakings/ (**int:** *id*)

Delete stocktaking

Query Parameters

- **id** – ID of selected stocktaking for delete

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no stocktaking

Example request:

```
DELETE /storekeeper/api/stocktakings/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

null
```

/api/stocktakings/<id>/items

GET /storekeeper/api/stocktakings/ (**int:** *id*) **/items**

List stocktaking items.

Query Parameters

- **`id`** – ID of stocktaking

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no item

Example request:

```
GET /storekeeper/api/stocktakings/1/items HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

[
  {
    "id": 1,
    "item": {
      "article_number": "FO213546",
      "id": 2,
      "name": "Pipe",
      "purchase_price": 0.0,
      "quantity": 0.0,
      "unit": {
        "id": 1,
        "unit": "m"
      },
      "vendor": {
        "id": 2,
        "name": "Star Shop Ltd."
      },
      "warning_quantity": 0.0
    },
    "quantity": 52.1
  },
  {
    "id": 2,
    "item": {
      "article_number": "SK132465",
      "id": 1,
      "name": "Spray",
      "purchase_price": 60.4,
      "quantity": 0.0,
      "unit": {
        "id": 2,
        "unit": "pcs"
      },
      "vendor": {
        "id": 1,
        "name": "Heavy Duty Ltd."
      },
      "warning_quantity": 4.0
    },
    "quantity": 26.8
  }
]
```

`POST /storekeeper/api/stocktakings/` (**int:** *id*) **`/items`**

Create stocktaking item

Query Parameters

- **id** – ID of stocktaking

Status Codes

- 201 Created – no error
- 401 Unauthorized – user was not logged in
- 403 Forbidden – can not add new stocktakings item after items was closed
- 404 Not Found – there is no item
- 422 Unprocessable Entity – there is wrong type / missing field / can not add one item twice

Example request:

```
POST /storekeeper/api/stocktakings/1/items HTTP/1.1
Host: localhost:8000
Content-Type: application/json

{
  "item": {
    "article_number": "FO213546",
    "id": 2,
    "name": "Pipe",
    "purchase_price": 0.0,
    "quantity": 0.0,
    "unit": {
      "id": 1,
      "unit": "m"
    },
    "vendor": {
      "id": 2,
      "name": "Star Shop Ltd."
    },
    "warning_quantity": 0.0
  },
  "quantity": 52.1
}
```

Example response:

```
HTTP/1.0 201 CREATED
Content-Type: application/json

{
  "id": 1,
  "item": {
    "article_number": "FO213546",
    "id": 2,
    "name": "Pipe",
    "purchase_price": 0.0,
    "quantity": 0.0,
    "unit": {
      "id": 1,
      "unit": "m"
    },
    "vendor": {
      "id": 2,
      "name": "Star Shop Ltd."
    },
    "warning_quantity": 0.0
  },
  "quantity": 52.1
}
```

/api/stocktakings/<id>/items/<item_id>

GET /storekeeper/api/stocktakings/ (**int:** *id*) **/items/**
int: *item_id* Get stocktaking item

Query Parameters

- **id** – ID of stocktaking
- **item_id** – ID of selected stocktaking item for get

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no stocktaking item

Example request:

```
GET /storekeeper/api/stocktakings/1/items/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "id": 1,
  "item": {
    "article_number": "FO213546",
    "id": 2,
    "name": "Pipe",
    "purchase_price": 0.0,
    "quantity": 0.0,
    "unit": {
      "id": 1,
      "unit": "m"
    },
    "vendor": {
      "id": 2,
      "name": "Star Shop Ltd."
    },
    "warning_quantity": 0.0
  },
  "quantity": 52.1
}
```

PUT /storekeeper/api/stocktakings/ (**int:** *id*) **/items/**
int: *item_id* Update stocktaking item

Query Parameters

- **id** – ID of stocktaking
- **item_id** – ID of selected stocktaking item for put

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in

- 403 Forbidden – can not change work item after outbound/returned items was closed
- 404 Not Found – there is no stocktaking item
- 422 Unprocessable Entity – there is wrong type / missing field / can not add one item twice

