

Sentry在vue项目中的使用

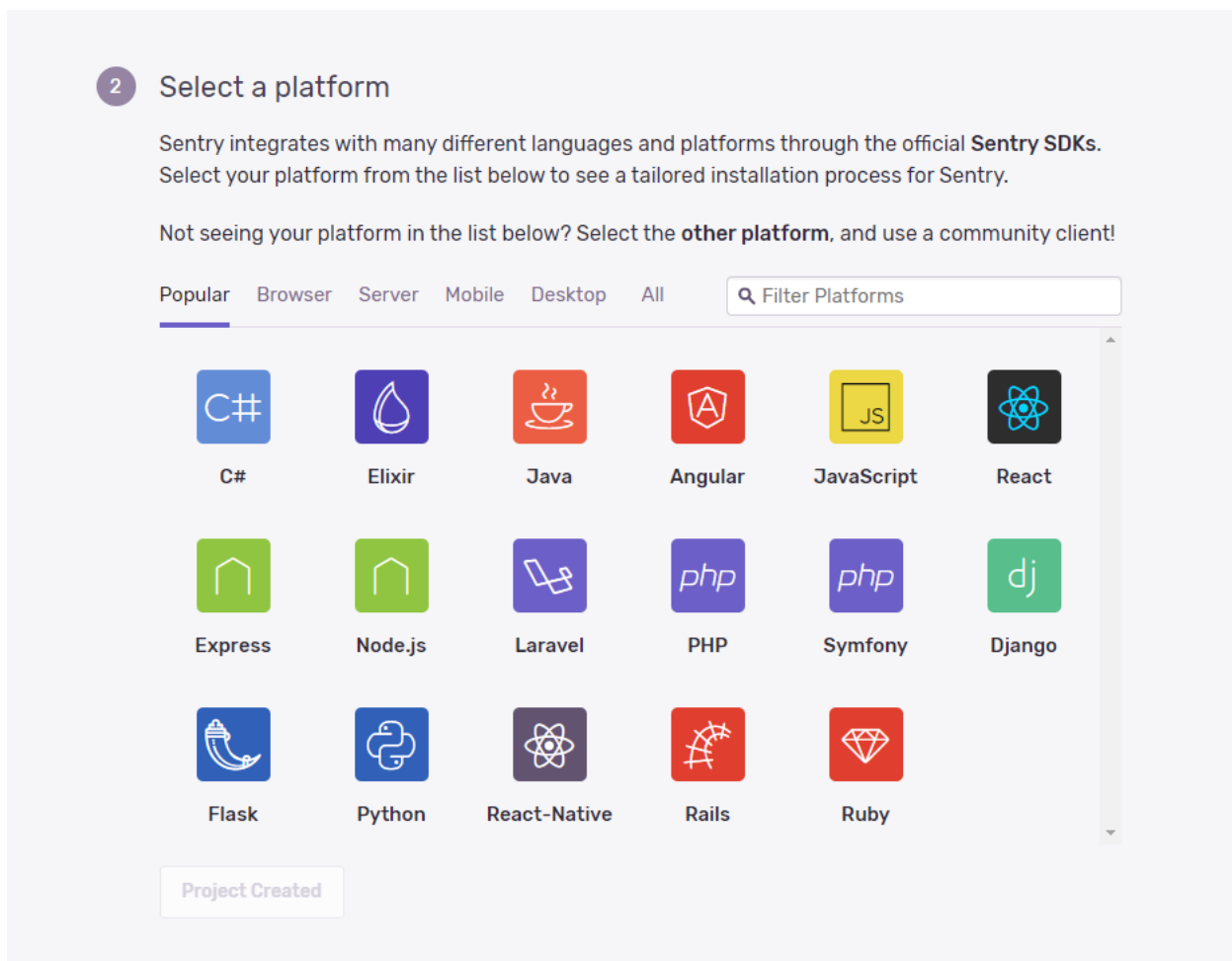
应用场景

Sentry是提供基于云端的错误监控报警系统，只要在项目代码中集成Sentry提供的sdk，便可在云端控制台查看，分析，处理错误，当然也可以部署在自有的服务器上，自己实现运维管理。

