Vue.js - 1.2

On this page:

Target audience:

Users of the extension providing **Vue.js** support for Web applications.

Summary: This document provides basic information about the extension providing **Vue.js** support for Web applications.

Extension ID

com.castsoftware.vuejs

What's new?

Please see Vue.js - 1.2 - Release Notes for more information.

Description

This extension provides support for **Vue.js**. Vue.js is an open-source JavaScript framework used to build user interface for web application: vuejs.org

In what situation should you install this extension?

If your Web application contains **Vue.js** source code and you want to view these object types and their links with other objects, then you should install this extension.

Supported Vue.js versions

Version	Support	Comment
v2.x	✓	

Supported template definitions

Vue.js has different methods to define a component's template - these methods are shown here: https://vuejsdevelopers.com/2017/03/24/vue-js-component-templates/. The following table shows the methods that are currently supported by Vue.js extension:

Pattern	Support
String	✗
Template literal	✗
X-Templates	✓
Inline	✓
Render functions	✓
JSX	✗
Single page components	✓

Unsupported template definition methods will not create links to any called functions.

CAST AIP compatibility

This extension is compatible with:

CAST AIP release	Supported
8.3.x	✓

Prerequisites

✓	An installation of any compatible release of CAST AIP (see table above)

Dependencies with other extensions

Some CAST extensions require the presence of other CAST extensions in order to function correctly.
The **Vue.js** extension requires that the following other CAST extensions are also installed:

- HTML5/JavaScript
- **Web services linker service** (internal technical extension)

> When using the **CAST Extension Downloader** to download the extension and the **Manage Extensions** interface in **CAST Server Manager** to install the extension, any dependent extensions are **automatically** downloaded and installed for you. You do not need to do anything.

Download and installation instructions

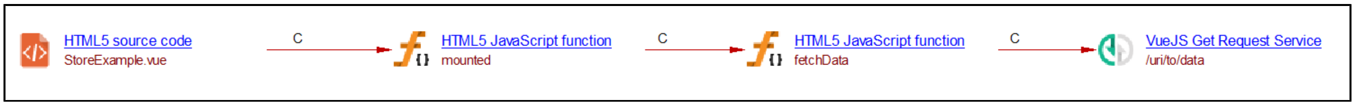
Please see:

- Download an extension
- Install an extension

> The latest release status of this extension can be seen when downloading it from the CAST Extend server.

What results can you expect?

Once the analysis/snapshot generation has completed, you can view the results in the normal manner (for example via CAST Enlighten):


HTML5 source code
StoreExample.vue
C
HTML5 JavaScript function
mounted
C
HTML5 JavaScript function
fetchData
C
VueJS Get Request Service
/uri/to/data

Objects

The following specific objects are displayed in CAST Enlighten:

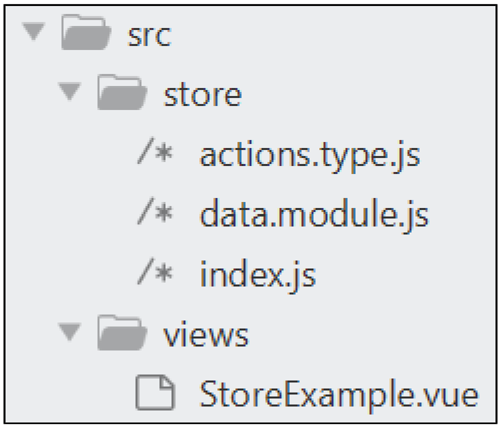
Icon	Description
	Vue.js Get Request Service
	Vue.js Post Request Service
	Vue.js Put Request Service

Store

Dispatch

Vue.js extension support Vuex store dispatch methods are used to call shared function.

Here is an example of a classical architecture using this method.



```
src
  store
    actions.type.js
    data.module.js
    index.js
  views
    StoreExample.vue
```

In actions.type.js

```
export const FETCH_DATA = "fetchData";
```

In data.module.js

```
import { FETCH_DATA } from "./actions.type";
import Vue from "vue";
import axios from "axios";
import VueAxios from "vue-axios";


Vue.use(VueAxios, axios);

const actions = {
  [FETCH_DATA]() {
    return return Vue.axios.get('uri/to/data')
  },
};

export default {
  actions
};
```

In index.js

```
import Vue from "vue";
import Vuex from "vuex";

import data from "./data.module";

Vue.use(Vuex);

export default new Vuex.Store({
  modules: {
    data
  }
});
```

