Nemesis Information System

User's Guide

Last updated: 09/20/2024

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1. Overview

The Nemesis Information System (NIS) is a business management system and webshop engine with lots of useful features in the e-commerce field. The target audience of this system is mainly small companies, who need a fast and easy solution for building a website and/or a simple business management system for basic tasks, but it may also be useful for home users, who need a smart application for managing business of their household.

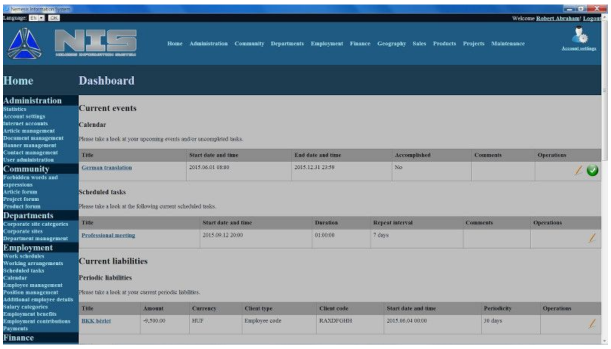


Figure 1: NIS main window

1.1. Key features

- Complete database server, webserver and desktop client (Figure 1) included in the installation package and portable version with a central service management application;
- Easy to use interface for product, project, order, customer, employee management and much more;
- Basic accounting system included;
- Supports banners in the header of the Customer's Page[1];
- Tips for all important menus to make the system more user-friendly;
- Support for importing and exporting data to and from CSV files;
- User-friendly maintenance with full backup and restore feature (Windows only);
- Primary modules are open-source and fully customizable;
- Portable mode without installing system services (NIS Control Central must be running to make services available without installing them).

1.2. Credits

- **Development**: Robert Abraham
- **Software Testers**: Dániel Nagy, Anita Kovács
- **Professional Consultant**: Veronika Nagy-Péteri

1.3. License

The Nemesis Information System is released under a modified version of the *GNU Lesser General Public License (version 2.1)* with attribution requirements and extensions for additional closed-source modules included in the system. For further information, please check the downloads.

1 The other name of this page is *frontend*. This is the main page of the system, created for public access.

2. System requirements

The core system of the Nemesis Information System is designed to be cross-platform and work on both 32 bit and 64 bit systems. However, a fully-featured installer and portable edition is yet available for Microsoft Windows systems only. If you want to install NIS on a different operating system then you have to use the source package.

We are planning to create a user-friendly installer on Linux systems too but we want to use the official repository of the target Linux distributions to install the required additional packages. This process is going to take some time. Thank you for your patience.

The minimal system requirements of the Windows binary version is the following:

- **Operating System**: Windows XP Service Pack 3 or later
- **CPU**: 1 GHz (2 GHz Intel Dual Core or equivalent recommended)
- **RAM**: 512 MB (2 GB recommended)
- **HDD**: 500 MB (for installation only)

These details do not limit the application of the system, they are just the guidelines before you decide to install it on your computer. NIS may also work on different architectures, especially when you install it from source. Practical system requirements may differ from the above details depending on the way of usage too. As NIS was designed to be a server-side application, it is recommended to install it on the strongest system you can provide.

You can find detailed information in the `readme.txt` file about the required packages and other dependencies when you try to install the system from source.

3. Installation

There are several methods you can install the system on your computer. You can install the system using the Windows installer package, use the Portable Edition without installation or install it from source.

3.1. Using the Windows installer package

This is the easiest method to get NIS working on Windows systems. The Windows installer, by default, will create a directory for the system, set the appropriate permissions and install the necessary services to get the system working. The basic steps of installation are the following:

1. Download the Windows installer package (usually the file `nis_win32_setup.exe`) and run the file. Make sure you have administrative permissions on Windows as it is necessary to install the system. The first steps are the same as in the case of all other applications. Click 'Next' on the welcome screen(s), accept the license and start the installer. When it's time to set the target folder it is strongly recommended to accept the default folder (usually `c:\nis`) to avoid permission problems that may prevent the services from starting. Set your new Start menu folder and click 'Next'.

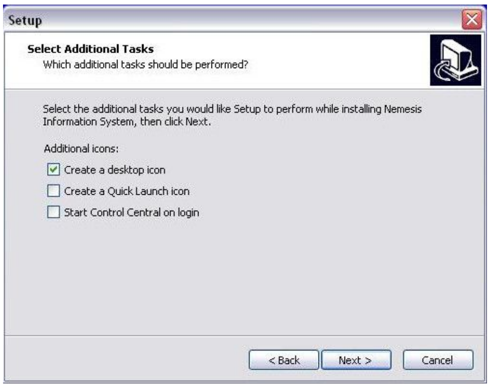


Figure 2: Primary NIS shortcuts

2. If you are using an older Windows system (for example: Windows XP) the installer will offer you to create a startup icon to launch the *Control Central* application automatically when you log in. this application requires administrative permissions so the icon will be created only for you. You can see this on Figure 2.

3. When you click next, the installer will ask you what port numbers you want the services to be assigned to. You can see the default values for all services. If you are not sure what port numbers you should be using, just leave these fields blank so default values will be used (Figure 3). If you have any problems running any of these services then you should change these port numbers to resolve conflicts. You can do this manually in the *Control Central* application after installing the system.

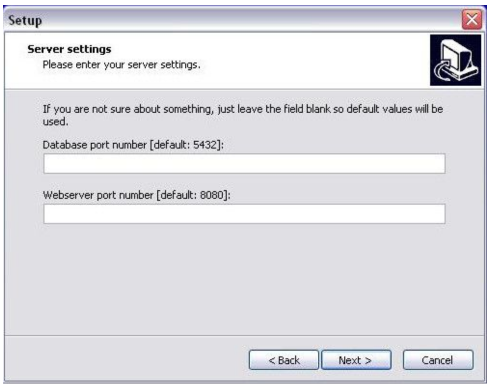


Figure 3: Service port numbers

4. After clicking 'Next', the installer will ask you to enter your mailing settings on the following pages. If you leave these fields blank, the mailing system will remain disabled and you will have to configure it manually later from the *Control Central*, if you want the system be able to send emails.

5. Click 'Next' and start the install process. Once it is finished you will see some important information about server maintenance operations. You should read this information carefully as it may help you when resolving problems with the system.

6. Click 'Next' and select if you want to start the *Administration System* after installation. When you click 'Next' again the installer will launch additional install processes to make sure the system is set up properly. **It is strongly recommended to install all of these additional applications and services**, including the **database**

server and the **web server**. If you reject installing these services then you will have to launch the *Control Central* application every time you want to use the system, otherwise the client applications will not be able to connect to the database server.

7. After installing these applications the installer will close and launch the *Administration System*. Now you can start working in the Nemesis Information System.

3.1.1. Installing the system on a production environment

Production environments need special installation details as they contain sensitive information and the `NIS\server` directory must be protected from unauthorized access. To install the system on a production environment or a publicly visible server, make sure you apply the following options during the installation process and after it:

1. **Install all services when offered**. Either with the Windows installer package or the *Control Central* application, make sure that both the database service and web service are installed properly and running, so other users will be able to access the system via their web browser or their web client application.

2. **Restrict all access to the `server` directory in the installation directory**. Make sure that only the system and the administrative users have read and write permissions on the `NIS\server` directory and none of the other users have any access to this directory. This is due after installation. You may need to temporarily stop the running services to do this and restart them after successfully changing permissions.

It is very important to apply these settings on a production environment as they make sure that the system will be secured and only authenticated users will be able to use it. Unauthorized database access may corrupt the database and all related applications, so these settings are the most important security guidelines.

3.2. Using the Portable Edition

Using the Portable Edition of NIS is only recommended when you want to test the system without installing it on your computer. Please note that administrative permissions are still required to launch the Portable Edition too as it will offer you to install the services later if you want to. The steps of starting the Portable Edition are the following:

1. Download and extract the Portable Edition if NIS (usually `nis_win32_portable.zip`). Go to the folder where you unzipped the program and open `readme.txt`. It contains important information how to start NIS.

2. Launch `server\control.exe` to execute the *Control Central* application. You will see now a tray icon on the bottom-left corner of your screen (Figure 4). *Control Central* will launch the database service automatically so now you can open the *Administration System* from the popup menu or open *Control Central* from the same place where you can start a lot more tasks.

3. If you no longer want to use the system, just click 'Exit' in the popup menu or in the 'Services' menu in the *Control Central* application. Please note that the database server will shut down if you have not explicitly told the system to install it and you will no longer be able to enter the system until you launch *Control Central* again.

Figure 4: NIS tray icon

3.3. Installing from source

This method is for developers and system administrators only. The source package contains only the web page and the database of NIS so you will have to set up a properly working database and web server manually. You will see basic instructions in the `readme.txt` file after downloading and extracting the contents of the source package (usually `source.zip`).

Since the source package contains only the source code of the core system, it is not limited to Windows operating systems, it is cross-platform and you can install them on any OS (for example: Linux systems) where you can install the necessary additional packages. The core system was designed on Linux so you should have no problems setting up NIS on Linux systems with a properly configured database and web server.

3.4. Troubleshooting

The system may fail to start when you are installing it to a folder with special characters included. To resolve this problem, install NIS to a folder, where special characters are excluded. This affects all versions of NIS for Windows systems, including the portable edition.

3.4.1. Windows 10 installation notices

There may be some problems with installing NIS on Windows 10 operating systems: if *SmartScreen* service is running, it may block the installation process or even prevent you from downloading any of the packages. To resolve this problem, it is recommended to temporarily disable *SmartScreen* service before downloading the package you want to install NIS from, install the system and when the installation process is completed, enable the service again.

If you do not want to disable *SmartScreen* service, click on the 'More info' link on the *SmartScreen* popup window and then on the 'Run anyway' button to bypass the filter when trying to install the system. Please note that you still may have to disable *SmartScreen* filter in your browser to download the packages, which you want to use, if you are using *Edge* browser.

4. Configuring the system

In this chapter we will cover how to configure NIS properly. All essential configuration files can be edited directly in the *Control Central*'s 'Configurations' menu. Once the system is installed (or the Portable Edition is extracted), launch file '`server\control.exe`'. This will load the *Control Central* and start the essential services. If you have installed NIS the default way then it will be launched automatically after the installation process is finished. You will have to see the NIS tray icon on the bottom-right corner of your screen (Figure 4).

Click on the 'Control Central' entry in the popup menu to open the application. This should bring up the main window (Figure 5). you can also launch this application from the Start menu if you have installed the system the regular way.

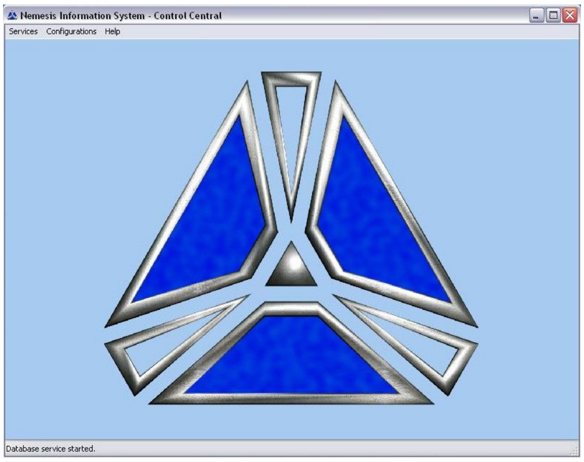


Figure 5: Nemesis Information System - Control Central

There are several entries in the 'Configurations' menu. All of them are assigned to the appropriate group and will open the configuration file assigned to it.

4.1. Server configurations

This is the most important group of configuration files. All of them determine the basic behavior of the system services. Editing these files require great precaution as errors in these files may result in services breaking down.

- **System configurations**: click on this entry if you want to edit the core system configurations of the Nemesis Information System. These configurations are the most basic configurations, including *database service* name, *web service* name, database access for *backup* and *restore* tools and more. Editing this file is usually not necessary when the system is used in an isolated, internal computer network but if you are planning to make the system publicly accessible it is strongly recommended to change the default password of the database server. **Please note that changing the password in this file is not enough as this file contains only how to access the database server!** You can change the default password permanently with the *database password maintenance tool* or use the included *pgAdmin III Database Client* with the same login credentials and modify the password at the login roles. After you changed the password in the *database client*, update this file with the new login credentials, then restart all running services. You can find further information in the *server maintenance help file* (which is also shown when the installation process is finished). Also note that if you have changed the contents of this file, you have to restart the *Control Central* for the new configurations to take effect. **It is not recommended to change the service names, but if you do so, you must uninstall all existing services from the 'Services' menu before exiting Control Central, otherwise the system will not be able to find its services!**

- **Database server configurations**: click on this entry if you want to edit the database server configuration file. This can be useful when you set the wrong port number for the database server at the installation and now you want to fix it. You can change the most important properties of the database server by editing this file. This is a standard *PostgreSQL* configuration file. Don't forget to restart the database server in the 'Services' menu to apply changes.

- **Database server authentication**: click on this entry if you want to enable or disable authentication methods for the database server. This may be useful if you want to enable IPv6 authentication method. After editing this file you will have to restart the database server in the 'Services' menu to apply changes.

- **Webserver configurations**: this does the same to the webserver as we have seen in the previous point. To update web server configurations more effectively, launch the web server application from the 'Services' menu. This will activate another tray icon on the bottom-right corner of your screen and also start the web server itself. Click on the 'Edit settings' entry in its popup menu. This will bring up a more detailed configuration window (Figure 6). Click on the 'Reload from file' button to reload the configuration file. Now you can change everything you want in the web server easily. When you're finished with the settings, click on the 'Save Settings' button and close this window. If you have already installed the web server, click on the 'Exit' entry in the popup menu and restart it from the 'Services' menu. Now all changes will be applied.

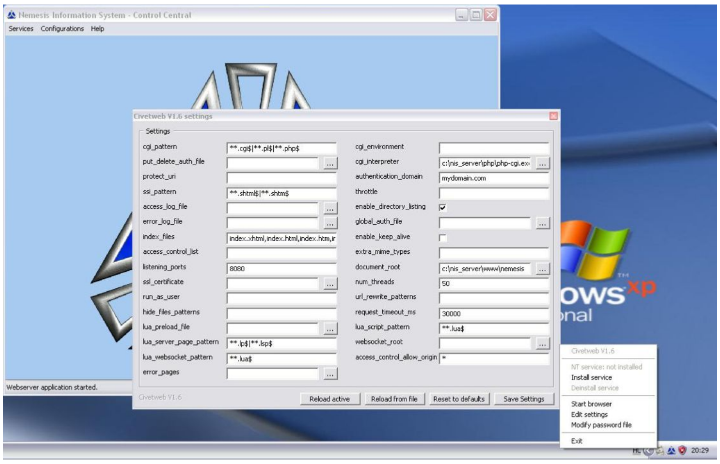


Figure 6: NIS web server configurations

- **PHP configurations**: this is the other web server configuration file. To be more specific, it's the interpreter for the web pages installed with the system. To change upload limits, used extensions and more, edit this file and restart the web server. Editing this file will also take effect in the desktop version of NIS as the interpreter is shared between the web server and the Administration System's desktop version.

- **Database client defaults**: this file stores the default connection details for *pgAdmin III Database Client*. These settings will take effect when adding new administrative users to the database server in the client application.

- **Database access configurations**: this is a very simple configuration file compared with the previous ones. This file stores the database connection details for the *Administration System* and the *Customer's Page*. Please note that if you change the configuration details in this file then you have to change the configuration on the database server too (as we have seen in the *System configurations* section), otherwise you will not be able to connect to the database via the interfaces mentioned above.

- **Mail configurations**: this configuration file stores all connection details for the mail server, which is used by the system. To use any mail server, you have to enable the connection in the configuration file, otherwise the system will not attempt to connect to the mail server. This is best for development environments, on a production environment you should configure a mail server and enable the connection.

- **Export configurations**: in this file you can determine the format of the CSV files when you are exporting data from the Administration System.

- **Import configurations**: this configuration file determines the default format of the CSV files when you want to import data to the Administration system. You can also override these configurations for you own account there.

4.2. Client configurations

- **Access configuration**: this configuration file tells the web client available for all users where the application has to navigate to find and load the Administration system successfully. Note: the *web server* must be installed on your system for this application to load successfully otherwise the application will throw errors and the Administration system will fail to load. If the web server is not installed yet then you can perform this task in the *Services* menu. Another possible solution is to specify the correct web location of the Administration system. This typically happens when the database server, the web server or the web client application is installed on a different system.

4.3. Company details

This group of configuration files determine the default display and process defaults for the Customer's Page and the Administration System. The elements of this group are the following:

- **Core details**: global configurations for the entire system. This is the most important configuration file for the user interface.
- **Product details**: determines how product and related database records are displayed and processed.
- **Community settings**: determines the global defaults and restrictions for the community modules (forums).

4.4. Appearance

This group of configuration files specify the appearance of the *Customer's Page* and the *Administration System*. All visual changes should be applied here. The elements of this group are the following:

- **Frontend (defaults)**: default appearance configuration for the *Customer's Page*.
- **Backend (defaults)**: default appearance configuration for the *Administration System*.
- **Frontend**: custom appearance configuration for the *Customer's Page*.
- **Backend**: custom appearance configuration for the *Administration System*.

Usually the server configuration updates require restarting all affected services to take effect, while other configuration updates usually take effect immediately after the *Customer's Page* or the *Administration System* is reloaded. The best practice is to restart all services after modifying the basic configuration files so all services will be up-to-date after modifying their configuration files.

4.5. Configuring the system on Linux

As the Linux version of NIS is planned to use the own repository of all target distributions, the location of the configuration files and their default content may be completely different from the Windows-version. You should read the manual for your own Linux distribution about how to configure the services properly.

The NIS web configuration files are located in the '`config`' and '`style`' sub-directories of the NIS web directory (usually `nemesis` subdirectory in the source package). On Linux systems you should edit them directly as root.

5. Service management

In this chapter we will cover how to manage NIS services and what the most effective way of application is for each service in long term. On Windows systems, all services can be managed directly from the 'Services' menu of the Control Central (Figure 7). This is the easiest solution if you want to install, uninstall, start, stop or restart services. All of these operations require administrative permissions.

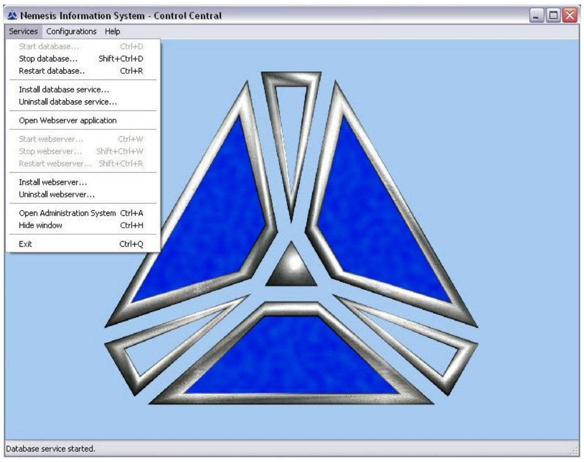


Figure 7: NIS service management

5.1. Database service

The database service is started automatically every time the Control Central is launched. The menu entries for the database service are the following:

- **Start database**: this operation will try to start the database server. If you have already installed the database service then it will be started as a normal Windows service, otherwise a temporary service will be started, which will be stopped when you close the Control Central application.
- **Stop database**: this operation will try to stop the running database service. If you have already installed the database service then it will be stopped as a normal Windows service, otherwise the temporary service will be stopped if it is running.
- **Restart database**: this operation will restart the running database service. If you have already installed the database service then it will be restarted as a normal Windows service, otherwise the database service will be restarted as a temporary service, which will be stopped when you close the Control Central application.
- **Install database service**: this operation will stop the running database service, install it as a normal Windows service, then start that service. Make sure that no database transactions are being executed at that time.
- **Uninstall database service**: this operation will stop the running database service and uninstall it from Windows services. The database service will remain stopped so you have to start it manually if you want to connect to the database again. Make sure that no database transactions are being executed at that time.

5.2. Web server

The web server must be started manually if you haven't installed it with NIS system. This service is essential if you want other users to be able to load the Administration system. You also need this service if you want to access the Administration system outside the Control Central application. The menu entries for the web server are the following:

- **Open webserver application**: this operation will launch the web server application and start the web server as a temporary service if it is not installed already. The service will keep running until you close this application, even if the Control Central is closed already. You can find further information about this application in the 'Configuring the system' chapter.
- **Start webserver**: this operation will start the web server if it is installed as a normal Windows service but it is still not running.

- **Stop webserver**: this operation will stop the web server if it is installed and running as a normal Windows service and it is running.
- **Install webserver**: this operation will install the web server as a normal Windows service if it is still not installed and running.
- **Uninstall webserver**: this operation will stop the web server and uninstall it from Windows services.

5.3. Other operations

There are some other entries in the 'Services' menu, which will make using the system easier. The additional entries are the following:

- **Open Administration System**: this operation will launch the desktop version of the Administration System.
- **Hide window**: this operation will minimize the Control Central window in the system tray.
- **Exit**: this operation will close the Control Central and stop the temporary database service if it is running.

5.4. Service management on Linux

Linux operating systems have their own methods for managing system services and currently we are not planning to provide any other way as it is the most secure way for your system.

6. Getting started

Once Nemesis Information System has been set up and configured properly you have to create an administrative user for managing the system. This is done by registering into the Administration System either by launching the desktop version (for example from Control Central) or visiting the Administration System's web page (only if the web server is installed and configured properly, usually the `http://localhost:8080/admin/index.php` location).

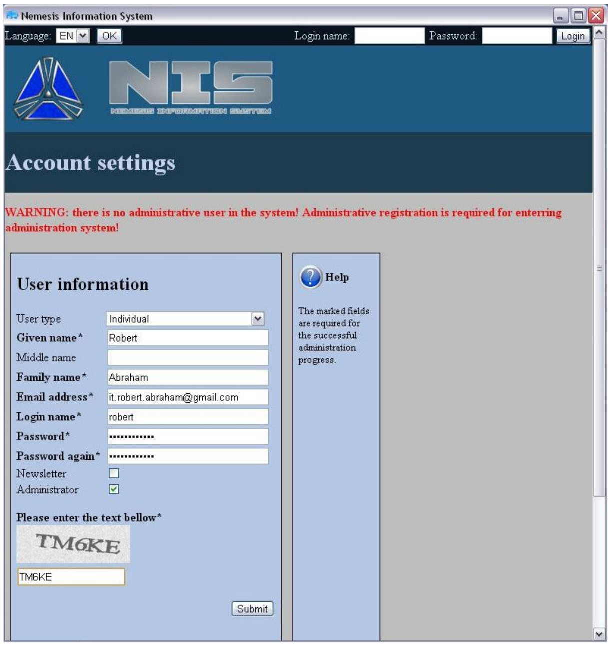


Figure 8: Registering the first administrator

When you open the Administration System at the first time, it will warn you that there is no administrative user yet and it will offer you to create one (Figure 8). Complete the form by filling all required fields and click on the 'Submit' button, then follow all additional instructions when the system tells you to do. Once all steps is complete, enter the system using the login name and password you specified on the registration form.

As you will see, you account is the first administrative account with superuser permissions and all additional permissions have been granted to you. This will help you to create the first essential database entries needed to start working in the system. Additionally, some records are already present in the system (for example: a test product and a corporate site, which is needed in the contact details block) as an example.

There are some tables in the system where at least one record must be present. If you wish to replace the entire content of these tables, delete all entries except the first one in each table, change its content to fit your needs and start adding the additional entries you want to see in the table.

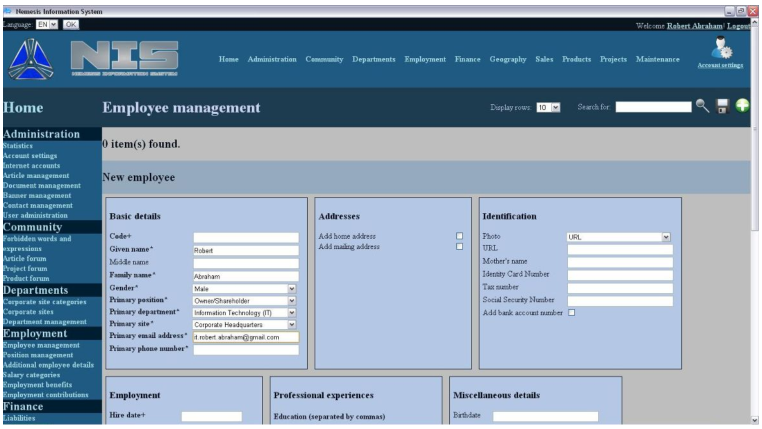


Figure 9: Creating the first employee

6.1. Creating the first employee account

Having all administrative permissions, by itself, is not enough to access all modules in the system. Some of these modules (for example: work schedules, payments, order management, etc.) require that you have an employee ID and code so the system can rearrange the default content for your account using your employee details. To get access for these modules you need to create an employee record for your account and reactivating your account with these details. The steps of this process are the following:

1. Enter 'Employment ► Employee management' module from the main menu on the top of the page or the classic menu on the left side of the page if shown (the classic menu may be hidden on lower screen resolutions) and navigate to the 'New employee' section (Figure 9).

2. Complete the form by filling all required fields. There are two kinds of required fields: the normal required fields (marked with '*****' character) and the generated fields (marked with '**+**' character). Generated fields can be omitted when adding new entries (so they can also be omitted when creating the first employee in the system) as the system will generate a default value for them, but they are required when editing an existing entries.