Sentry适用于多种语言，也为各种前后端热门的框架提供了配套的SDK。

注册创建应用

首页我们注册账号，新账户会有一个14天的免费使用期，过了试用期后可选择付费套餐或者使用功能受限的个人免费版。选择相应的框架，选择后会生成一个简单的安装指南。我们在"Browser"下找到了"vue"，然后开始安装。



安装sdk

```
1 # Using yarn
```

```
2 $ yarn add @sentry/browser
3
4 # Using npm
5 $ npm install @sentry/browser
```

```
1 # Using yarn
2 yarn add @sentry/integrations
3
4 # Using npm
5 npm install @sentry/integrations
```

通过安装 *sentry/browser*, 可以捕捉到浏览器环境js的错误, 而安装 *sentry/integrations*, 通过vue全局的*config.errorHandler*可以定位错误是从哪个vue组件中的具体哪个属性引起。

最后在main.js中初始化监控

```
1 import Vue from 'vue'
2 import * as Sentry from '@sentry/browser';
3 import { Vue as VueIntegration } from '@sentry/integrations';
4
5 Sentry.init({
6   dsn: 'https://*****@o409167.ingest.sentry.io/5281135',
7   integrations: [new VueIntegration({Vue, attachProps: true, logErrors: true})],
8   debug:true,
9   environment: 'dev'
10 });
```

init方法中的配置参数主要有:

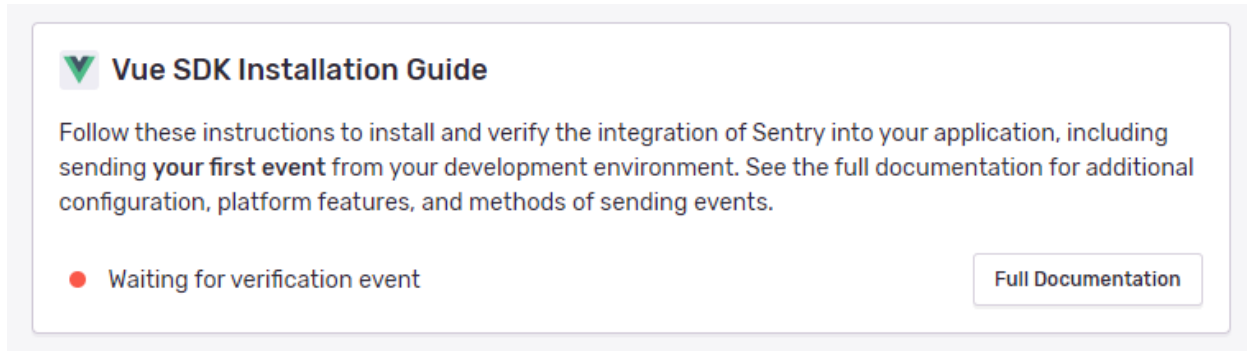
- dsn: 相当于密钥, 也是区别项目的唯一id
- debug: 是否记录debug信息
- release: 记录当前的项目发布版本, 便于多版本使用中的问题定位
- environment: 预设环境, 便于在控制台过滤
- ...