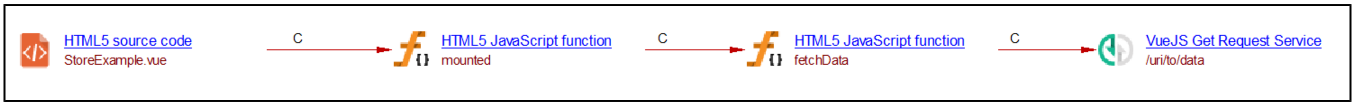
In StoreExample.vue

```
<template>
  <div></div>
</template>

<script>
import { FETCH_DATA } from "@/store/actions.type";

export default {
  name: "StoreExample",
  mounted: function() {
    this.$store.dispatch(FETCH_DATA)
  }
};
</script>
```

In Enlighten: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VueJS Get Request Service
/uri/to/data

Webservices

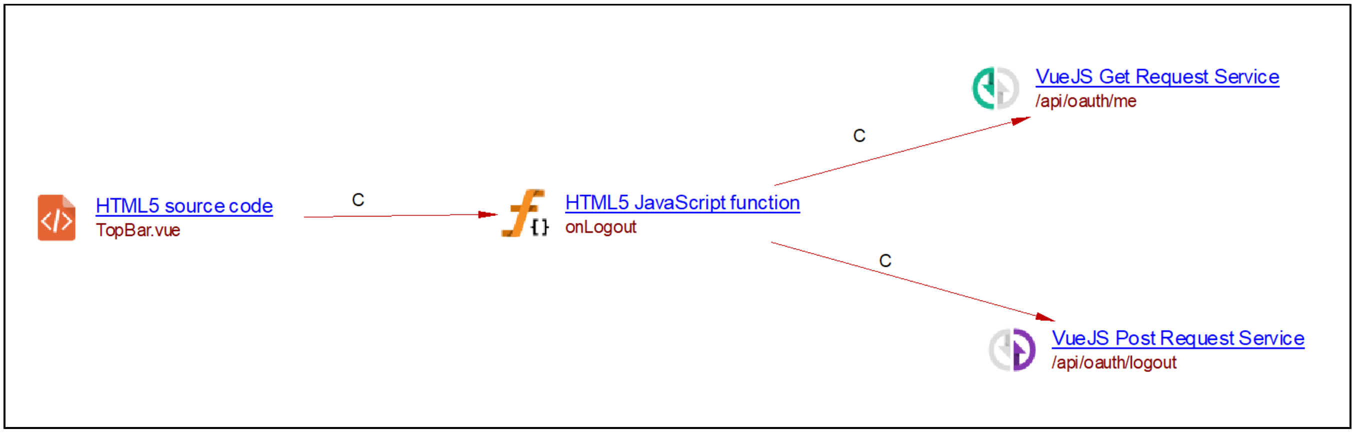
Axios

The Vue.js extension supports webservices using Axios:

```
async onLogout() {
      await this.$axios.$post('/api/oauth/logout');
      this.setLogout(true);
      this.setCurrentUser(null);

      try {
        await this.$axios.$get('/api/oauth/me')
      } catch (e) {
        // middleware redirects to login page
      }
    }
```

Giving the following graph in Enlighten:


HTML5 source code
TopBar.vue
C
HTML5 JavaScript function
onLogout
C
VueJS Get Request Service
/api/oauth/me
C
VueJS Post Request Service
/api/oauth/logout

