Installation Guide

Version 2.3

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1. Document History

Details/Section	Version	Date	current release	Owner
Initial Version	1.0.0	20.04.2018		Valérie Maret
Added Server checks	1.0.1	28.06.2018		Valérie Maret
Restructured	1.0.2	22.08.2018		Valérie Maret
Added ping check	1.0.3	18.10.2018	2018.10.001	Valérie Maret
Improved documentation Get default configuration, Index data	1.0.4	30.11.2018	2018.11.001	Valérie Maret
Simplified installation: introducing package loader to load default settings	1.0.5	17.01.2019	2019.01.001	Valérie Maret
Simplified load for UI configuration Slight change in install steps	1.0.6	06.03.2019	2019.02.001	Valérie Maret
new install process	2.0.0	25.09.2020	2020.02.001	Valérie Maret
Section 7 Access Rights in SpiceCRM	2.0.1	31.12.2020	2020.04.001	Valérie Maret
Updated requirements	2.0.2	08.10.2021	2021.02.001	Valérie Maret
default preferences	2.0.3	22.11.2021	2021.03.001	Valérie Maret
php requirements	2.0.4	08.07.2022	2022.02.001	Valérie Maret
Fts connection params; repair/rebuild moved to Dictionary Manager; reload cache	2.0.5	21.03.2023	2023.01.001	Valérie Maret
Added imap to required extensions, recommendation charset and collation for MySQL	2.0.6	2.10.2023	2023.01.002	Valérie Maret

New Installation Process with SpiceCRM version 2024.01.001	2.1	21.5.2024	2024.01.001	Valérie Maret
Additional php extension php-pear	2.2	8.11.2024	2024.02.001	Valérie Maret
Updated the after installation steps	2.3	05.12.2024	2024.02.001	Valérie Maret

2. Server architecture

Backend and Frontend may be installed on different servers or on the same one

2.1. Server Requirements (Linux based or Windows)

Apache:

Caution: there was a bug with debian/ubuntu higher than apache 2.4.54

Enable Url Rewriting

On linux based systems e.g. debian enter

a2enmod rewrite

On **windows** based systems in your httpd.conf ensure the following line is there

LoadModule rewrite_module modules/mod_rewrite.so

Restart webserver

To ensure that the rewrite rules from the .htaccess files can be evaluated also override for the directory or the virtual host if you use virtual hosts in apache. Depending on your configuration you might find the Directory part in the httpd.conf or any subconfiguration for your webserver.

DocumentRoot "/var/www"

<Directory "/var/www">

Options Indexes FollowSymLinks Includes ExecCGI

AllowOverride All

Require all granted

</Directory>

A fast way to get an environment on your local computer would be to download xampp distribution from xampp.org and install.

PHP 8.0– PHP 8.2

PHP 8.0 is minimum requirement since 2024.01.001

Required extensions:

- BCMath => bcmath (since 2024.01.001)
- cURL Module => curl
- Database Drivers => dbdrivers
- Image handling => gd
- Imap => imap
- Mail Parse => mailparse
- MB Strings Module => mbstring
- PCRE Library => pcre
- Pear => pear (since 2024.02.001)
- XML Parsing => xml_parser
- ZIP Handling Module => zip

Additionally any php extension related to the database type you use.

PHP allows to use stream (upload://)

php.ini

- display_errors=Off
- default_charset="UTF-8"
- date.timezone = Europe/Vienna date.timezone setting is important! Think of it!
- max_execution_time=300
- memory_limit=256M
- upload_file_size=50MB

If your php CLI uses another php.ini, do the same modifications there too!

Database Server (commonly MySQL)

Supported MySQL, MSSQL, Oracle

Installation wizard supports MySQL

MySQL 8 is supported since SpiceCRM version 2023.01.001
Check your version: **SHOW VARIABLES LIKE** "%version%"

Elastic Search (supported 7.6 and higher)

ElasticSearch 8 is supported & recommanded since SpiceCRM version 2023.01.001

Follow installation steps described under https://www.elastic.co/de/downloads/elasticsearch:

1. Download and unzip Elasticsearch
2. Run bin/elasticsearch (or bin\elasticsearch.bat on Windows
3. Run curl http://localhost:9200/ or Invoke-RestMethod http://localhost:9200 with PowerShell

NodeJS

If you wish to use the real time notification capability or any CTI integration, you will need NodeJS.

Use latest version available for your server environment.

How to Check requirements per console

Check php version	php -v or create a phpinfo file
Check elastic Search version	curl -XGET 'localhost:9200'
Check MySQL	connect to db: #: mysql -u xxx -pyyy mysql > SHOW VARIABLES LIKE 'version'
Check url rewrite	open phpinfo: search for mod_rewrite Sollte in “apache2handler” “Loaded Modules” erscheinen

Access to external APIs

API	**needed for**	**Check per command line**
smtp.sendgrid.net (SpiceCRM full version only)	Mailboxes	ping smtp.sendgrid.net
spicecrmrelease.spicecrm.io	SpiceLoader	ping spicecrmrelease.spicecrm.io

	(default configurations)	

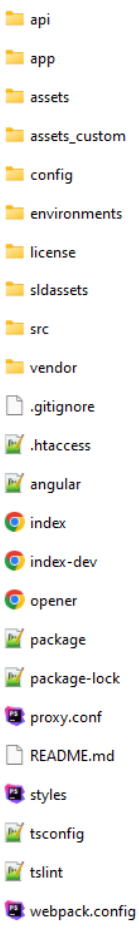
2.2. Download package

The main components (core) can be retrieved from GitHUB

https://github.com/spicecrm/spicecrm

2.3. Architecture example

/var/www/html/myspicecrm/



Unzip spicecrm package to the root of your instance (here called *myspicecrm).*

Or checkout with git clone:

cd /var/www/html

git clone https://github.com/spicecrm/spicecrm.git myspicecrm

3. Launch Frontend

Make sure you have all credentials needed for installation:

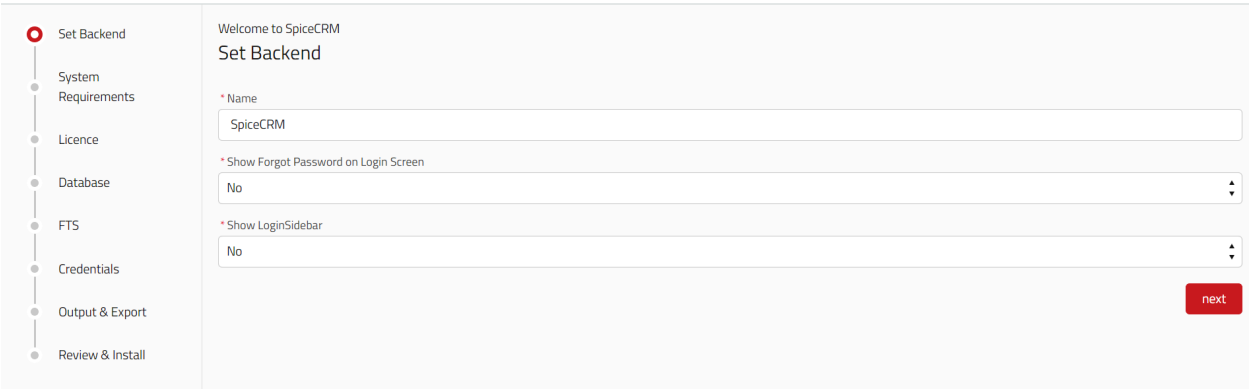
- Database host, name, user name and password
- Elastic search server name, port.
  Optional: username and password to secure your elasticsearch (new since 2023.01.001)
- File permission will be checked during installation but they won't be corrected automatically

Installation process will also create folders under api/. Make sure api/ is writeable.

Call your SpiceCRM instance. http://localhost/myspicecrm in our example.

Installation process will start automatically. Fill in fields step by step.

3.1. Backend Settings

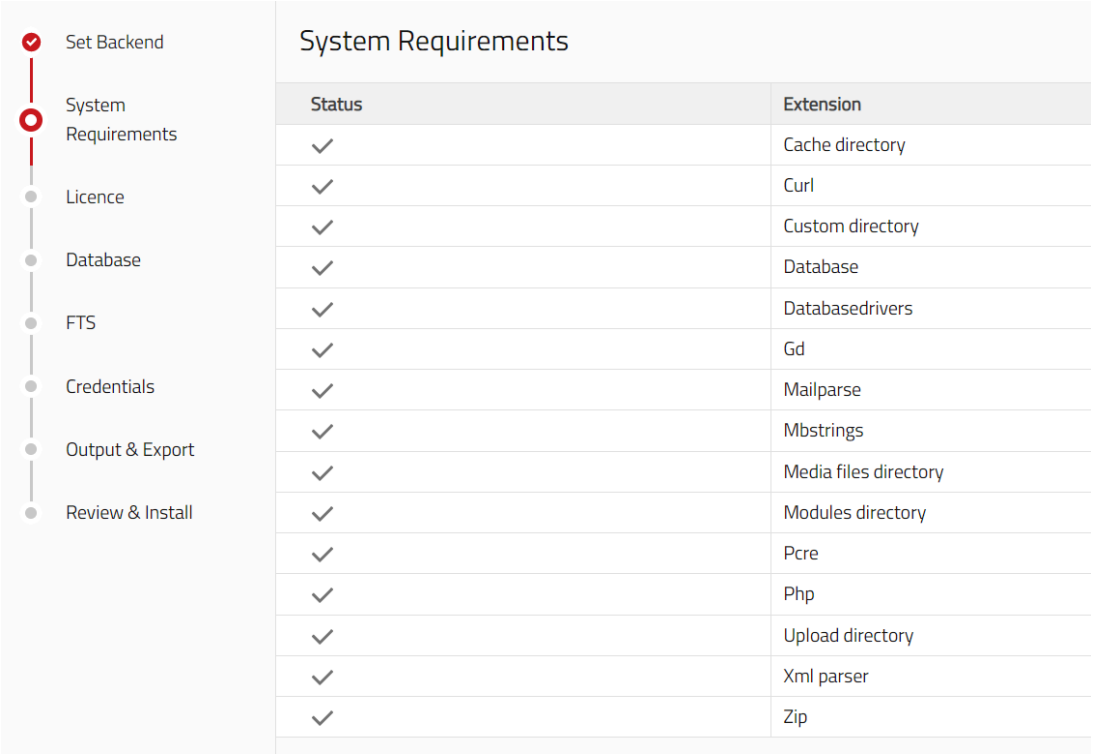


Field	description

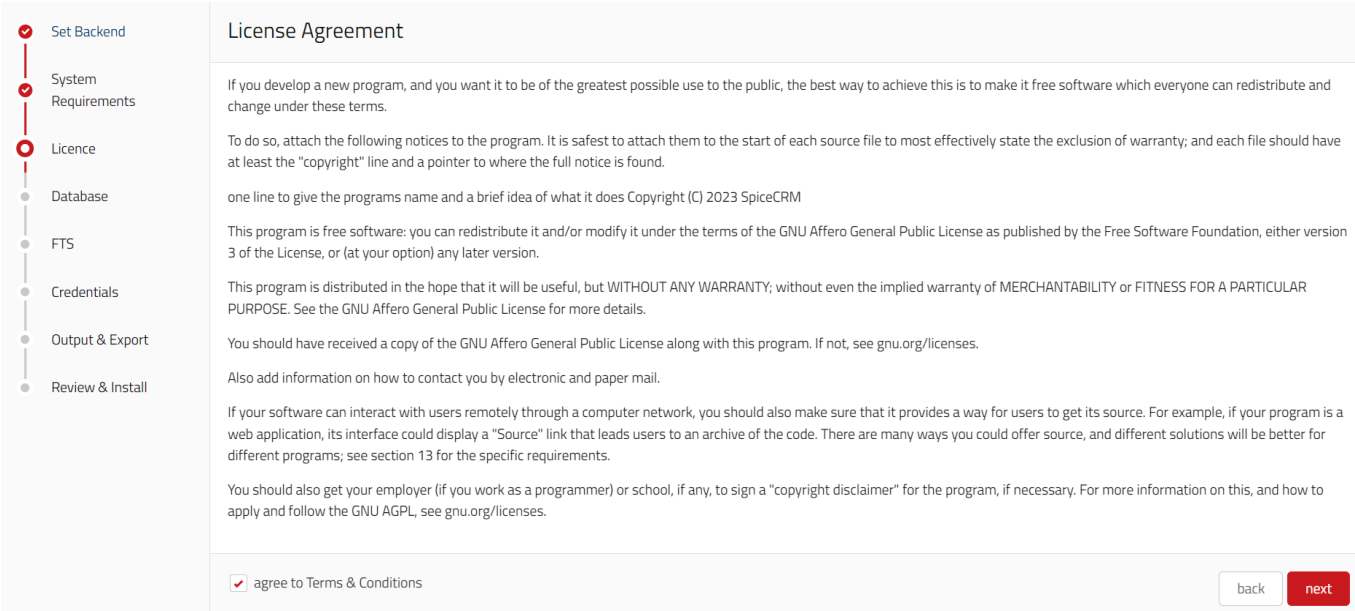
Name	Name of your instance
Show Forgot Password on Login Screen	display the Link to request a new password
Show LoginSideBar	Will display a sidebar on the right hand side. May contain a link to another website, news feeds.