Example request:

```
PUT /storekeeper/api/stocktakings/1/items/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json

{
  "item": {
    "article_number": "FO213546",
    "id": 2,
    "name": "Pipe",
    "purchase_price": 0.0,
    "quantity": 0.0,
    "unit": {
      "id": 1,
      "unit": "m"
    },
    "vendor": {
      "id": 2,
      "name": "Star Shop Ltd."
    },
    "warning_quantity": 0.0
  },
  "quantity": 52.1
}
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "id": 1,
  "item": {
    "article_number": "FO213546",
    "id": 2,
    "name": "Pipe",
    "purchase_price": 0.0,
    "quantity": 0.0,
    "unit": {
      "id": 1,
      "unit": "m"
    },
    "vendor": {
      "id": 2,
      "name": "Star Shop Ltd."
    },
    "warning_quantity": 0.0
  },
  "quantity": 52.1
}
```

DELETE /storekeeper/api/stocktakings/(**int:** *id*)**/items/**
int: *item_id* Delete stocktaking item

Query Parameters

- **id** – ID of stocktaking

- **`item_id`** – ID of selected stocktaking item for delete

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 403 Forbidden – can not delete stocktaking item after items was closed
- 404 Not Found – there is no stocktaking item

Example request:

```
DELETE /storekeeper/api/stocktakings/1/items/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

null
```

Commands

/api/stocktakings/<id>/close

`PUT /storekeeper/api/stocktakings/`(int: *id*)`/close`
Close items on stocktaking

Query Parameters

- **`id`** – ID of selected stocktaking for put

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no stocktaking
- 422 Unprocessable Entity – there is wrong type / missing field / items have been closed / insufficient quantities for close the stocktaking items

Example request:

```
PUT /storekeeper/api/stocktakings/1/close HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "close_timestamp": "2016-01-07T08:44:32.153603+00:00",
  "close_user": {
    "admin": false,
    "disabled": false,
    "email": "foo@bar.com",
    "id": 2,
    "username": "foo"
  },
  "comment": "Maybe missing some items",
  "id": 1,
  "timestamp": "2016-01-07T08:44:32.153564+00:00"
}
```

Units API endpoint for manage units.

Data management

`/api/units`

`GET /storekeeper/api/units`

List units

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in

Example request:

```
GET /storekeeper/api/units HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

[
  {
    "id": 1,
    "unit": "m"
  },
  {
    "id": 2,
    "unit": "pcs"
  }
]
```

`POST /storekeeper/api/units`

Create unit

Status Codes

- 201 Created – no error
- 401 Unauthorized – user was not logged in
- 422 Unprocessable Entity – there is wrong type / missing field / unit is already exist

Example request:

```
POST /storekeeper/api/units HTTP/1.1
Host: localhost:8000
Content-Type: application/json

{
  "unit": "m"
}
```

Example response:

```
HTTP/1.0 201 CREATED
Content-Type: application/json

{
  "id": 1,
  "unit": "m"
}
```

/api/units/<id>

GET /storekeeper/api/units/ (**int:** *id*)
Get unit

Query Parameters

- **id** – ID of selected unit for get

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no unit

Example request:

```
GET /storekeeper/api/units/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "id": 1,
  "unit": "m"
}
```

PUT /storekeeper/api/units/ (**int:** *id*)
Update unit

Query Parameters

- **id** – ID of selected unit for put

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no unit
- 422 Unprocessable Entity – there is wrong type / missing field / unit is already exist

Example request:

```
PUT /storekeeper/api/units/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json

{
  "unit": "dl"
}
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "id": 1,
  "unit": "dl"
}
```

DELETE /storekeeper/api/units/ (int: *id*)

Delete unit

Query Parameters

- `id` – ID of selected unit for delete

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no unit

Example request:

```
DELETE /storekeeper/api/units/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

null
```

Users API endpoint for manage users.

