



Installation Guide

1. Document History	4
2. Server architecture	4
2.1. Server Requirements (Linux based or Windows)	5
Apache: Enable Url Rewriting	5
PHP 7.4 – PHP 8.x	5
Database Server (commonly MySQL)	6
Elastic Search (supported 7.6 and higher – but not 8)	7
NodeJS	7
How to Check requirements per console	7
Access to external APIs	7
2.2. Download package	8
2.3. Architecture example	8
3. Launch Frontend	9
3.1. Backend Settings	10
3.2. System Requirements check	11
3.3. Database Settings	12
3.4. ElasticSearch Settings	12
3.5. CRM Credentials for admin user	13
3.6. Select Language to load	13
3.7. Review Settings	13
3.8. Scroll down and push “begin installation” button	14
3.9. After install	15
3.10. Set default preferences	15
4. Trouble shooting	16
4.1. File permissions	16
Apache: default file permissions for SpiceCRM backend	16
Apache: default file permissions for SpiceCRM frontend	17
4.2. Check URL Rewriting	17
Check KREST availability	17
5. Get additional configurations for UI	18
5.1. Load default e-mail templates	18
5.2. Load any other package you need	18
6. Index Data	19
6.1. Index data per cron job	20
6.2. Index data manually	20
6.3. Finishing	21

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

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: 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 7.4 – PHP 8.x

Extensions:

- XML Parsing => SimpleXML
- Soap => soap
- MB Strings Module => mbstring
- ZLIB Compression Module zlib
- ZIP Handling Module => zip
- PCRE Library => pcre
- IMAP Module => imap
- cURL Module => curl
- Sprite Support => gd
- Mail Parse => mailparse

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 not supported yet. Check your version: **SHOW VARIABLES LIKE "%version%"**

Elastic Search (supported 7.6 and higher – but not 8)

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 (default configurations)	ping spicecrmrelease.spicecrm.io

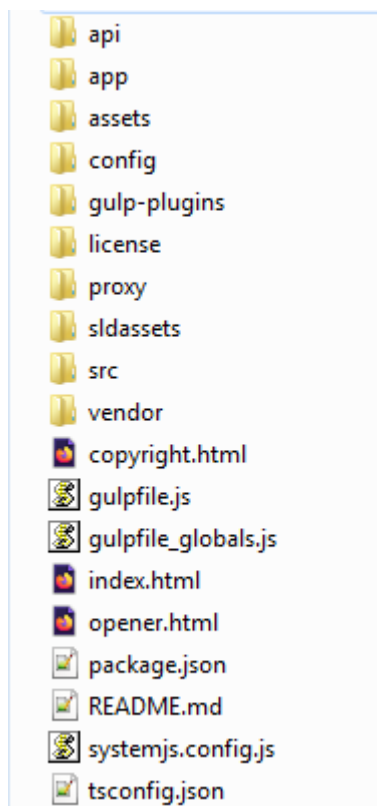
2.2. Download package

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
- File permission will be checked during installation but they won't be corrected automatically

~~Installation process will create folder config/sites. Make sure that config/ is writable.~~

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

Define Backend Connection

*id
000

*Name
spice

*Backend URL
[Empty field]