3.2. System Requirements check

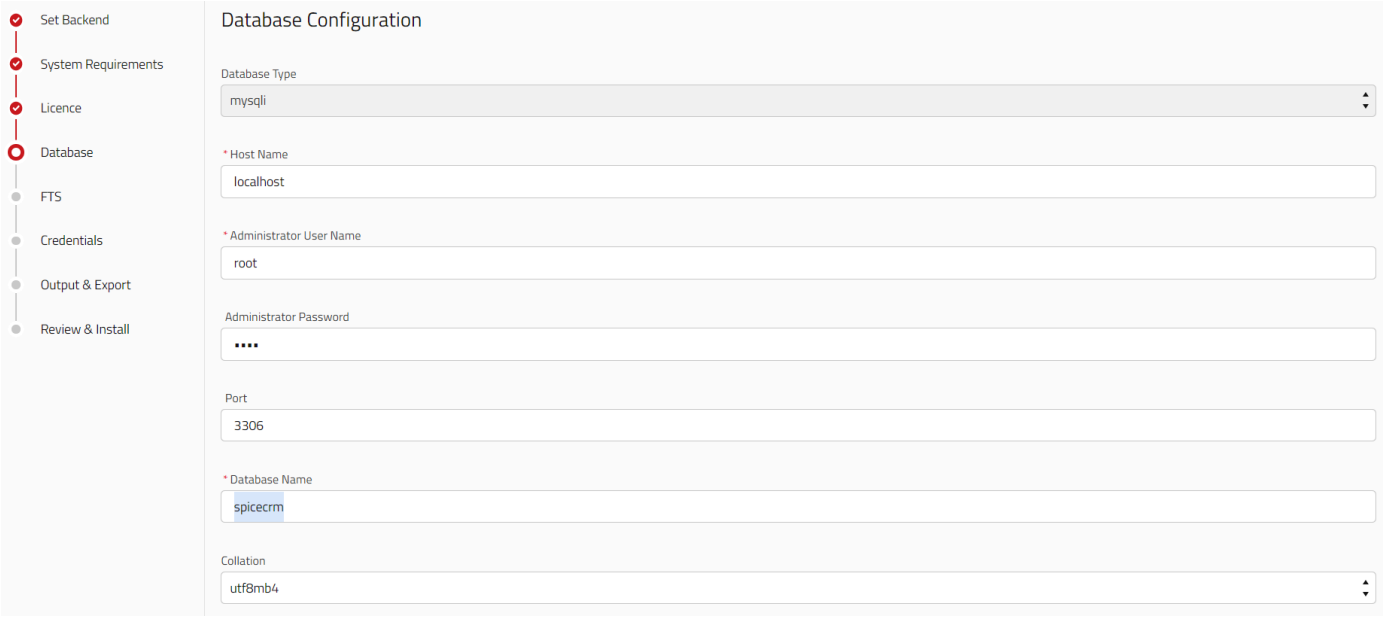
CHeck required php extensions and file access permissions



