



**SpiceCRM**

**Installation Guide**

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## 1. Document History

<b>Details/Section</b>	<b>Version</b>	<b>Date</b>	<b>current release</b>	<b>Owner</b>
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

## 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 7.2 – 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

PHP allows to use stream (upload://)

php.ini

```
display_errors=Off
default_charset="UTF-8"
date.timezone = Europe/Vienna
max_execution_time=300
memory_limit=256M
upload_file_size=50MB
```

**date.timezone setting is important! Think of it!**

**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 7.5 and higher as 7.x)

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

### 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

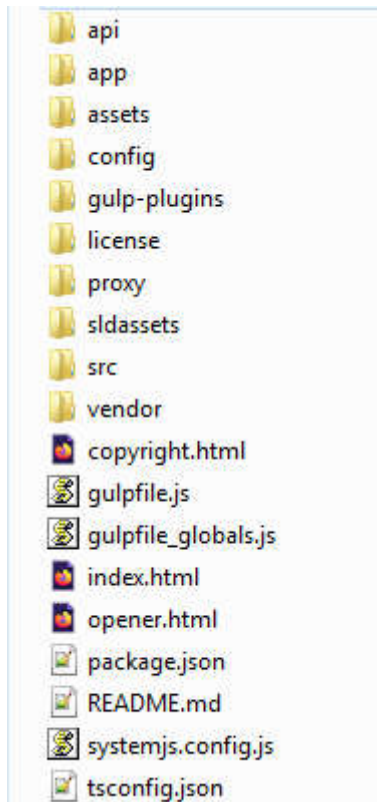
## 2.2. Download package

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

The screenshot shows a web-based configuration interface titled "Define Backend Connection". On the left, there is a sidebar with a list of steps: "Set Backend" (highlighted with a red circle), "System Requirements", "Licence", "Database", "FTS", "Credentials", "Language", and "Review and Install". The main area contains several input fields and dropdown menus. The "id" field contains "000", the "Name" field contains "spice", and the "Backend URL" field is empty. Below these are four dropdown menus: "use proxy" (set to "No"), "developermode" (set to "Yes"), "Show Loader Details" (set to "Yes"), and "Show Forgot Password on Login Screen" (set to "Yes"). A red "next" button is located at the bottom right of the form.

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

## 3.2. System Requirements check

**System Requirements**

- ✓ curl
- ✓ custom\_dir
- ✓ db
- ✓ dbdrivers
- ✓ mbstrings
- ✓ modules\_dir
- ✓ pcre
- ✓ php
- ✓ upload\_dir
- ✓ xml\_parser
- ✓ zip

next

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The precise terms and conditions for copying, distribution and modification follow.

TERMS AND CONDITIONS

0. Definitions.

agree to Terms & Conditions

next

## 3.3. Database Settings

**Database Configuration**

Database Type: mysql

\* Host Name

\* Administrator User Name

Administrator Password

Database Access User: Database Admin

Port:

\* Database Name

Collation: utf8

next



### 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 progress bar lists the steps: Set Backend, System Requirements, Licence, Database, FTS (highlighted), Credentials, Language, and Review and Install. The main area contains three input fields: '\* Server' (empty), '\* Port' (empty), and '\* Prefix' (containing 'spiccrm\_'). A red 'next' button is located in the bottom right corner.

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. On the left, the progress bar highlights the 'Credentials' step. The main 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 in the bottom right corner.

### 3.6. Select Language to load

The screenshot shows the 'Set Language' step in the installation wizard. On the left, the progress bar highlights the 'Language' step. The main area contains a dropdown menu labeled 'Choose a Language' with 'English (US)' selected. A red 'next' button is located in the bottom right corner.

### 3.7. Review Settings

Backend Configuration Settings:

- allowForgotPass: 0
- backendUrl: http://localhost/spicecrm\_202002001\_be\_core
- developerMode: true
- display: spice
- id: 000
- loginProgressBar: 0
- proxy: 0

Database Configuration Settings:

- db\_host\_instance: SQLEXPRESS
- db\_host\_name: localhost
- db\_manager: MysqlManager
- db\_name: myspicecrm
- db\_password: ttime
- db\_port:

Credentials:

- email:
- firstname:
- password: Ttime5
- surname: Administrator
- username: admin

Language:

- language: en\_us

begin installation

### 3.8. Scroll down and push “begin installation” button

Database

- db\_name: myspicecrm
- db\_password: ttime
- db\_port:
- db\_type: mysql
- db\_user\_name: root
- autofree: false
- charset: UTF8
- collation: utf8\_general\_ci
- debug: 0

Installation is successful when you are redirect to login screen



Username

Password

Login

In SpiceCRM it's e  
going on in your s  
to have the most  
home screen suiti

#### Did you

In SpiceCRM it is  
SpiceCRM then g  
desired data usin

#### Did you

In SpiceCRM it's e  
correct tile to its  
amount in the bar

#### Did you

SpiceCRM lets pr  
wherever they ar  
basically everywh  
into the desired h

### 3.9. After intall

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

all search SpiceCRM

Sales Home Repair database

rep Repair Dictionary

Repair database	Check and repair the database	Execute
Repair language	Repair language	Execute
Repair ACL roles	Repair ACL roles	Execute
Repair cache	Repair 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.

### 3.10. Set default preferences

The screenshot shows a web application interface for configuring default preferences. At the top, there is a navigation bar with 'Admin', 'Home', and 'Default Preferences' tabs. Below the navigation bar is a search bar containing 'def'. The main content area is divided into two columns. The left column is a sidebar menu with sections 'SYSTEM' and 'WORKBENCH'. Under 'SYSTEM', 'Default Preferences' is selected and highlighted in dark blue, with 'System Texts Ids' below it. Under 'WORKBENCH', there are four items: 'Custom Copyrules', 'Copyrules', 'Validation Rules', and 'Module Filters'. The right column is the 'Default Preferences' configuration page, which has a red gear icon and the title 'Default Preferences'. It is divided into two sections: 'Locale Preferences' and 'Navigation Preferences'. Under 'Locale Preferences', there are two settings: 'Timezone' and 'Distance Unit System'. Under 'Navigation Preferences', there is one setting: 'Navigation Paradigm'.

Define the system wide default preferences.

## 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/spicercrm/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 KREST availability

Call your CRM url in browser + /api/sysinfo

Example: <http://localhost/myspicercrm/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 php error log and spicercrm.log**

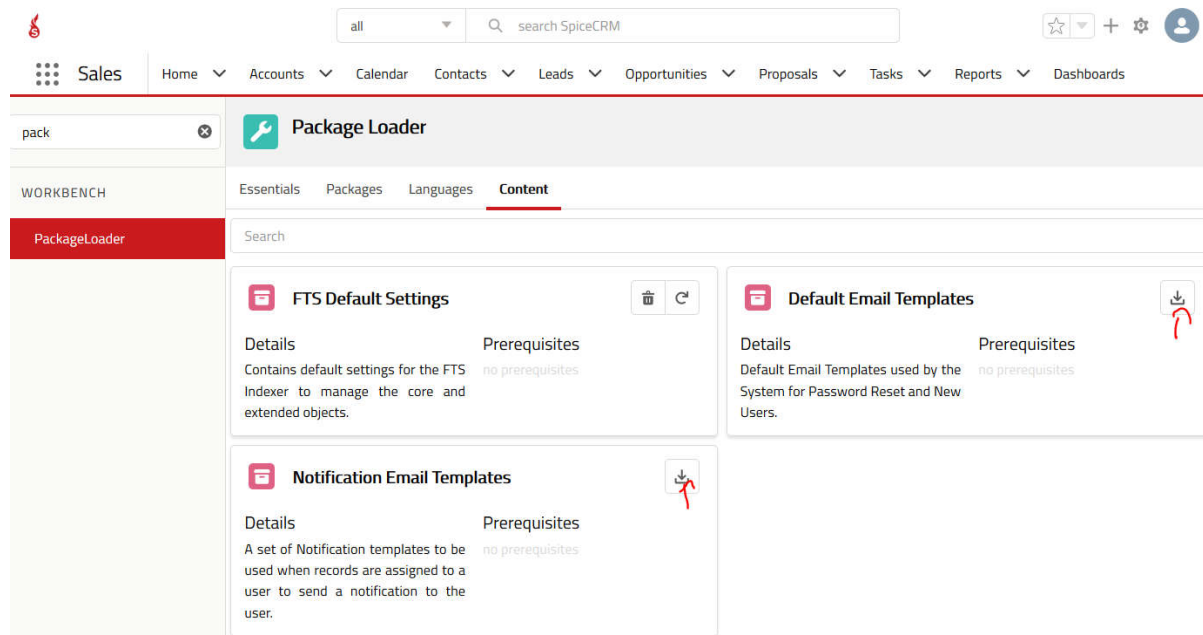
## 5. Get additional configurations for UI