Data management

/api/users

GET /storekeeper/api/users

List users *(for administrators only)*

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 403 Forbidden – user has not enough rights

Example request:

```
GET /storekeeper/api/users HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

[
  {
    "admin": true,
    "disabled": false,
    "email": "admin@test.com",
    "id": 1,
    "username": "admin"
  },
  {
    "admin": false,
    "disabled": false,
    "email": "foo@bar.com",
    "id": 2,
    "username": "foo"
  }
]
```

POST /storekeeper/api/users

Create user *(for administrators only)*

Status Codes

- 201 Created – no error
- 401 Unauthorized – user was not logged in
- 403 Forbidden – user has not enough rights
- 422 Unprocessable Entity – {original} / user is already exist

Example request:

```
POST /storekeeper/api/users HTTP/1.1
Host: localhost:8000
Content-Type: application/json

{
  "email": "foo@bar.com",
  "password": "bar",
  "username": "foo"
}
```

Example response:

```
HTTP/1.0 201 CREATED
Content-Type: application/json

{
  "admin": false,
  "disabled": false,
  "email": "foo@bar.com",
  "id": 2,
  "username": "foo"
}
```

/api/users/<id>

GET /storekeeper/api/users/ (**int:** *id*)

Get user

Query Parameters

- **id** – ID of selected user for get

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no user

Example request:

```
GET /storekeeper/api/users/2 HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "admin": false,
  "disabled": false,
  "email": "foo@bar.com",
  "id": 2,
  "username": "foo"
}
```

PUT /storekeeper/api/users/ (**int:** *id*)
Update user

Query Parameters

- **id** – ID of selected user for put

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 403 Forbidden – user can not modify other users
- 404 Not Found – there is no user
- 422 Unprocessable Entity – {original} / user is already exist

Example request:

```
PUT /storekeeper/api/users/2 HTTP/1.1
Host: localhost:8000
Content-Type: application/json

{
  "email": "foo@bar.com",
  "password": "bar",
  "username": "new_foo"
}
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "admin": false,
  "disabled": false,
  "email": "foo@bar.com",
  "id": 2,
  "username": "new_foo"
}
```

DELETE /storekeeper/api/users/ (**int:** *id*)

Delete user *(for administrators only)*

Query Parameters

- **id** – ID of selected user for delete

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 403 Forbidden – user can not remove itself
- 404 Not Found – there is no user

Example request:

```
DELETE /storekeeper/api/users/2 HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

null
```

Config management

/api/users/<id>/config

GET /storekeeper/api/users/ (**int:** *id*) **/config**

List user items.

Query Parameters

- **id** – ID of user

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no item

Example request:

```
GET /storekeeper/api/users/2/config HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

[
  {
    "name": "lang",
    "value": "hu"
  },
  {
    "name": "fruits",
    "value": "[\"apple\", \"orange\", \"banana\"]"
  }
]
```

POST /storekeeper/api/users/(**int:** *id*)**/config**

Create user item

Query Parameters

- **id** – ID of user

Status Codes

- 201 Created – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no item
- 422 Unprocessable Entity – there is wrong type / missing field / can not add one item twice

Example request:

```
POST /storekeeper/api/users/2/config HTTP/1.1
Host: localhost:8000
Content-Type: application/json

{
  "name": "lang",
  "value": "hu"
}
```

Example response:

```
HTTP/1.0 201 CREATED
Content-Type: application/json

{
  "name": "lang",
  "value": "hu"
}
```

/api/users/<id>/config/<id>

GET /storekeeper/api/users/(**int:** *id*)**/config/**

string: *name* Get user item

Query Parameters

- **id** – ID of user
- **name** – Name of selected user config value for get

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no user item

Example request:

```
GET /storekeeper/api/users/2/config/lang HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "name": "lang",
  "value": "hu"
}
```

PUT /storekeeper/api/users/ (**int:** *id*) **/config/**
string: *name* Update user item

Query Parameters

- **id** – ID of user
- **name** – Name of selected user config value for put

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no user item
- 422 Unprocessable Entity – there is wrong type / missing field / can not use one config name twice

Example request:

```
PUT /storekeeper/api/users/2/config/lang HTTP/1.1
Host: localhost:8000
Content-Type: application/json

{
  "name": "lang",
  "value": "hu"
}
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "name": "lang",
  "value": "hu"
}
```

DELETE /storekeeper/api/users/ (**int:** *id*) **/config/**
string: *name* Delete user item

Query Parameters

- **id** – ID of user
- **name** – Name of selected user config value for delete

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in

- 404 Not Found – there is no user item

Example request:

```
DELETE /storekeeper/api/users/2/config/lang HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

null
```

Vendors API endpoint for manage vendors.