3.3. Licence



3.3. Database Settings

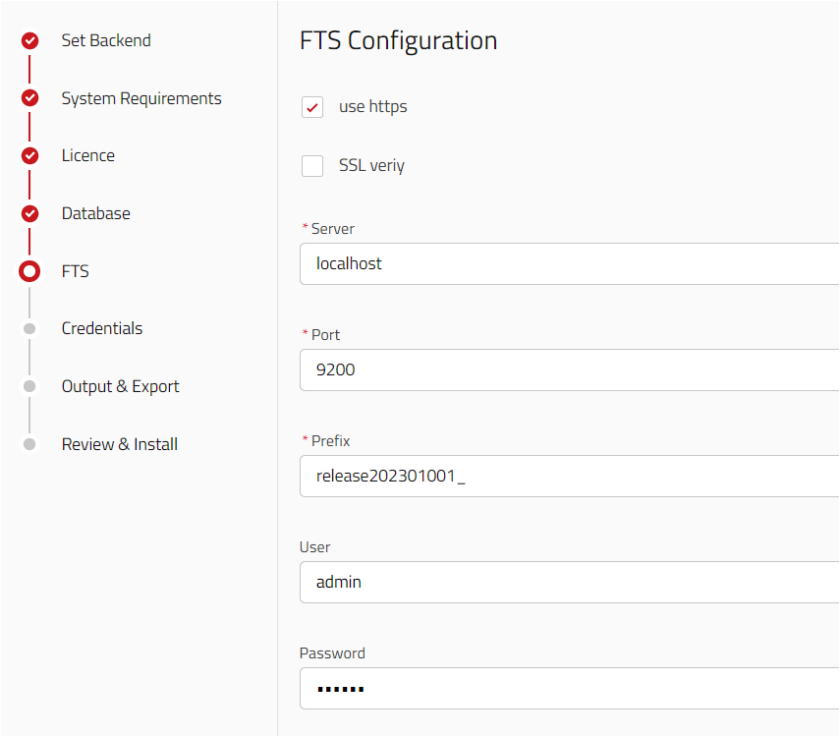


We recommend collation utf8mb4_general_ci and charset utf8mb4

With MySQL8 you may use utf8mb4_unicode_900_ai_ci

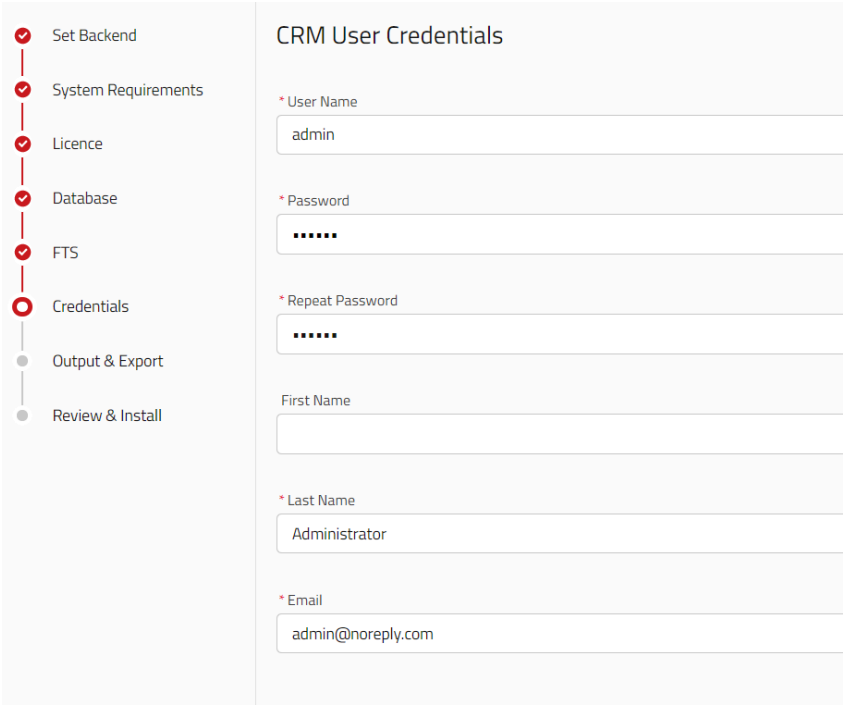
3.4. ElasticSearch Settings

elastic server shall be up and running



Field	**description**	**Available since**
Use https	Will set how to call the url weather with https or http Http is default	2021.01.001
Ssl verify	Adds SSL verify host and verify peer in curl options to connect to elasticsearch. False is default.	2023.01.001
Server	The name of the host localhost or any IP where you installed elastic	2016.01.01
Port	Default port is 9200	2016.01.01
Prefix	The prefix for your index names	2016.01.01
username	Optional username to connect to elasticsearch	2023.01.001
password	Optional password to connect to elasticsearch	2023.01.001

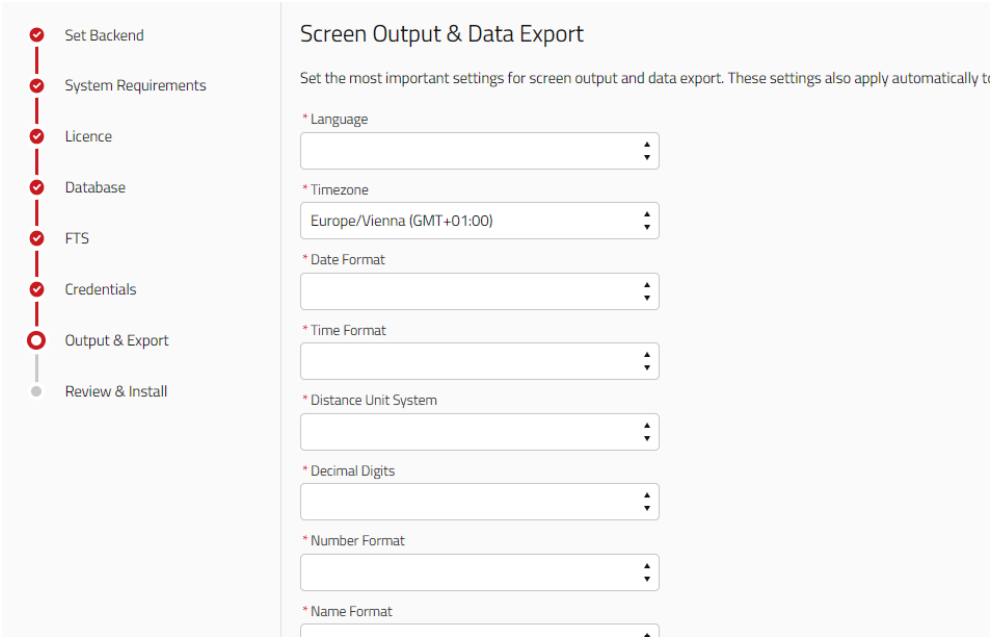
3.5. CRM Credentials for admin user



3.6. Screen Output & Data Export

Extended view since 2022.03.001

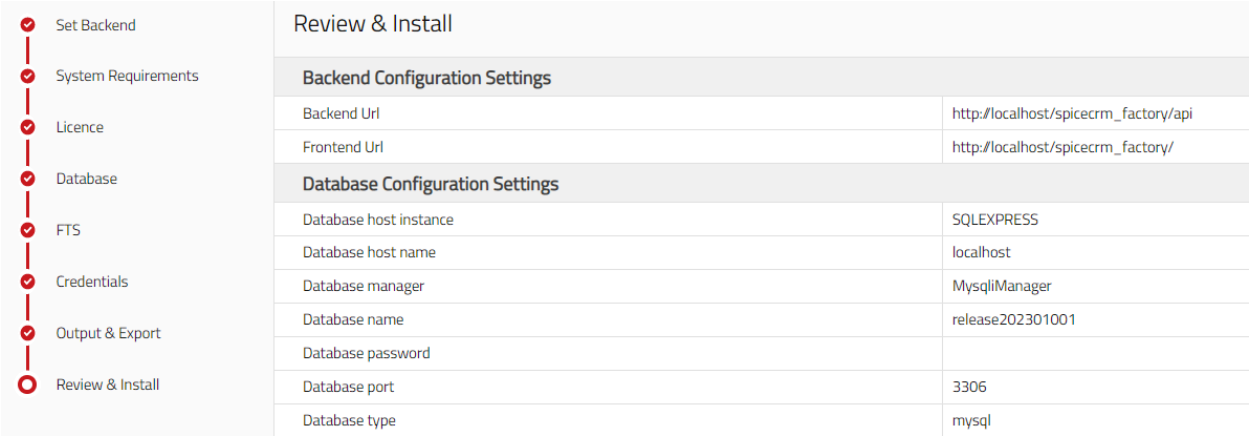
Set the most important settings for screen output and data export. These settings also apply automatically to each user as long as a user does not make any individual settings.