use proxy
No

developermode
Yes

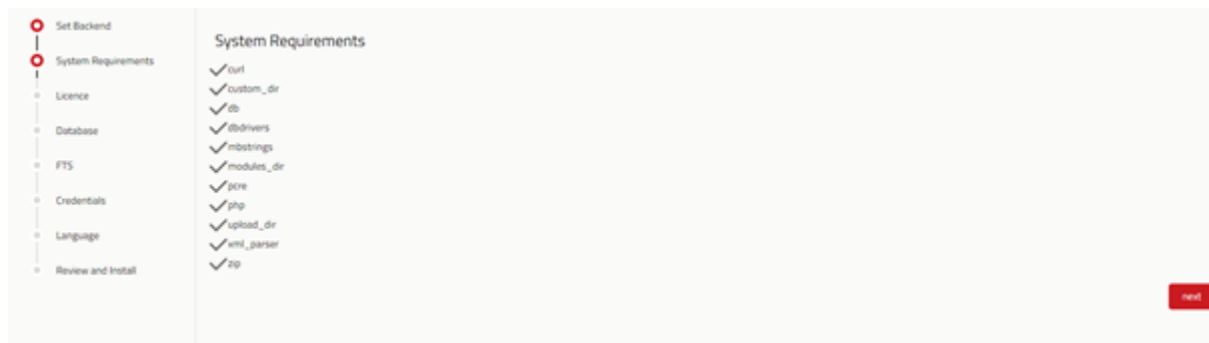
Show Loader Details
Yes

Show Forgot Password on Login Screen
Yes

next

Field	technical name	description	example
Id	id	value to identify config when you use multiple config files	prod01
Name	display		My SpiceCRM
Backend URL	backendUrl	points to spicecrm backend	http://localhost/myspicecrm/api <i>Please note the absence of a slash in the end!</i>
use proxy	proxy	will use proxy if set to "yes"	yes
developer mode	developerMode	will not ask for login on page reload if set to "yes"	no
Show Loader Details	loginProgressBar	display loading details when logging in	no
Show Forgot Password on Login Screen	allowForgotPass	display the click to request a password	yes

3.2. System Requirements check



License

The screenshot shows the GNU Affero General Public License (AGPL) version 3.0 page. On the left, there is a vertical navigation menu with the following items: Set Backend, System Requirements, License (highlighted with a red circle), Database, FTS, Credentials, Language, and Review and Install. The main content area displays the license text, including the preamble and the terms and conditions. At the bottom of the main content area, there is a checkbox labeled 'agree to Terms & Conditions' which is currently unchecked. A 'next' button is located in the bottom right corner of the page.

3.3. Database Settings

The screenshot shows the Database Configuration page. On the left, there is a vertical navigation menu with the following items: Set Backend, System Requirements, License, Database (highlighted with a red circle), FTS, Credentials, Language, and Review and Install. The main content area displays the 'Database Configuration' form. The form includes the following fields: Database Type (dropdown menu with 'mysql' selected), Host Name (text input field), Administrator User Name (text input field), Administrator Password (password input field), Database Access User (dropdown menu with 'Database Admin' selected), Port (text input field), Database Name (text input field), and Collation (dropdown menu with 'utf8' selected). A red 'next' button is located in the bottom right corner of the page.

3.4. ElasticSearch Settings

elastic server shall be up and running

The screenshot shows the 'FTS Configuration' step in the installation wizard. On the left, a vertical navigation menu lists the steps: Set Backend, System Requirements, Licence, Database, FTS, Credentials, Language, and Review and Install. The 'FTS' step is currently selected and highlighted with a red circle. The main content area contains three input fields: '*Server' (empty), '*Port' (empty), and '*Prefix' (containing 'spacem...'). A red 'next' button is located at the bottom right of the form.

Port is usually 9200

Server: localhost or any IP where you installed elastic

3.5. CRM Credentials for admin user

The screenshot shows the 'CRM User Credentials' step in the installation wizard. The left navigation menu is the same as in the previous step, with 'Credentials' now selected and highlighted with a red circle. The main content area contains several input fields: '*User Name' (containing 'admin'), '*Password' (empty), '*Repeat Password' (empty), 'First Name' (empty), '*Surname' (containing 'Administrator'), and 'E-mail' (empty). A red 'next' button is located at the bottom right of the form.