更具体的配置可参考文档: <https://docs.sentry.io/error-reporting/configuration/?platform=browser>

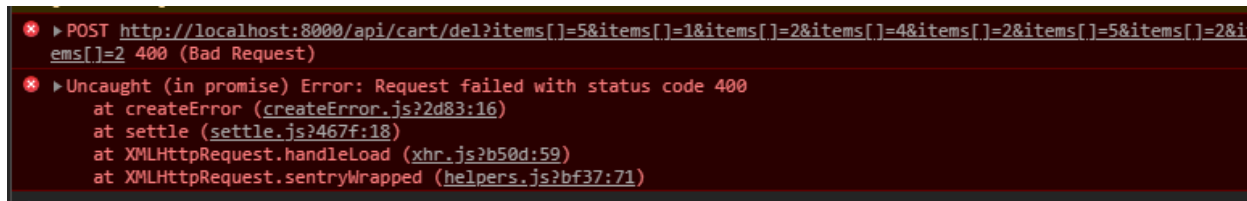
上述是浏览器环境的通用配置，而在vue项目中integrations的配置，记得添加 `logErrors: true` 的配置，不然在开发环境中，无法在console中看见错误信息。

验证结果

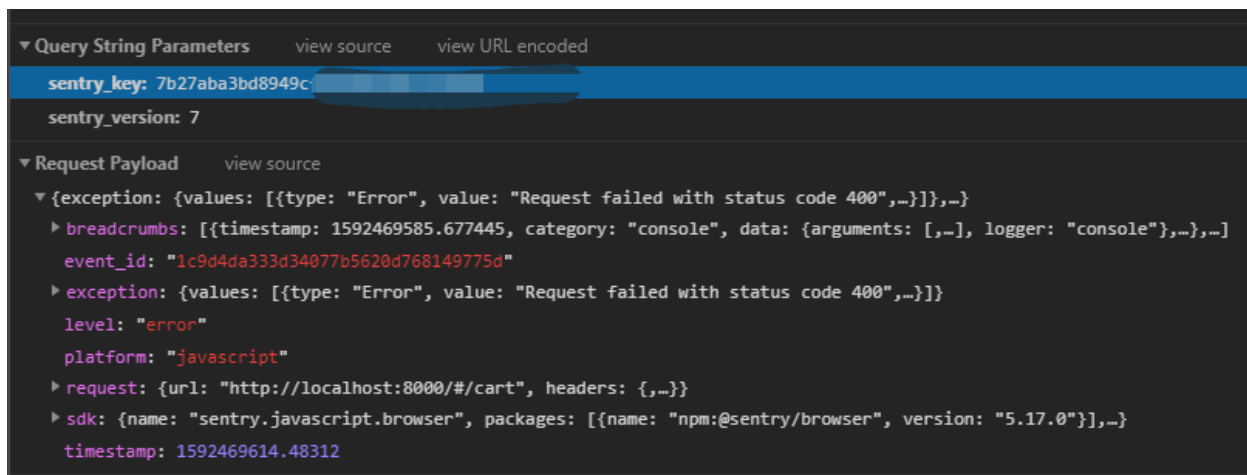
可以看到，网页一直在等待着错误信息，验证我们是否安装成功



我们在开发环境中，故意产生一个错误




我们post一个接口后发生了400错误，sentry立刻帮助我们捕捉并上报，可以看下具体上报的参数。



- breadcrumbs 包含了用户的操作步骤，能让我们更快地复现bug。
- exception 包含错误的具体信息
- request 是报错接口的详情
- ...