3. Check the 'Can login' field and add your login name to the 'User login name' field in the 'Employment' subsection (a quick popup menu will appear after the 3rd character if your login name matches any of the existing patterns in the database, there you can click on the '+' button for auto-completion). Check the 'Active' field too in the same subsection so you will be an employee in the system with active status. Please note that the employee given name, middle name, family name and email must be the same as they were set in your user account, however the system will automatically synchronize them. Also note that you are not allowed to change these details in your account settings later, you have to change them in your employee details.

4. When you completed all required fields on the form, click on the 'Submit' button to save your details. A new record will be created in the database and a new entry will be shown on the list with your employee ID and code. Now you have to reactivate your account to apply changes.

5. To reactivate your account with the updated details, simply log out from the system and log in again with the same login name and password. Now you should be able to access all modules in the system.

6.2. Completing the user account

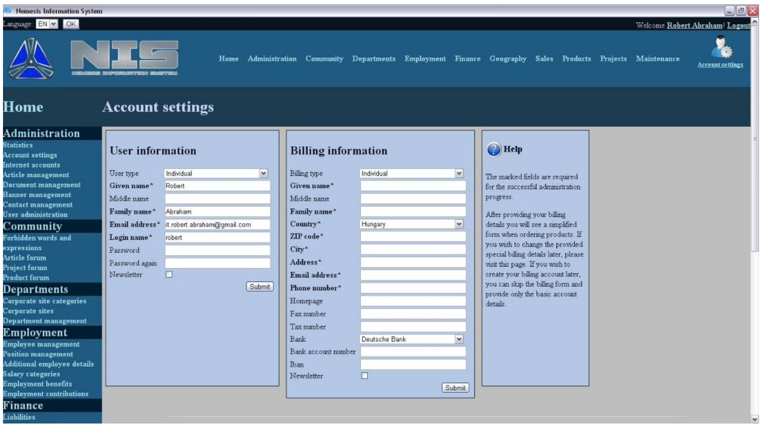


Figure 10: NIS account settings

If you want your user account to be fully activated then you need to add all additional information (to be more specific: the billing information) to it. This is done in the 'Administration►Account settings' module, which can be accessed from the main menu, the classic menu or the top-right icon in the NIS window (Figure 10).

The 'User information' is the basic section of the module, it has been completed during the registration process. The 'Billing information' is useful when you want the system to store this information to simplify the ordering process. This should be filled automatically if you are ordering products when you are logged in. This will create a customer ID for your account that can be reused when you want to add special discounts or bonus points for your account (however a simple employee ID and code should be enough for bonus points).

User and customer records in the database are lightly assigned to each other, which means that contact details do not have to be the same in these fields. You can specify a billing entity that is different from your personal details. When you are finished with adding your billing details, click on the 'Submit' button in this subsection. User and customer information can be edited separately.

When all fields contain all information, your account should be fully activated and you can start using all modules in the system without any limitation.

6.3. Getting started on Linux

The Linux-version of NIS is purely a web-based information system and has no desktop version yet, but the above steps are the same in your browser. To get started, enter the Administration System from your browser (usually the `http://localhost/admin` location, however the actual location may be different from this one depending on how you have your Linux system configured) then follow the steps above.

7. Using the Administration System

The Administration System is the main application of NIS. This is where you can easily manage database entries, add new users with specific permissions, edit customer or employee details, manage orders or work schedules and much more. If you want to change anything in the database, this should be your primary resource as this system will make sure the database will remain consistent after all changes.

In this chapter we will cover all essential modules, what they are used for, how they work and what fields need more precaution than the others. Basically, all modules have one or more small help boxes with the most important information about their containing modules. You should read carefully all tips as they provide essential support for proper database management.

The available modules in the Administration System depend on your permissions. Users with more permissions can access more modules in the system. To give a specific user access to a specific module, edit its permissions in the 'Administration ► User administration' module to fit the required details.

7.1. Dashboard

This is the starting page of the Administration System. The contents of this module depends on your permissions in the system but practically, it contains the current events and statistics that you should check before you start working in the system (Figure 11).

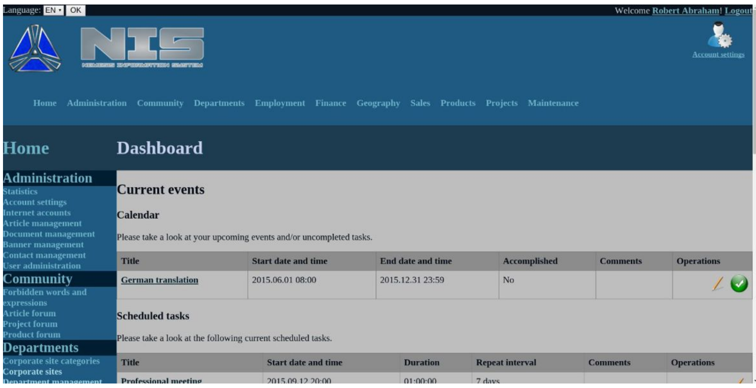


Figure 11: Dashboard for administrators

The most important elements of the dashboard are the following:

1. **Current events**: entries from the calendar, scheduled tasks and tasks assigned to projects. Entries from the calendar can be marked as accomplished directly from the dashboard, while scheduled tasks will show up again and again when they become current. Current open tasks assigned to projects are shown bellow them.

2. **Current liabilities**: this is very similar to the current events, except that this is about current financial transactions. One-time liabilities can be marked as paid, while periodic liabilities will show up again and again when they become current.

3. **Favourites**: tables with custom filters can be stored in the system assigned to your account. These entries work as a shortcut to the linked module. Elements in this section can be useful when you have to apply the same filter on a specific table often and you do not want to apply the filter every time you query those database entries.

4. **Statistics**: in this section you can find various statistic details. There are two types of these statistic details:

   a) **Generic statistic details**: this subsection provides you information about the number of registered users, administrators, employees, customers and more.

   b) **Default statistic details**: by default, this subsection will show you the monthly income from financial transactions but you can change it to any other existing statistic view of the database. Modifying this subsection requires administrative permissions on your operating system as it applies to all users logged in the system.

Dashboard provides you a quick way to look up the current events in the Nemesis Information System. When you click on the 'Home' entry in the main or classic menu, or the logo on the top-left corner of your screen, or the title in the same area it will navigate you back to the dashboard from any of the modules in the Administration System.

7.2. Statistics

NIS provides you different types of statistics. You can apply any filters on these statistic details. Statistics can be accessed from the 'Administration►Statistics' menu. On the top of this module, you will see a detailed table with the statistic details (Figure 12).

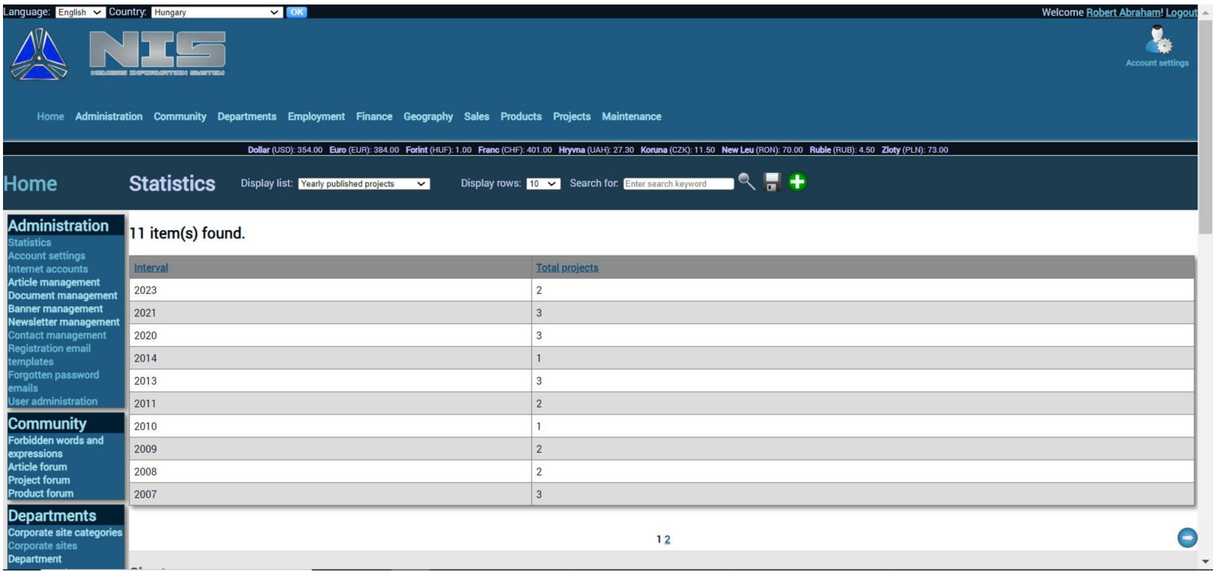


Figure 12: Statistics module

The header of this table contains the following elements:

- the **title** of the module,
- the **type of the list** (or table),
- the maximum **number of rows** to display,
- a **search box** with button for custom filters,
- an icon for **exporting** the list to CSV file
- and a '+' icon to **add** the table with the applied filters **to** the **Favourites**.

All modules with tables and lists follow this layout in the Nemesis Information System. If you click on any of the column names then the rows will be ordered by the selected column. If you click on this column name again then the ordering will change from ascending to descending or from descending to ascending depending on the original ordering.

Below the table you will see a chart for the currently selected statistic details if the dataset for this list was found

(Figure 13). The header of this chart may contain a dataset selector (like currency) depending on the type of the statistic details.

Figure 13: Charts for Statistics module

Please note that currency selectors work as filtering elements and not a currency exchangers in this module. If you select a currency that is not present among the records for displaying, then an empty dataset will be returned and the module will not be able to display the chart. You will see a warning telling you that there was no dataset found.

7.3. Internet accounts

This module is basically a password manager, however its security is much lower than a normal password manager as **database encryption key is stored in the database configuration file on the server**. Employees in the system can store their login details for third-party sites in this module if they have the appropriate permissions. Originally, this module was designed to store login details of partner sites to make the related administration processes easier (Figure 14).

This module can be accessed from the 'Administration►Internet accounts' menu. You may notice that the table in this module has been extended with a special column at the beginning. The name of this column is 'Operations' and it has two basic types of icons:

1. **Edit**: open the current database entry for editing. If you click on this icon then the entry will be opened in the '*Edit account / Add new account*' section below the table.

2. **Delete**: delete the current database entry. If you click on this icon then the system will ask for confirmation and remove the selected entry when the operation is confirmed.

This column is present in most of the tables and may be extended with additional icons (for example: '*go to item*' icon) in other tables or lists, usually when we want to provide here a direct access to the selected element on the Customer's Page.

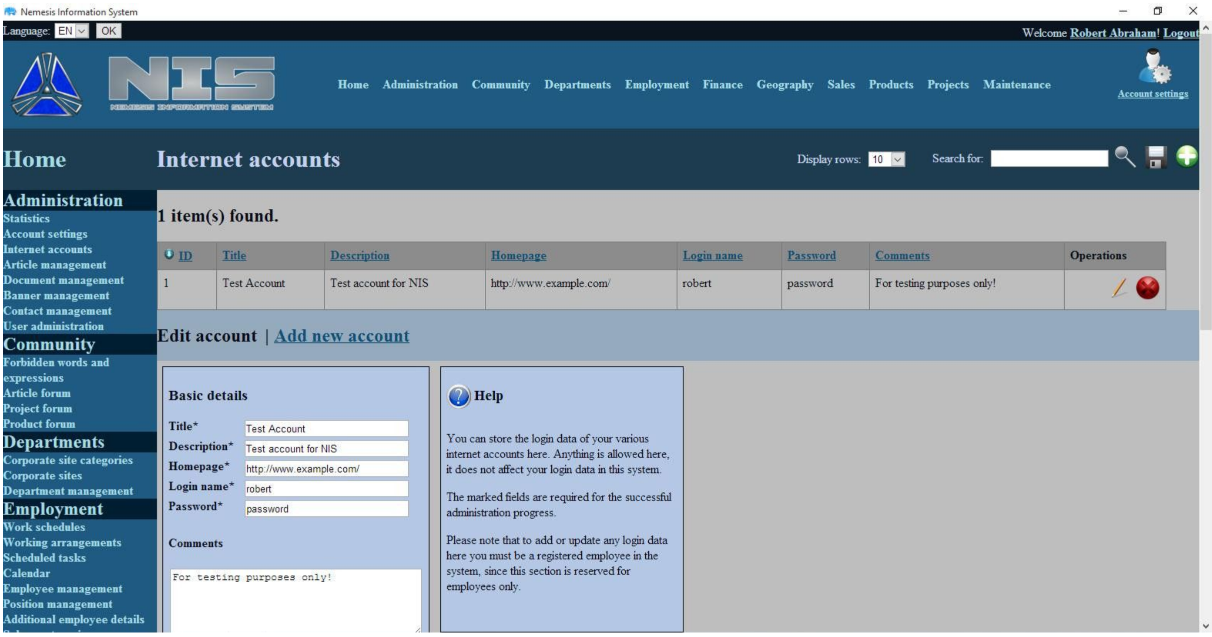


Figure 14: Third-party internet accounts

The layout in this module is used in almost all modules in the system. Every time you want to edit an existing database entry or add a new entry to the list, you have to do this in the *Edit/Add* section of the current module below the list you want to update. This section is different in each module to fit the current needs but it can be found always in the same area. Usually, it has a small help box showing important tips to make sure you fill the form correctly.

If you are done with the editing, click on the 'Submit' button, which can be found on the bottom-right corner of the section. The position of this button may also be different in other modules to fit the current form, especially when there are multiple available operations on the list, which require additional details in their own forms.

When the form is filled correctly and submitted to the database, the new (or updated) entry must appear on the list immediately with possible additional messages. Usually, the comments are not shown on the Customer's Page. Where comments are shown, there is an explicit message telling you this.

7.4. Article management

This module lets you manage articles shown on the Customer's Page. Articles can contain anything: news, current events, discounts, special offers and much more. The content is not limited any way. Articles shown on the Customer's Page depend on their language. If the total number of articles on a specific language is lower than the required minimal number on the homepage then the system will try to fill up the missing spaces with articles on different languages.

You can access the article management module from the 'Administration ▸ Article management' menu. The module is very similar to the previous one except that is is globally visible for all employees (Figure 15).

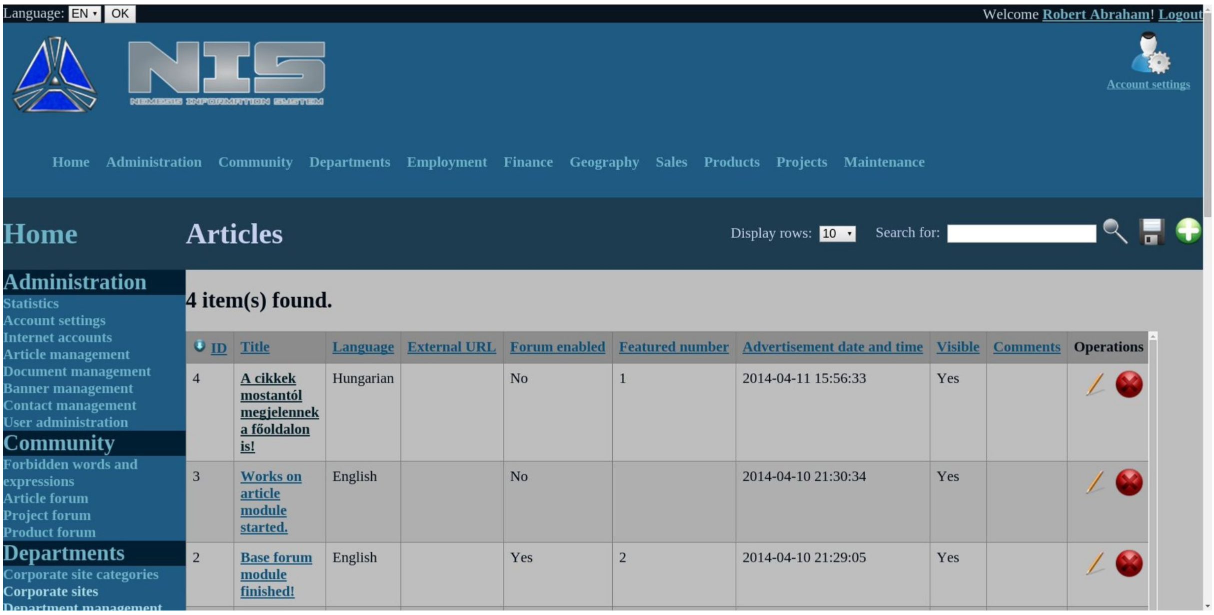


Figure 15: Article management

You can add an *external URL* for each article so your web browser will navigate to that location when you click on the title on the Customer's Page. You can also specify a so called 'Featured number' so the article will become featured, articles on the Customer's Page will be reordered and featured articles will be shown at the beginning of the list. The 'Visible' field determines whether the article is shown on the Customer's Page or not. The *Edit/Add* field is similar to the previous module (Figure 16).

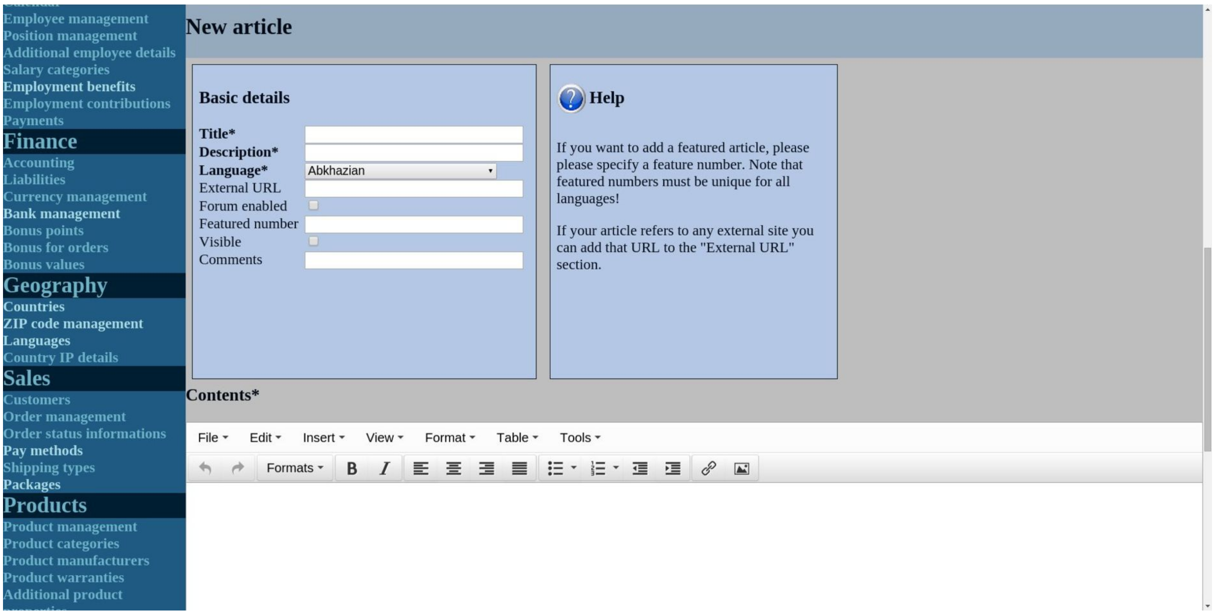


Figure 16: Adding a new article

Both *title* and *description* will be shown on the Customer's Page and the description will handled as a short review for the content of the article. If you want to allow comments on your article, check the 'Forum enabled' field. You can add any additional information to the 'Comments' field as this field is not shown on the Customer's Page.

When you are finished with the header information, you can start writing the article itself using a simple, Word-like interface with basic formatting functions. This interface is done by the *TinyMCE* module, which is released under *GNU Lesser General Public License (version 2.1)*. For further information, please read the license. You can edit the source code of the content too as this module generates a simple HTML code. Usually, this function is not needed.

When you are finished with your article, click on the 'Submit' button to store the article in the database. You can publish the article later if you wish by leaving the 'Visible' field unchecked.

7.5. Document management

This module is almost the same as the article management module, with a few differences (Figure 17). The first major difference is that documents can have unlimited number of attachments. You can upload files or add URLs as attachments to the current article. The attachment will be added when you click on the 'Submit' button. You can remove attachments too while editing the article. The maximum size of attachment is determined in the *PHP configurations*, you can increase this number in that configuration file (see '*Configuring the system*' chapter for further information).

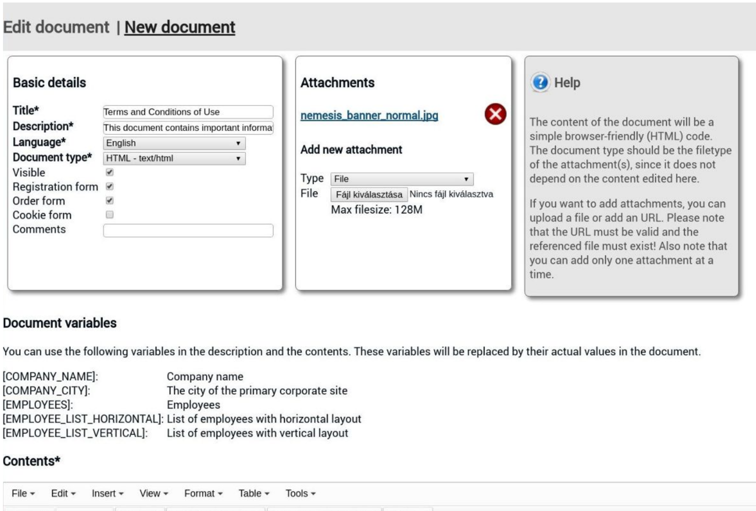


Figure 17: Document management

You can open this module from the 'Administration►Document management' menu. The list and the *Edit/Add* section is similar to the article management module, but this time you have to specify the document type too. This is important when the actual document (for instance: a PDF file) is among the attachments and we use the HTML form only to notify visitors how to open the document.

The third difference is that there is another group of fields in the form, called 'Registration form', 'Order form' and 'Cookie form'. If you check these fields then the document will have a link on the registration form, the order form and/or the form of cookies, where visitors will be asked to read this document carefully. This can be useful when you want to have a direct link to the '*Terms of Use*' and '*Privacy Policy*' document on the registration form to avoid legal problems when making your site public.

You can also use special variables in the description and the content of the document. These variables will be replaced with their actual values on the *Customer's Page*. This can be useful when you are creating a document for the terms and conditions of use for your site, where the name of your company may appear many times. When you are finished with the document, click on the 'Submit' button to store it in the database.

7.6. Banner management

In this module you can manage the banners shown on the top of the *Customer's Page* below the main menu. If you add two or more banners, the banners will start sliding. Banners can contain any kind of advertisement including news, current events, discounts and much more.

You can access the banner management module from the 'Administration►Banner management' menu. The layout is the usual, the language field determines which banner will be shown on the Customer's Page. You can add a background image to the banner by uploading a file or specifying an URL. The filed 'Enabled' determines whether the banner can be shown or not. You can use special variables in the content to display attached content properly. You can read the essential information for these variables in the help box.

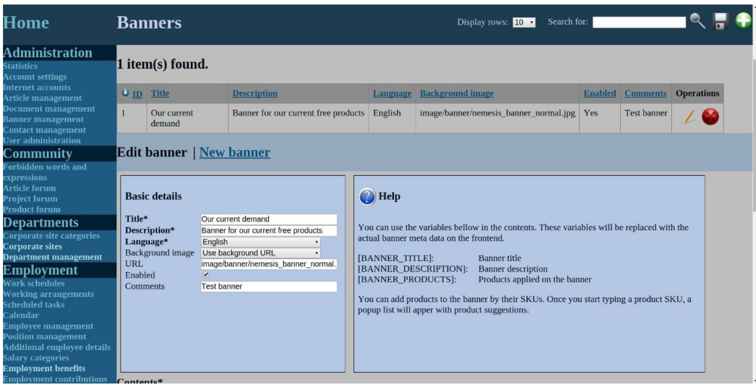


Figure 18: Banner management

When you are finished with the header data of the banner, click on the 'Submit' button to store it in the database. The system will automatically open the banner for editing after saving the core details, so you can start adding products immediately (Figure 19).

To add an existing product to the banner, enter the SKU[1] of the product in the 'SKU' field and click on the 'Add product' button. You can add any kind of additional information in the 'Comments' field. It will not be shown on the Customer's Page. To remove a product from the banner, click on the '**X**' icon on the list above. The product will be removed from the banner after confirmation. Currently, products can be added to existing banners only.

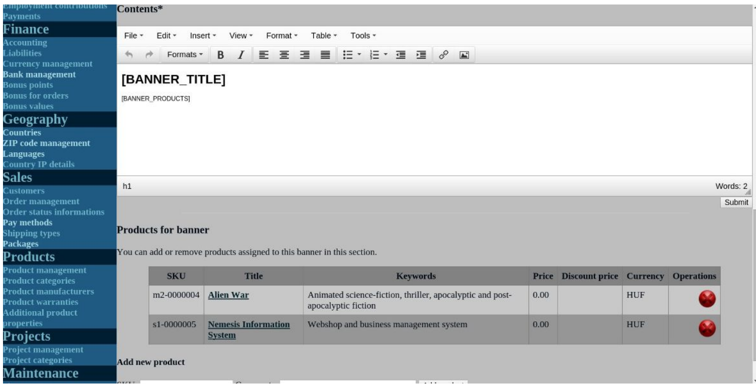


Figure 19: Products for banners

When the banner is finished, make sure the 'Enabled' field is checked and click on the 'Submit' button. It is the best not to enable the banner until all desired products have been added to the banner. When the banner is finished and and enabled, it will be shown on the Customer's Page.