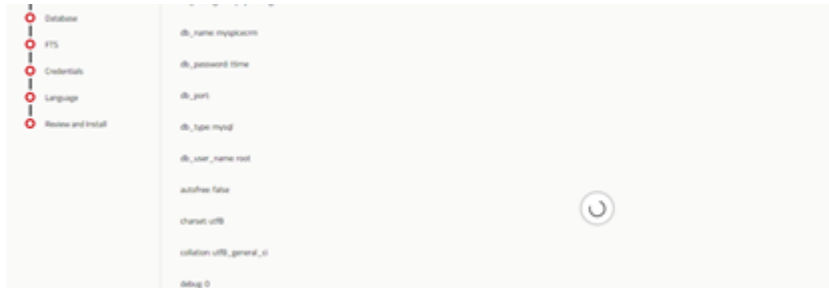
3.6. Select Language to load

The screenshot shows the 'Set Language' step in the installation wizard. The left navigation menu is the same as in the previous steps, with 'Language' now selected and highlighted with a red circle. The main content area contains a dropdown menu labeled 'Choose a Language' with 'English (US)' selected. A red 'next' button is located at the bottom right of the form.

3.7. Review Settings

...

3.8. Scroll down and push “begin installation” button











Installation is successful when you are redirect to login screen

A screenshot of the SpiceCRM login screen. At the top center is the SpiceCRM logo, a red flame with a white 'S' inside. Below the logo is a login form with two input fields: 'Username' and 'Password'. Below the fields is a red 'Login' button. To the right of the login form is a vertical sidebar containing three 'Did you know?' sections. Each section has a small icon and a short paragraph of text. The first section says 'In SpiceCRM it's e going on in your s to have the most home screen suiti'. The second section says 'In SpiceCRM it is SpiceCRM then g desired data usin'. The third section says 'In SpiceCRM it's e correct tile to its amount in the bar'. The sidebar has a light gray background and a white border.

3.9. After install

Login as the admin user, go to the workbench, look for repair & perform a repair/rebuild.









Repair Dictionary

 Repair database	Check and repair the database		Execute
 Repair language	Repair language		Execute
 Repair cache	Since 2022.02.001: summarizes all field definitions and saves 1 record for each field into table sysdictionaryfields. Table index definitionen are saved into table sysdictionaryindices. All relationship definitions are saved into relationships table. Before 2022.02.001: summarizes all field definitions and saves them as files unter ./api/cache/modules.		Execute
 LBL_REPAIR_CUSTOM_CACHE	LBL_REPAIR_CUSTOM_CACHE		Execute
 Reset server cache	Resets the server cache		Execute
 Database column cleaner	Compares the Vardefs with the columns in the database. Old columns can be deleted directly (with the data in it!)		Execute
 Convert DB Charset	Convert the database or tables charset and collation		Execute

Additional tables will be created.

Then run a Repair cache









Repair Dictionary

	Repair database	Check and repair the database	Execute
	Repair language	Repair language	Execute
	Repair cache	Since 2022.02.001: summarizes all field definitions and saves 1 record for each field into table sysdictionaryfields. Table index definitionen are saved into table sysdictionaryindices. All relationship definitions are saved into relationships table. Before 2022.02.001: summarizes all field definitions and saves them as files unter ./api/cache/modules.	Execute 
	LBL_REPAIR_CUSTOM_CACHE	LBL_REPAIR_CUSTOM_CACHE	Execute
	Reset server cache	Resets the server cache	Execute
	Database column cleaner	Compares the Vardefs with the columns in the database. Old columns can be deleted directly (with the data in it!)	Execute
	Convert DB Charset	Convert the database or tables charset and collation	Execute

If you are updating from an older version:

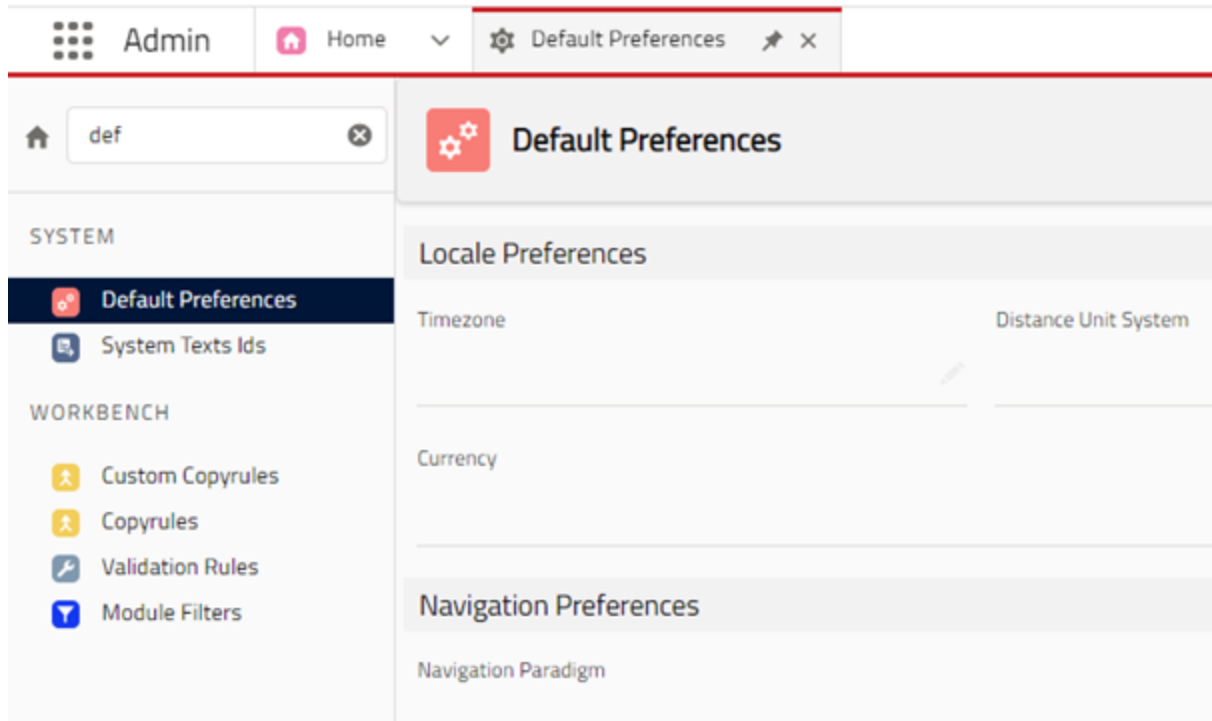
Run a repair custom cache

Repair Dictionary

	Repair database	Check and repair the database	<input type="button" value="Execute"/>
	Repair language	Repair language	<input type="button" value="Execute"/>
	Repair cache	Since 2022.02.001: summarizes all field definitions and saves 1 record for each field into table sysdictionaryfields. Table index definitions are saved into table sysdictionaryindices. All relationship definitions are saved into relationships table. Before 2022.02.001: summarizes all field definitions and saves them as files under ./api/cache/modules.	<input type="button" value="Execute"/>
	LBL_REPAIR_CUSTOM_CACHE	LBL_REPAIR_CUSTOM_CACHE	 <input type="button" value="Execute"/>
	Reset server cache	Resets the server cache	<input type="button" value="Execute"/>
	Database column cleaner	Compares the Vardefs with the columns in the database. Old columns can be deleted directly (with the data in it!)	<input type="button" value="Execute"/>
	Convert DB Charset	Convert the database or tables charset and collation	<input type="button" value="Execute"/>

This will move custom dropdown values defined in files to proper database entries as from release 2022.02.001 on.

3.10. Set default preferences



Define the system wide default preferences.

Important are timezone, date and time format, decimal separator and thousands separator.

It is recommended to set them all.

4. Trouble shooting

4.1. File permissions

Apache: default file permissions for SpiceCRM backend

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 writeable

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 installation process. Permissions are set automatically unless server settings do not allow this action.