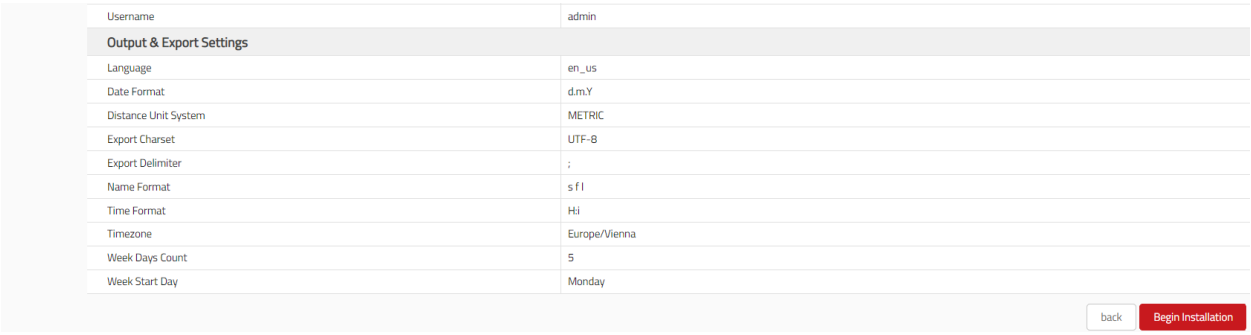
Field	description
Language	Select default language
Timezone	Set the default time zone
Date Format	Set default date format
Time Format	Set default time format
Distance Unit System	Set default measure units (metric | imperial)
Decimal digits	Set default number of decimal digits
Number format	Set default number format
Name format	Set default format to display a contact name
Week start day	Set default value for the first day of the week in the calendar display
Week Days Count	Set default value for the number of days the calendar should display in “week” display
Export delimiter	Set default field separator for data export (, or ;)
Export charset	Set default value for export charset

3.7. Review Settings

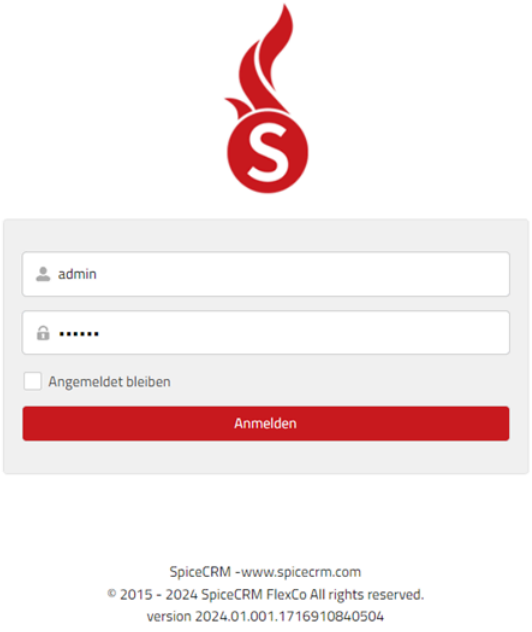
You can review all your settings before proceeding with installation.



3.8. Scroll down and push “begin installation” button



Installation is successful when you are redirected to the login screen

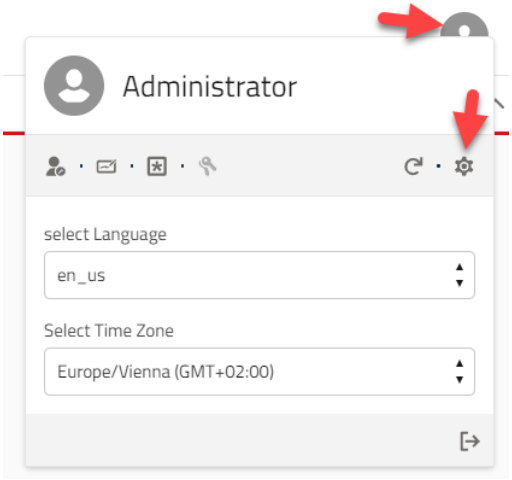


3.9. After install

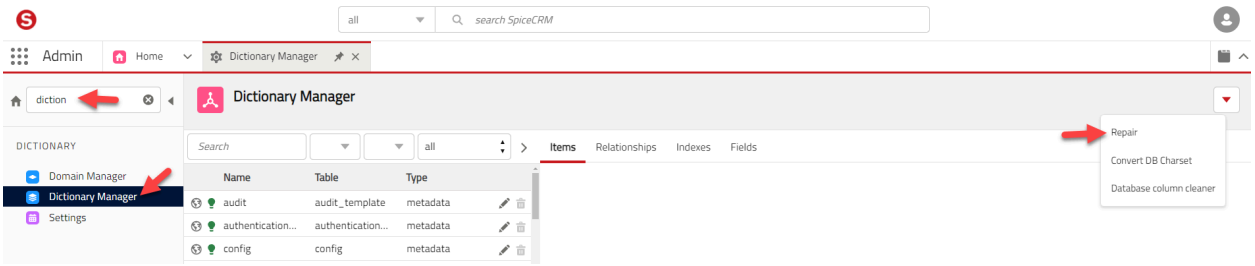
Login as the admin user.

Timezone will be set automatically for the user.

Go to the workbench: the click is now under the profile panel of the admin user



Open the workbench, look for ~~repair & perform a repair/rebuild~~ the **Dictionary Manager** & perform Repair.



The repair modal window pops up.

Set execute SQLs and push the “play” button.

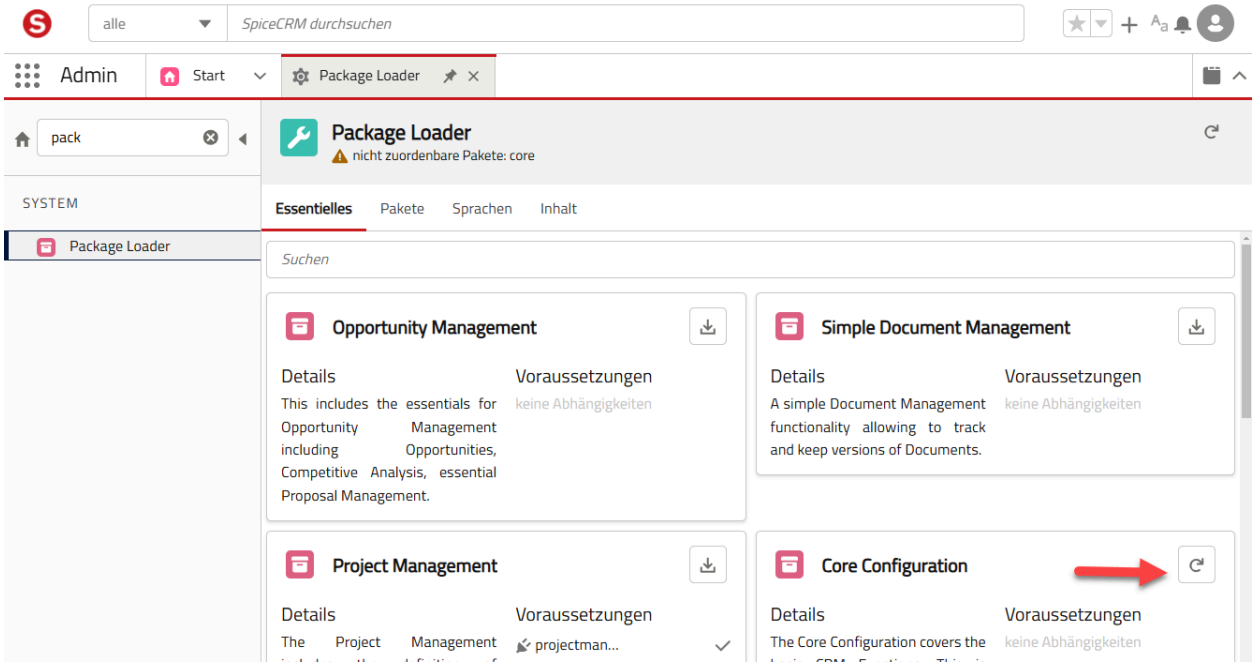
SQL queries to be processed will be found and executed.