7.7. NEWSLETTER MANAGEMENT

This module lets you create newsletters or edit existing ones in the system. You can access this module from the 'Administration ▶ Newsletter management' menu. Newsletters are elegant notifications about current events, discounts, special offers and more. Newsletters are sent to users and customers with the appropriate language selected. To crearte a newsletter or update an existing one, you have to specify the following details (Figure 20):

- **Title**: the title of the newsletter. Newsletters must have unique titles for each language. Titles are not sent to the recipients.
- **Description**: the short description of the newsletter. Descriptions are not sent to the recipients.
- **Subject**: the subject of the email containing the newsletter.
- **Language**: the language of the newsletter. The selected language will take effect on the list of the recipients. Users, who selected a different language, will not receive the newsletter.

1 Stock Keeping Unit: this is the primary code after the product ID. This code must be unique for all products.

- **Start date and time**: the start date and time, from which the newsletter is valid.

- **End date and time**: the expiration date and time of the newsletter. When omitted, the newsletter will never expire.

- **Active**: check this option if you want to be able to send the newsletter to the users and customers.

- **Attachments**: files and URLs attached to the newsletter.

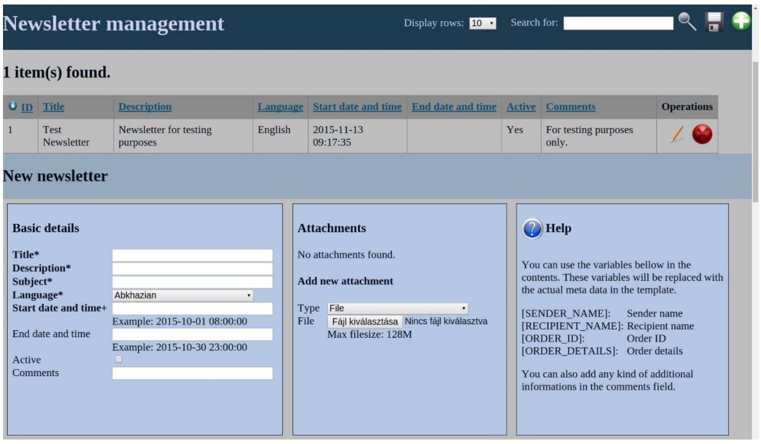


Figure 20: Newsletter management

- **Contents**: the body of the email containing the newsletter. Basically, this is the newsletter itself.

- **Comments**: any kind of additional information. You can omit this field as it is not used by the system.

You can use special variables (for instance: `[SENDER_NAME]`, `[RECIPIENT_NAME]`, etc.) in the subject and the contents of the newsletters. These variables will be replaced with their actual values when sending the newsletter to the recipients.

You can send valid newsletters to users and customers on the bottom of the module (Figure 21). A newsletter is valid, when the *current date and time* is after its *start date and time*, the newsletter have not expired yet and the newsletter is active.

When you send a newsletter to its recipients, a loading screen will appear until the process is completed and the newsletter is sent to all recipient. Please note that sending a newsletter to multiple email addresses may take a long time as the sending process is delayed after each newsletter, to make sure that the mailer daemon is able to process all requests.

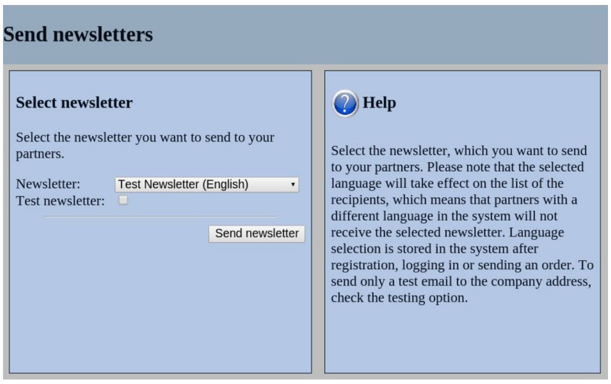


Figure 21: Sending newsletters

Each newsletter can be delivered only once for each recipient. When you are trying to send a newsletter two or more times to the same recipient, the first request will be sent to the mailing system, the other requests will be skipped with a simple warning message, which says the newsletter has already been sent to the same recipient. To send a test newsletter to the company address only, check the 'Test newsletter' option.

7.8. Contact management

In this module you can manage contact details of your company's partners. Please note that this information is visible for all administrative users with the appropriate permission so do not store private information here. You can access this module from the 'Administration►Contact management' menu. The layout is very similar to the Internet account management module and has no less priority than that module (Figure 22). The way of usage is the same.

However this module has been designed to store contact information of partners it can store a lot more than only contact details. The data it can store includes the date of birth, the place of birth, education and employments. Of course, these details can be omitted but at least one primary contact information must be provided: email address or phone number.

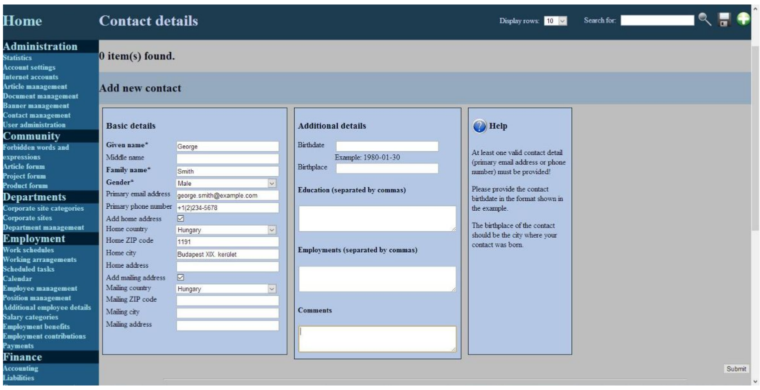


Figure 22: Contact management

There are two kind of addresses: home address and mailing address. If your contact can be reached in a location different from his/her home address, use the mailing address to store this information in the database. You can add any kind of additional information in the 'Comments' field. The help box will provide you important information about how to complete the form properly.

7.9. Registration email templates

This module lets you create registration email samples for new user accounts. When registration emails are enabled in the mailing settings and an appropriate template is defined for each used language in the system, the system will send an email for new users after registration.

To activate the new registration, the user must click on the activation URL in the email, otherwise the system will refuse the login request. If the system cannot send an appropriate registration email to the user with the activation URL, the user account will be activated automatically after creation so the user can log in immediately. You can access this module from the 'Administration ► Registration email templates' menu. To add a new template or update an existing one, you have to specify the following details (Figure 23):

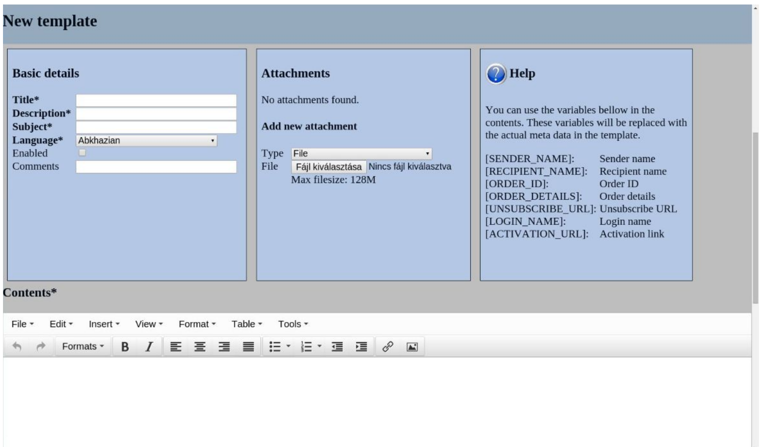


Figure 23: Registration email templates

- **Title**: the name of the registration email template.
- **Description**: the short description of the registration email template.
- **Subject**: the subject of the email sent to the user. You can apply special variables on this field (see the help-box for further information).
- **Language**: the language of the email. You have to create a template for each language used in the system, otherwise the system will not send registration emails to users with different languages but will activate their account automatically to avoid problems with the registration progress.
- **Email change request**: when this option is checked, the template will be used as a verification email, which is automatically sent when a specific user requests changing his/her email address, for activation.

- **Enabled**: when this option is checked, the system will use the template for new registrations, otherwise the template will remain inactive.

- **Attachments**: you can add attachments to the template. Attachments can be added via file upload or specifying local URLs in the system.

- **Contents**: the body of the email sent to the user. This field must contain the `[ACTIVATION_URL]` special variable, otherwise the system will not use the template, since there is no activation link in it, which could be used for activating the new user account, so the template will be ignored.

- **Comments**: any kind of additional information. You can omit this field as it is not used by the system.

When you have completed the form, click on the 'Submit' button to store the registration email template in the database, so it can be used to activate new registrations.

7.10. Forgotten password emails

You can access this module from the 'Administration ► Forgotten password emails' menu. This module is very similar to the registration email template module, the only difference is that there is an extra field: *Expiration period*. This module lets you create email templates for forgotten password notification. When a user loses his/her password and becomes unable to log in the system, he/she can request a temporary password. This password will be sent to his/her email address associated to his/her account. The password remains valid until the expiration date and time is reached or until the user is logging in the system with this password at the first time.

7.11. User administration

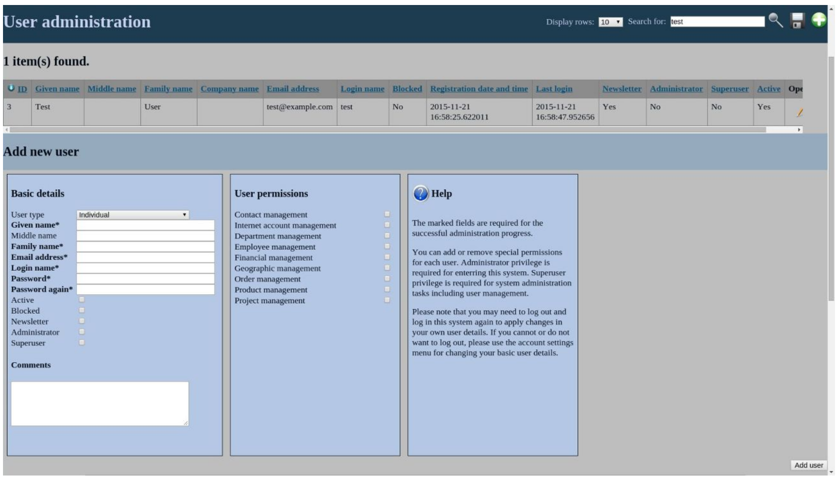


Figure 24: User administration

In this module you can update the details of existing users in the system or add new users without registration. You can access this module from the 'Administration ► User administration' menu (Figure 24).

The layout of this module is the same as the other ones we have seen previously. You can set the basic user details in the 'Basic details' subsection of the *Edit user / Add* new user section. There are a few special fields here we have to cover a bit more detailed as they might be not as obvious as the other ones. These fields are the following:

- **Active**: when this option is checked, the user account will be activated, so the user can log in the system, when the account is not blocked.

- **Blocked**: by checking this field you can prevent users from logging in the system, using the forum and other modules that can store information publicly visible to everyone on the Customer's Page.

- **Newsletter**: when checked, the system will send newsletters to this address regularly, when the appropriate modules are installed. This is independent from the customer email address but, of course, the system will not send two newsletters to the same address with the same content. Identical email addresses will be filtered.

- **Administrator**: when checked, the user will have permission to use the Administration System. When this field is unchecked, the system will prevent the user from logging in the Administration System.
- **Superuser**: this is the highest permission in the system. When this option is checked, the user will be a superuser, and the user will be able to grant additional permissions to himself/herself and access restricted modules in the system. Basically, a superuser can change anything in the system. Accessing the user management module always require superuser permission.

You can add additional permissions to the current user in the 'User permissions' subsection. Please note these settings will not take effect until the user is logged out and logged in again.

Warning: this module has been designed to edit user accounts other than your own account. **It is not recommended to use this module to edit your own account settings** as these modification will not take effect until you log out and log in the system again. **Use the account settings module to edit your own personal details.**

7.12. Community management

In this group of modules you can manage the different forums on the Customer's Page and also add forbidden words to prevent harassing and other kind of deviant behavior on the forums. We will cover all of these modules in this section, however they are very similar to each other and it should be enough to describe only the differences between them.

7.12.1. Forbidden words and expressions

You can add forbidden words and expressions in this module to automatically block comments in the system having the contents specified here. This is one of the easiest modules as the behavior of this module is not different any way from the ones we have seen in the previous sections (Figure 25).

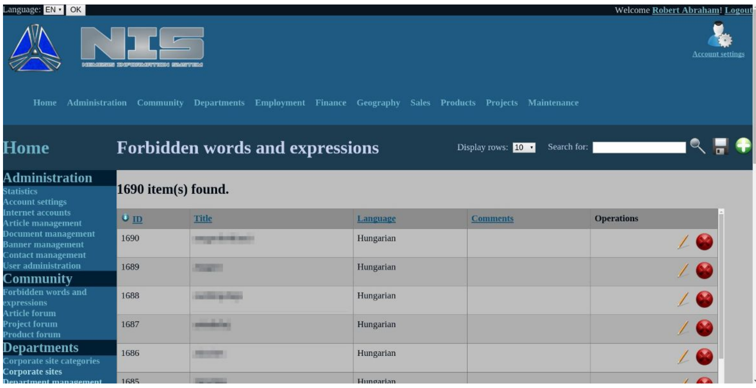


Figure 25: Forbidden words and expressions

You can access this module from the 'Community ► Forbidden words and expressions' menu. To add a new entry on the list, specify the title (the forbidden word or expression itself, to be more specific: the forbidden content itself) and the language. You can add any kind of additional information in the 'Comments' field but it has no effect at all on the system. After you have added a new entry on the list, comments or posts on the Customer's Page will be blocked automatically when they contain the specified content. They will see a simple 'no bad language' error message on the page and can try to post their content again without the forbidden content.

7.12.2. Article forum

In this module, you can manage the comments and post of the users for the articles present on the Customer's Page (Figure 26). You can access this module from the 'Community ► Article forum' menu. On the top of the module, you can see a list of the articles with the latest comments. To open the comments for a specific article, click on the 'go to item' icon in the 'Operations' column and the comments will appear in the 'Manage posts' section below the list.

You can also choose to view all articles by clicking on the 'All articles' link below directly the list. To navigate back to the previous state click on the link below the list again. If you click on the title of the article, the system will navigate you to the article on the Customer's Page. Please note that you might have limited access to comment operations from here. To navigate back to the Administration System from the Customer's Page, click on the 'Administration' link in the main menu. If an article, which you are looking for, is not shown on the list any way, check whether the forum module of that article is enabled or disabled and enable the forum for the article if needed.

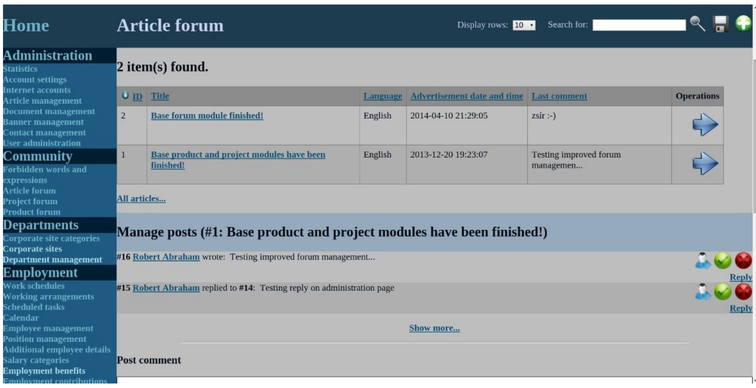


Figure 26: Article forum management

When the comments are shown in the 'Manage posts' section, you can do various operations on each comment:

- **Go to user settings**: this is the left icon at the comment if you are a superuser. This will navigate you to the user settings of the writer of the comment. If a specific user is violating the guidelines of your community, you can block the user from here.
- **Show/Hide comment**: this is the middle icon at the comment if you are a superuser, the left icon otherwise. As the name suggests, you can show or hide comments with this icon without physically removing them from the system, so you can change your mind later.
- **Delete comment**: this is the icon on the right. As the name suggests, you can permanently remove a specific comment from the system with this icon after confirmation.
- **Replying the comment**: if you click on the 'Reply' link, you can write an answer to a specific comment if the user, who wrote it, have asked you some questions about the selected article.
- **Show more**: if you click on this link, you can read older comments for the same article.
- **Post comment**: this is the bottom area in the 'Manage posts' section. You can add your own posts or comments from here. When you are finished with your post or comment, click on the 'submit' button and it will be shown on the Customer's Page immediately.

You can open your email client directly from here by clicking on the name of a specific user. The destination address will be the selected user's email address and you can start writing your private message immediately for the user. This method of management is the same in all forums in the system as they physically use the same module for this service. Only valid email addresses will work and only if there is a mail client application installed on your computer or there is a valid association for email addresses in your system.

7.12.3. Project forum

This module is very similar to the previous one. As its name suggests, it opens the list of projects with the latest comments. You can open this module from the 'Community ► Project forum' menu. The usage is also the same as we have seen it at the 'Article forum' module.

7.12.4. Product forum

Probably this is the most important forum in the system. It does the same as we have seen in the previous two forum modules. This module has been designed to provide a way for registered users to ask some questions about a specific product on the Customer's Page if they haven't find that information in the product description. You should reply all of these comments as soon as possible. You can access this module from the 'Community►Product forum' menu. The management system works the same way we have seen at the previous two modules.

7.13. Corporate site categories

In this module you can define categories for your corporate sites. You can access this module from the 'Departments►Corporate site categories' menu. The layout is the same as we have seen in the previous modules and does not have any special section or subsection that need further description.

You should add a detailed title and description for each category to make the administration process easier. You will find here a few predefined entries. Feel free to modify them the way you want. Please note that at least one category must be present in the system.

7.14. Corporate sites

This module is for adding corporate sites for your company. You can open this module from the 'Departments►Corporate sites' menu (Figure 27). Sites you add here will be shown on the bottom of the Customer's Page with all contact details and can be set as the primary warehouse of the products in the system. Please note that at least one corporate site must be defined in the system.

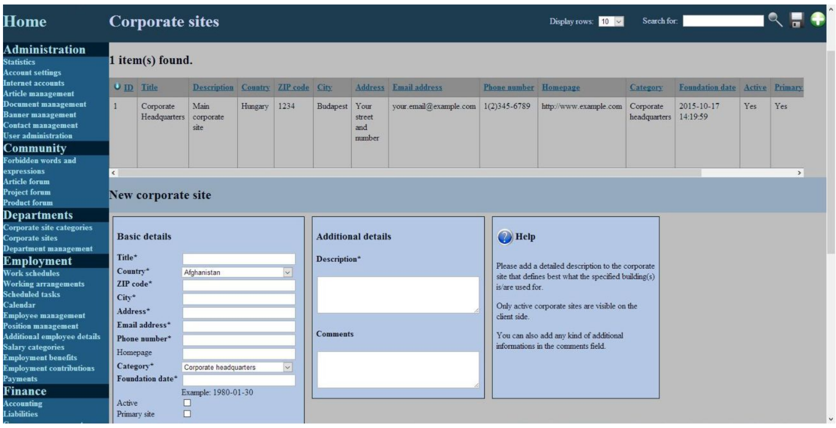


Figure 27: Corporate site management

You can specify the details of a corporate site in the *Edit corporate site / New corporate site* section. The fields of this section may need a little further description than just showing them on the figure:

- **Title**: the name of the corporate site. This is shown on the Customer's Page.
- **Description**: a short description of the corporate site. This is also shown on the Customer's Page.
- **Country**: the country where the corporate site is located. It is recommended to set this field first for the auto-completion system to take effect.
- **ZIP code**: the postal code of the corporate site. If the 'City' field is already set, the system will search for the location and try to complete this field automatically when you click on this field on the form. You can rewrite the search result.
- **City**: the city of the corporate site. If the 'ZIP code' field is already set, the system will search for the location and try to complete this field automatically when you click on this field on the form. You can rewrite the search result.

- **Address**: the street and number part of the location.
- **Email address, phone number**: generic contact details. They are shown on the Customer's Page.
- **Homepage**: if the corporate site has its own homepage, it will also be shown on the Customer's Page.
- **Category**: the type of the corporate site you specified in the previous module.
- **Foundation date**: the date when the corporate site has been found. If you do not know this date then just add the start date of your ownership here.
- **Active**: check this option if the corporate site is currently being used. Only active corporate sites are shown on the Customer's Page.
- **Primary site**: check this option if the current corporate site is the primary corporate site in your company. Main headquarters should have this option selected.
- **Comments**: any kind of additional information that is not shown on the Customer's Page.

When the form is completed, click on the 'Submit' button the add the corporate site to the system or modify the selected one.

7.15. DEPARTMENT MANAGEMENT

You can define the logical hierarchy of departments in your company in this module (Figure 28). You can access this module from the 'Departments►Department management' menu. All employees must have one primary department assigned to their details as this is one of the details that defines their role in your company. Please note that at least one department must be defined in the system.

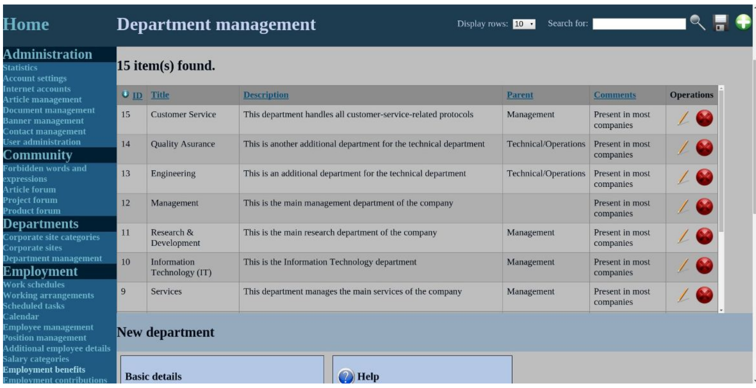


Figure 28: Department management

You should add a detailed title and description for all departments to make administration process easier. After installation, you will also notice that a few example departments have already been defined in this module. To define a hierarchy between your departments, click on the 'Add to parent' field in the *Edit department / New department* section and select an existing department from the drop down list at the 'Parent' field. Avoid circular references when defining a hierarchy between your departments. Self-references are also prohibited in the system. You can also add any kind of additional information in the 'Comments' field but that will not have any effect on the system.

When you have the form completed, click on the 'Submit' button to store your department in the database.

7.16. Work schedules

In this module you can manage pure working time of employees for proper salary calculations. The module can be accessed from the 'Employment ►Work schedules' menu.

7.16.1. Basic mode

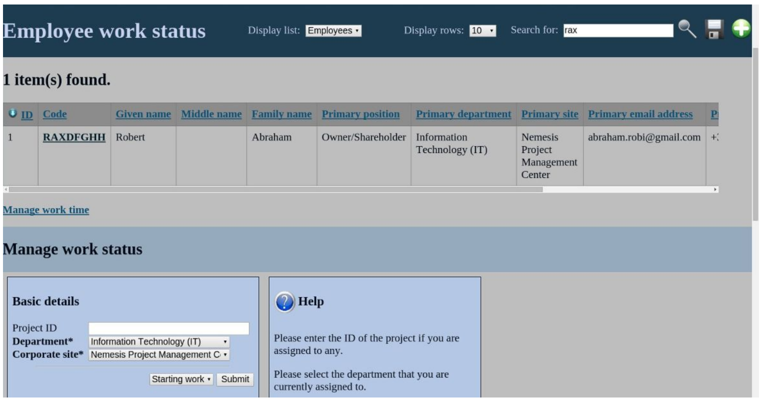


Figure 29: Work schedules - basic mode

By default, you can manage your own work schedule with limited access, which is always available if you are an employee in the system and your account is assigned to your employee record (Figure 29). This basic mode does not require any special permissions and you can also see the status of the other employees to check whether you can reach them or not. To select whether you want to see the status of the employees or your own schedule, use the *Display list* selector in the header of the module.

You can change your status of work in the *Manage work status* section. You can also specify the project, which you are currently working on, by adding its ID to the 'Project ID' field. You have to specify the department, where you are working currently. By default, the department is your primary department that is stored with your other employee details. Similarly, you have to specify the corporate site, where you are working currently. Next you must select whether you are starting or ending your work. When all fields are set, click on the 'Submit' button to change your status.