Vue SDK Installation Guide

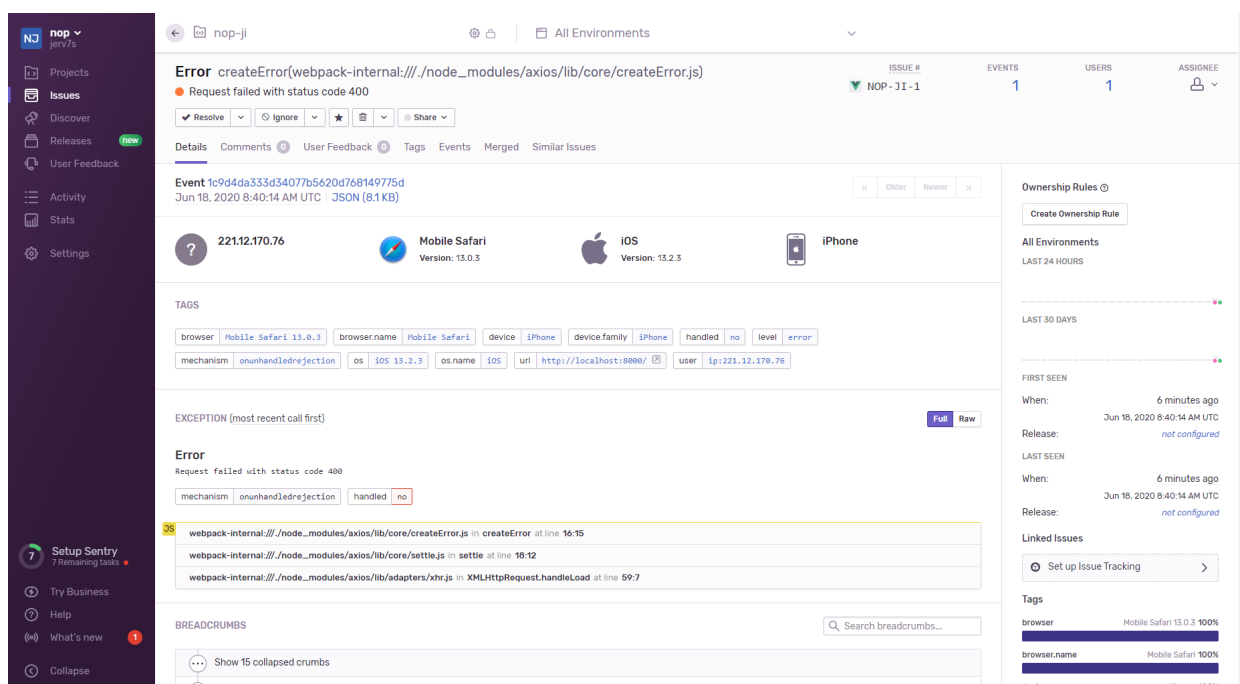
Follow these instructions to install and verify the integration of Sentry into your application, including sending **your first event** from your development environment. See the full documentation for additional configuration, platform features, and methods of sending events.

 Event was received!

[Take me to my event](#)

[Full Documentation](#)

然后我们在页面上看到了服务端更新了页面状态，上报事件已被接收。我们点击进入控制台看下：



The screenshot displays the Sentry web interface for a project named 'nop-jl'. The main view shows an error event with the message 'Request failed with status code 400'. The event is associated with the issue 'NOP - 11 - 1'. The event details include the following information:

- Event ID:** 1c9d4da33d34077b5620d768149775d
- Timestamp:** Jun 18, 2020 8:40:14 AM UTC
- JSON Size:** 8.1 KB
- Tags:** browser: Mobile Safari 13.0.3, browser.name: Mobile Safari, device: iPhone, device.family: iPhone, handled: no, level: error, mechanism: onunhandledrejection, os: iOS 13.2.3, os.name: iOS, url: http://localhost:8080/, user: ip:221.12.170.76
- Exception:** Request failed with status code 400
- Breadcrumbs:** webpack-internal:///./node_modules/axios/lib/core/createError.js in createError at line 16:15, webpack-internal:///./node_modules/axios/lib/core/settle.js in settle at line 10:12, webpack-internal:///./node_modules/axios/lib/adapters/xhr.js in XMLHttpRequest.prototype.onload at line 59:7

The right sidebar shows the 'Ownership Rules' section, which is currently empty. Below this, there are charts for 'All Environments' and 'LAST 24 HOURS'.