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



The screenshot shows the 'Package Loader' interface in a web application. The search bar contains 'pack'. The results are displayed in a grid under the 'Content' tab. Three packages are listed:

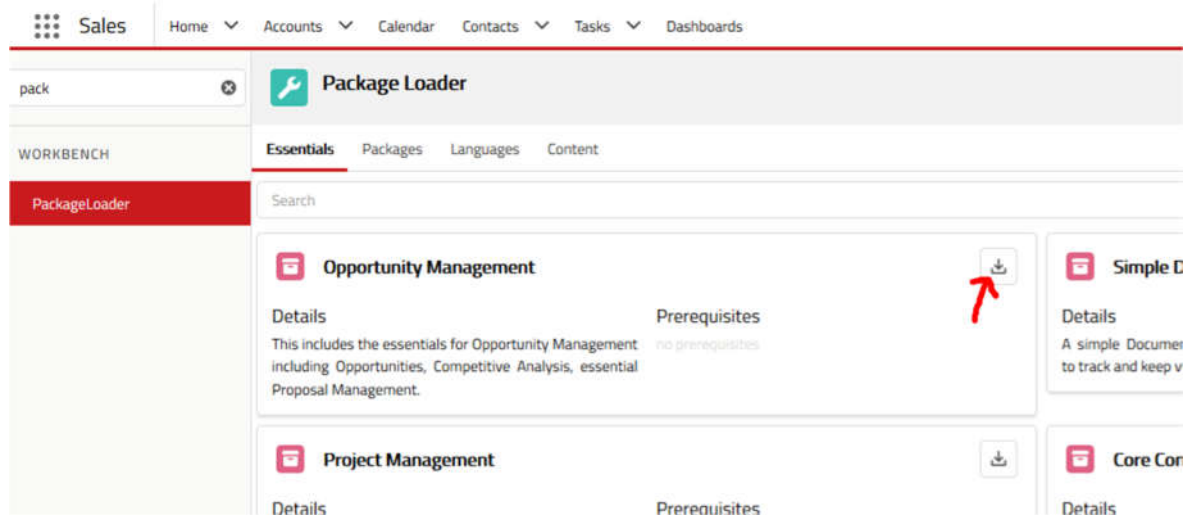
- FTS Default Settings**: Contains default settings for the FTS Indexer to manage the core and extended objects. Prerequisites: no prerequisites.
- Default Email Templates**: Default Email Templates used by the System for Password Reset and New Users. Prerequisites: no prerequisites.
- Notification Email Templates**: A set of Notification templates to be used when records are assigned to a user to send a notification to the user. Prerequisites: no prerequisites.

Red arrows point to the download icons for 'Default Email Templates' and 'Notification Email Templates'.

Click appropriate download icon

### 5.2. Load any other package you need

Example with Opportunity Management.  
Load package Essentials > Opportunity Management



The screenshot shows the 'Package Loader' interface with the search bar containing 'pack'. The results are displayed in a grid under the 'Essentials' tab. Three packages are listed:

- Opportunity Management**: This includes the essentials for Opportunity Management including Opportunities, Competitive Analysis, essential Proposal Management. Prerequisites: no prerequisites.
- Project Management**: Prerequisites: no prerequisites.
- Simple D**: A simple Documer to track and keep v. Prerequisites: no prerequisites.