Apache: default file permissions for SpiceCRM frontend

Web user (usually `www-data`)

Needs write permissions when installing frontend for `./config/sites`

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": [] }, "projectmanagemant": { "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 php error log and spicercrm.log

5. Get additional configurations for UI

Since 202004001 following packages are downloaded automatically during installation process:

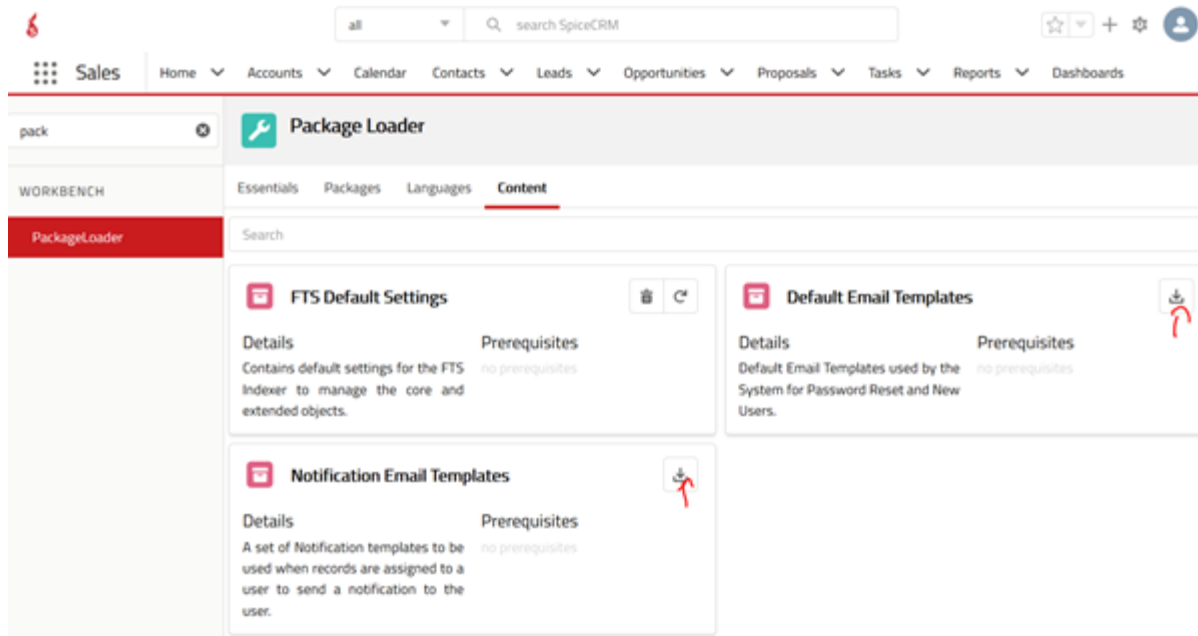
Core, FTS default settings, ACL essentials