控制台上的信息十分详细，除了上报请求内的参数外，还把http头的ua等相关信息解析出来了，也可对比不同机型发现兼容性问题。

我们在代码中修改一些，看看vue组件的错误如何被捕捉。



```
See more tips at https://vuejs.org/guide/advanced/monitoring.html
* [Vue warn]: Error in created hook: "TypeError: Cannot read property 'id' of undefined"

found in

---> <Info> at src/page/user/order/info.vue
      <App> at src/App.vue
      <Root>

* TypeError: Cannot read property 'id' of undefined
    at VueComponent.created (info.vue:4445:81)
    at invokeWithErrorHandling (vue.runtime.esm.js:22b0e:1854)
    at callHook (vue.runtime.esm.js:22b0e:4219)
    at VueComponent.Vue._init (vue.runtime.esm.js:22b0e:5008)
    at new VueComponent (vue.runtime.esm.js:22b0e:5154)
    at createComponentInstanceForVnode (vue.runtime.esm.js:22b0e:3283)
    at init (vue.runtime.esm.js:22b0e:3114)
    at merged (vue.runtime.esm.js:22b0e:3301)
    at createComponent (vue.runtime.esm.js:22b0e:5978)
    at createElm (vue.runtime.esm.js:22b0e:5925)
    at updateChildren (vue.runtime.esm.js:22b0e:6216)
    at patchVnode (vue.runtime.esm.js:22b0e:6319)
    at VueComponent.patch [as __patch__] (vue.runtime.esm.js:22b0e:6482)
    at VueComponent.Vue._update (vue.runtime.esm.js:22b0e:3948)
    at VueComponent.updateComponent (vue.runtime.esm.js:22b0e:4066)
    at VueComponent.get (vue.runtime.esm.js:22b0e:4479)
    at Watcher.get (vue.runtime.esm.js:22b0e:4554)
    at flushSchedulerQueue (vue.runtime.esm.js:22b0e:4310)
    at Array.eval (vue.runtime.esm.js:22b0e:1980)
    at flushCallbacks (vue.runtime.esm.js:22b0e:1906)
```

```
▼ Request Payload view source
{,--}
  ► breadcrumbs: [{timestamp: 1592470496.865464, category: "console", data: {arguments: [,--], logger: "console"},,--}]
  ▼ contexts: {vue: {componentName: "Info", propsData: "[undefined]", lifecycleHook: "created hook"}}
    ▼ vue: {componentName: "Info", propsData: "[undefined]", lifecycleHook: "created hook"}
      componentName: "Info"
      lifecycleHook: "created hook"
      propsData: "[undefined]"
      event_id: "c1d49c556d494c1aa3eb4d4d6fb4150e"
    ▼ exception: {values: [{type: "TypeError", value: "Cannot read property 'id' of undefined", stacktrace: {,--},,--}]
      ▼ values: [{type: "TypeError", value: "Cannot read property 'id' of undefined", stacktrace: {,--},,--}]
        ▼ 0: {type: "TypeError", value: "Cannot read property 'id' of undefined", stacktrace: {,--},,--}
          ► mechanism: {handled: true, type: "generic"}
          ► stacktrace: {,--}
            type: "TypeError"
            value: "Cannot read property 'id' of undefined"
          level: "error"
          platform: "javascript"
        ► request: {url: "http://localhost:8000/#/user/order/info/2", headers: {,--}}
        ► sdk: {name: "sentry.javascript.browser", packages: [{name: "npm:@sentry/browser", version: "5.17.0"}],,--}
        timestamp: 1592470496.941649
```