7.16.2. Advanced mode

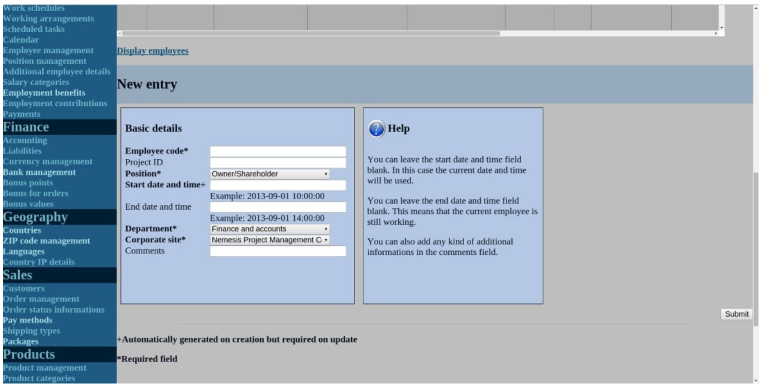


Figure 30: Work schedules - advanced mode

If you have the appropriate permissions, you can switch between basic and advanced mode in this module by clicking on the link below the list directly. In advanced mode, you have HR-level permissions and you can manage not only yours, but the status of all other employees (Figure 30). This is useful when you have to correct the schedules after one or more employee made some mistakes in their status (for example: forgot to close their work status at the end of the day). To change work status of an employee in this mode, you have to explicitly set the start and end of the work time entries. The fields of this form in the *Edit entry / New entry* section are the following:

- **Employee code**: the unique identifier of the employee defined when creating the employee record.
- **Project ID**: the project, which the current work time is assigned to.
- **Position**: the current position of the employee. It may differ from the primary position.
- **Start date and time**: when the employee started working. If omitted, the current time stamp will be used.
- **End date and time**: when the employee ended working. If omitted, the employee is considered to be working.
- **Department**: the current department, where the employee is working.

- **Corporate site**: the current location, where the employee is working.
- **Comments**: any kind of additional information. It does not affect the schedule any way.

When you have completed the form, click on the 'Submit' button to update the work status of the selected employee.

7.17. Leave requests

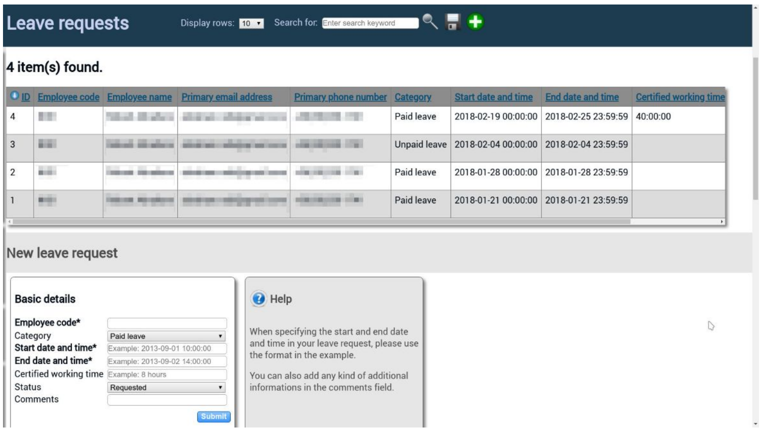


Figure 31: Leave requests

This module lets you manage paid and unpaid leave requests. You can access this module from the ‘Employment ►Working arrangements’ menu (Figure 31). If you are an *employer* with the appropriate permissions, you can manage leave requests by specifying the following details:

- **Employee code**: the unique code of the subject employee;
- **Category**: the category of the leave request. By default, you can manage paid, unpaid leave requests and sick leaves, but you can add as many categories as you like;
- **Start date and time**: the start date and time of the leave request;
- **End date and time**: the end date and time of the leave request;
- **Certified working time**: in the case of paid leaves, this interval will be paid as a pure working time;
- **Status**: you can accept or reject leave requests here by selecting the appropriate item, or just reopen leave requests;
- **Comments**: any additional information you would like to add.

If you are an *employee* without the appropriate permissions to manage leave requests in the system, this module works as an interface, where you can send your own leave requests to your employers. In this case, request editing features are disabled and you can only add new leave requests for yourself without the ability to change its status. Everything else will be the same as above.

When accepting leave requests (or adding new leave requests with accepted status), the *working arrangement table* of the subject employee will be updated automatically to prevent conflicts with his/her work plan.

7.18. Working arrangements

Basically, this module is the working plan for all employees. By default, you can see only your own working arrangement. To edit working arrangements, you must have the appropriate permissions. You can access this module from the 'Employment►Working arrangements' menu. This module is very similar to the *Work schedules* module, except that it will not take effect on the automatic payment calculations. New work plans are automatically verified to prevent conflicts with *accepted leave requests*. When trying to add a new work plan, which is in conflict with an accepted leave request, you will see an error message notifying you about the conflict and the table will not be updated with this value. Also, if the status of a leave request is changed to *accepted*, the table will be synchronized automatically with the leave request to prevent conflicts.

7.18.1. Basic mode

In basic mode, you can see only your own working arrangement. On the list, you can find the current project (if defined any), your current position, your current department, your current location of work, the start date and time of work, the end date and time of work, your total break time permitted and some additional information in the 'Comments' field (if added any). The list is read-only and you are not allowed to change it any way. You can switch to advanced mode by clicking on the link below the list if you have the appropriate permissions.

7.18.2. Advanced mode

In advanced mode, you can edit the working arrangement of all employees. To edit working arrangements, you must have the appropriate permissions. The layout is the same as in the previous modules and the fields of the form in the *Edit working arrangement / New working arrangement* are the same as we have seen in the basic mode.

You can add a new working arrangement to a specific employee by specifying his/her unique employee code. It is recommended to add entries to the list as full days of work with the total length of break time allowed. You can add any additional information in the 'Comments' field. When you are finished with the form, click on the 'Submit' button to store the new entry in the database.

To switch back to basic mode, click on the link below the list directly.

7.19. Task management

This group of modules let you schedule tasks for yourself and other employees in the system. There are two kinds of tasks: tasks defined for a fix time stamp and tasks having a start date and time and a repeat interval. Tasks assigned for a fix time stamp will be shown in the *Dashboard* when the start date and time is not further than a specified interval and the system will keep showing them until they are marked as accomplished. Tasks having a interval will be shown again and again for a specified amount of time. These tasks are independent from projects, where current tasks are also shown on the dashboard. Both of these entries are assumed to be parts of the system calendar and are reserved for registering special events.

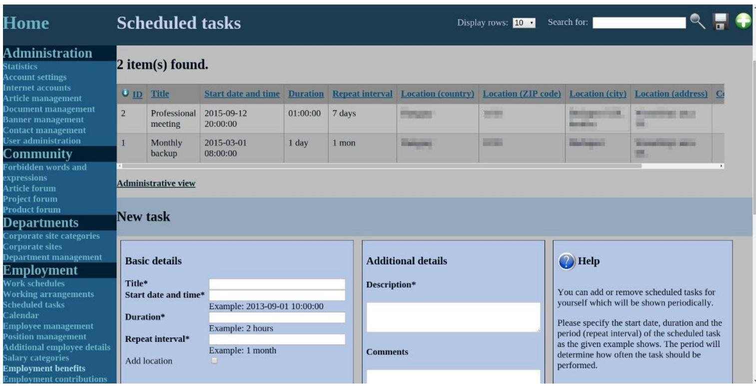


Figure 32: Scheduled tasks

7.19.1. Scheduled tasks

This module lets you create tasks assigned for a fix start date and time with a repeat interval in the system (Figure 32). You can access this The module from the 'Employment ► Scheduled tasks' menu. By default, you can edit only your own tasks. This is the basic mode. Editing tasks of other employees require the appropriate permissions. This is the advanced mode. The layout is not different from the ones we have seen before.

In basic mode, you can edit the following fields of a task in the *Edit task / New task* section: the title, the start date and time, the duration of the task, the repeat interval, the location (country, ZIP code, city, address), the description and the comments. The fields shown on the list are the same with the ID of the task added.

In advanced mode, the fields are extended with the mist important employee details and the unique employee code must be specified to edit the tasks.

When you have finished filling the form, click on the 'Submit' button to store the task in the database. When one of your scheduled tasks becomes current, you will see a notification referencing the task with the calculated scheduled date and time in the dashboard.

7.19.2. Calendar

This module lets you create tasks assigned to a fix time stamp in the system (Figure 33). You can access this module from the 'Employment►Calendar' menu. The module is almost the same as the *Scheduled tasks* module with some major differences:

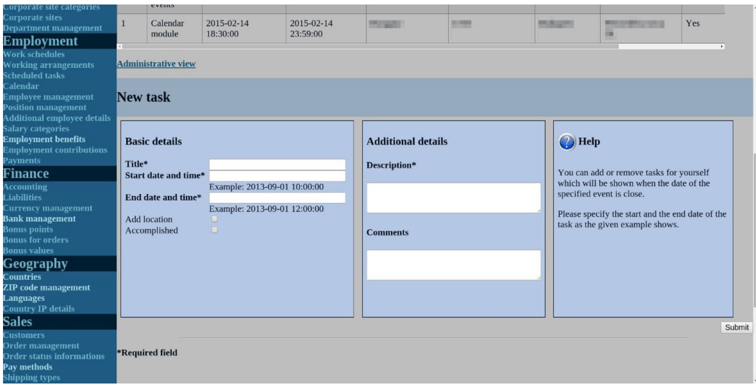


Figure 33: Calendar

- There is no *duration* and *repeat interval* fields as the task is assigned to a fix time stamp. Instead, the end date and time must be specified.
- There is another field, called 'Accomplished', which determines whether the task is completed or still under progress.

Other fields are the same as in the previous module and so is the usage of this module. Tasks marked as *accomplished* (or completed) will not show up any more in the *Dashboard*.

7.20. Employee management

This is one of the most important modules in the system (previously seen on Figure 9). You can access this module from the 'Employment►Employee management' menu. In this module, with the appropriate permissions, you can manage the employees working for the company.

7.20.1. Basic details

This subsection contains the most common details of employees with their primary contact details.

- **Code**: the unique identifier of employees. It is not equivalent to the database record ID, which is an integer number and can be only greater or equal to 1). The *code* field can be omitted when creating a new employee record in the database, then the system will generate a new employee code. When editing employee details, the *code* must always be specified. This code makes easier to identify employees when adding new records to the database referencing to employees (for instance: registering paid salaries).
- **Given name, middle name, family name**: the parts of the employee name, the middle name can be omitted. If

the current employee has a user account in the system, it will be synchronized with these fields.

- **Gender**: the gender of the employee.
- **Primary position**: the primary position of the employee. This detail takes effect in the payment calculations and is always the default position in the work time management modules.
- **Primary department**: the primary department of the employee. This is always the default department in the work time management modules.
- **Primary site**: the primary corporate site of the employee. This is always the default location in the work time management modules.
- **Primary email address**: the primary email address of the employee. If you have to contact an employee in the system, this should be your primary resource. If the current employee has a user account in the system, it will be synchronized with this field.
- **Primary phone number**: the primary phone number of the employee. If you have to contact an employee in the system, this should be your second primary resource.

7.20.2. Addresses

There are two kind of addresses for the employees in this subsection: the home address and the mailing address. If the employee can be reached in a location different from where the employee officially lives, the mailing address should be specified as this location. There are four fields for both type of addresses:

- **Country**: this should be selected first when storing an address in the system.
- **ZIP code**: the postal code. If the 'City' field is already set, the system will try to find this field for you. You can always override the search result.
- **City**: if the 'ZIP code' field is already set, the system will try to find this field for your. You can always override this search result too.
- **Address**: the street and number. Any kind of additional identifiers should be specified here.

7.20.3. Identification

This subsection contains the fields that help you identify the employees. These are common details, not generated by the system. The fields are the following:

- **Photo**: the primary profile photo of the employee. You can add URLs here, or you can upload any image file (JPEG or PNG recommended).
- **Mother's name**: the name of the employee's mother. Does not need further description.
- **Identity Card Number**: the number of the official identity card (or ID card) of the employee.
- **Tax number**: the official tax number (or VAT number) of the employee.

- **Social Security Number**: the official social security number of the employee.
- **Bank account number**: the primary bank account number of the employee, if the employee has any.

7.20.4. Employment

In this subsection you can find the primary employment details of the employee. This is the other group of fields that defines the actual position of the employee in your company. These fields are the following:

- **Hire date**: the start date of employment. The current time stamp will be used if omitted.
- **Manager code**: the code of the employee's manager (or boss).
- **Salary category**: overrides the default salary category defined for the employee's position. Takes effect in the payment calculations.
- **User login name**: the login name of the employee's user account. Employee name and email address will be synchronized with the user account if this field is not empty.
- **Active**: check this field if the employee is officially working for your company.
- **Public contact details**: check this option if you want the employee to appear among the contacts on the *Customer's Page*. Please note that you have to add the `[EMPLOYEES]`, `[EMPLOYEE_LIST_HORIZONTAL]` or `[EMPLOYEE_LIST_VERTICAL]` special variables to the appropriate documents to set the location of the contact details of the employees.

7.20.5. Professional experiences

The education and previous employments of the employee is stored in this subsection. The fields are the following:

- **Education**: the list of schools, universities and other educational institutes, separated by commas.
- **Previous employments**: the list of the employee's former workplaces, separated by commas.

7.20.6. Miscellaneous details

Additional details can be found in this subsection. Here is stored everything that could not be categorized in the previous subsections. The fields are the following:

- **Birthdate**: date of birth; when the employee was born. No further description is needed.
- **Birthplace**: place of birth; the city where the employee was born. No further description is needed.
- **Comments**: any kind of additional information.

When you have completed the form, click on the 'Submit' button to store the new details in the database. Please note that you have to log out and log in the system again for the modifications of your own details to take effect.

7.20.7. Documents for employees

When an employee is selected for editing, you can upload documents, remove documents or change the visibility of the uploaded documents for the selected employee on the bottom of the module. To change the visibility of a document, click on the *status icon* in the 'Visible' column. If you want to remove a document, click on the *delete icon* in the 'Operations' column. To upload a new document in the *Add new document* subsection, you need to specify the following details:

- **Title**: the short name of the document.
- **Description**: the short description of the document.
- **Type**: the source URL of the document. You can upload files or specify external URLs here.
- **Visible**: check this option if you want to make the uploaded document public.

When all mandatory details are specified, click on the 'Submit' button to add the document to the selected employee. After successful submission, you should be able to see the new document on the list above the *Add new document* subsection. You can also download the documents in this list by clicking on their *title* or the *download icon* in the 'Operations' column.

7.21. Position management

This module is designed for managing the positions of the employees. The entries here take effect in the primary positions of the employees, the positions for a specific group of working arrangements and the payment calculations (Figure 34). The layout is not different from what we have seen before. You can access this module from the 'Employment ► Position management' menu.

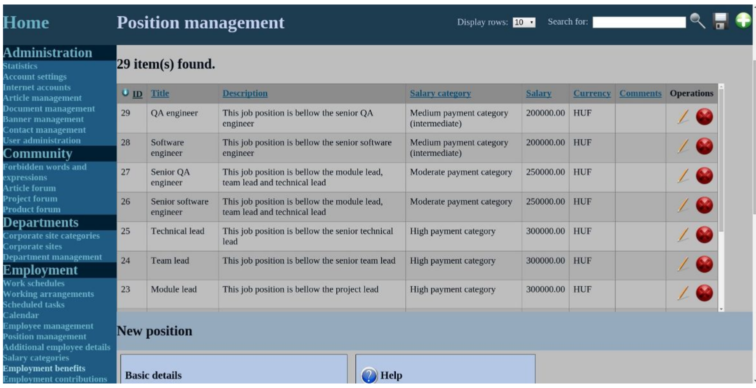


Figure 34: Position management

You have to add a detailed *title* and *description* for each position and you should also define the default *salary category* for the position if possible so the system can calculate the payment for each employee automatically. You can also define the hierarchy of the positions by adding a *parent* position for a *child* position. Please make sure you do not create circular references between the positions. Self-references are also prohibited. You can add any kind of additional information in the 'Comments' field. After installation, you will notice that a few example positions have been predefined in the system. Please note that at least one position must be defined in the system.

7.22. Additional employee details

The most important fields of personal details are already present in the system but it is possible that you have to specify additional personal details that are still not defined in the system. You can do this via this module by adding entries to the list. These additional personal details are stored as simple text data and is visible for all users with the appropriate permissions. You can access this module from the 'Employment ► Additional employee details' menu.

There are only two mandatory fields for these definitions: the *title* and *description*. Make sure you add a detailed description for each entry to make the administration process easier for other employees. You can add any kind of additional information in the 'Comments' field. When you have completed the form, click on the 'Submit' button to store the definition in the database. If one or more additional employee detail has been defined, it will be shown in the *Edit employee / New employee* section letting you add a value to it.

7.23. Leave categories

In this module you can manage the categories of leave requests (Figure 35). By default, only paid, unpaid leave requests and sick leaves are registered in the system but you can add as many additional category as you like. You can access this module from the ‘Employment ►Leave categories’ menu.

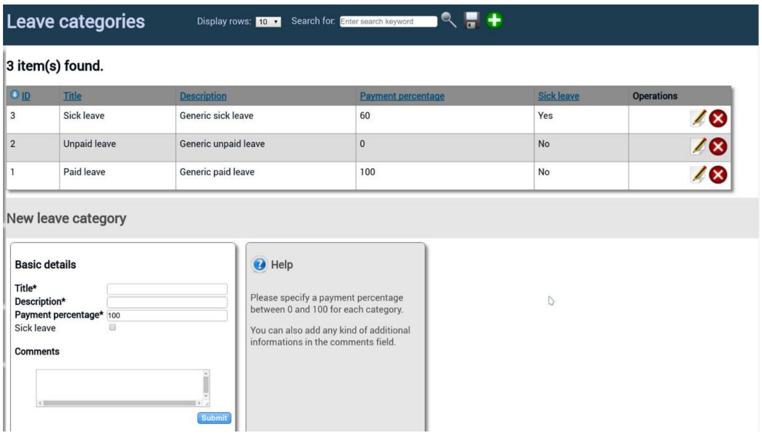


Figure 35: Leave categories

To add a new category or update an existing one you need to specify the following details of the category:

- **Title**: the name of the category;
- **Description**: a brief description for the category;
- **Payment percentage**: a number between 0 and 100, which specifies the ratio of the payment for this period of time;
- **Sick leave**: check this for *sick leaves*, which will provide special treatment for this leave category;
- **Comments**: any additional information you would like to add.

7.24. Salary categories

In this module you can manage the salary categories in the system that will take effect on the payment calculations. The module can be accessed from the 'Employment►Salary categories' menu (Figure 36).

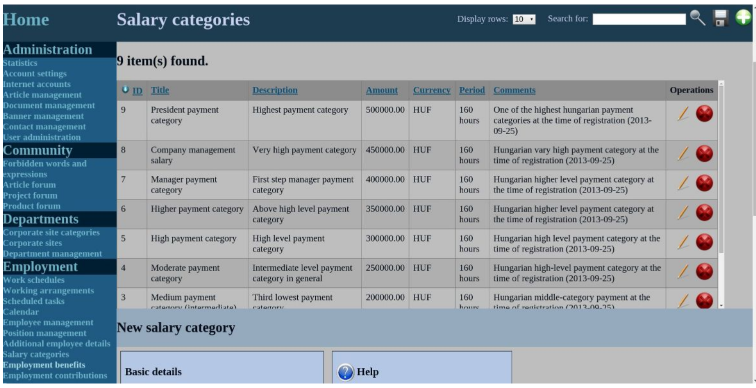


Figure 36: Salary categories

You should add a detailed *title* and *description* for each salary category, as the name is the primary field for identifying these items, the *amount* of salary with its *currency* and the *period* for how much time the salary can be achieved for. You can add any kind of additional information in the 'Comments' field. A few example salary categories have been predefined in the system. You will notice this after installation.

Please note that at least one salary category must be defined in the system to make sure that the automatic payment calculation subsystem works.

7.25. Employment benefits

This module lets you manage employment benefits in the system. These benefits are just like salaries but they are not regular payments, all employment benefit must be assigned to a specific position and they do not take effect automatically on the payment calculations. You can access this module from the 'Employment►Employment benefits' menu.

The way of usage is the same as we have seen in the *Salary categories* module but usually we set the period in days instead of working hours. You can also add any kind of additional information in the 'Comments' field. When you have completed the form in the *Edit salary category / New salary category* section, click on the 'Submit' button to store the entry in the database.

A few example benefit has been predefined in the system as an example. Employment benefits are not mandatory for the payment calculations you you can remove all benefits from the system if you wish.

7.26. Employment contributions

This module defines the generic contributions for salaries and employment benefits. The entries here always take effect in the automatic payment calculations. You can access this module from the 'Employment►Employment contributions' menu. The layout is the same as we have seen in the previous two modules but there are some major differences in the definition compared to them (Figure 37).

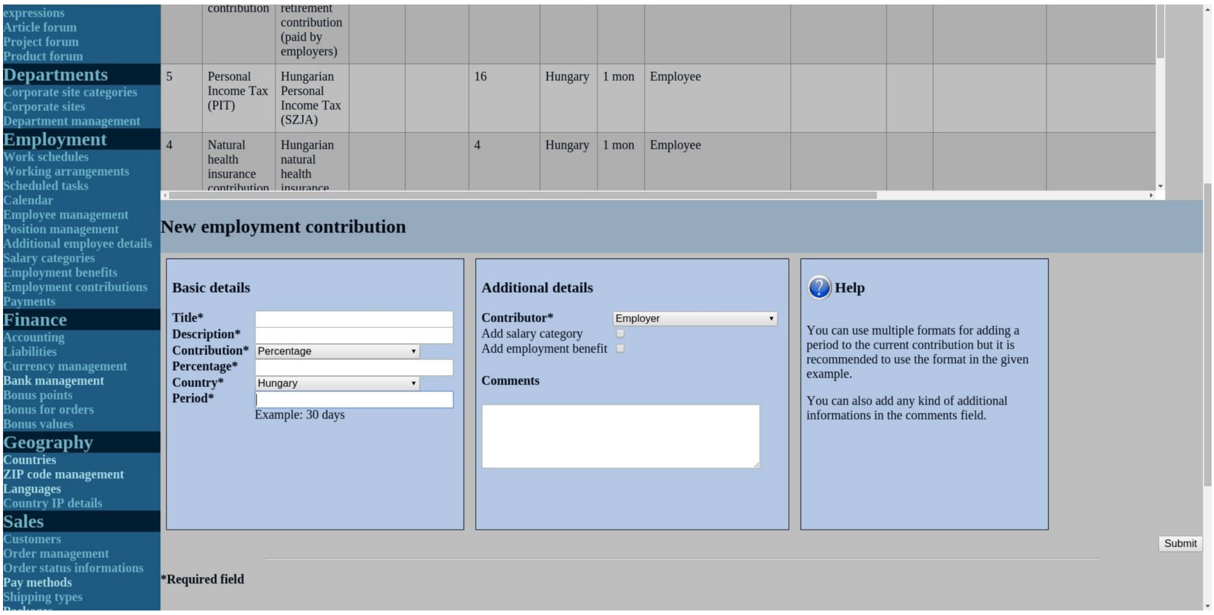


Figure 37: Employment contributions

The first of these differences is that you have to define the country where the contribution is applied. This is the 'Country' field in the *Edit employment contribution / New employment contribution* section and the *Basic details* subsection within this area. If the employee is working in a country different from the one specified in the contribution then the contribution will not be applied on the employee's payment.

The second difference is that you have to specify whether the contribution is a fix-amount contribution with a specified currency or some percentage of the employee's payment. This is the 'Contribution' field in the *Basic details* subsection and the 'Percentage' or 'Amount' and 'Currency' fields below that field depending on which is selected. If the contribution is paid as some ratio of the employee's payment then the 'Period' field of the contribution will be ignored in the payment calculations.

You also have to specify whether the contribution is paid by the employer or the employee. This will take effect in the accounting. This is the 'Contributor' field in the *Additional details* subsection. If the contribution is paid by the employer, it will be subtracted from the balance of your company.

You can also assign the contribution to a *salary category* or an *employment benefit*. These fields can be found in the *Additional details* subsection too. If one of these fields are set then the contribution will be applied only on the appropriate salaries or benefits. You can also add any kind of additional information in the 'Comments' field but it will note take effect on the payments any way. When you have completed the form, click on the 'Submit' button to store the contribution details in the database.

After installation, you will notice that a few predefined entries are already present in the database. These are the last known employment contributions at the time. Employment contributions are registered in the database for legal reasons to help the system automatically calculate the payment of the employees correctly. Please note that if you remove these entries then your accountant will have to add all contributions to the payments manually, increasing administration time significantly.

7.27. PAYMENTS

This module has been designed for calculating the payment of your employees automatically then adding it to the accounting. You can access this module from the 'Employment►Payments' menu. This module is accessible for all employees, however employees without special permissions can only read their own payment details here. This is the normal or default mode. To view one of your payments, navigate to the list and click on the 'go to item' icon (the right-arrow) in the 'Operations' column. Below the list you can see a detailed information about your selected payment. To select which type of payment you would like to see, use the drop down list in the header of the module. You can select your *paid salaries*, *benefits* or *contributions* here.

If you have the appropriate permissions to edit payments, you can switch to edit mode by clicking on the link below the list directly. There are two types of editing mode: the *basic mode* and the *advanced mode*. This can be selected in the header of the *Edit payment / New payment* section at the *Input mode* drop down list.

7.27.1. Basic mode

This is the recommended mode of editing payments as the system will apply the appropriate contributions assigned to the payment automatically (Figure 38) and you only have to verify the applied contributions instead of adding all of them manually. This will significantly make your administration process more productive.