Data management

/api/vendors

GET /storekeeper/api/vendors
List vendors

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in

Example request:

```
GET /storekeeper/api/vendors HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

[
  {
    "id": 1,
    "name": "Heavy Duty Ltd."
  },
  {
    "id": 2,
    "name": "Star Shop Ltd."
  }
]
```

POST /storekeeper/api/vendors
Create vendor

Status Codes

- 201 Created – no error
- 401 Unauthorized – user was not logged in
- 422 Unprocessable Entity – {original} / vendor is already exist

Example request:

```
POST /storekeeper/api/vendors HTTP/1.1
Host: localhost:8000
Content-Type: application/json

{
  "name": "Heavy Duty Ltd."
}
```

Example response:

```
HTTP/1.0 201 CREATED
Content-Type: application/json

{
  "id": 1,
  "name": "Heavy Duty Ltd."
}
```

`/api/vendors/<id>`

GET /storekeeper/api/vendors/ (**int:** *id*)
Get vendor

Query Parameters

- **id** – ID of selected vendor for get

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no vendor

Example request:

```
GET /storekeeper/api/vendors/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "id": 1,
  "name": "Heavy Duty Ltd."
}
```

PUT /storekeeper/api/vendors/ (**int:** *id*)
Update vendor

Query Parameters

- **id** – ID of selected vendor for put

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no vendor
- 422 Unprocessable Entity – {original} / vendor is already exist

Example request:

```
PUT /storekeeper/api/vendors/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json

{
  "name": "new_foo"
}
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "id": 1,
  "name": "new_foo"
}
```

DELETE /storekeeper/api/vendors/ (int: *id*)

Delete vendor

Query Parameters

- `id` – ID of selected vendor for delete

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no vendor

Example request:

```
DELETE /storekeeper/api/vendors/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

null
```

Works API endpoint for manage works.

Data management

/api/works

GET /storekeeper/api/works

List works

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in

Example request:

```
GET /storekeeper/api/works HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

[
  {
    "comment": "First work",
    "customer": {
      "id": 1,
      "name": "Big Customer Ltd."
    },
    "id": 1,
    "outbound_close_timestamp": null,
    "outbound_close_user": {
      "admin": null,
      "disabled": null,
      "email": null,
      "id": null,
      "username": null
    },
    "returned_close_timestamp": null,
    "returned_close_user": {
      "admin": null,
      "disabled": null,
      "email": null,
      "id": null,
      "username": null
    }
  },
  {
    "comment": null,
    "customer": {
      "id": 2,
      "name": "Buy Everything Co."
    },
    "id": 2,
    "outbound_close_timestamp": null,
    "outbound_close_user": {
      "admin": null,
      "disabled": null,
      "email": null,
      "id": null,
      "username": null
    },
    "returned_close_timestamp": null,
    "returned_close_user": {
      "admin": null,
      "disabled": null,
      "email": null,
      "id": null,
      "username": null
    }
  }
]
```

POST /storekeeper/api/works

Create work

Status Codes

- 201 Created – no error
- 401 Unauthorized – user was not logged in
- 422 Unprocessable Entity – there is wrong type / missing field

Example request:

```
POST /storekeeper/api/works HTTP/1.1
Host: localhost:8000
Content-Type: application/json

{
  "comment": "First work",
  "customer": {
    "id": 1,
    "name": "Big Customer Ltd."
  }
}
```

Example response:

```
HTTP/1.0 201 CREATED
Content-Type: application/json

{
  "comment": "First work",
  "customer": {
    "id": 1,
    "name": "Big Customer Ltd."
  },
  "id": 1,
  "outbound_close_timestamp": null,
  "outbound_close_user": {
    "admin": null,
    "disabled": null,
    "email": null,
    "id": null,
    "username": null
  },
  "returned_close_timestamp": null,
  "returned_close_user": {
    "admin": null,
    "disabled": null,
    "email": null,
    "id": null,
    "username": null
  }
}
```

`/api/works/<id>`

GET /storekeeper/api/works/ (**int:** *id*)