5.1. Load default e-mail templates

Introduced in release 201901001

Go to administration settings

Search for package loader



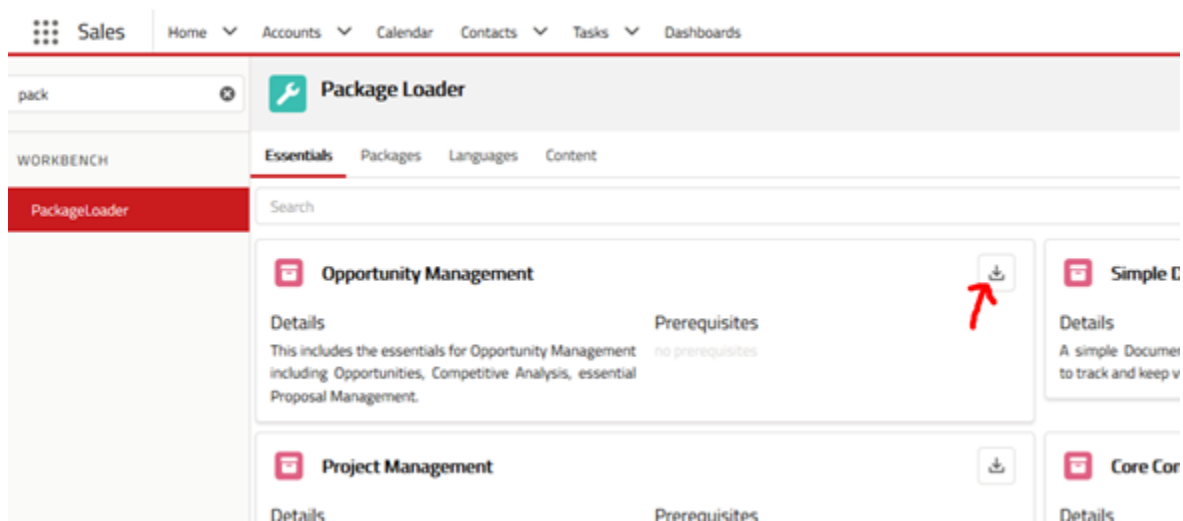
Click appropriate download icon

Perform a repair database, then a repair cache.

5.2. Load any other package you need

Example with Opportunity Management.

Load package Essentials > Opportunity Management



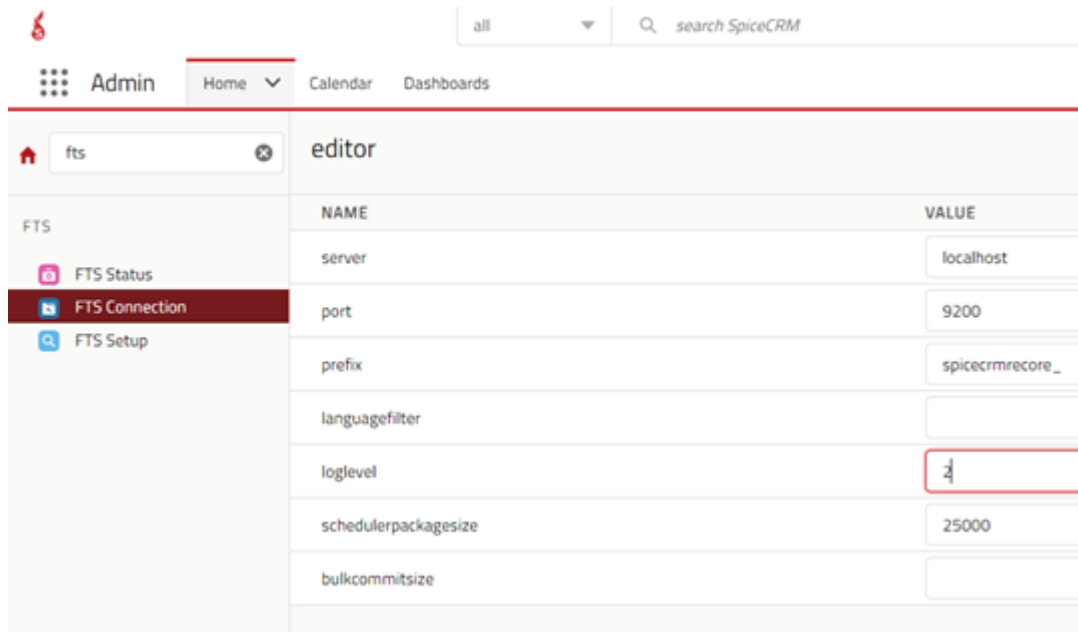
Please repair database and then repair cache.

Opportunity module will be available in the navigation bar after re-login.

6. Index Data

You now need elastic to index your data.