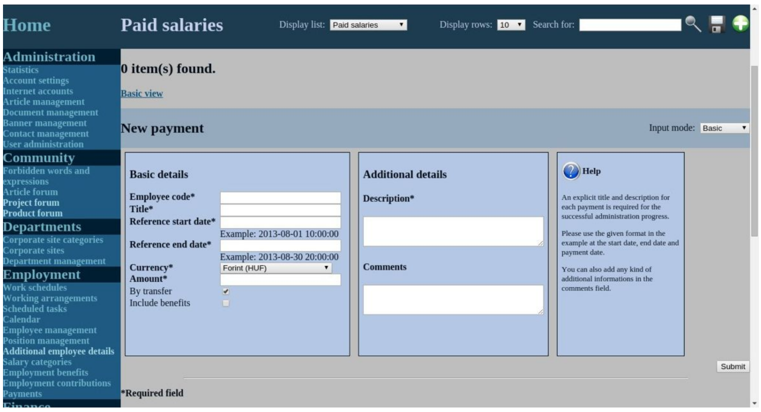


Figure 38: Editing employee payments - basic mode

By default, you can edit the paid salaries if you have not changed this in the header of the module. To add a payment to an employee, you have to specify the following fields:

- **Employee code**: the unique identifier of the employee specified at creation.
- **Title**: the title of the payment. This will improve the search results when looking for a specific payment.
- **Reference start date**: the start date of the working time for which the payment is applied.
- **Reference end date**: the end date of the working time for which the payment is applied.
- **Currency**: the currency of the payment.
- **Amount**: the amount of the payment. When the above fields are already set, the system will calculate the payment automatically. You can override the result if you want.
- **By transfer**: determines whether the salary, benefit or contribution is paid via bank transfer.
- **Include benefits**: if you are adding a paid salary, you can include the benefits for the referenced interval too.
- **Description**: the description of the payment. This will provide more detailed information about the current payment of the employee.
- **Comments**: you can add any kind of additional information here. This will not take effect on the accounting any way. You can omit this field if you want to.
- **Benefit type**: if you are adding paid benefits, you have to select which benefit will be paid.
- **Payment date and time**: the time stamp when the payment has been added to the employee. This field appears when you are applying contributions on a specific payment.
- **Contributor**: if you are applying contributions on a specific payment, this field must be specified so the system will know how to apply the contribution on the accounting. This field determines the person or company who pays the contribution.
- **Paid salary ID and paid benefit ID**: if you are applying contributions on a specific salary or benefit then the appropriate one of these fields must be specified. Setting values for both fields on the same contribution is prohibited.

7.27.2. Advanced mode

This edit mode was designed for advanced users. In this mode, there are no automatic payment calculations, benefits and contributions are not applied automatically, you have to add all of these entries manually. This mode is not recommended to be used by default as it has been designed for correcting possible errors in the automatic payment calculations. Wrong entries may occur in the system if one or more contributions, which would be needed, is still not defined in the system. To fix problems like this, you should define these entries in the appropriate modules that we have seen before so they will be present in the automatic calculations.

The fields and their definitions in advanced mode are the same as in the basic mode, however this mode makes the administration process more difficult. You should use advanced mode for correction purposes only as it is easy to make mistakes when applying contributions for the salaries of the employees. Avoid creating salary entries manually when it is not needed.

7.28. ACCOUNTING

This is the primary module for managing financial transactions. You can access this module from the 'Finance ► Accounting' menu. The layout is the same as we have seen in the previous modules with some additional information. This extra information is the *Current balances* section below the transaction list directly. This section contains the following details:

- **Current balances grouped by currencies**: the total amount of transactions in each currency group, where any transaction is present.
- **Total balance**: the total amount of transaction converted to the default currency in the system.

Transactions can be added to or removed from the system in the *Edit transaction / New transaction* section. There are two modes for editing financial transactions in the system: the basic mode and the advanced mode. The basic mode is the default as it is the easiest way to add new transactions, the advanced mode has been designed for correcting purposes, if any of the entries contain wrong details. To switch between basic and advanced mode, use the *Display list* selector in the header of the module. Both modules require the appropriate permissions in you user account. You also need an employee record to use this module as the system will store your employee ID as the accountant ID.

7.28.1. Basic mode

In basic mode, you can only add new transactions to the accounting and view the details of existing financial transactions. To view the details of a transaction, click on the right-arrow (*Go to item* icon) in the 'Operations' column. The details of the selected transaction will appear in the *Transaction details* section below the *Current balances* section.

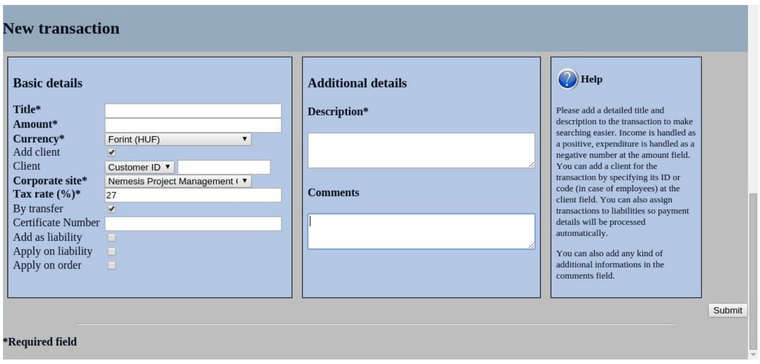


Figure 39: Adding a new financial transaction - basic mode

To add a new transaction, you have to specify the following details (Figure 39):

- **Title**: the name of the transaction.
- **Amount**: the value of the transaction.
- **Currency**: the currency, in which the amount of the transaction is specified.
- **Add client**: check this if the client is already registered in the system. Then select the type of the client from the drop down list below and specify the unique identifier of the client. This is either an ID or a code depending on what type of client you have selected.
- **Corporate site**: the corporate site, to which the transaction is assigned.
- **Tax rate (%)**: the rate of tax for the financial transaction. Usually the VAT ratio in percentage.
- **By transfer**: check this if the transaction is due via bank transfer.
- **Certificate Number**: enter the certificate number (or invoice number) here if the transaction has any.

- **Add as liability**: check this if you want to create a new liability record in the system using the details of the current transaction.
- **Apply on liability**: check this if you want to apply the transaction as a payment for a specific liability, then enter the ID of the liability.
- **Apply on order**: check this if you want to apply the transaction as a payment for a specific order, then enter the ID of the order. Only an order ID or a liability ID can be assigned to the transaction.
- **Description**: the detailed description of the financial transaction to make searching for transactions easier.
- **Comments**: any kind of additional information. You can omit this field as it has no effect on the accounting any way.

When you have completed the form, click on the 'Submit' button to store the transaction in the database. The new entry will take effect on the balances immediately. If you find that one or more transaction is incorrect, use the advanced mode with the appropriate permissions to fix them.

7.28.2. Advanced mode

This is the error-correcting mode for existing transactions. However you can add new transactions in this mode too, it is not recommended to use this mode for that purpose as everything in this mode must be done manually. *Edit* and *delete* operations are available in this mode but you cannot assign the transaction to liabilities or orders automatically. These fields are removed from the *Edit transaction / New transaction* section but everything else is the same as in the basic mode plus the ability to edit the date and time of the transaction.

When you have modified a specific transaction, the text '[modified]' will be added to the comments of the transaction to show which transactions have been updated in the system. This text cannot be removed from the transactions as it works as a marker for updates.

7.28.3. Documents

Bellow the transaction details, you can find the attached documents when editing or viewing a transaction. You can add or remove documents here. By default, these documents are stored in the database when they do not exceed the maximal file size limit, otherwise they are stored on the filesystem encrypted (if allowed).

When adding a new document to a transaction, you have to provide the following details:

- **Title**: a short name for the document (usually invoice, bill, payment confirmation, etc.).
- **Description**: a brief description for the document in a few words (what the document is exactly about).
- **Type**: you specify here the source of the document. For storing the document locally, select ‘File’, for adding a hyperlink to a remote document, select ‘URL’ (only direct links will work).
- **File**: if you want to store the document locally, you can upload the file through this input field.
- **URL**: if you want to add a hyperlink to a remote document, specify its location here.

When all details are provided, click on ‘Submit’ to store the document.

7.29. LIABILITIES

You can manage your debts in this module. Negative sign before the amount of the liability means that you have debts for a specific partner, positive sign means that the partner has debts for you. You can access this module from the 'Finance ► Liabilities' menu. There are two types of liabilities: the one-time liabilities and the periodic liabilities. The difference between these two types is that the one-time liabilities have a *payment* field and once a liability has been paid, it will no longer show up among the notifications. Periodic liabilities will be displayed again and again as you approach the due date and time. To switch between the two types, use the drop down list in the header of the module at the *Display list* field.

When a liability becomes current, you will see a notification referencing the liability with its timing in the dashboard. When the deadline of a one-time liability is reached, the system will show you a warning sign to make sure the liability is paid.

7.29.1. One-time liabilities

One-time liabilities are the primary entries for storing debts in the system. To add a one-time liability, you need to specify the following fields in the *Edit liabilities / New liabilities* section (Figure 40):

- **Title**: the name of the liability.
- **Description**: the detailed description of the liability.
- **Amount**: the value of the liability. If this is a negative number then you or your company has debts for a specific partner, if this is a positive number then that partner has debts for you.
- **Currency**: the currency, in which the amount of the liability is specified.

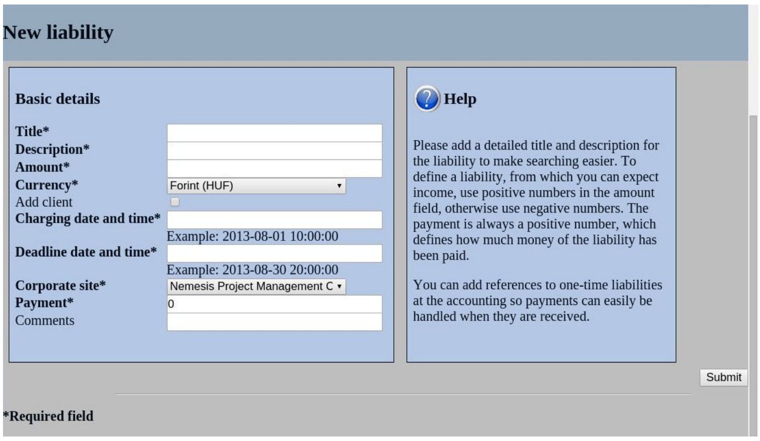


Figure 40: Adding one-time liabilities

- **Add client**: check this if the client is already registered in the system. Then select the type of the client from the drop down list below and specify the unique identifier of the client. This is either an ID or a code depending on what type of client you have selected.
- **Charging date and time**: the date and time when the liability has been defined.
- **Deadline date and time**: the due date and time of getting the liability paid.
- **Corporate site**: the corporate site, to which the liability is assigned.
- **Payment**: the amount of the payment on the liability. This is always a positive number.
- **Comments**: any kind of additional information. It does not affect the liability any way.

7.29.2. Periodic liabilities

These entries store regular liabilities in the system, which must be paid again and again after a specific amount of time. Editing periodic liabilities is similar to the one-time liabilities with a few exceptions (Figure 41):

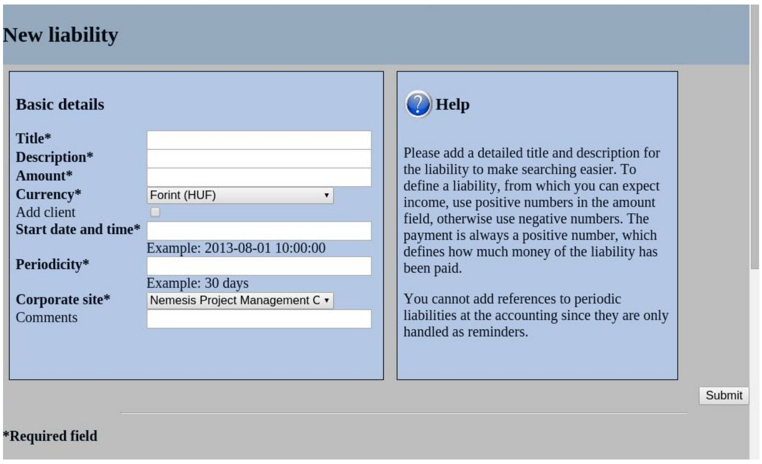


Figure 41: Adding periodic liabilities

- Instead of *charging date and time* we define a *start date and time*, from which the liability must be shown among the notifications periodically.
- Instead of *deadline date and time* we define a *periodicity* for the liability, which determines how often the liability will be shown.
- There is no *payment* field in this type of liability as it is defined to show up again and again when the liability becomes current.

When you have competed the form of a liability, click on the 'Submit' button to store it in the database. The definitions of liabilities do not take effect on the accounting directly as the accounting is used to get liabilities paid, however they can be marked as paid directly from the *Liabilities* module.

7.30. Currency management

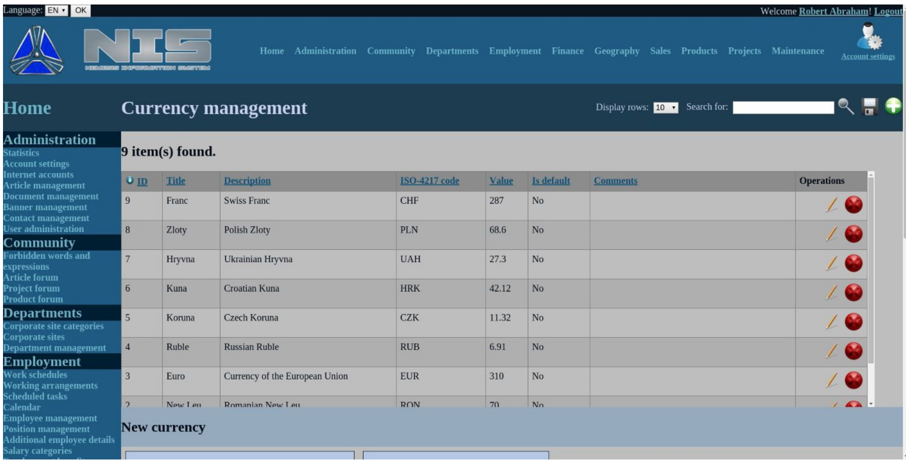


Figure 42: Currency management

The Currency management module lets you manage all currencies stored in the database. This is the most important module as its entries are used almost everywhere in the system. Thus, it is strongly recommended to keep these entries up to date.

This module can be accessed from the 'Finance►Currency management' menu. The layout is not different from what we have seen previously in the other modules but this module has the highest priority in the system (Figure 42). To add a new currency to the system or edit an existing one, you have to specify the following fields:

- **Title**: the short name of the currency.
- **Description**: the long name of the currency or a detailed description of where it is used.
- **ISO-4217 code**: this is the most commonly used currency code. It contains three letters and is mandatory as it is the primary text identifier of the currency in the system. This code is used almost everywhere when we have to define a specific amount of money.

- **Value**: the ratio related to the default currency in the system.

- **Is default**: check this if the selected currency is the default one in the system. **Exactly one default currency must be present in the system.** All currency ratios are proportional to the value of this currency.

- **Comments**: any kind of additional information. You can omit this field as it does not affect anything in the system.

You can remove currencies from the system by clicking on the *delete* icon in the 'Operations' column but removing all currencies from the system is prohibited. At least one currency must be present. Please note that removing all currencies will lead the system to fail loading product lists correctly, registering orders and almost all other operations related to handling money.

Adding wrong ratios to currencies will lead to wrong results in financial calculations as these values are constantly used by the system. Using this module is very simple but requires a great precaution. Use this module only if you know what you are doing.

7.31. Bank management

This module has been designed for storing bank details in the system. The entries in this module contain the most common details of some well-known banks. The list of banks can easily be expanded. You can access the *Bank management* module from the 'Finance►Bank management' menu. To add a new bank to the list or update an existing one in the *Edit bank / New bank* section, you need to specify the following details (Figure 43):

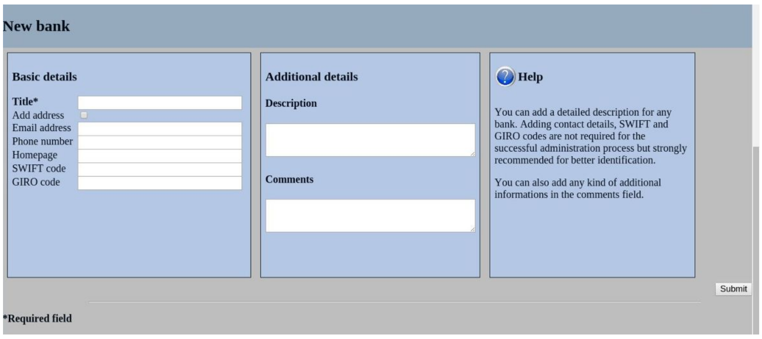


Figure 43: Bank management

- **Title**: the name of the bank.

- **Add address**: check this if you know the address of the bank so you can add it to the bank details.

- **Country**: the country-part of the bank's address.

- **ZIP code**: the postal code of the bank.

- **City**: the city-part of the bank's address.

- **Address**: the street name and number of the bank.

- **Email address**: the primary email address of the bank.

- **Phone number**: the primary phone number of the bank.

- **Homepage**: the main homepage of the bank.

- **SWIFT code**: the international *SWIFT code* of the bank.

- **GIRO code**: the international GIRO code of the bank.

- **Description**: a detailed description of the bank.

- **Comments**: any kind of additional information.

Once you have added a new bank to the list, it will be available on the *Customer's Page* too at the ordering module. To remove a bank from the list, click on the *delete* icon in the 'Operations' column. It is not recommended to remove all banks from the system as it makes the transfer method of payment unavailable on the ordering form and other related modules.

7.32. Bonus management

This group of modules lets you manage bonus calculations in the system. Each bonus point worth a certain amount of money and can be applied on the accountancy and the orders of customers. It is also possible to generate bonus points automatically for keeping customers and employees close to your company. Bonus points can have an expiration date, from which bonus points must be re-validated before they can be used again. We will cover all modules related to the bonus subsystem in the following.

7.32.1. Bonus points

This module lets you manage bonus points of clients in the system. You can access this module from the 'Finance►Bonus points' menu. Bonus points can be applied on the *accounting* and on the *orders*. Bonus points applied on an order will be registered as a payment for that order. Bonus points applied on the accounting will create one or more financial transaction entry.

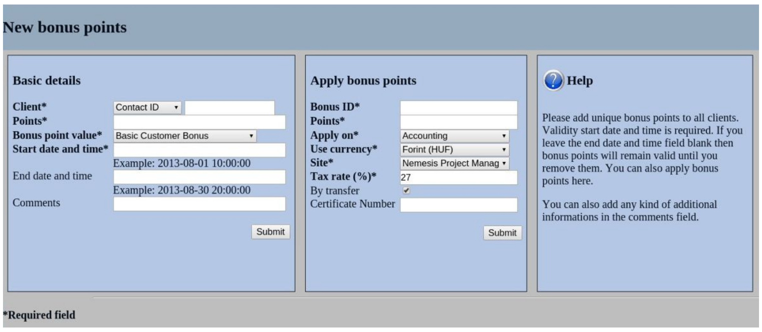


Figure 44: Adding and applying bonus points

To add bonus points for a specific client, you need to specify the following details in the *Basic details* subsection of the *Edit bonus points / New bonus points* section (Figure 44):

- **Client**: the ID or code of the client. Use the drop down list to define the type of the client.
- **Points**: the amount of bonus points. It is always an integer number and is greater or equal to 1.
- **Bonus point value**: the type of the bonus points. It determines how much money the current bonus points worth. At least one bonus point type must be defined in the system to use this module.
- **Start date and time**: the start date and time from which the bonus points are valid and can be used.
- **End date and time**: the expiration date and time of the bonus points. From this time the bonus points become invalid and will be lost. If omitted, the bonus points will never expire. This is the default setting. You can always override this date, thus invalid bonus points can be re-validated manually.
- **Comments**: any kind of additional information. You can omit this field as it has no effect on the bonus points.

You can apply existing and valid bonus points in the *Apply bonus points* subsection. To apply bonus points, you need to specify the following details (Figure 44):

- **Bonus ID**: the unique identifier of the bonus point.

- **Points**: the number of the bonus points to apply.
- **Apply on**: select the module on which you want to apply the bonus points.
- **Use currency**: the currency of the financial transaction created by the bonus points. This field takes effect only if you are applying bonus points on the accounting.
- **Site**: the corporate site to which the financial transaction, created by the bonus points, is assigned. This field takes effect only if you are applying bonus points on the accounting.
- **Tax rate (%)**: the VAT ratio of the financial transaction created by the bonus points. This field takes effect only if you apply the bonus points on the accounting.
- **By transfer**: check this if you want to apply bonus points on the accounting and the financial transaction is done via bank transfer.
- **Certificate Number**: specify the *Certificate Number* (or *Invoice Number*) of the financial transaction if you want to apply bonus points on the accounting and you know this identifier of the document assigned to the transaction.
- **Order ID**: the unique identifier of the order on which you want to apply the bonus points as a payment. Define this field if you want to apply the bonus points on a specific order.

7.32.2. Bonus for orders

In this module, you can manage the bonus points automatically given for customers and/or employees after *successful* orders (Figure 45). You can access this module from the 'Finance►Bonus for orders' menu. When a customer's order is marked as successful, automatic bonus points, defined in this module, are given to the customer or the employee assigned to the order.

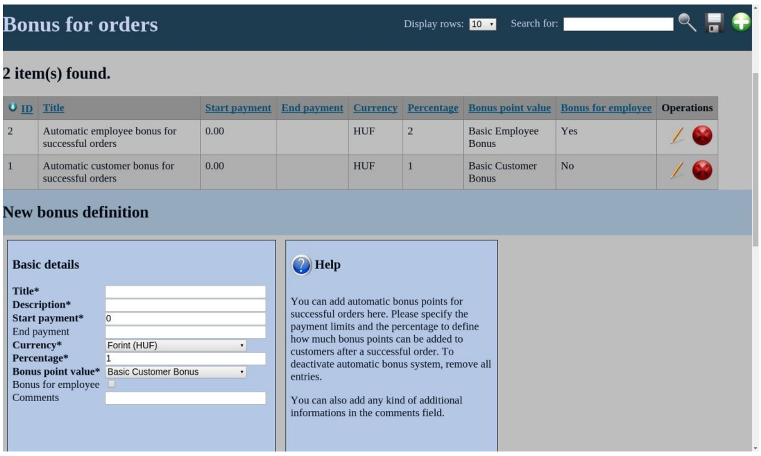


Figure 45: Automatic bonus points for successful orders

To add an automatic bonus definition to the system, you need to specify the following details:

- **Title**: the name of the automatic bonus definition.
- **Description**: the detailed description of the automatic bonus definition.
- **Start payment**: the minimal payment for the orders to apply the current automatic bonus points.
- **End payment**: the maximum payment for orders to apply the current automatic bonus points. If omitted, then the customer will receive automatic bonus points for all successful orders with payment above the minimal necessary payment.
- **Currency**: the currency of the minimal and maximum payment (if specified).

- **Percentage**: this field will determine how much percentage of the payment the current automatic bonus points worth. This number must be greater than 0 and lower or equal to 100.

- **Bonus point value**: the type of the current automatic bonus points.

- **Bonus for employee**: when this option is checked, the bonus points will be added to the assigned employee's bonus points, otherwise the bonus points will be provided to the customer.

- **Comments**: any kind of additional information. You can omit this field as it takes no effect on the bonus calculations.

When you have completed the form, click on the 'Submit' button to store the details in the database. If you do not want to give automatic bonus points for customers at all, you have to remove all entries from this module. Removing all entries from this module will disable the automatic bonus calculations.

7.32.3. Bonus values

This is the most important module of the bonus subsystem. This module defines the types of the bonus points and how much money they worth (Figure 46). The entries defined here are used everywhere in the bonus calculations. You can access this module from the 'Finance ► Bonus values' menu.

To add or update bonus types in the system, you need to specify the following fields:

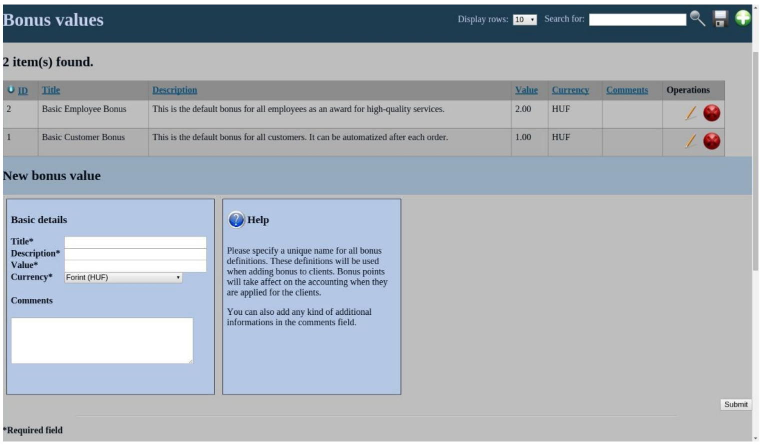


Figure 46: Bonus point values

- **Title**: the name of the bonus type.

- **Description**: the detailed description of the bonus type.

- **Value**: the amount of money in the bonus definition. This field determines how much money 1 bonus point worth.

- **Currency**: the currency of money in the bonus definition. This is always converted when applying bonus points.

- **Comments**: any kind of additional information. You can omit this field as it takes no effect in the bonus calculations.

You have to specify at least one bonus value to get the bonus system working. The number of bonus definitions are not limited. If you remove all bonus definitions, you will not be able to add or apply bonus points in the system.

7.33. Geography

This group of modules lets you manage countries, postal codes, languages and more. These are the basic modules in the system and almost everything depends on them. In the following, we will cover all modules in this group.