Follow the progress on the screen. In version 2024.01.001 it might seem a little long. Future versions will have less tables to create.

After all SQLs have been executed, close the window.

Go to the package loader and load the Essentials > CORE package

This contains all the definitions for the basic modules like Accounts, Contacts and Activities.

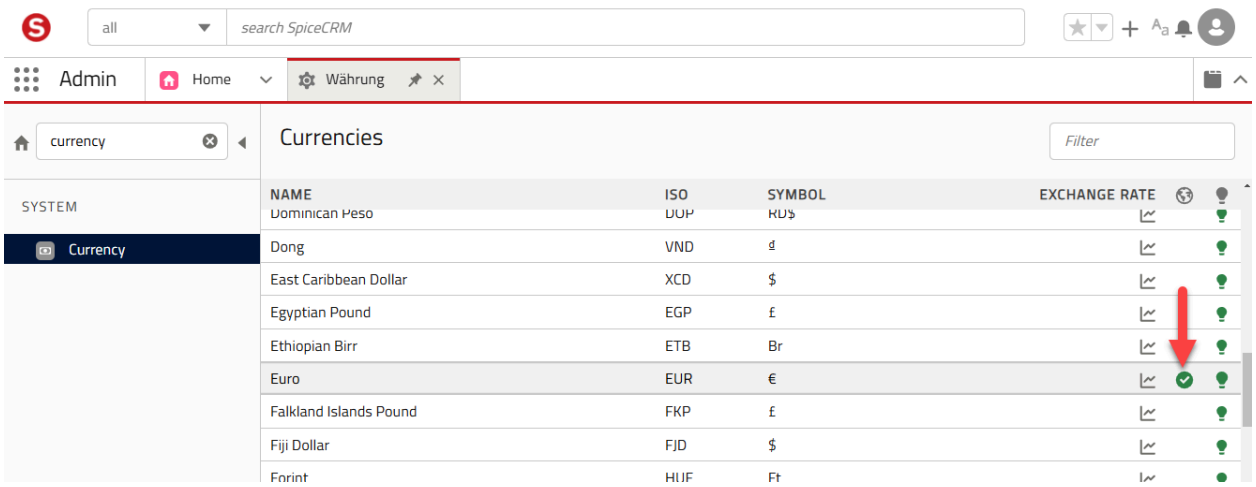


Go back to the Dictionary Manager & perform *Repair* again.

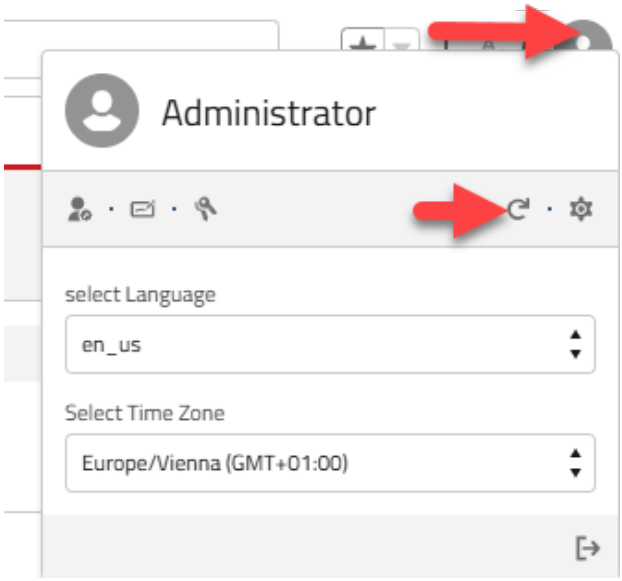
Go to currency and set the system currency

Click in the empty column on the proper line to get the checked icon.

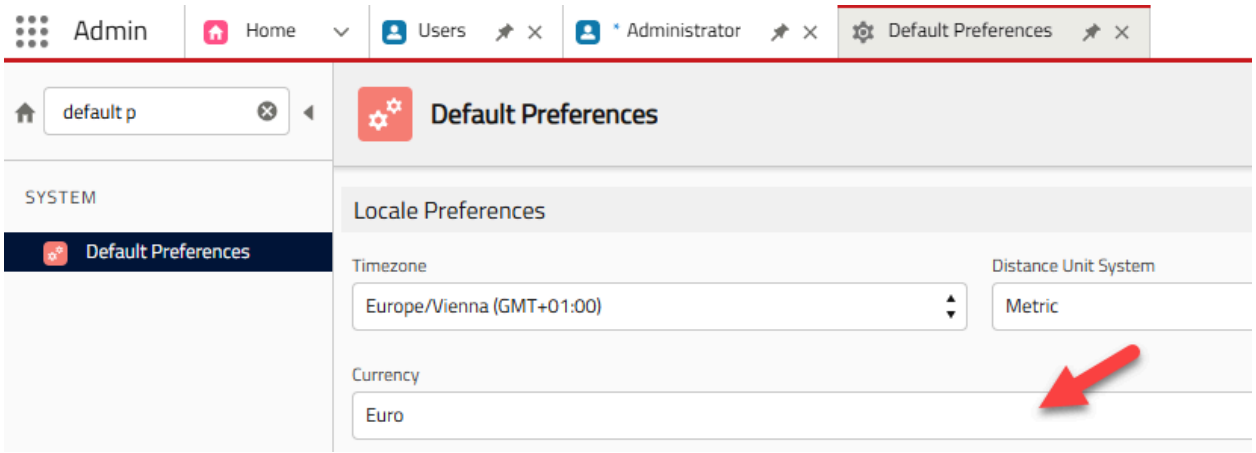
CAUTION: you can only click one time! Make sure you click the proper currency!