OPTIONAL: set debug level to 2 in workbench



The screenshot shows the SpiceCRM Admin interface. The top navigation bar includes 'Admin', 'Home', 'Calendar', and 'Dashboards'. A search bar at the top right contains the text 'search SpiceCRM'. The main content area is titled 'editor' and displays a table of configuration parameters for the FTS (Full-Text Search) module. The table has two columns: 'NAME' and 'VALUE'. The 'loglevel' parameter is highlighted with a red box and has the value '4' entered in its input field. Other parameters include 'server' (localhost), 'port' (9200), 'prefix' (spicecrmrecore_), 'languagefilter', 'schedulerpackagesize' (25000), and 'bulkcommitsize'.

NAME	VALUE
server	localhost
port	9200
prefix	spicecrmrecore_
languagefilter	
loglevel	4
schedulerpackagesize	25000
bulkcommitsize	

Login to UI

Go to **Workbench > FTS > Connection**

Click button „initialize“ and confirm. All indexes will be created. Check for any error messages in sysftslog table. 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 > Administration > Schedulers**

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

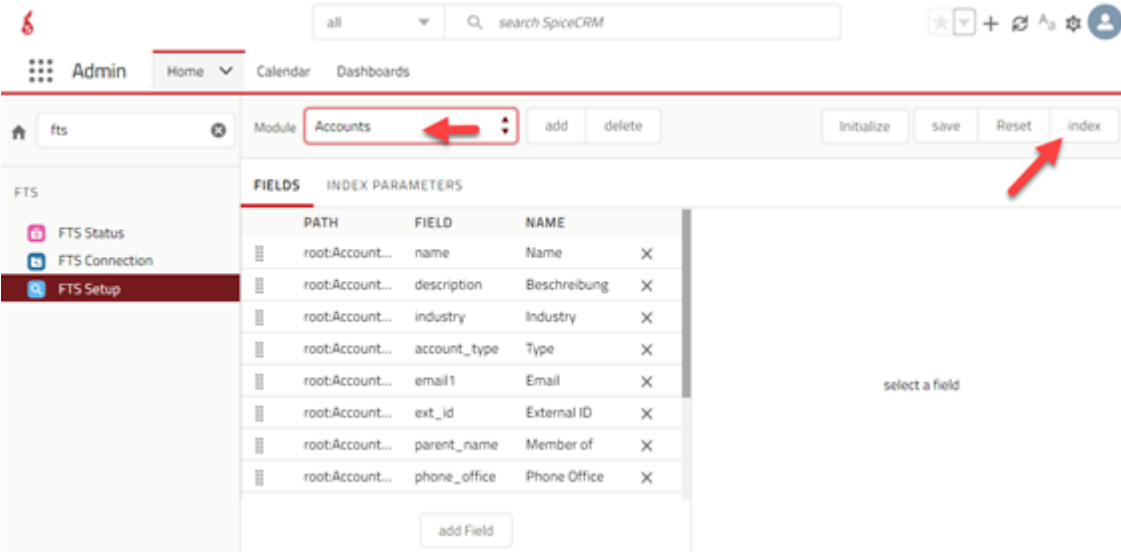
In case the job is not there, run following query in database

```
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, '*/*/*/*/*/*/*/*', NULL, NULL,  
NULL, 'Inactive', 0);
```

6.2. Index data manually

You will have to repeat the steps for each module!

Select module and click index



The screenshot shows the Admin interface for the FTS (Full Text Search) module. The 'Accounts' module is selected, and the 'index' button is highlighted with a red arrow. A table of fields is visible, including name, description, industry, account_type, email1, ext_id, parent_name, and phone_office.

PATH	FIELD	NAME	
root:Account...	name	Name	X
root:Account...	description	Beschreibung	X
root:Account...	industry	Industry	X
root:Account...	account_type	Type	X
root:Account...	email1	Email	X
root:Account...	ext_id	External ID	X
root:Account...	parent_name	Member of	X
root:Account...	phone_office	Phone Office	X

6.3. Finishing

OPTIONAL: After data has been indexed set debug level back to 0 in workbench FTS Connection

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.