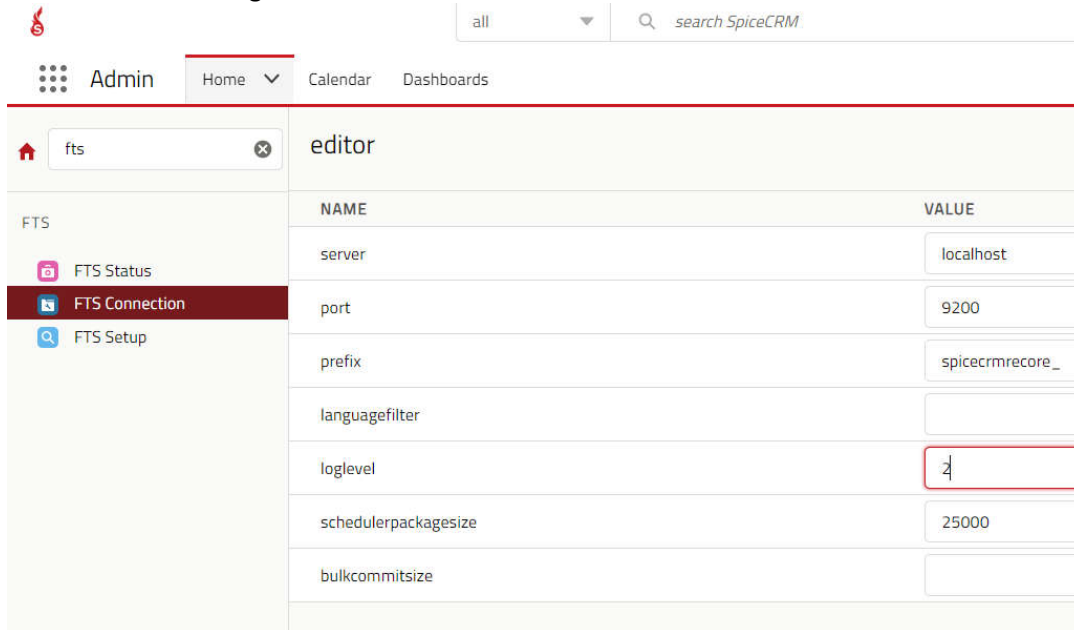
Red arrows point to the download icons for 'Opportunity Management' and 'Project Management'.

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

## 6. Index Data

You now need elastic to index your data.

OPTIONAL: set debug level to 2 in workbench

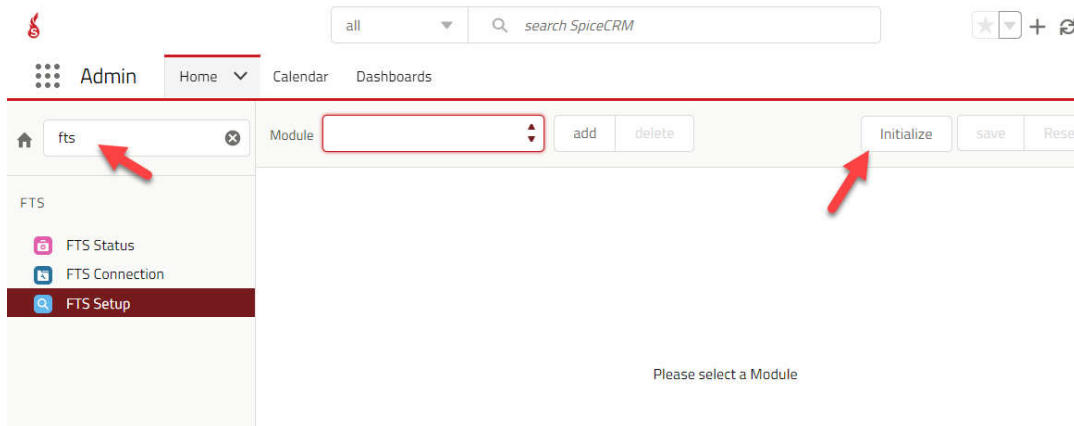


The screenshot shows the 'editor' interface for the 'fts' module. The 'loglevel' field is highlighted with a red box and contains the value '2'. Other fields include 'server' (localhost), 'port' (9200), 'prefix' (spicecrmrecore\_), 'languagefilter', 'schedulerpackagesize' (25000), and 'bulkcommitsize'.

NAME	VALUE
server	localhost
port	9200
prefix	spicecrmrecore_
languagefilter	
loglevel	2
schedulerpackagesize	25000
bulkcommitsize	

Login to UI

Go to Workbench > FTS



The screenshot shows the 'fts' module selected in the left sidebar. The 'Module' dropdown is empty, and the 'Initialize' button is highlighted with a red arrow. The 'save' and 'Reset' buttons are also visible.