Get work

Query Parameters

- **id** – ID of selected work for get

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no work

Example request:

```
GET /storekeeper/api/works/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "comment": "First work",
  "customer": {
    "id": 1,
    "name": "Big Customer Ltd."
  },
  "id": 1,
  "outbound_close_timestamp": null,
  "outbound_close_user": {
    "admin": null,
    "disabled": null,
    "email": null,
    "id": null,
    "username": null
  },
  "returned_close_timestamp": null,
  "returned_close_user": {
    "admin": null,
    "disabled": null,
    "email": null,
    "id": null,
    "username": null
  }
}
```

PUT /storekeeper/api/works/(**int:** *id*)

Update work

Query Parameters

- **id** – ID of selected work for put

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no work
- 422 Unprocessable Entity – there is wrong type / missing field

Example request:

```
PUT /storekeeper/api/works/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json

{
  "comment": "Something are not finished",
  "customer": {
    "id": 1,
    "name": "Big Customer Ltd."
  }
}
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "comment": "Something are not finished",
  "customer": {
    "id": 1,
    "name": "Big Customer Ltd."
  },
  "id": 1,
  "outbound_close_timestamp": null,
  "outbound_close_user": {
    "admin": null,
    "disabled": null,
    "email": null,
    "id": null,
    "username": null
  },
  "returned_close_timestamp": null,
  "returned_close_user": {
    "admin": null,
    "disabled": null,
    "email": null,
    "id": null,
    "username": null
  }
}
```

DELETE /storekeeper/api/works/ (**int:** *id*)
Delete work

Query Parameters

- **id** – ID of selected work for delete

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no work

Example request:

```
DELETE /storekeeper/api/works/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

null
```

/api/works/<id>/items

GET /storekeeper/api/works/ (**int:** *id*) **/items**
List work items

Query Parameters

- **id** – ID of work

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no item

Example request:

```
GET /storekeeper/api/works/1/items HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

[
  {
    "id": 1,
    "item": {
      "article_number": "FO213546",
      "id": 2,
      "name": "Pipe",
      "purchase_price": 0.0,
      "quantity": 0.0,
      "unit": {
        "id": 1,
        "unit": "m"
      },
      "vendor": {
        "id": 2,
        "name": "Star Shop Ltd."
      },
      "warning_quantity": 0.0
    },
    "outbound_quantity": 132.8,
    "returned_quantity": null
  },
  {
    "id": 2,
    "item": {
      "article_number": "SK132465",
      "id": 1,
      "name": "Spray",
      "purchase_price": 60.4,
      "quantity": 0.0,
      "unit": {
        "id": 2,
        "unit": "pcs"
      },
      "vendor": {
        "id": 1,
        "name": "Heavy Duty Ltd."
      },
      "warning_quantity": 4.0
    },
    "outbound_quantity": 41.2,
    "returned_quantity": 2.1
  }
]
```

POST /storekeeper/api/works/ (**int:** *id*) **/items**

Create work item

Query Parameters

- **id** – ID of work

Status Codes

- 201 Created – no error
- 401 Unauthorized – user was not logged in
- 403 Forbidden – can not add new work item after outbound items was closed
- 404 Not Found – there is no item
- 422 Unprocessable Entity – there is wrong type / missing field / can not add one item twice

Example request:

```
POST /storekeeper/api/works/1/items HTTP/1.1
Host: localhost:8000
Content-Type: application/json

{
  "item": {
    "article_number": "FO213546",
    "id": 2,
    "name": "Pipe",
    "purchase_price": 0.0,
    "quantity": 0.0,
    "unit": {
      "id": 1,
      "unit": "m"
    },
    "vendor": {
      "id": 2,
      "name": "Star Shop Ltd."
    },
    "warning_quantity": 0.0
  },
  "outbound_quantity": 132.8
}
```

Example response:

```
HTTP/1.0 201 CREATED
Content-Type: application/json

{
  "id": 1,
  "item": {
    "article_number": "FO213546",
    "id": 2,
    "name": "Pipe",
    "purchase_price": 0.0,
    "quantity": 0.0,
    "unit": {
      "id": 1,
      "unit": "m"
    },
    "vendor": {
      "id": 2,
      "name": "Star Shop Ltd."
    },
    "warning_quantity": 0.0
  },
  "outbound_quantity": 132.8,
  "returned_quantity": null
}
```