Reset & reload



Go to the default preferences and set the default currency.



Reset & reload

Logout & re-login

Go to the package loader and load the following packages

- Essentials > Email Handling: includes the basics for Email Management: send e-mails via CRM or process incoming emails for specific mailboxes. Also load the Content packages *Notification email Templates* as well as *Default Email Templates*.
- Essentials > Opportunity Management, Lead Management
- Content > FTS default settings: contains all the basic index definitions for Accounts, Contacts and Activities

- Content > Default Scheduler Jobs: contains default scheduler job tasks
- Content > ACL essentials: contains the basic configuration for the administration of access permissions.
  We recommend newcomers to download the Content > ACL examples Package. It contains ACL profiles and pre-defined access permissions.
- Content > Default Scheduler Jobs: contains basic jobs like FTS bulk indexing

After that we recommend running the *repair* again.
Dictionary Manager > repair

Then run *reset and reload* in order to make sure all important configurations are cached (cached data is stored under ./api/cache per default).
Alternatively you will find the button in the workbench > cache viewer.

If you haven't encountered any problem , please jump to section 6. Index data

4. Trouble shooting

4.1. File permissions

Apache: default file permissions for SpiceCRM api

Web user (usually www-data on Apache linux server)

Needs recursive write permissions for:

- ./cache
- ./custom
- ./media
- ./upload

Needs write permissions in folder ./ (where CRM is installed)

If you want to restrict:

*.log files + config.php and config_override.php shall be writable

Standard Setup example

cd /var/www/html/spicecrm/api

chown -R www-data cache

chmod -R 0755 cache

cache, custom, media and upload folders are created during the installation process. Permissions are set automatically unless server settings do not allow this action.

4.2. Check URL Rewriting

Check REST API availability

Call your CRM url in browser + /api/sysinfo

Example: http://localhost/myspicecrm/api/sysinfo

You shall get a json string as response looking like:

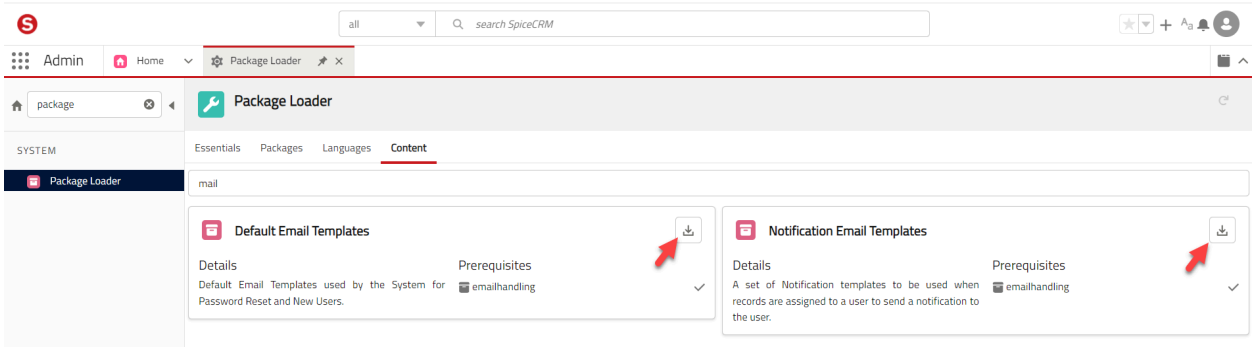
{"version":"2.0","extensions":{"google_api":{"version":"1.0","config":{"key":""}},"telecockpit":{"version":"1.0","config":[]},"portal":{"version":"1.0","config":[]},"mailboxes":{"version":"1.0","config":[]},"projectmanagement":{"version":"1.0","config":[]},"theme":{"version":"1.0","config":[]},"cardreader":{"version":"1.0","config":[]},"core":{"version":"2.0","config":{"edit_mode":"custom"}},"gdpr":{"version":"1.0","config":[]},"reporting":{"version":"1.0","config":[]},"login":{"version":"1.0","config":[]},"forgotPassword":{"version":"1.0","config":[]},"metadata":{"version":"1.0","config":[]},"module":{"version":"2.0","config":[]},"mobile":{"version":"2.0","config":[]},"user":{"version":"1.0","config":[]},"utils":{"version":"1.0","config":[]}},"languages":{"available":[{"language_code":"en_us","language_name":"English (US)","system_language":true,"communication_language":true},{"language_code":"de_DE","language_name":"Deutsch","system_language":true,"communication_language":true}],"default":"en_us"},"loginSidebarUrl":false,"ChangeRequestRequired":false,"sessionMaxLifetime":1440}

If not, please check the php error log and the api/spicercrm.log

5. Get additional configurations for UI

5.1. Load default e-mail templates

Go to the workbench and search for the package loader



Click appropriate download icon. All necessary “repairs” are performed automatically

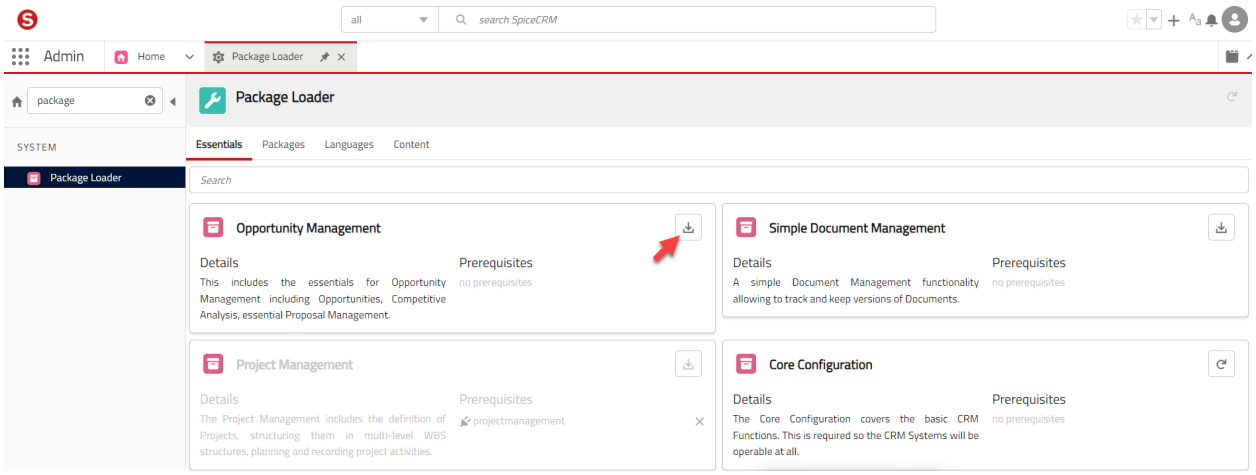
~~Perform the following actions after loading the package~~

- ~~Dictionary Manager > repair database~~
- ~~Dictionary Manager > repair cache~~
- ~~Admin Profile > reset and reload~~

5.2. Load any other package you need

Example with Opportunity Management.