7.33.1. Countries

This module stores all countries with their code and geographic location (region). You can access this module from the 'Geography►Countries' menu. To add or update entries in this module, you have to specify the following details (Figure 47):

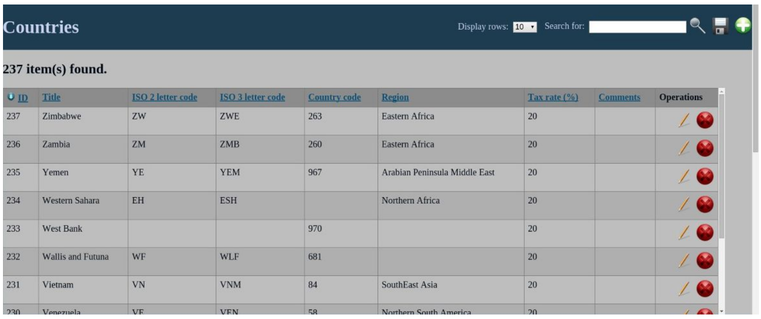


Figure 47: Country management

- **Title**: the name of the country.
- **ISO 2 letter code**: the international 2 letter code of the country.
- **ISO 3 letter code**: the international 3 letter code of the country.
- **Country code**: custom country code.
- **Region**: the continent or a specific area of a continent, where the country is located.
- **Tax rate (%)**: the default VAT value in the country in percentage. For legal reasons, it is recommended to set this the highest known VAT value in the country applied on the primary category of your products. VAT calculations are based on this value. The VAT value is used mainly at order management when calculating the gross prices of the ordered products.
- **Comments**: any kind of additional information. You can omit this field as it does not effect anything in the system.

When you have completed the form, click on the 'Submit' button to store the new details in the database. Usually, country details are changed when the appropriate VAT value is changed in a specific country.

7.33.2. ZIP code management

This module lets you manage postal codes stored in the system. Stored postal codes are useful when you have to specify addresses in various forms and you want to find the city for a specified postal code or the postal code for a specified city automatically. The number of possible postal codes is enormous, only a few common postal codes have been predefined in the system. You can extend the list as you like. You can access this module from the 'Geography►ZIP code management' menu. To add or update postal codes in the system, you need to specify the following details:

- **Country**: the country where the postal code is used.
- **ZIP code**: the postal code itself.
- **City**: the city where the postal code is used.
- **State**: the state or province where the postal code is used.

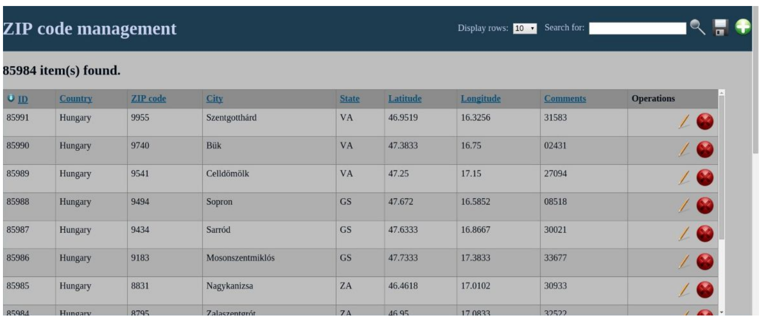


Figure 48: ZIP code management

- **Latitude** and **longitude**: the geographic location of the postal code.

- **Comments**: any kind of additional information. You can omit this value as it is not used anywhere.

You can also remove obsolete postal codes from the system by clicking on the *delete* icon in the 'Operations' column. Please note if you remove too many or all postal codes from the system, the automatic address look-up module will stop working, which would make specifying addresses in the system more comfortable.

7.33.3. Languages

This module lets you manage languages stored in the database (Figure 49). Language entries are used almost everywhere in the system, including articles, documents, projects and much more. There are lots of language entries predefined in the system, much more than how many of them are used today. Basically, this module contains all languages known today.

You can access this module from the 'Geography ► Languages' menu. To add or update languages in the system, you have to specify the following details:

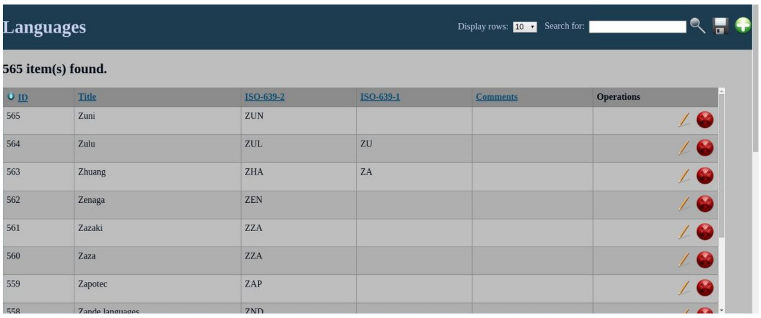


Figure 49: Languages in the database

- **Title**: the name of the language. Usually, languages are identified by name in the system.

- **ISO-639-2 code**: the standard ISO-639-2 code of the language. This is a 3 letter code.

- **ISO-639-1 code**: the standard ISO-639-1 code of the language. This is a 2 letter code and it is strongly recommended to set this value, as it is needed to identify the language of your browser and select the correct one for the system automatically.

- **Comments**: any kind of additional information. You can omit this value as it is not used anywhere.

The usage of this module is the same as we have seen in the previous module.

7.33.4. Country IP details

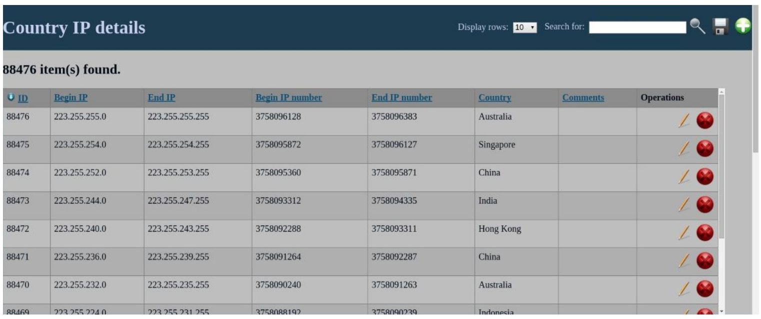


Figure 50: Country IP details

This module is used to assign countries to IP ranges (Figure 50). These entries are needed to determine which country a specific client is accessing the homepage from and it is not recommended to remove any of these records. You can access this module from the 'Geography ► Country IP details' menu. To add or update records in this module, you have to add the following data to the entry:

- **Begin IP**: the start of the IP range for the specified country.

- **End IP**: the end of the IP range for the specified country.
- **Begin IP number**: the start IP number of the range for the specified country.
- **End IP number**: the end IP number of the range for the specified country.
- **Country**: the country, which is assigned to the IP range.
- **Comments**: any kind of additional information. You can omit this value as it is not used anywhere.

Normally, you will never have to edit these records as everything is predefined here to fit global addressing when accessing the system. If you are using the system from a local computer (for example: a workstation on your LAN) then these records are ignored and the default settings will be used. Usually, country IP details are used when you have to calculate the correct tax rate (or VAT value) for the products on the *Customer's Page* and for this, you must know where the customer is visiting your homepage from.

7.34. Customers

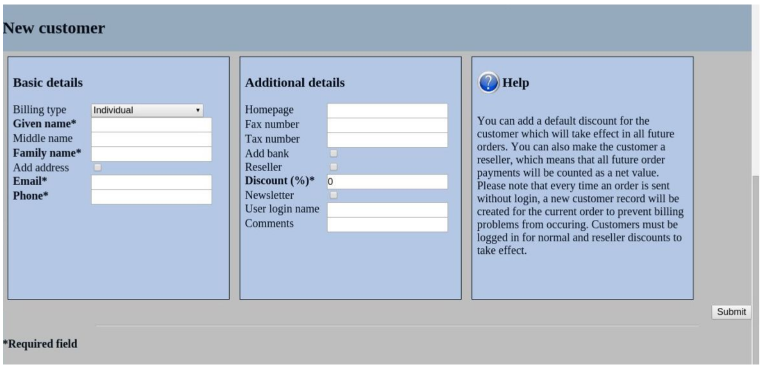


Figure 51: Customer management

This module lets you manage all customers in the system (Figure 51). You can access this module from the 'Sales ► Customers' menu.

Customer records are automatically generated when ordering products on the *Customer's Page*. Multiple customer records can be assigned to the same person if that person is ordering products without registration. This happens because normal personal details are not enough for the system to unambiguously identify the customers but the price calculation must be the same in all cases. If a customer wants bonus points, special discounts and other benefits then the customer must create an account on the Customer's Page so the system will be able to identify the customer using the login details. Customers are always identified by their customer ID in the Administration System. When a customer record is created via the registration process, the system will assign the customer ID to the user account automatically.

To add or update a customer record manually, you have to specify the following details:

- **Billing type**: the type of the customer. Customers can be both individuals and companies.
- **Given name**: the forename of the customer if the customer is an individual.
- **Middle name**: the middle name of the customer if the customer is an individual. It can be omitted.
- **Family name**: the surname of the customer if the customer is an individual.
- **Company name**: the name or trademark if the customer is a company.
- **Country**: the country-part of the default billing address if specified.
- **ZIP code**: the postal code in the default billing address if specified.
- **City**: the city in the default billing address if specified.

- **Address**: the street name and number in the default billing address if specified.
- **Email**: the email address of the customer. This is the primary contact detail.
- **Phone**: the phone number of the customer. This is the other primary contact detail.
- **Homepage**: the homepage of the customer. Usually companies have homepages but individuals can use this field too. This is optional and can be omitted.
- **Fax number**: the fax number of the customer. This is a secondary contact detail and can be omitted.
- **Tax number**: the standard tax (or VAT) number in the European Union. Customers must provide a valid tax (or VAT) number if they want to buy products as resellers.
- **Bank**: the name of the customer's bank. This field is used with the bank account number field.
- **Bank account number**: the customer's bank account number. Specifying this field is very useful when there is some overpayment in the system, which must be compensated.
- **IBAN**: the standard IBAN of the customer. Basically, this is the customer's bank account number with a few modifications, if necessary.
- **Reseller**: check this field if the customer has a valid tax (or VAT) number and is a registered reseller (or retailer). Applying this field means that the customer can buy your products paying net prices.
- **Discount**: this is a percentage between 0 and 100 depending on how much special discounts you want to provide the customer by default.
- **Newsletter**: check this field if the customer requests newsletters from the system.
- **User login name**: add the customer's login name here if the customer has a valid user account in the system. This means that there will be no more customer records generated for the same customer when ordering products, as the system will be able to identify the customer by the user account (if logged in), and will use this record to handle orders of the customer.
- **Comments**: any kind of additional information. You can omit this value as it has no effect on the customer and order management modules.

When you are done with the editing, click on the 'Submit' button to store the customer details in the database. To remove duplicate entries for the same customer, click on the *delete* icon in the 'Operations' column. Please note that you can remove a customer record only if there is still no order assigned to that record in the system.

7.35. ORDER MANAGEMENT

This module lets you manage customer orders in the system. You can access this module from the 'Sales►Order management' menu. The layout is similar to the previous ones, but the way it works is a little different from the others.

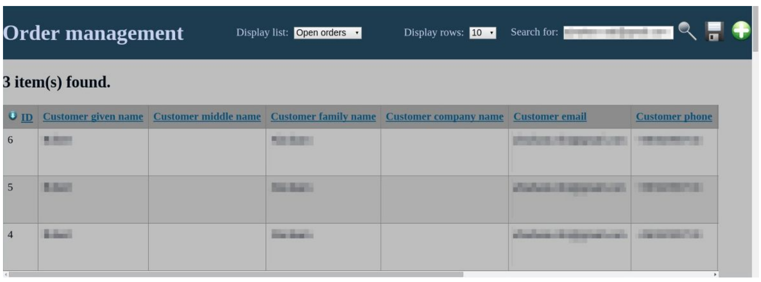


Figure 52: Simplified list of orders

On the top of the module, you can see a simplified list of the orders (Figure 52). This list contains only the core details of the customers and the orders. Orders can have two basic types of status:

- **Open orders**: these orders are still under progress and they can still be updated, if necessary.
- **Closed orders**: these are the successful or canceled orders. Administration process for these orders have ended and modifications are prohibited. If you want to update a closed order, you have to put it back to open state.

To select which type of orders you want to see, use the *Display list* selector in the header of the module. You can also select to view all orders in this drop down lists. By default, the list is in descending order by IDs. Basically, this defines an ordering by date and time, since the latest order should appear on the top of the list.

Orders are generated automatically using the *Customer's Page*, however you can add orders manually to the system. This is done in the *Modify order / New order* section. Adding a new order manually will also create a new customer record in the system, except when you define an existing customer ID for the order in the *Billing details* subsection. You can also modify existing orders in this section without changing the assigned customer record.

7.35.1. Adding new orders

To add a new order to the list manually, navigate to the *Modify order / New order* section and specify the following core details:

- **Billing type**: select whether the customer is an individual or a company.
- **Given name**: the forename of the customer in the case of individuals.
- **Middle name**: the middle name of the customer in the case of individuals. This field can be omitted.
- **Family name**: the surname of the customer in the case of individuals.
- **Company name**: the name of the company in the case of companies.
- **Country**: the country-part of the billing address.
- **ZIP code**: the postal code in the billing address.
- **City**: the city in the billing address.
- **Address**: the street name and number in the billing address.
- **Customer ID**: add this value if you want to ignore the above details and use an existing customer record instead.
- **User login name**: add this value if you want to ignore the above details and use an existing customer record instead. This identifier will take effect only if the customer has registered in on the *Customer's Page* or you have assigned a login name for the customer record manually.
- **Payment method**: select how the price of the ordered products and the shipping fee (if present) will be paid.
- **Currency**: select the primary currency of the order. Ordered products will use their own currencies in the order but these currencies will be converted automatically on the payment calculations.

- **Shipping type**: select how the ordered products will be delivered to the customer.
  - If the selected delivery method requires transportation, you have to specify the recipient details (**given name**, **middle name**, **family name**, **country**, **ZIP code**, **city**, **address**) and the **shipping fee**.
  - If personal takeover is selected, you have to select the **takeover park** (the corporate site, where the ordered product will be delivered to the customer).
- **Email**: the email address of the customer or recipient.
- **Phone**: the phone number of the customer or recipient.
- **Employee code**: the code of the employee, who is actually selling the ordered products to the customer. If omitted, your own employee code will be used by default. Changing this value later requires the appropriate permissions.
- **Customer comments**: special requests from the customer. This field can be omitted but omitting this field is not recommended when the customer has special needs (for example: on the way of delivery).

When you have completed the form, click on the 'Submit' button to store the core details of the order in the database so you can start adding products to the current order immediately.

7.35.2. Editing orders

To open an order for editing, click on the *edit* icon in the 'Operations' column. When editing orders, you cannot change the customer details from this module. If you want to modify customer details assigned to the current order, click on the *edit* icon at the *Customer ID* field. This will redirect you to the *Customers* module.

Editing core details of the order is similar to adding new orders to the system. You can change the billing information, the shipping details, and the basic order details. In the *Order details* subsection, a new field will appear: the **Deposit**. This field determines how much money has been paid for the current order. If you have just created this record, this value should be still 0. you can also change the *Status* of the order here. Please note that orders can be marked as successful only if the ordered products and the shipping fee (if present) are paid. You can also add any kind of additional information in the *Comments* field.

On the bottom of the *Modify order / New order* section, you can add products to the order or remove them from the order (Figure 53). To add a new product to the current order, you have to add the following values to the fields in the form:

Figure 53: Adding or removing products in orders

- **SKU**: this is the primary identifier of the product in the system.
- **Quantity**: the quantity of the current product you want to sell.
- **Extra discount (%)**: specify this value between 0 and 100 if you want to apply additional discounts on the sale price of the products. Please note that you must have special permissions to do this.

When you have completed the form, click on the 'Add product' button to add the current product to the order. If you want to remove products from the current order, click on the *delete* icon in the 'Operations' column of the list above the form directly.

You can also see how much money of the payable has been paid already. This field can be found on the bottom of the module, below the *Ordered products* form.

When you have completed all forms in the current order, click on the 'Submit' button to store all changes in the database.

7.36. Confirmation email templates

This module lets you create confirmation email templates for orders. When an order is successfully sent via the *Customer's Page*, the mail connection is properly configured and the system finds a template on an appropriate language for the customer, a confirmation email with the details of the order will be sent to the customer using the templates defined here (or a simple confirmation message if no template found). You can access this module from the 'Sales ► Confirmation email templates' menu.

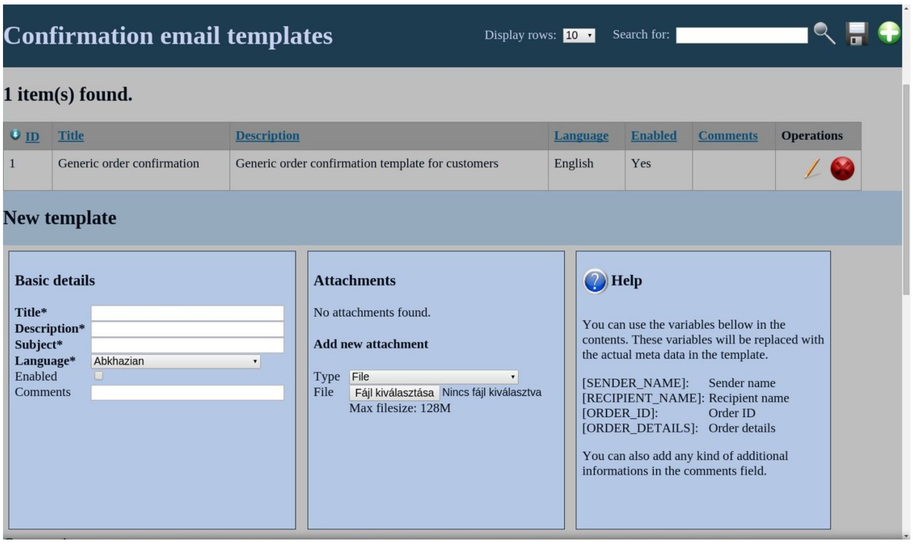


Figure 54: Confirmation email templates for orders

To add a new confirmation email template or edit an existing one, you need to specify the following details (Figure 54):

- **Title**: name name of the confirmation email template. This must be unique for all languages.
- **Description**: the short description of the confirmation email template.
- **Subject**: the subject of the confirmation email sent to the customer. You can use special variables (such as `[ORDER_ID]`, `[SENDER_NAME]`, etc.) in this field. These variables will be substituted to the actual details.
- **Language**: the language of the confirmation email sent to the customer.
- **Enabled**: check this option if you want to activate the template, otherwise the system will not use it.
- **Attachments**: the attachments in the confirmation email sent to the customer.
- **Contents**: the body of the confirmation email sent to the customer. You can use special variables in this field (what we have seen at the *subject*) and it is recommended to do so for personalizing the email. You can see the list of special variables in the help box. Please note that the context always takes effect on which special variables can be used. The '`[ORDER_DETAILS]`' special variable should be present in the content so the

system will be able to send a confirmation email to the customer with all important details of the order.

When you have completed the form, click on the 'Submit' button to create or update the confirmation email. A few confirmation email templates are predefined in the system as an example. Please note that you must have a valid email account for sending confirmation email with the system.

7.37. Order status informations

This module contains the information for all status of the orders in the system (Figure 55). you can access this module from the 'Sales►Order status informations' menu.

Basically, this is a system table and it is not recommended to change its contents, however you may need to add new status entries to orders.

To add a new specification, you need to define the following details for the new entry:

- **Title**: the name of the status entry.
- **Description**: the detailed description of the status entry.
- **Success**: check this if orders with this status are considered as successful (or completed).
- **Canceled**: check this if orders with this status are considered as canceled (or deleted).

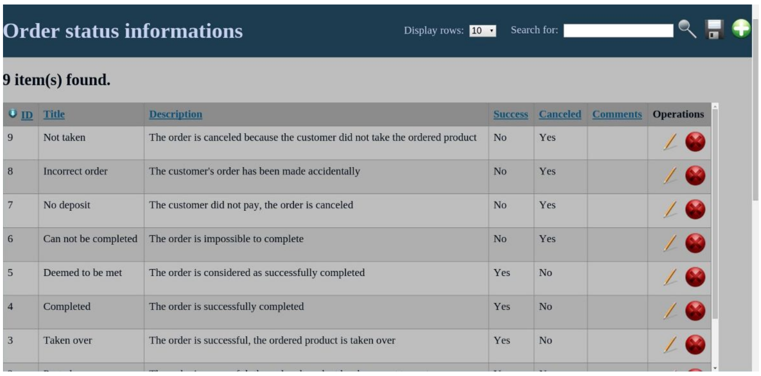


Figure 55: Order status information table

- **Comments**: any kind of additional information. This field can be omitted as it is not used by the system.

Please note that a status entry cannot be marked both successful and canceled. If you try to store an entry with these settings, you will get an error message. Of course, a status entry can be marked as none of these, if this status is defined as a new step in the progress before marking orders as completed.

You can also remove status entries by clicking on the *delete* icon in the 'Operations' column, however this operation is not recommended as the system may need it. If there is one or more order in the system with the status you want to remove, you will get an error message when trying to delete it.

7.38. Payment methods

This module defines how customers can pay the ordered products and the shipping fee (if present). You can access this module from the 'Sales►Payment methods' menu. To add a new payment method to the system, you need to specify the following details (Figure 56):

- **Title**: the name of the payment method.
- **Description**: the detailed description of the payment method.
- **Transfer**: check this if the payment method is due via bank transfer.

- **Comments**: any kind of additional information. You can omit this field.

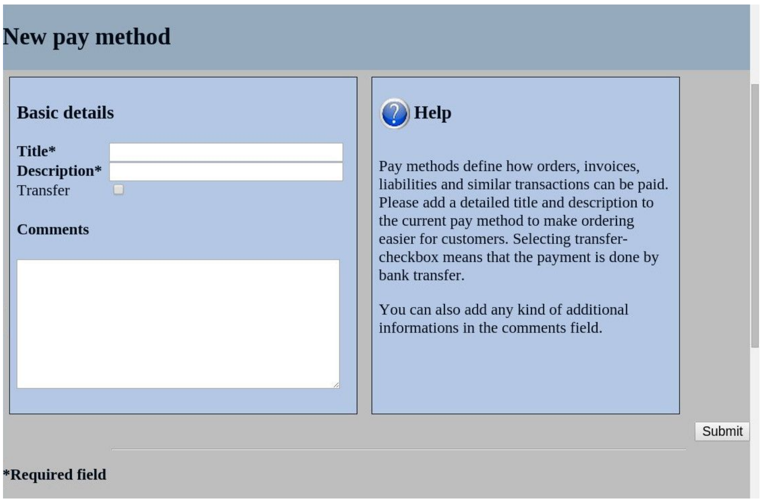


Figure 56: Payment methods

It is not recommended to remove any of the entries already present in the system as they are needed by the ordering modules.

7.39. Shipping types

This module is very similar to the *Payment methods* module, except that it defines the shipping types for the orders. You can access this module from the 'Sales►Shipping types' menu. The usage is the same as we have seen in the previous module. To add a new shipping type to the system, you need to define the following details (Figure 57):

- **Title**: the name of the shipping type.
- **Description**: the detailed description of the shipping type.
- **Delivery**: check this option if the shipping type needs transportation. This field will take effect on the order form, when entering shipping, and also when calculating the delivery cost of the ordered products. If this field is unchecked, the ordered products are assumed to be taken over by the customer personally.

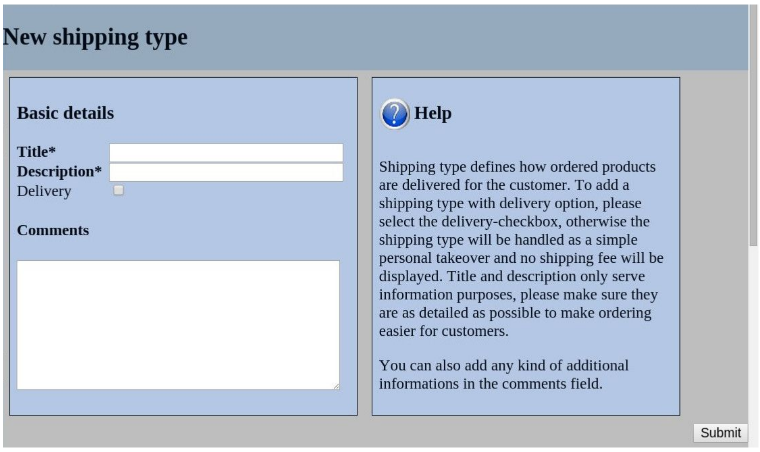


Figure 57: Shipping types

- **Comments**: any kind of additional information. You can omit this field.