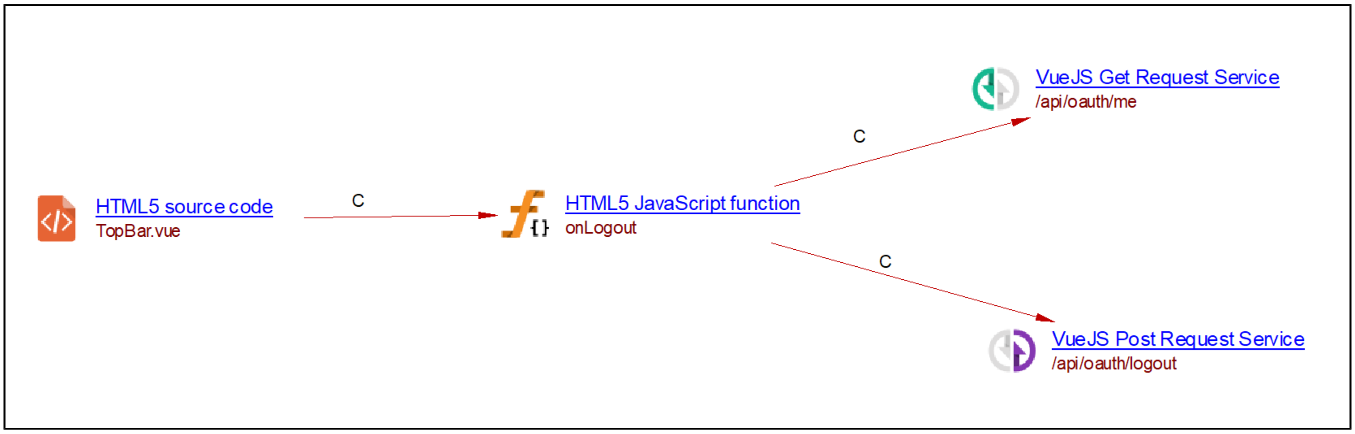
Vue-resources

The Vue.js extension supports webservices using vue-resources.

```
async onLogout() {
      await this.$http.post('/api/oauth/logout');
      this.setLogout(true);
      this.setCurrentUser(null);

      try {
        await this.$http.$get('/api/oauth/me')
      } catch (e) {
        // middleware redirects to login page
      }
    }
```

Giving the following graph in Enlighten:


HTML5 source code
TopBar.vue
C
HTML5 JavaScript function
onLogout
C
VueJS Get Request Service
/api/oauth/me
C
VueJS Post Request Service
/api/oauth/logout

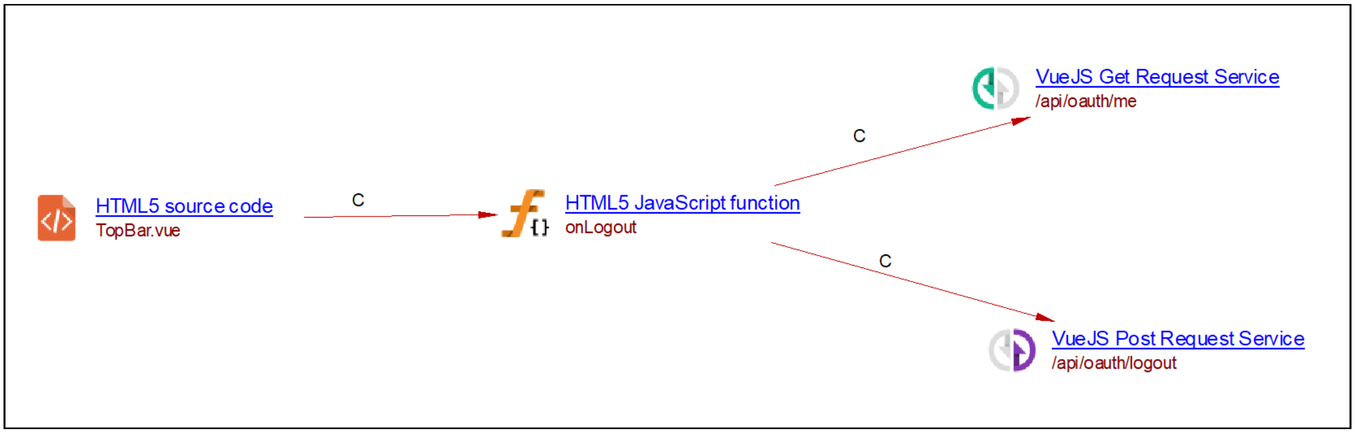
Fetch

The Vue.js extension supports webservices using fetch:

```
async onLogout() {
      await fetch('/api/oauth/logout');
      this.setLogout(true);
      this.setCurrentUser(null);

      try {
        await fetch('/api/oauth/me')
      } catch (e) {
        // middleware redirects to login page
      }
    }
```

Giving the following graph in Enlighten:


HTML5 source code
TopBar.vue
C
HTML5 JavaScript function
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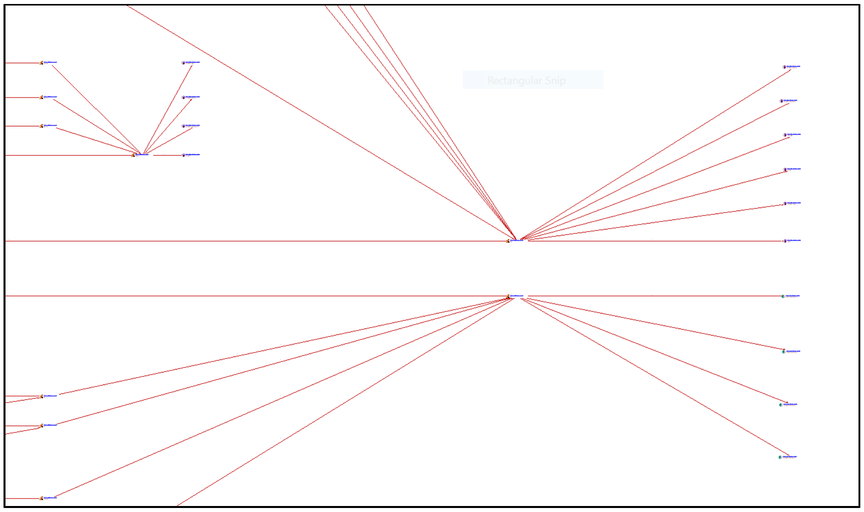
C
VueJS Get Request Service
/api/oauth/me
C
VueJS Post Request Service
/api/oauth/logout