/api/works/<id>/items/<item_id>

GET /storekeeper/api/works/(int: id)/items/
int: *item_id* Get work item

Query Parameters

- **id** – ID of work
- **item_id** – ID of selected work item for get

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no work item

Example request:

```
GET /storekeeper/api/works/1/items/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "id": 1,
  "item": {
    "article_number": "FO213546",
    "id": 2,
    "name": "Pipe",
    "purchase_price": 0.0,
    "quantity": 0.0,
    "unit": {
      "id": 1,
      "unit": "m"
    },
    "vendor": {
      "id": 2,
      "name": "Star Shop Ltd."
    },
    "warning_quantity": 0.0
  },
  "outbound_quantity": 132.8,
  "returned_quantity": null
}
```

PUT /storekeeper/api/works/(int: id)/items/
int: *item_id* Update work item

Query Parameters

- **id** – ID of work
- **item_id** – ID of selected work item for get

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 403 Forbidden – can not change work item after outbound/returned items was closed
- 404 Not Found – there is no work item
- 422 Unprocessable Entity – there is wrong type / missing field / can not add one item twice

Example request:

```
PUT /storekeeper/api/works/1/items/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json

{
  "item": {
    "article_number": "FO213546",
    "id": 2,
    "name": "Pipe",
    "purchase_price": 0.0,
    "quantity": 0.0,
    "unit": {
      "id": 1,
      "unit": "m"
    },
    "vendor": {
      "id": 2,
      "name": "Star Shop Ltd."
    },
    "warning_quantity": 0.0
  },
  "outbound_quantity": 132.8
}
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "id": 1,
  "item": {
    "article_number": "FO213546",
    "id": 2,
    "name": "Pipe",
    "purchase_price": 0.0,
    "quantity": 0.0,
    "unit": {
      "id": 1,
      "unit": "m"
    },
    "vendor": {
      "id": 2,
      "name": "Star Shop Ltd."
    },
    "warning_quantity": 0.0
  },
  "outbound_quantity": 132.8,
  "returned_quantity": null
}
```

DELETE /storekeeper/api/works/ (**int:** *id*) **/items/**
int: *item_id* Delete work item

Query Parameters

- **id** – ID of work
- **item_id** – ID of selected work item for get

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 403 Forbidden – can not delete work item after outbound/returned items was closed
- 404 Not Found – there is no work item

Example request:

```
DELETE /storekeeper/api/works/1/items/1 HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

null
```

Commands

/api/works/<id>/close-outbound

PUT /storekeeper/api/works/ (**int:** *id*) **/close-outbound**
Close outbound items on work

Query Parameters

- **id** – ID of selected work for put

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no work
- 422 Unprocessable Entity – there is wrong type / missing field / outbound items have been closed /insufficient quantities for close the outbound work items

Example request:

```
PUT /storekeeper/api/works/1/close-outbound HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "comment": "First work",
  "customer": {
    "id": 1,
    "name": "Big Customer Ltd."
  },
  "id": 1,
  "outbound_close_timestamp": "2016-01-07T08:44:32.154018+00:00",
  "outbound_close_user": {
    "admin": false,
    "disabled": false,
    "email": "foo@bar.com",
    "id": 2,
    "username": "foo"
  },
  "returned_close_timestamp": null,
  "returned_close_user": {
    "admin": null,
    "disabled": null,
    "email": null,
    "id": null,
    "username": null
  }
}
```

`/api/works/<id>/close-returned`

PUT /storekeeper/api/works/ (**int:** *id*) **/close-returned**

Close returned items on work

Query Parameters

- **id** – ID of selected work for put

Status Codes

- 200 OK – no error
- 401 Unauthorized – user was not logged in
- 404 Not Found – there is no work
- 422 Unprocessable Entity – there is wrong type / missing field / outbound items have not been closed / returned items have been closed /insufficient quantities for close the returned work items

Example request:

```
PUT /storekeeper/api/works/1/close-returned HTTP/1.1
Host: localhost:8000
Content-Type: application/json
```

Example response:

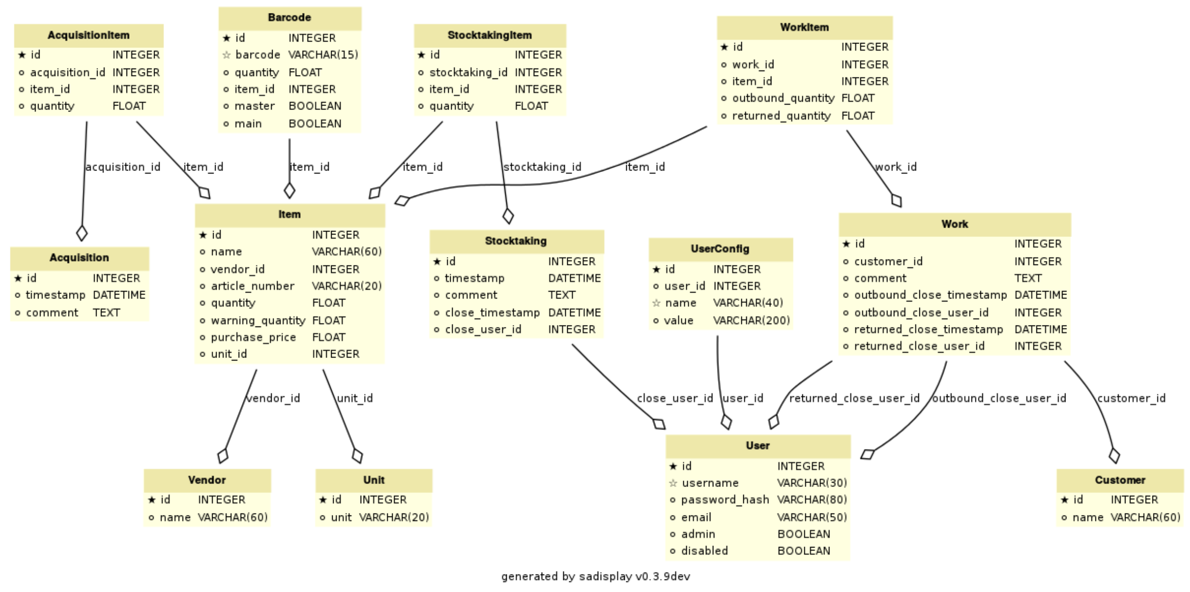
```
HTTP/1.0 200 OK
Content-Type: application/json

{
  "comment": "First work",
  "customer": {
    "id": 1,
    "name": "Big Customer Ltd."
  },
  "id": 1,
  "outbound_close_timestamp": "2016-01-07T08:44:32.154018+00:00",
  "outbound_close_user": {
    "admin": false,
    "disabled": false,
    "email": "foo@bar.com",
    "id": 2,
    "username": "foo"
  },
  "returned_close_timestamp": "2016-01-07T08:44:32.154052+00:00",
  "returned_close_user": {
    "admin": false,
    "disabled": false,
    "email": "foo@bar.com",
    "id": 2,
    "username": "foo"
  }
}
```