7.40. Packages

You can define packages for the shipping fee calculations in this module. A few packages has been predefined in the system as an example. You can access this module from the 'Sales►Packages' menu. Packages are needed to correctly calculate the shipping fee for the ordered products when transportation is selected in the order. You can define one or more package type in the system, the number of types is not limited. Each package must have a start weight and a start size so the system will know which category the ordered products belong to. A shipping fee is also required in each entry as it will be used, when the total size and weight of the products is calculated and the

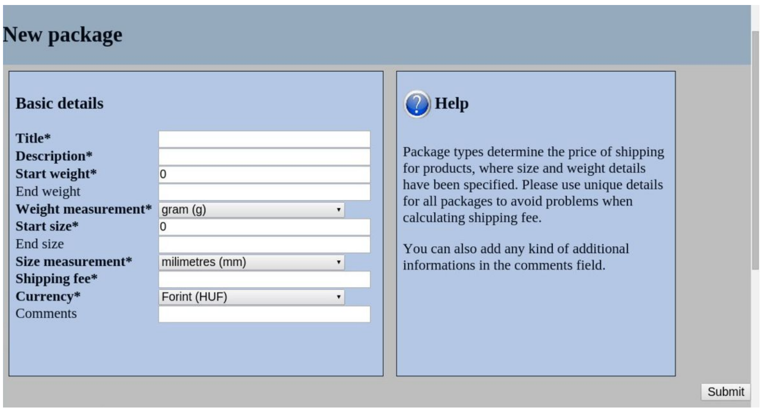


Figure 58: Packages

appropriate shipping fee must be returned.

To add a new package type or edit an existing one in the *Edit package / New package* section, you have to specify the following details for the package (Figure 58):

- **Title**: the name of the package type.
- **Description**: the detailed description of the shipping type.
- **Start weight**: the minimal weight to apply the package type.
- **End weight**: the maximum weight to apply the package type.
- **Weight measurement**: select how the weights are measured. The standard is the European SI.
- **Start size**: the minimal size to apply the package type.
- **End size**: the maximum size to apply the package type.
- **Size measurement**: select how the sizes are measured. The standard is the European *SI* but you can also use *US / Imperial* standards when specifying the package size.
- **Shipping fee**: the price of transportation for the selected package type.
- **Currency**: the currency of the shipping fee. Currencies are exchanged automatically when calculating the total payable of the ordered products, optionally with delivery cost.
- **Comments**: any kind of additional information. You can omit this field as it is not used by the system.

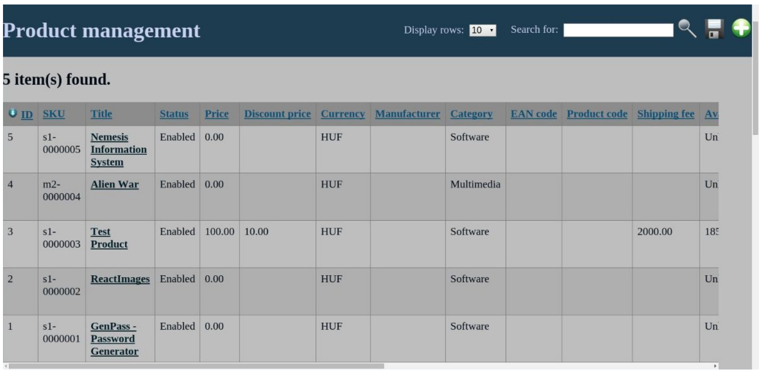
Please note that it is not recommended to remove all package types from the system as they are needed for automatic shipping fee calculations for the ordered products. If you do not want to enable transportation for your products, you should disable shipping at the product details.

To be able to apply package types for the ordered products, you have to define the size and weight at the product details. If you cannot specify these values then you should add custom shipping fees to these products or disable shipping for them. Also note that if a product is ordered, for which the shipping is disabled, then the customer will not be able to select delivery for that order.

7.41. Product management

This is the primary product management module and one of the most important basic modules in the system. In this module, you can add or update products, remove obsolete product entries, upload additional contents for them and much more.

You can access this module from the 'Products ► Product management' menu.



ID	SKU	Title	Status	Price	Discount price	Currency	Manufacturer	Category	EAN code	Product code	Shipping fee
5	s1-0000005	Nemesis Information System	Enabled	0.00		HUF		Software			
4	m2-0000004	Alien War	Enabled	0.00		HUF		Multimedia			
3	s1-0000003	Test Product	Enabled	100.00	10.00	HUF		Software			2000.00
2	s1-0000002	ReactImages	Enabled	0.00		HUF		Software			
1	s1-0000001	GenPass - Password Generator	Enabled	0.00		HUF		Software			

Figure 59: Simplified product list

On the top of the module, you can see a simplified list of the products present in the system (Figure 59). You can see the most important core details of the products on this list. You can remove obsolete products from the system by clicking on the *delete* icon in the 'Operations' column. To add new products to the system or update existing ones, you have to specify their basic core details. These details are grouped in the *Edit product / New product* section.

7.41.1. Basic details

This subsection contains the primary identifiers and the most important details of the products. These details contain the following:

- **SKU**: the *Stock Keeping Unit* of the product. This is the primary identifier of the product after its ID, which is automatically handled by the system. You can omit this value if you want the system to generate a default SKU for your product (this is the recommended option). Please note that stock keeping units must be unique.
- **Title**: the name of the product. Usually, customers are referencing products by their names so it is recommended to add a detailed name for each product to help your administrators.
- **Keywords**: category, type or other meta data to help customers and search engines finding the product.
- **Status**: the status of the product. There are three options for this field:
  - **Enabled**: the product is enabled and visible for customers.
  - **Disabled**: the product is not visible for customers and the product cannot be ordered the regular way.
  - **Problematic**: the product is disabled due to some specific problems.
- **Price**: the normal price of the product. This field is required even when the product is free of charge (in which case the price is 0).
- **Discount price**: the discount price of the product. When specified, this will be the sale price of the product.
- **Shipping fee**: the default transportation fee of the product. You can omit this value only when the size and weight of the product is specified and there is at least one appropriate package type defined for these values in the system (in which case the shipping fee will be calculated automatically) or the shipping is disabled for the product (in which case the ordering process will fail when the customers try to select delivery option for their orders containing this product).
- **Currency**: the currency of the *price*, *discount price* and *shipping fee* of the product.

7.41.2. Product photos

This subsection contains the photos uploaded or referenced for the product. The number of photos is not limited, you can upload as much as you like. Photos take an important role on the product pages when trying to sell a specific product as the customers want to see how the actual product really looks like. You should upload at least one product photo for each product. To assign a new photo to the product, you either have to upload an image file or specify the URL of the photo. The fields of this form are the following:

- **Type**: select whether you want to upload a file or specify its URL.
- **File**: the file you want to upload if upload is selected.

- **URL**: the link of the file if URL option is selected.

7.41.3. Package details

This subsection contains the size and weight of the product when specified. The fields in this subsection are obvious but we add a little description for them:

- **Width**, **height**, **length**: the size of the product.
- **Size measurement**: the measurement of the size. The standard is the European SI.
- **Weight**: the weight of the product.
- **Weight measurement**: the measurement of the weight. The standard is the European SI.

Set these fields if you want to enable automatic shipping fee calculation for the packages containing these products.

7.41.4. Additional details

This subsection contains other important details for the product. These details are the following:

- **Category**: the main category of the product. All product must belong to a main category customers will be able to find it more easily. This is the primary product listing mode on the *Customer's Page*.
- **Video URL**: set this field if you have a demonstration video about how the product works.
- **External URL**: set this field if the product is present on another website too.
- **EAN code**: the standard EAN code of the product.
- **Product code**: the standard production code of the product.
- **Availability**: the number of products in stock. The following options can be applied on this field:
    - **Order only**: the product is not necessarily in stock but you can order it from one of your partners, so you want customers to be able to order the product. You can also set the availability to this value by setting the number of the product to -1.
    - **Unlimited quantity**: the number of product is not limited. Usually, software products have this option as they can be downloaded any times. You can also set the availability to this value by setting the number of the product to -2.
    - **Number**: the exact number of the products in stock. Add this number to the field below this drop down list. Please note that this field is automatically updated when the status of a specific order is set to successful (which means that the product is or will be served for the customer).
- **Reserved**: the number of the reserved instances of the product. Please note that this field is automatically updated when a customer is ordering a specific product.
- **Warehouse title**: the primary warehouse, from which the product will be served when ordered.

7.41.5. Additional availabilities

This subsection contains additional stock information for products. A product can be stored at multiple warehouses but it can be ordered only from its primary warehouse. This subsection will show you the stock information of the current product in each warehouses. The availabilities here are not shown on the *Customer's Page* as this is an internal information for employees only.

You can modify these stocks in the *Warehouse management* module.

7.41.6. Miscellaneous options

This subsection contains the remaining important core details of the product. The details are the following:

- **Warranty**: the default limited warranty for the product.
- **Manufacturer**: the manufacturer or brand of the product.
- **Featured**: check this option if you want the product to appear on the main page of the *Customer's Page*.
- **Discontinued**: check this option if the product is no longer in production and you cannot order it from any of your partners any more, so the customers will see that you only have a strongly limited quantity of the product.
- **Shipping enabled**: check this option if you want to enable transportation for the product. Please note that you either have to set the default shipping fee, the package size and weight of the product or keep this option disabled.
- **Shopping cart enabled**: check this option if you want customer to be able to put the product in the *shopping cart* so they can order it on the *Customer's Page*.
- **Project ID**: if the product has been created under a specific project, you can add the ID of that project here, so it will be shown on the *product page* of the *Customer's Page*.
- **Comments**: any kind of additional information. You can omit this value as it is not used by the system.

7.41.7. Additional product properties

This subsection contain the user-defined properties of the product. The number of these additional properties are not limited and you can define as many as you like. These details are stored in the database as plain text data so you can define any kind of property here, but the system will not use these details in the calculations as there are no rules and conditions defined for these values.

7.41.8. Description

This subsection contains the description of the product. This is one of the most important details of the product and almost all customers will check the contents present here. This field can be a formatted text with HTML tags allowed. It is strongly recommended to create an elegant description for each product as it will take effect in the ranking of your products and your homepage.

7.41.9. Downloads

This subsection contains the download-able contents for the product. The number of these contents is not limited and you can define as many as you like. Please note that you have to save the core details of your product first to enable this subsection for the product. This subsection will be shown only when opening the product for editing. You can do this by clicking on the *edit* icon in the 'Operations' column.

On the top of the subsection, you can see the list of the download-able contents for the selected product (Figure 60). If you click on the name of the content or the *download* icon in the 'Operations' column, you will be redirected to the location of that content. You can also change the visibility of the content by clicking on the icon in the 'Enabled' column. To remove the content, click on the *delete* icon in the 'Operations' column.

To add a new download-able content to the list, you need to specify the following details on the form below:

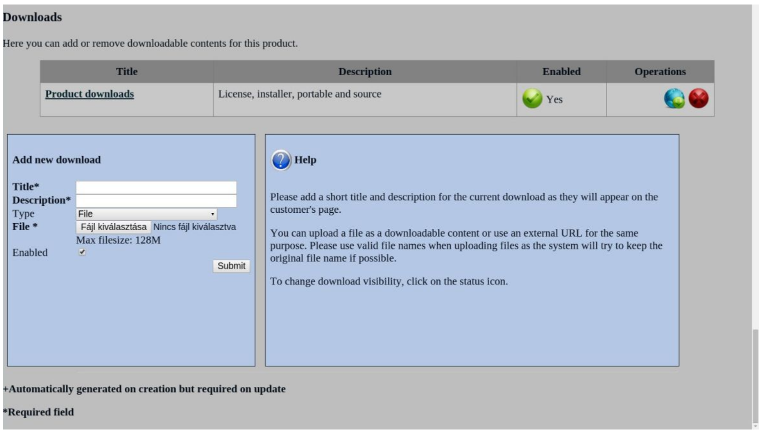


Figure 60: Download-able contents for products

- **Title**: the name of the download-able content.
- **Description**: a short but detailed description of the content. It will be shown on the *Customer's Page*.
- **Type**: select whether you want to upload a file or specify an URL for the content.
- **File**: the file you want to upload if upload is selected.
- **URL**: the link of the file if URL option is selected.
- **Enabled**: check this option if you want to make the content visible for customers.

If you have completed the form, click on the 'Submit' button to store the content in the database.

7.42. Product Categories

This module lets you manage the main categories for the products. Main categories are the primary grouping items for the products in the system. You can access this module from the 'Products ► Product categories' menu. A few main categories have been predefined in the system as an example.

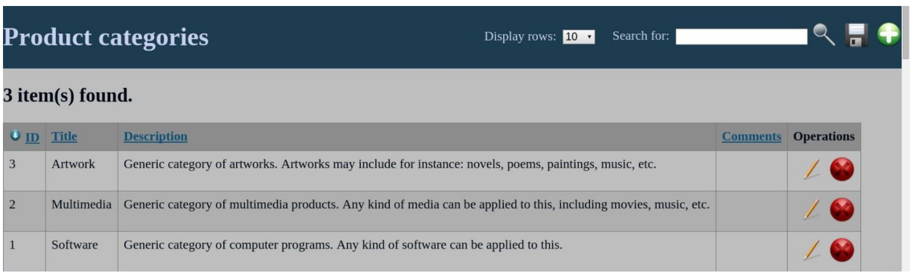


Figure 61: Product categories

You can add a new product category or update an existing one in the *Edit product category / New product category* section. To update product categories in the system, you need to specify the following details at each product category

(Figure 61):

- **Title**: the name of the category.
- **Description**: the short description of the category. This is shown on the *Customer's Page*.
- **Comments**: any kind of additional information. You can omit this field.

Please note at least one product category must be present in the system for successfully adding products. Thus, removing all product categories is prohibited.

7.43. Product manufacturers

This module lets you manage the manufacturers of products in the system. Manufacturers are automatically added when importing products to the system but you can add new manufacturers or update existing ones manually. When importing manufacturers with products, only the name of the manufacturers are imported so this module can be useful when you want to specify additional details for them. You can access this module from the 'Products►Product manufacturers' menu.

To add a new manufacturer or update an existing one, you only have to add the name of the manufacturer (so it can be selected for a specific product after storing the manufacturer in the database), however you can specify all known details, which are the following (Figure 62):

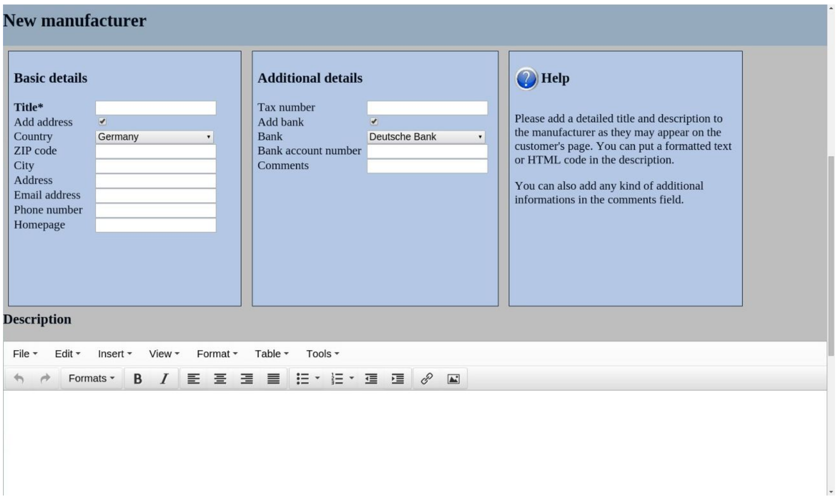


Figure 62: Adding or updating manufacturers for products

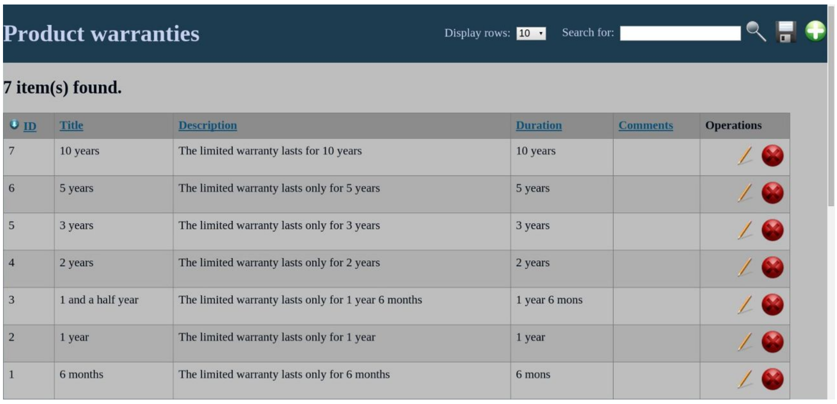
- **Title**: the name of the manufacturer. This field is updated automatically when importing products with manufacturers, other the other fields are ignored by the import process.
- **Country**: the country, where the primary corporate site of the manufacturer is located.
- **ZIP code**: the postal code of the manufacturer's primary corporate site.
- **City**: the city, where the primary corporate site of the manufacturer is located.
- **Address**: the street name and number, where the manufacturer's primary corporate site is located.
- **Email address**: the primary contact email address of the manufacturer.
- **Phone number**: the primary contact phone number of the manufacturer.
- **Homepage**: the manufacturer's primary website.
- **Tax number**: the VAT number of the manufacturer.

- **Bank**: the bank, to which the manufacturer's bank account number is assigned.
- **Bank account number**: the manufacturer's bank account number.
- **Description**: the detailed description of the manufacturer. This field should contain a well-formatted text.
- **Comments**: any kind of additional information. You can omit this field.

When you have completed the form, click on the 'Submit' button on the bottom of the module to store the manufacturer in the database.

7.44. Product warranties

You can manage the limited warranties for the products in the system. For legal reasons, it is strongly recommended to add a warranty for each commercial product, so a few warranties have been predefined in the system (Figure 63). It is not recommended to remove any of these warranties. You can add as many further warranties as you like, the number of these warranties is not limited. You can access this module from the 'Products ► Product warranties' menu. To add a new limited warranty or update an existing one, you have to add the following details to the warranty:



Product warranties

Display rows: 10 Search for:

7 item(s) found.

ID	Title	Description	Duration	Comments	Operations
7	10 years	The limited warranty lasts for 10 years	10 years		
6	5 years	The limited warranty lasts only for 5 years	5 years		
5	3 years	The limited warranty lasts only for 3 years	3 years		
4	2 years	The limited warranty lasts only for 2 years	2 years		
3	1 and a half year	The limited warranty lasts only for 1 year 6 months	1 year 6 mons		
2	1 year	The limited warranty lasts only for 1 year	1 year		
1	6 months	The limited warranty lasts only for 6 months	6 mons		

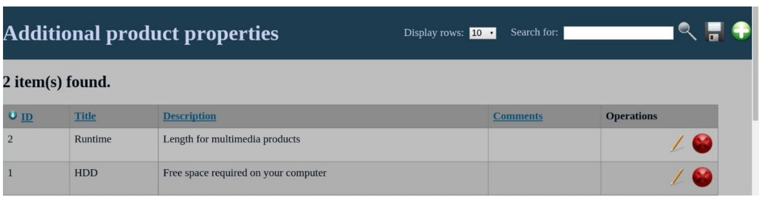
Figure 63: Limited warranties for products

- **Title**: the name of the limited warranty. It is recommended to set this value as the duration of the warranty as the title is shown on the *product page* of the *Customer's Page*.
- **Description**: a short or detailed description for the limited warranty.
- **Duration**: the time interval for how long the limited warranty lasts. It is recommended to set this value as it is shown in the example at this field.
- **Comments**: any kind of additional information. You can omit this field.

When you have completed the form, click on the 'Submit' button to store the warranty in the database.

7.45. Additional product properties

You can define additional properties for your products in this module (Figure 64). The number of additional properties is not limited and you can define as many as you like. You can access this module from the 'Products ► Additional product properties' menu. To add a new type of property, you have to specify the following details in the *Edit additional property / New additional property* section:



Additional product properties

Display rows: 10 Search for:

2 item(s) found.

ID	Title	Description	Comments	Operations
2	Runtime	Length for multimedia products		
1	HDD	Free space required on your computer		

Figure 64: Additional product properties

- **Title**: the name of the property. This field is shown on the *Customer's Page*.
- **Description**: the short description of the property. This field is also shown on the *Customer's Page*.
- **Comments**: any kind of additional information. You can omit this field.

The additional properties of products are shown on the *product page* of the *Customer's Page* on the *Additional details* tab. Only details with values are shown on this tab. Values for additional properties are stored in the database as plain text data so you can specify any kind of details here.

When you have completed the form, click on the 'Submit' button to store the definition of the property in the database.

7.46. WAREHOUSE MANAGEMENT

In this module you can manage the real stock details of the products in the system (Figure 65). To use this module, you must have the appropriate permissions as all stock movement will take effect on the availabilities of the products. You can access this module from the 'Products ► Warehouse management' menu.

To add a new stock movement entry, you must specify the following details:

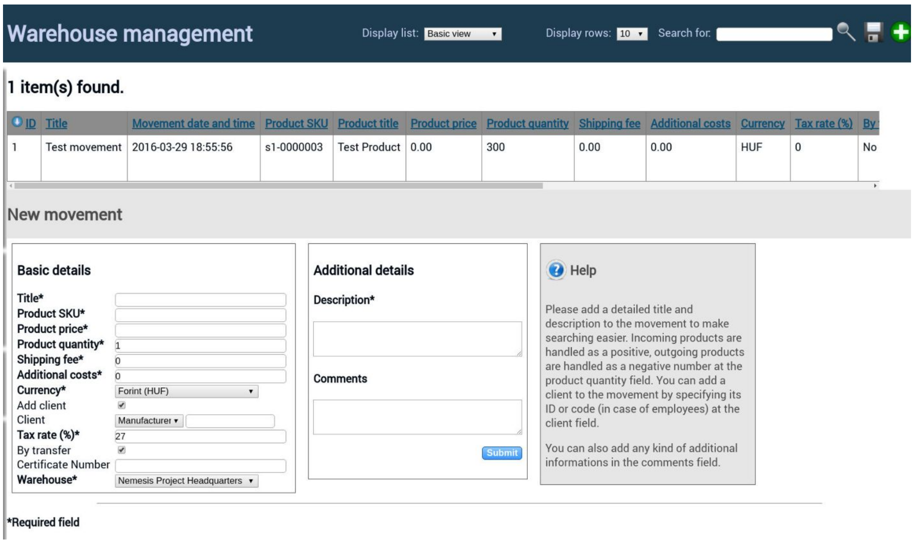


Figure 65: Warehouse management

- **Title**: the title of the stock movement.
- **Product SKU**: the stock keeping unit of the product, to which you want to assign the current stock movement.
- **Product price**: the price of the assigned product. In the case of incoming products, you have to add the price, which your company paid for the product, otherwise you have to add the price, on which your company has sold the product.
- **Product quantity**: the quantity of the product in the current stock movement.
- **Shipping fee**: the shipping fee of the current product's package.
- **Additional costs**: any additional cost, which your company had to pay for the current stock movement.
- **Currency**: the currency of the current stock movement.
- **Client**: if you can assign any partner to the current stock movement, you should specify its code here.

- **Tax rate**: the percentage of the tax on the current stock movement.
- **By transfer**: check this field if the transaction was made via bank transfer.
- **Certificate number**: if you can assign the current stock movement to any invoice or CMR, you should specify its certificate or serial number here.
- **Warehouse**: the corporate site, where the current stock movement has taken effect.
- **Description**: the detailed description of the current stock movement.
- **Comments**: any kind of additional information.

7.46.1. Documents

Bellow the stock movement details, you can find the attached documents when editing or viewing a stock movement. You can add or remove documents here. By default, these documents are stored in the database when they do not exceed the maximal file size limit, otherwise they are stored on the filesystem encrypted (if allowed).

When adding a new document to a stock movement, you have to provide the following details:

- **Title**: a short name for the document (usually invoice, bill, delivery note, etc.).
- **Description**: a brief description for the document in a few words (what the document is exactly about).
- **Type**: you specify here the source of the document. For storing the document locally, select ‘File’, for adding a hyperlink to a remote document, select ‘URL’ (only direct links will work).
- **File**: if you want to store the document locally, you can upload the file through this input field.
- **URL**: if you want to add a hyperlink to a remote document, specify its location here.

When all details are provided, click on ‘Submit’ to store the document.

7.47. Project management

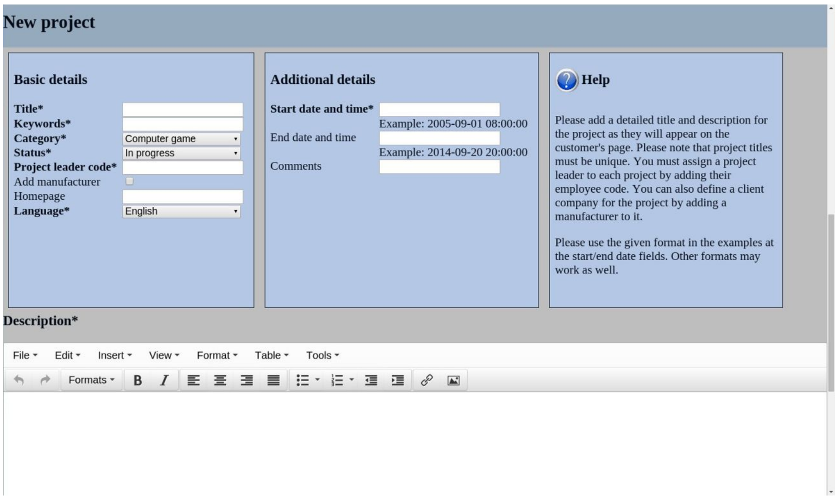


Figure 66: Adding a new project to the system

This module lets you manage projects in the system. Basically, projects are handled as products under development, which are not necessarily published yet, however any other working unit can be managed as a project. You can assign one ore more employees for each project as the responsible personnel. You can access this module from the 'Projects►Project management' menu. To add a new project to the system or update an existing one, you need to specify the following details in the *Edit project / New project* section (Figure 66):

- **Title**: the name of the project.
- **Keywords**: category, type, short description or any other information that helps users and search engines finding the project, if the project is published.
- **Category**: the main category of the project. If the project is published, this is the primary group, in which the project will appear on the *Customer's Page*.
- **Status**: the status of the project. Projects can have the following statuses:
  - **In progress**: the project is still under progress and is still not published.
  - **Closed**: the works on the project have ended but the project has not been published.
  - **Published**: the works on the project may not have ended but the project is already published.
  - **Published and closed**: the works on the project have ended and the project has been published.
  - **Canceled**: the works on the project have ended and the project is canceled.
- **Project leader code**: the code of the employee, who is the primary responsible personnel or the author of the project.
- **Manufacturer**: the company, who ordered the project.
- **Homepage**: the URL of the primary external website, if the project has been published on other websites too.
- **Language**: the primary language of the project.
- **Start date and time**: the date and time, when the works on the project have started.
- **End date and time**: the date and time, when the works on the project have ended. If not specified, the works on the project are considered as being still under progress.
- **Description**: the detailed description of the project. This should be a well-formatted text as it is shown on the *Customer's Page* similarly to the product pages.
- **Comments**: any kind of additional information. You can omit this value as it is not used by the system.

