

Run Developer Guide Frontend

With Webpack

What is webpack?

It is a library that helps us bundle the frontend code. As you know the final app is a set of javascript files that contain javascript and html design. With webpack as a standard file bundler we can define how our file shall be bundled.

Why did we introduce webpack in the SpiceCRM frontend environment?

We used to have a complex process involving gulp files. By using webpack we rely on an official bundling standard and reduce the complex maintenance of the gulpfiles.

Before you go

After merging in customer repository and for further development you must:

- Make sure the variables you use in the template are set to public
- Don't use "points" as a property of an object is a reserved word
- Don't define a variable "let await"
- Use relative path for the templateUrl
- Don't leave dead components behind
- Clean up your code from dead methods etc.

Developing front with webpack

Step 1

After pulling changes, run npm install and wait.

Step 2

Define host for your dev server. Create a new text file on the root level of the project called "dev_server.url" and enter the url of the host of your project i.e. <http://localhost/spicecrm.local>.

Step 3

Adjust your api url to "../api" inside your config/sites/filename.conf

Example:

```
{"id": "000", "display": "spicecrm", "backendUrl": "../api", "proxy": false, "developerMode": false, "loginProgressBar": false, "allowForgotPass": true, "autoLogout": 0}
```

Step 4

Run npm start in your terminal. This will automatically open a new browser tab with your project ready to use.

You could add npm start to php storm run Configuration by clicking on tab "Run" and "Edit configuration", click on "+", select "npm" and in the command field select "start" and click ok.

Now you'll see "start" in the dropdown list of your run config php storm. To run it select it from the dropdown and click on the run icon beside or press Shift+F10 on your keyboard.

Step 5

If you get an error check the absolute url paths and change them to relative paths i.e. "../templates/fieldcategories.html"

Deployment with webpack

Only one step

Call "npm run build" in your terminal or you could also call it from the php storm check step 4 in the Development Section. In the Command field select "run" and from the "scripts" dropdown select "build".

You can optionally watch the typescript changes on build so this will rebuild the changes you made. Just add inside the "Arguments" field the value "--watch".

Debugging with PhpStorm

You could debug SpiceCRM in PhpStorm directly and set breakpoints.

To do this just add npm start to php storm run Configuration by clicking on tab “Run” and “Edit configuration”, click on “+”, select “Javascript Debug”. Just give it a name e.g. “angular” and in the url type in “\database\DBManagerFactory.p” and click ok. Now you’ll see “angular” in the dropdown list of your run config php storm. To start the application in debugging mode, select “angular” from the dropdown and click on the debug icon beside or press Shift+F9 on your keyboard.

FAQ

- **How to debug in the browser?**
In the Sources tab you’ll find webpack://. Open the dot folder “.” there you’ll find the source of the app where you’ll find the components you want to debug.
- **Do I need to use gulp for deployment?**
For module js files webpack will deploy. But for the css files and vendor you still need to use gulpfile_utils.js. We’ll inform you later as soon as it’s replaced with webpack.
- **I get an error when running npm start**
Node.js version v8.17.0 detected. The Angular CLI requires a minimum Node.js version of either v12.20, v14.15, or v16.10.
Please update your Node.js version (minimum requirement is NodeJS 15) or visit <https://nodejs.org/> for additional instructions.

- I get an error when running npm install

```
ca: npm install

C:\wamp64\www\spicecrm_factory>npm install
npm ERR! code ERESOLVE
npm ERR! ERESOLVE unable to resolve dependency tree
npm ERR!
npm ERR! While resolving: spicecrm@2.0.0
npm ERR! Found: @angular/core@13.1.3
npm ERR! node_modules/@angular/core
npm ERR!   @angular/core@"~13.1.1" from the root project
npm ERR!   peer @angular/core@">=12.0.0" from @angular-architects/module-federation-runtime@14.0.2
npm ERR!     node_modules/@angular-architects/module-federation-runtime
npm ERR!       @angular-architects/module-federation-runtime@"^14.0.1" from the root project
npm ERR!
npm ERR! Could not resolve dependency:
npm ERR! peer @angular/core@"13.2.1" from @angular/common@13.2.1
npm ERR!   node_modules/@angular/common
npm ERR!     @angular/common@"^13.2.0" from the root project
npm ERR!   peer @angular/common@">=12.0.0" from @angular-architects/module-federation-runtime@14.0.2
npm ERR!     node_modules/@angular-architects/module-federation-runtime
npm ERR!       @angular-architects/module-federation-runtime@"^14.0.1" from the root project
npm ERR!
npm ERR! Fix the upstream dependency conflict, or retry
npm ERR! this command with --force, or --legacy-peer-deps
npm ERR! to accept an incorrect (and potentially broken) dependency resolution.
npm ERR!
npm ERR! See C:\Users\maretval\AppData\Local\npm-cache\eresolve-report.txt for a full report.

npm ERR! A complete log of this run can be found in:
npm ERR!   C:\Users\maretval\AppData\Local\npm-cache\_logs\2022-02-05T19_48_34_658Z-debug-0.log

C:\wamp64\www\spicecrm_factory>node -v
v16.13.2

C:\wamp64\www\spicecrm_factory>npm install --force
npm WARN using --force Recommended protections disabled.
[ ] / idealTree:request: sill fetch manifest supports-preserve-symlinks-flag@^1.0.0
```

Try npm install --force