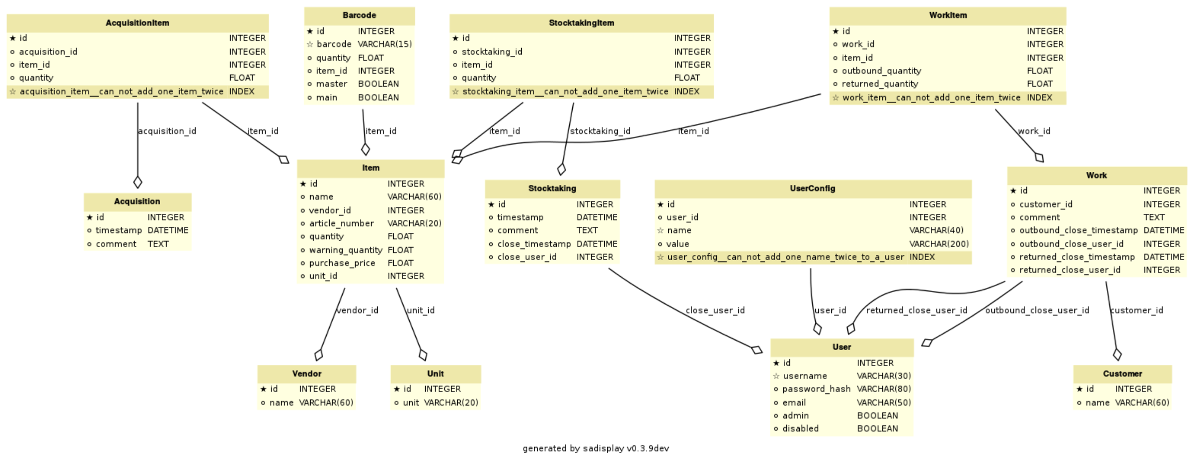
4.4.2 Details

SQL Model

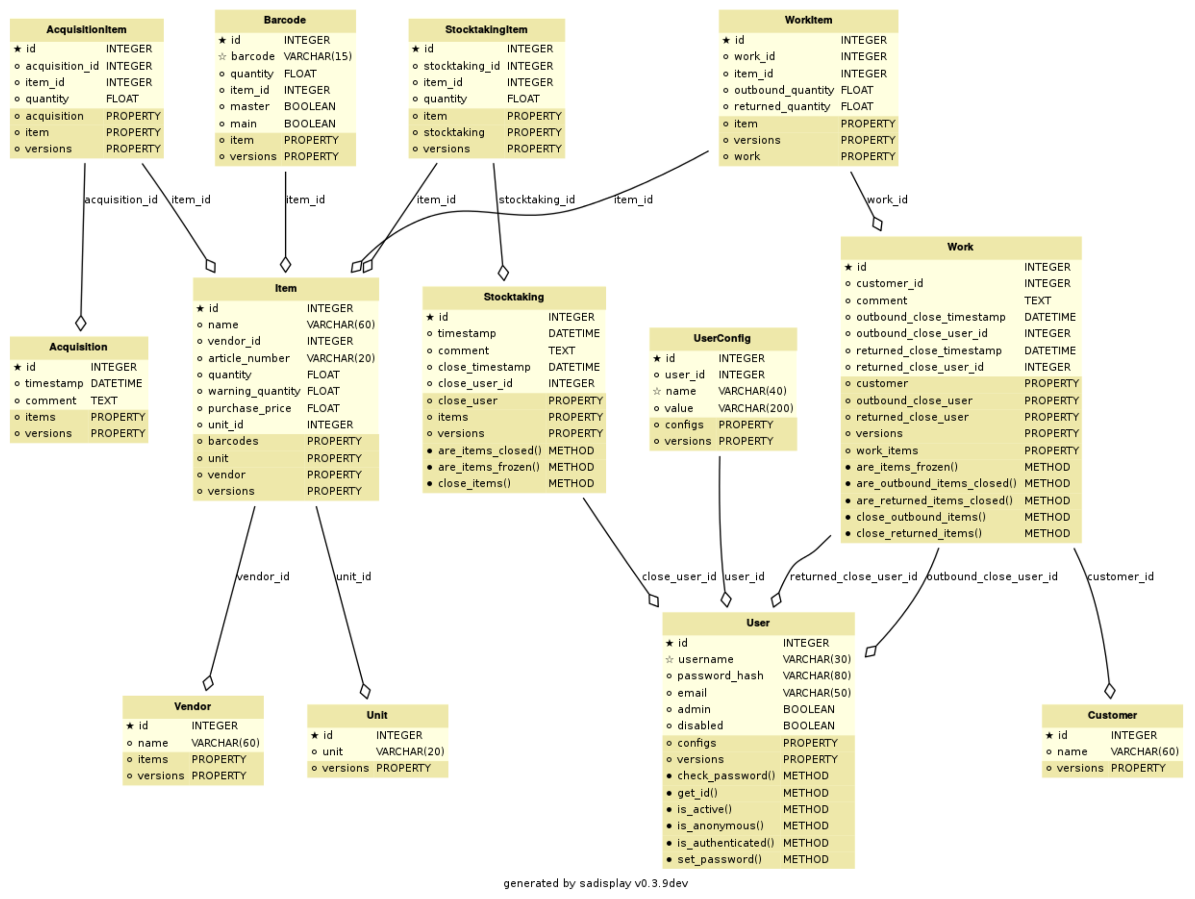
This software is SQL independent (thank you for SQL Alchemy), and we want to hold it in future. However, requirements, installer scripts, tests were prepared for and ran on PostgreSQL, MySQL and SQLite databases.



Model with indexes



Model with active properties and methods



CHAPTER 5

Indices and tables

- genindex

/storekeeper

Index