When you have completed the form, click on the 'Submit' button to store it in the database. You can define as many project as you like, the number of the projects is not limited. You can also add a specific project to a specific product, which means that the product is the result of the works on the specified project.

7.48. PROJECT CATEGORIES

In this module, you can manage the main categories of the projects in the system. Project categories are very similar to product categories and they work the same way on the *Customer's Page*. You can access this module from the 'Project►Project categories' menu. A few project categories have been predefined in the system as an example (Figure 67).

To add a new project category to the system or update an existing one, you need to specify the following details in the *Edit project category / New project category* section:

- **Title**: the name of the project category.
- **Description**: the short description of the project category. This is shown on the *Customer's Page*.
- **Comments**: any kind of additional information. You can omit this field as it is not used by the system.

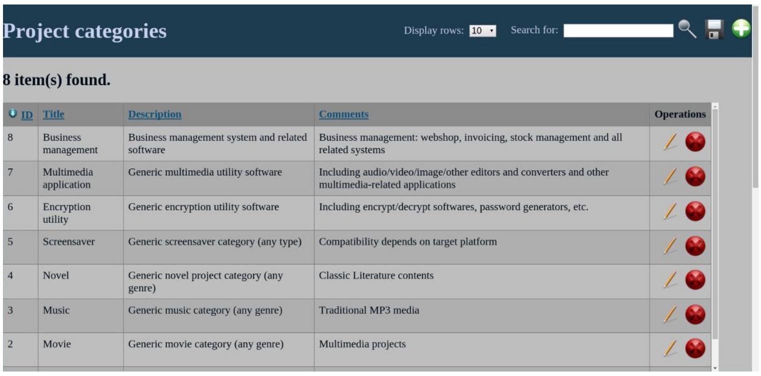


Figure 67: Project categories with details

When you have completed the form, click on the 'Submit' button to store the new details in the database. You can add as many categories as you like, the number of project categories is not limited, but it is recommended to keep this number under a reasonable quantity.

7.49. Tasks for projects

Projects are assumed as the source of products or the result of long-time works. Thus, you can add tasks for projects, which are shown on the dashboard of the assigned employees when becoming current (Figure 68).

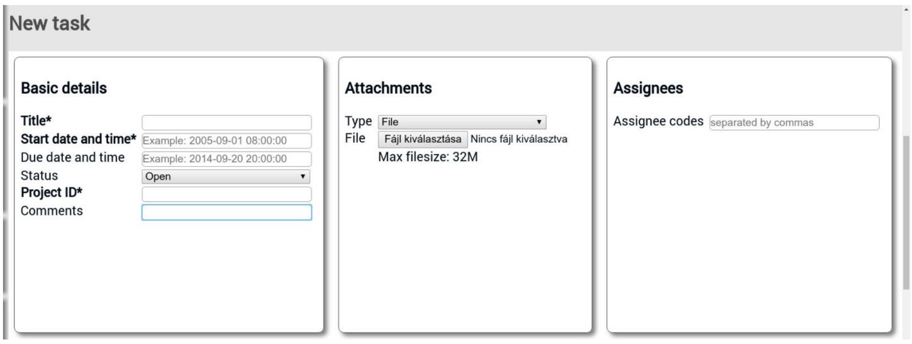


Figure 68: Tasks for projects

You can enter this module for the 'Projects►Tasks for projects' menu. To add a new task to a specific project, you have to specify the following details:

- **Title**: the title or short description of the task.
- **Description**: the long description of the task. This can be a well-formatted HTML code.
- **Start date and time**: the date and time, when the task becomes current.
- **Due date and time**: the date and time, when the status of the task must be set as completed.
- **Status**: the current status of the task.
- **Project ID**: the unique identifier of the project, to which the task is assigned.
- **Comments**: any additional information. You can omit this field.

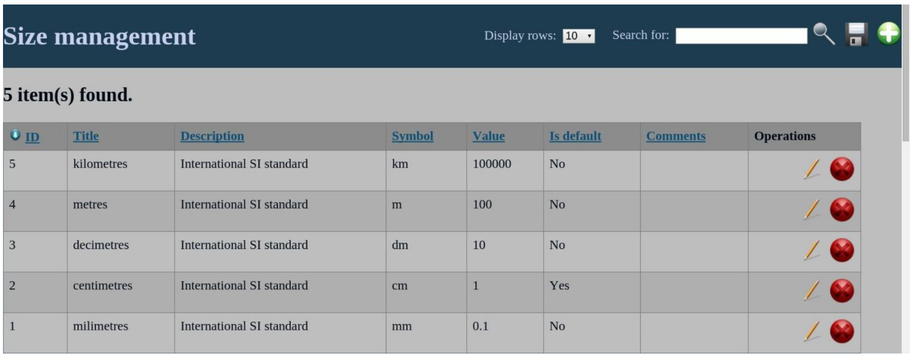
You can attach one or more file or URL to the task at the *Attachments* section. The attachments will be shown on the dashboard too, when the task becomes current. To assign one or more employee to the task, enter the *codes* of the assigned employees separated by commas in the *Assignees* field.

7.50. MAINTENANCE

This group of modules contains the *measurement subsystem* and the *import/export module*. These modules provide you a more effective way to manage the most basic tables in the system than their own containing modules. Of course, accessing these modules require the appropriate permissions for your user account. We will cover all of these modules in the following sections.

7.50.1. Size management

Basically, this module lets you manage the measurement units for the size of your products and package sizes, however this is a generic module reserved for any other kind of usage with managing sizes and distances in the system. You can access this module from the 'Maintenance►Size management' menu. A few basic measurement units have been predefined in the system so you can start using it immediately (Figure 69). The default size measurement unit is based on the European SI standard.



ID	Title	Description	Symbol	Value	Is default	Comments	Operations
5	kilometres	International SI standard	km	100000	No		
4	metres	International SI standard	m	100	No		
3	decimetres	International SI standard	dm	10	No		
2	centimetres	International SI standard	cm	1	Yes		
1	milimetres	International SI standard	mm	0.1	No		

Figure 69: Size measurement units

To add a new size measurement unit to the system or update an existing one, you need to define the following details for the measurement unit in the *Edit size measurement / New size measurement* section:

- **Title**: the name of the measurement unit.
- **Description**: the short description of the measurement unit.
- **Symbol**: the symbol of the measurement unit. This will appear at the values of the sizes.
- **Value**: the ratio to the default measurement unit. This is used when converting values between units.
- **Is default**: check this field if the current measurement unit is the default. Exactly one default size measurement unit must be present in the system.
- **Comments**: any kind of additional information. You can omit this field as it is not used by the system.

When you have completed the form, click on the 'Submit' button to store the new details in the database. You can also remove measurement units from the system by clicking on the *delete* icon in the 'Operations' column, but this operation is not recommended. Removing all measurement units is prohibited as the system needs at least one measurement unit for calculating sizes and distances correctly. The module is similar to the *currency module* and works the same way.

7.50.2. Weight management

This module lets you manage the weight measurements in the system. This is very similar to the previous module and is used the same way. You can access this module from the 'Maintenance ▶ Weight management' menu. A few basic measurement units have been predefined in the system (Figure 70). The default weight measurement unit is based on the European SI standard.

ID	Title	Description	Symbol	Value	Is default	Comments	Operations
4	ton	International SI standard	t	1000	No		
3	kilogram	International SI standard	kg	1	Yes		
2	decagramme	International SI standard	dkg	0.01	No		
1	gram	International SI standard	g	0.001	No		

Figure 70: Weight measurement units

To add a new weight measurement unit to the system or update an existing one, you need to define the following details for the measurement unit in the *Edit weight measurement / New weight measurement* section:

- **Title**: the name of the measurement unit.
- **Description**: the short description of the measurement unit.
- **Symbol**: the symbol of the measurement unit. This will appear at the values of the weights.
- **Value**: the ratio to the default measurement unit. This is used when converting values between units.
- **Is default**: check this field if the current measurement unit is the default. Exactly one default weight measurement unit must be present in the system.
- **Comments**: any kind of additional information. You can omit this field as it is not used by the system.

When you have finished the form, click on the 'Submit' button to store the new details in the database. You can also remove weight measurement units from the system by clicking on the *delete* icon in the 'Operations' column, but this operation is not recommended. Please note that at least one weight measurement unit must be present in the system for calculating package weights correctly, so removing all measurements is prohibited.

7.50.3. Import/Export

This module lets you import and export tables to and from the system effectively. You can access this module from the 'Maintenance ▶ Import/Export' menu. Importing tables need the appropriate permissions so does the export function, but there are some tables, which can be exported with simple administrative permissions. The *import* section can be found on the top of the module.

To import a table to the system, first you need to define the following basic import details for the table, which is always the same for each table in the system (Figure 71):

- **List type**: the table in the database, to which you want to import the new records.

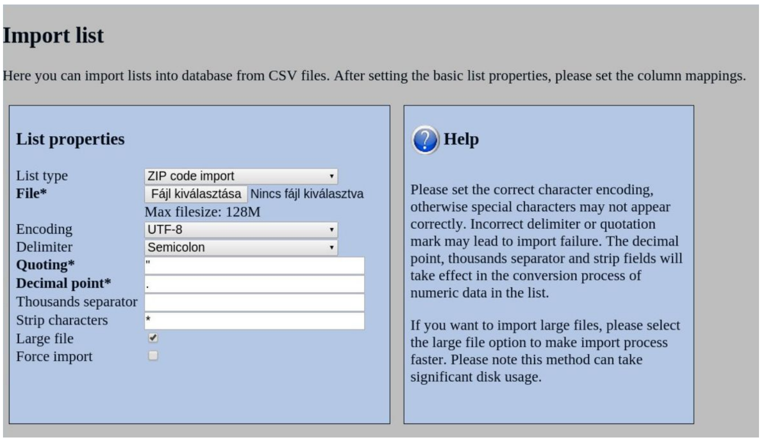


Figure 71: Basic import details

- **File**: the file, which you want to import to the system.
- **Encoding**: the character encoding of the file, which you want to import.
- **Delimiter**: the special character, which separates the columns in the import file.
- **Quoting**: the special character, which encloses the values in the import file.
- **Decimal**: the special character, which is the decimal point of the numbers in the import file.
- **Thousands separator**: the special character, which is the thousands separator of the numbers in the import file. You can omit this value, which means that thousands are not separated in the import file.
- **Strip characters**: numbers may be corrupted with invalid characters in the import file. You can list here the characters, which you want to remove from the numbers, so the system will try to fix numeric values before importing them to the system.
- **Large file**: check this option if the import file is large, so the system will try to process the import file entirely in the database, which is a lot faster method than processing the file line-by-line. Please note that this method needs more disk space on your server as the system must convert the file to the appropriate format to be able to copy its lines to the database.
- **Force import**: check this option if the import fails to start the normal way, so the system will be forced to process the file. Import process fails to start when another import process is working with the table, to which you want to import new records, or the cache table for large import files has not been cleared due to some errors. This option will clear the cache table and force the import process to start. **This option is for error-correction purposes only and it is not recommended to import tables with this option enabled by default as it may corrupt running import processes.** To use this option, you must have superuser permissions in the system.

Below the basic import details, you can find the *import column mappings* assigned to the selected *list type*. You have to assign a column in the file for each mandatory column in the database to be able to identify the values in the file, which you want to import to the appropriate column in the database. Unassigned columns or columns, which have not been found in the import file, will be substituted with empty values.

You can see an example of correct column mappings for *postal codes* on Figure 72. When you have set all column references, click on the 'Import' button to start the import process. When the import is completed, you will see a summary of the results depending on the type of the selected import method.

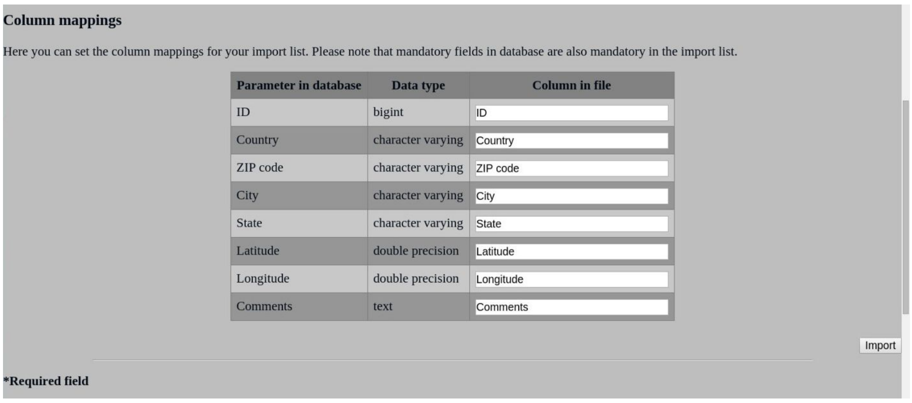


Figure 72: Column mappings for postal codes

The export section can be found on the bottom of the module (Figure 73). To export a list from the database, select the type of the list and click on the 'Export' button. Your system will start downloading the file.

Basically, any lists and tables, to which you have access, can be exported from the database, but a few lists require special handling to make sure they can be imported to the system without modifications. Some of these lists may require special permissions to access.

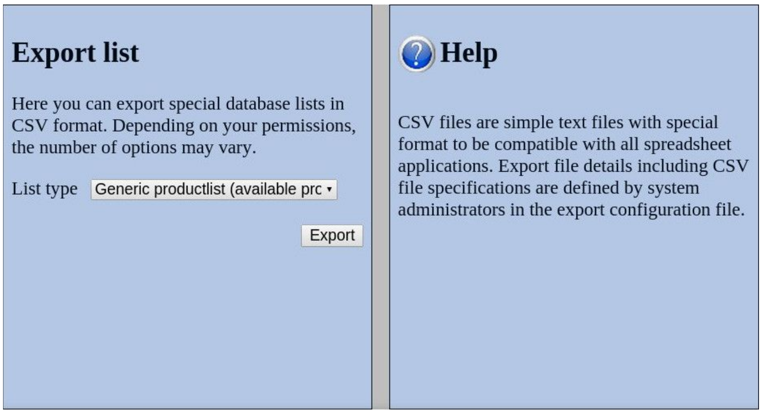


Figure 73: Export lists

Import and export functions work with standard CSV files. It is important to set the correct file properties for import files, otherwise the import process will fail or the imported details may not appear correctly. Export settings are managed by system administrators, usually the default settings are the following:

- **Encoding**: UTF-8 (international standard)
- **Delimiter**: semicolon (;)
- **Quoting**: double-quotation mark (")

You can change the export settings in the Control Central with the built-in configuration editor window. To change default CSV settings, you have to be a system administrator.

7.50.4. System log

The system is automatically logging the most important user activities when the system log is enabled. You can view system log entries in this module by visiting the 'Maintenance►System log' menu (Figure 74). System log is a read-only table, which means you can view all details of a specific entry but you cannot edit them. Log entries are created automatically when an important event is triggered and they are deleted when the entry IDs are close to overflowing. The maximal number of IDs is a very large number and when this point is reached, the system log is already taking a huge amount of space on your hard drive.

To prevent the system log from taking too much space on your hard drive, you can clear log entries manually in this module. To clear system log entries, simply select the interval in the *Manage system log* section, from which entries should be deleted, then click on the 'Submit' button. You can also disable system log completely so you will not have to worry about system log table becoming too large.

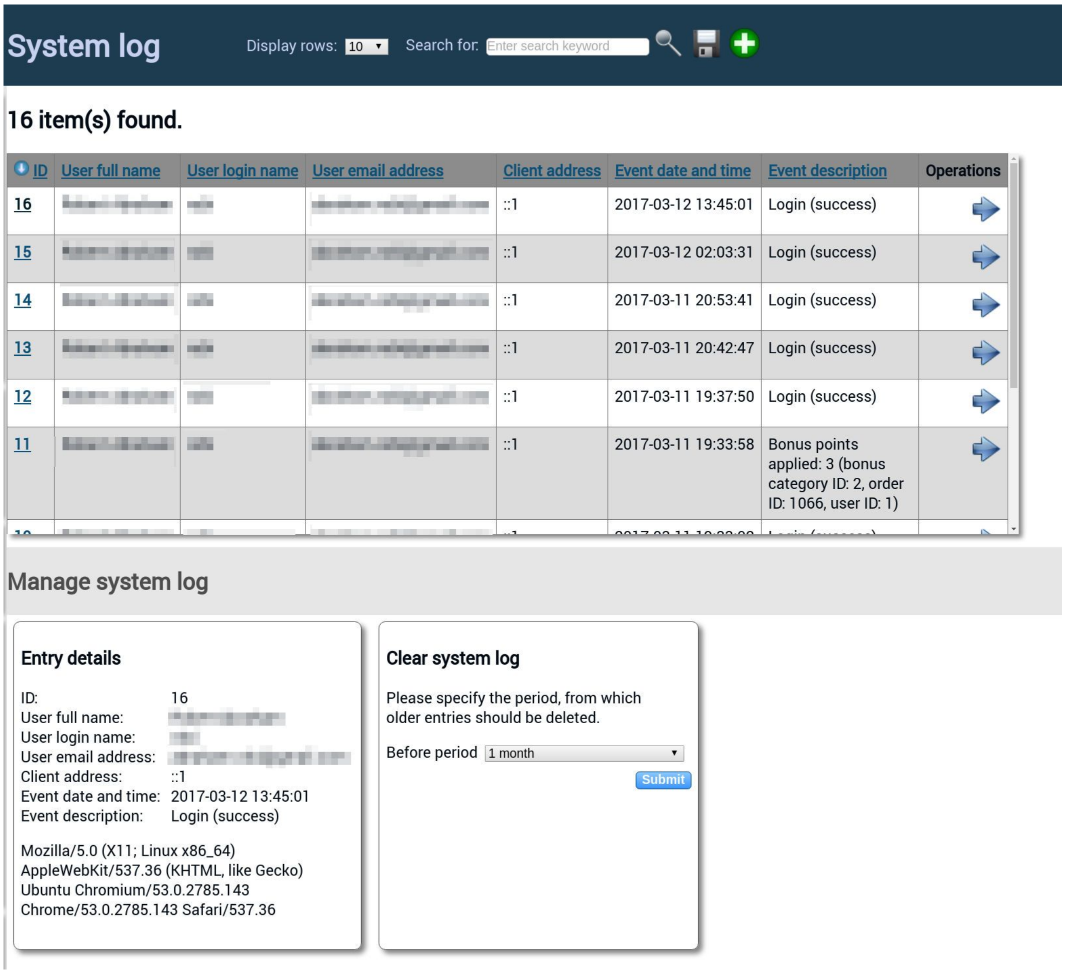


Figure 74: System log

8. Maintenance

You can start several maintenance operations on the system. The most important group of maintenance operations is database backup and restore. It is recommended to backup the database regularly so your data can be restored when anything goes wrong with the database. The other type of data that you can backup and restore are the uploads. These are ordinary files uploaded by end-users and have no additional requirements. These basic maintenance operations can be started directly from the *Control Central*. Please note that all maintenance operations require system administrator permissions.

8.1. Backup uploads

This maintenance operation will scan the `upload` directory and compress its content to a *ZIP archive* with relative paths. This archive file is a simple ZIP file, which can be managed manually as well. If there are no uploads in the `upload` directory then the system will not create the archive file, an error message will appear on the status bar instead, saying there are no uploads to backup.

You can start the backup process from the 'Maintenance ► Backup ► Backup uploads...' menu.

8.2. Backup web application

This maintenance operation will scan the directory of the entire web application (including the `upload` directory) and compress its content to a *ZIP archive* with relative paths. This archive file is a simple ZIP file, which can be managed manually as well. If you want to backup, basically, everything use this feature with the database backup feature. This may be useful before installing any updates so you can revert to the old version of the web application if the update process fails.

You can start the backup process from the 'Maintenance ► Backup ► Backup web application...' menu.

8.3. Restore uploads

This operation will take the selected archive file and unzip it to the `upload` directory. This can be done manually as well, this feature has been implemented only to make the system more comfortable. If the files in the archive are newer than the files in the `upload` directory, then you should unzip the archive manually to the `upload` directory to make sure that old files are overwritten with their newer versions.

You can start the restore process from the 'Maintenance ► Restore ► Restore uploads...' menu.

8.4. Restore web application

This operation will take the selected archive file and unzip it to the directory of the web application. This can be done manually as well, this feature has been implemented only to make the system more comfortable. If the files in the archive are newer than the files in the directory of the web application, then you should unzip the archive manually to that directory to make sure that old files are overwritten with their newer versions. This feature may be useful to revert to an old version of the web application if the update process failed.

You can start the restore process from the 'Maintenance ► Restore ► Restore web application...' menu.

8.5. Backup database

This maintenance operation will create a database dump and save to to a backup file. Both structure and data will be saved to this file so you can restore everything if the database gets damaged for some reason (for instance: system crash).

You can create a database backup from the 'Maintenance►Backup►Backup database...' menu in the *Control Central*. After specifying the file name and the location, click on the 'Save' button and the system will start creating the backup file. If the file already exists, the system will ask for confirmation before overwriting the file.

When installing a newer of NIS, the installer will automatically offer you the option of backing up the database before updating it. It is recommended to choose this option so you can reinstall the old version of NIS and restore your data, if anything goes wrong with the update process. Thus, you should always keep a copy of the latest working version of NIS on your system.

8.6. Restore database

This operation will delete everything from the database and reload both structure and data from the specified backup file. If your database is damaged for some reason and you have a fresh backup file, you can fix the database by reloading the contents of that file.

You can restore a previous version of the database from the 'Maintenance►Restore►Restore database...' menu in the *Control Central*. After opening the backup file, the system will ask for confirmation before starting the restore process. Please note that all data will be deleted from the database and only data present in the backup file will be restored! Use this operation only for correction purposes and with great precaution.

8.7. Change database password

This operation lets you change the default password for the *primary administrative user* in the database server. This is the primary database password maintenance tool. Unlike editing *configuration files* directly, this operation will update all related *configuration files* automatically, so this is the recommended method for modifying the *database password*. You can change the database password from the 'Maintenance►Change database password...' menu in the *Control Central*.

Please note that the *password for the database server* is not equivalent with the *password of the main administrative user in the Administration System*. If you have changed the *database password*, the *password of the primary administrative user account* will not be changed, as the first one is a generic system password and the second one belongs to a specific user account in the *Administration System*.

8.8. Other maintenance operations

You can also run other maintenance operation on the database, such as cleaning dead records, analyzing, re-indexing and other kind of optimization. To run such operations you have to use the *pgAdmin III database client* included in the system. To access the database with this client, you have to provide the appropriate user name and password. You can check these details in the *Configurations* of the *Control Central*.

9. Uninstalling the system

There are multiple packages of the Nemesis Information System and each of them has its own method for installing and uninstalling the application. In this chapter, we will cover how to uninstall the main packages.

9.1. Using the uninstaller application

If you have installed Nemesis Information System using the Windows installer package, you can use its own uninstaller application to remove the system from your computer. To uninstall NIS, close all running instances of the *Control Central* application. If the application is still running, it will prevent the uninstaller to run, which means that it will display an error message, saying that the application must be closed first, then it will exit.

If the *Control Central* is not running, but the uninstaller is still showing the message and exiting, it is possible that, due to improper closing, the application could not clean up its directory, which makes the uninstaller think that the application is still running. To resolve this error, go to the installation directory and remove the '`server\control.run`' file. This is a simple plain text file, which makes sure that only one instance of the *Control Central* application can run at a time. Removing this file manually will make the uninstaller think that the application is not running any more, so this operation will resolve the problem.

It is also recommended to remove the installed services manually from the *Control Central*'s service manager before running the uninstaller either from the Start menu or the installation directory, however the uninstaller will try to remove them automatically. This is just a more secure way to remove NIS from your computer.

9.2. Removing the portable edition

To remove the portable edition of the Nemesis Information System from your computer, you have to uninstall all services from the *Control Central*'s service manager, if you have installed any of them. If any of these services is still running, then it will prevent your system to remove the files needed by the service. You can also use the Windows service manager to remove these services manually, but this method requires a lot more precaution.

When all NIS services are uninstalled, simply delete the application directory and you have uninstalled the portable edition successfully.

9.3. Other installed versions

If you have installed NIS from source then you have to use your operating system's own package manager to remove all instances of the system and we cannot provide you more information about how to do this, since we do not know the configuration details of your system. For further information, please contact your software vendor.