Link transition

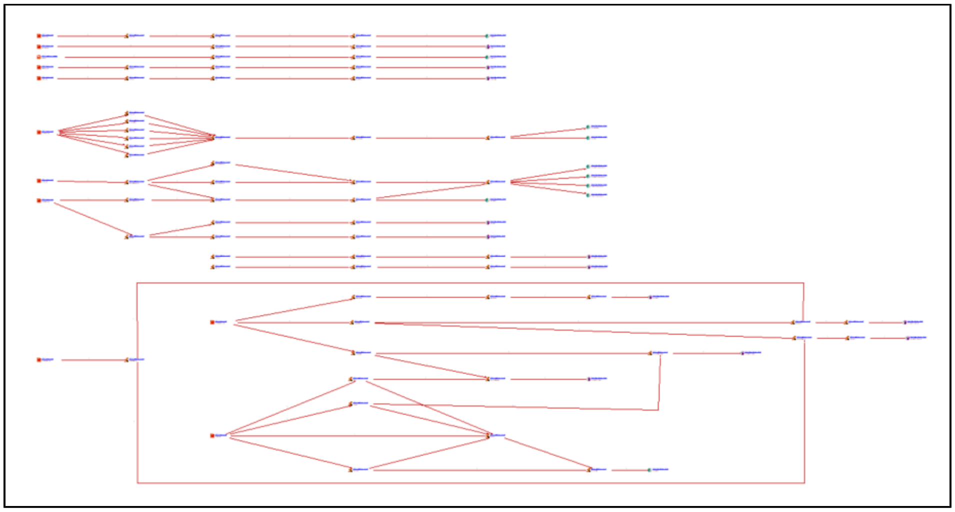
Sometimes calls to services are factorized into a function that only concatenates URI parts leading to the following kinds of bottleneck and making it hard to follow which function called a given service:

Click to enlarge



Link transition allows the extension to go through the specified functions to make a direct link between the function defining the service URI and the service object. This leads to a better graph without bottlenecks:

Click to enlarge



Quality rules

The following structural rules are provided:

1.2.1-funcrel	https://technologies.castsoftware.com/rules?sec=srs_vuejs&ref=||1.2.1-funcrel
1.2.0-funcrel	https://technologies.castsoftware.com/rules?sec=srs_vuejs&ref=||1.2.0-funcrel

Known limitations

Store map function

Currently there are no links to the following store map functions from components using them:

- mapGetters
- mapActions

For example:

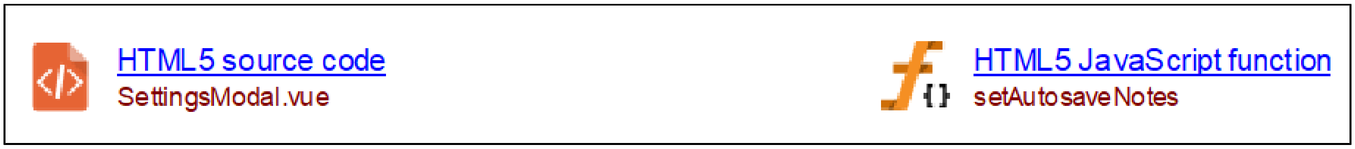
In SettingsModal.vue

```
// ...
<ToggleSwitch v-model="user.autosave_notes" @change="setAutosaveNotes(user.autosave_notes)" />
// ...
methods: {
    ...mapActions(['deleteUser', 'setShowLanguageTags', 'setAutosaveNotes', 'revokeUserAccess']),
    // ...
  }
```

In user.js

```
const actions = {
  // ...
  setAutosaveNotes({ commit }, flag) {
    return client.put('/user/autosave-notes', { flag }).then(({ data }) => {
      commit(SET_USER, data)
    })
  }
}
```

No link shown in CAST Enlighten:



HTML5 source code
SettingsModal.vue

HTML5 JavaScript function
setAutosaveNotes

Functions passed as properties

In Vue.js components can have properties, which could be functions. Links to those functions are currently unsupported.