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

Login to backend and check command defined under Administration > Schedulers

Example:

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

Go to backend > Administration > Schedulers

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

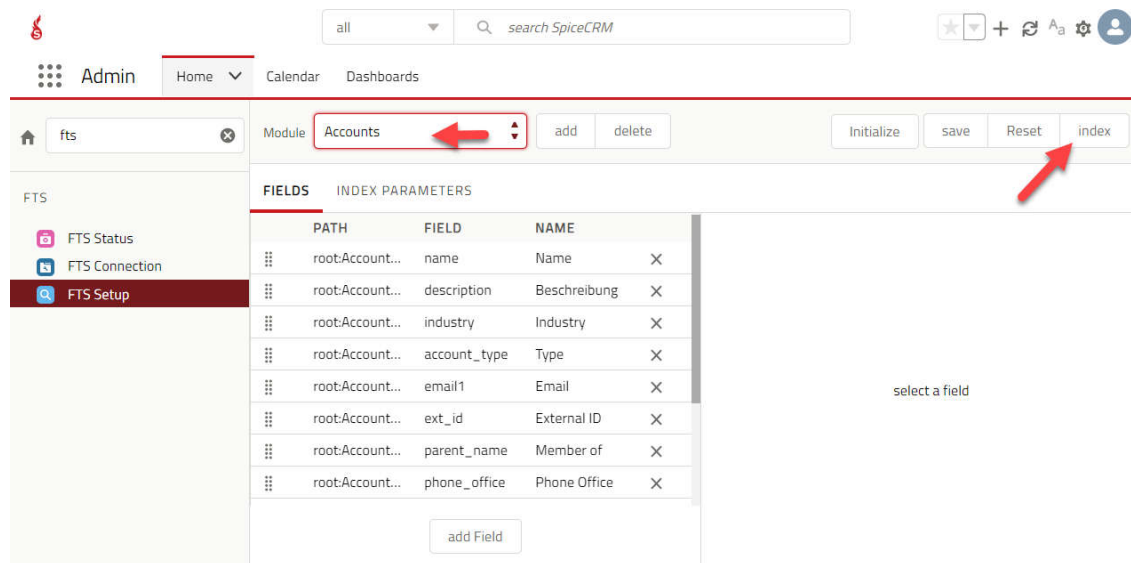
In case the job is not there, run following query in database

```
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, '*/5::*:*:*:*:*:*:*:*:*:*:*:*:*:*:*:*:*:*:*:*:*:*:*:*:*:*:*  
*', 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 SpiceCRM interface. At the top, there is a search bar and navigation tabs for Admin, Home, Calendar, and Dashboards. The main content area is titled 'fts' and shows the 'Accounts' module selected. Below the module name, there are buttons for 'add', 'delete', 'Initialize', 'save', 'Reset', and 'index'. The 'index' button is highlighted with a red arrow. On the left side, there is a sidebar with 'FTS' options: 'FTS Status', 'FTS Connection', and 'FTS Setup'. The main area displays a table of fields for the Accounts module, with columns for PATH, FIELD, and NAME. The table lists various fields like 'name', 'description', 'industry', 'account\_type', 'email1', 'ext\_id', 'parent\_name', and 'phone\_office'. An 'add Field' button is located at the bottom of the table.

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

## 6.3. Finishing

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