Load package Essentials > Opportunity Management



~~Perform the following actions after loading the package~~

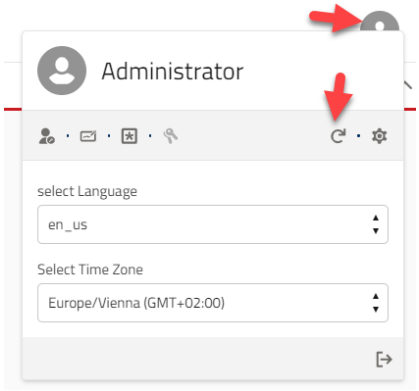
- ~~Dictionary Manager > repair database~~
- ~~Dictionary Manager > repair cache~~
- ~~Admin Profile > reset and reload~~

Opportunity module will be available in the navigation bar ~~after re-login~~ right away

5.3. Trouble shooting

In case the machine ran into a timeout, not all repair tasks might have been executed.
Run a *repair* database again.

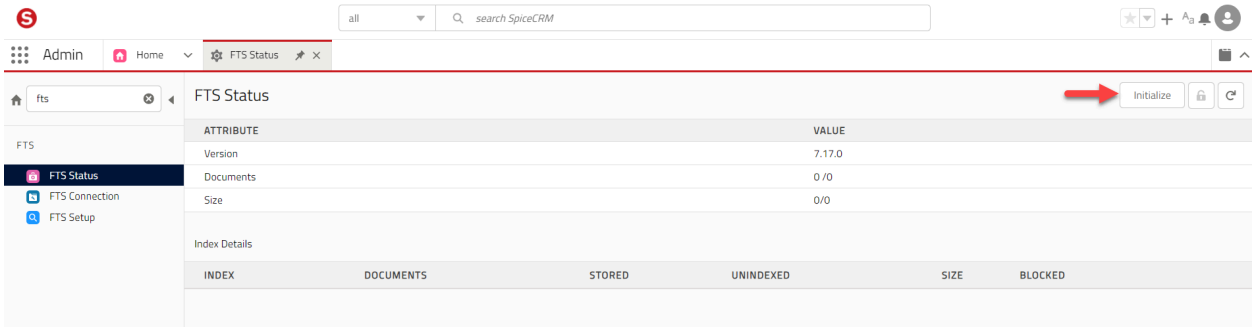
You also may try to reset the application cache. The reload button is now under the admin user profile pop over



6. Index Data

You now need elastic to index your data.

Go to **Workbench > FTS Status**



Click button „initialize“ and confirm. All indexes will be created (Data itself will not be indexed yet).

6.1. Index data per cron job

Make sure crontab contains cron.php entry on server

#: crontab -e -u www-data

Login to backend and check command defined under Administration > Schedulers

Example:

*** * * * * cd /var/www/html/myspicecrm/api; php -f cron.php > /dev/null 2>&1**

Go to **Workbench > manage jobs**

Set Status= Active for Job „Spice Full Text Indexing“

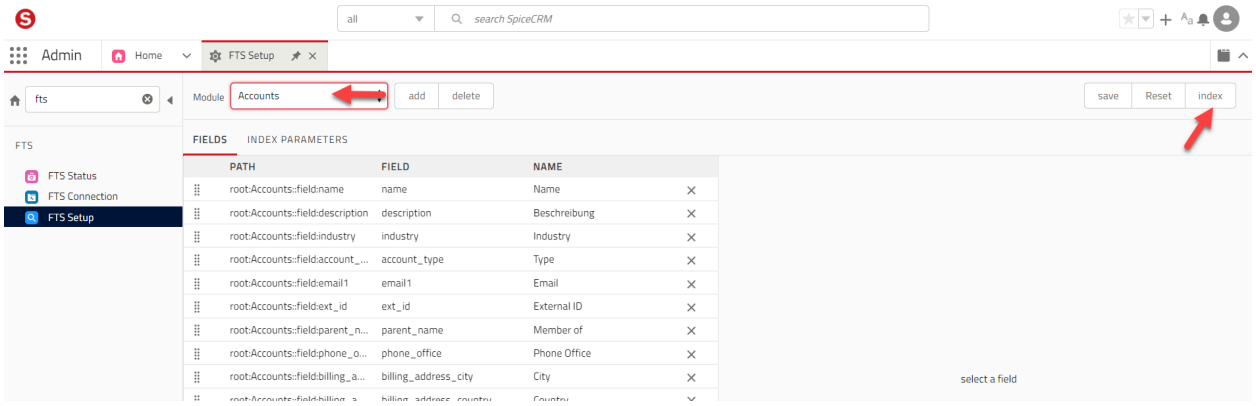
In case the job is not there, run following query in database

```
REPLACE INTO `schedulers` (`id`, `deleted`, `date_entered`, `date_modified`, `created_by`, `modified_user_id`, `name`, `job`, `date_time_start`, `date_time_end`, `job_interval`, `time_from`, `time_to`, `last_run`, `status`, `catch_up`) VALUES ('5cfc2d1b-23c3-3dc1-8713-5a213f9021fb', 0, '2017-12-01 11:39:52', '2018-07-04 12:48:30', '1', '1', 'Spice Full Text Indexing', 'function::fullTextIndex', '2017-12-01 11:45:00', NULL, '*/5::*::*::*::*', NULL, NULL, NULL, 'Inactive', 0);
```

6.2. Index data manually

You will have to repeat the steps for each module!

Select the module and click index



7. Access Rights in SpiceCRM

With SpiceCRM 202004001 ACL concept is based on SpiceACL logic.

After creating users you will have to allocate them access rights so they may see and use modules like Accounts, Contacts, Opportunities…

You may create your own ACL profiles or download package ACL Examples

To allocate, edit or create ACL Profile go to workbench, look up for ACL, select ACL Profiles

To allocate a user to a profile, select profile, click tab “Users”, then select the user.

We recommend Newcomers to load the ACL examples package.

In version 202402001 you can create employee records, add rrganizational units and link the employee records to the proper organizational unit(s). Add the organizational unit(s) to the ACL Profiles. The access rights will propagate from the organizational unit to the employee record to the user record.