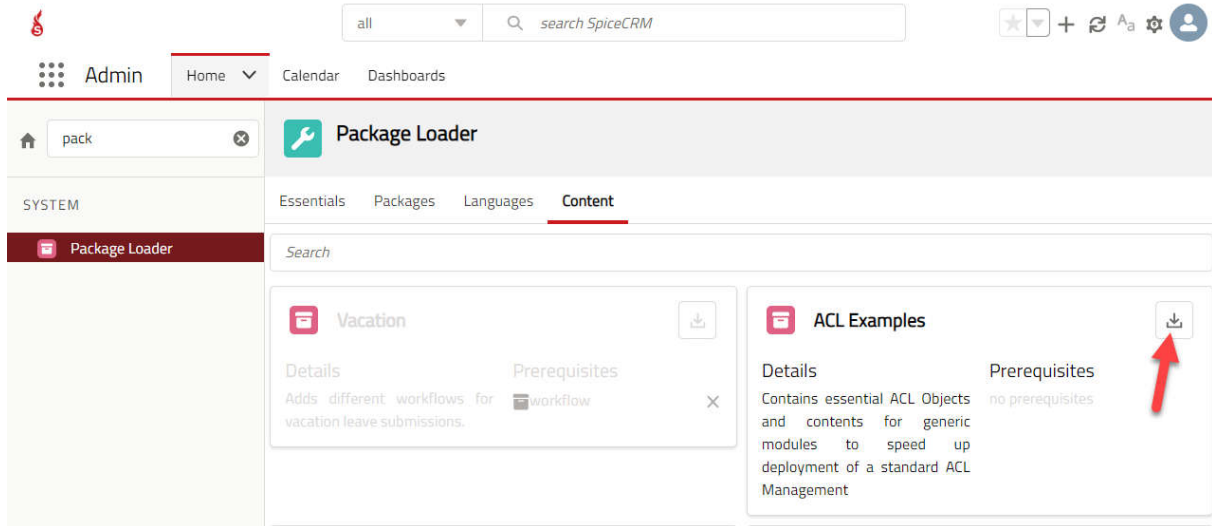


## 7. Access Rights in SpiceCRM

With SpiceCRM 202004001 ACL concept is based on SpiceACL logic.

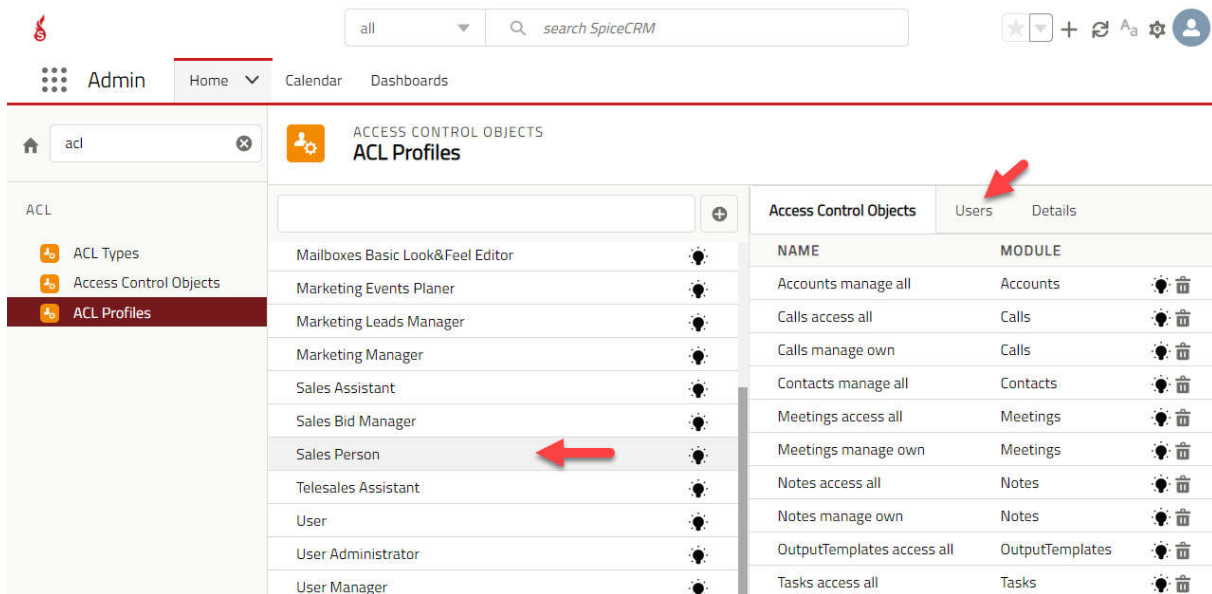
After creating users you will have to allocate them access rights so they may see and use modules like Accounts, Contacts, Opportunities...

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



The screenshot shows the 'Package Loader' interface in SpiceCRM. The 'Content' tab is selected, displaying a search bar and two package cards. The 'ACL Examples' package card has a red arrow pointing to its download icon.

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



The screenshot shows the 'ACCESS CONTROL OBJECTS ACL Profiles' interface. The left sidebar has 'ACL Profiles' selected. The main area displays a list of ACL Profiles and a table of Access Control Objects. A red arrow points to the 'Users' tab, and another red arrow points to the 'Sales Person' profile in the list.

NAME	MODULE	Lightbulb	Trash
Accounts manage all	Accounts	Lightbulb	Trash
Calls access all	Calls	Lightbulb	Trash
Calls manage own	Calls	Lightbulb	Trash
Contacts manage all	Contacts	Lightbulb	Trash
Meetings access all	Meetings	Lightbulb	Trash
Meetings manage own	Meetings	Lightbulb	Trash
Notes access all	Notes	Lightbulb	Trash
Notes manage own	Notes	Lightbulb	Trash
OutputTemplates access all	OutputTemplates	Lightbulb	Trash
Tasks access all	Tasks	Lightbulb	Trash

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