	console	[Vue warn]: Error in created hooks: "TypeError: Cannot read property 'id' of undefined"	08:54:56
		found in	
		---> <Info> at src/page/user/order/info.vue	
		<App> at src/App.vue	
		<Root>	
	logger	console	
	arguments	["[Vue warn]: Error in created hooks: \"TypeError: Cannot read property 'id' of undefined\"\\n\\nfound in\\n\\n---> <Info> at src/page/user/order/info.vue\\n <App> at src/App.vue\\n <Root>"]	
	console	TypeError: Cannot read property 'id' of undefined	08:54:56
	arguments	[{"message": "Cannot read property 'id' of undefined", "name": "TypeError", "stack": "TypeError: Cannot read property 'id' of undefined\\n at VueComponent.created (webpack-internal:///./node_modules/cache-loader/dist/cjs.js?!./node_modules/babel-loader/lib/index.js!.node_modules/cache-loader/dist/cjs.js?!./node_modules/vue-loader/lib/index.js?!./src/page/user/order/info.vue?vue&type=script&lang=js&75:41)\\n at invokeWithErrorHandling (webpack-internal:///./node_modules/vue/dist/vue.runtime.esm.js:1853:57)\\n at callHook (webpack-internal:///./node_modules/vue/dist/vue.runtime.esm.js:4998:5)\\n at new VueComponent (webpack-internal:///./node_modules/vue/dist/vue.runtime.esm.js:5144:12)\\n at createComponentInstanceForVnode (webpack-internal:///./node_modules/vue/dist/vue.runtime.esm.js:3280:10)\\n at init (webpack-internal:///./node_modules/vue/dist/vue.runtime.esm.js:311:45)\\n at merged (webpack-internal:///./node_modules/vue/dist/vue.runtime.esm.js:3298:5)\\n at createComponent (webpack-internal:///./node_modules/vue/dist/vue.runtime.esm.js:5968:9)\\n at createElm (webpack-internal:///./node_modules/vue/dist/vue.runtime.esm.js:5915:9)\\n at updateChildren (webpack-internal:///./node_modules/vue/dist/vue.runtime.esm.js:6206:11)\\n at patchVnode (webpack-internal:///./node_modules/vue/dist/vue.runtime.esm.js:6472:9)\\n at VueComponent.Vue._update (webpack-internal:///./node_modules/vue/dist/vue.runtime.esm.js:3942:19)\\n at VueComponent.updateComponent (webpack-internal:///./node_modules/vue/dist/vue.runtime.esm.js:4060:10)\\n at Watcher.get (webpack-internal:///./node_modules/vue/dist/vue.runtime.esm.js:4473:25)\\n at Watcher.run (webpack-internal:///./node_modules/vue/dist/vue.runtime.esm.js:4548:22)\\n at flushSchedulerQueue (webpack-internal:///./node_modules/vue/dist/vue.runtime.esm.js:4304:13)\\n at Array..."}	

这是一个常见的错误,可以看到contexts里可以识别到发生错误的组件的名称, 错误产生的事件, 和错误的属性是哪一个。控制台的面包屑也是完完全全复原了控制台中的错误堆栈。

生产环境问题定位

刚才的尝试是在开发环境中的, 所以错误堆栈产生的原因都能清晰地定位到具体代码行, 如果实在生产环境中, 我们需要上传sourcemap。

安装命令行工具

可以在github上下载相应系统的工具, 并且重命名为 sentry-cli

<https://github.com/getsentry/sentry-cli/releases/>

生成配置文件

在工具目录下执行

```
1 sentry-cli login
```

要求我们填入token, 我们可以在网页上的控制台找到, 然后命令行工具会生成一个.sentryclirc 的配置文件, 放在项目根目录即可。配置文件中还需要填org和project, 与注册账号时填写的信息一致。

当然你也可以手动创建, 就像这样

```
1 [auth]
2 token=*****
3 [defaults]
4 project=****
5 org=****
```

上传插件配置

Sentry提供一个webpack插件, 能使我们在工程打包时把sourcemap文件上传。

```
1 $ npm install --save-dev @sentry/webpack-plugin
2 //or
3 $ yarn add --dev @sentry/webpack-plugin
```

我们在打包时, 发现报错, 找不到对应的map文件。

```

~/dist/js/chunk-03806d90.js (no sourcemap ref)
- warning: could not determine a source map reference (Could not auto-detect referenced sourcemap for ~/dist/js/chunk-03806d90.js.)
~/dist/js/chunk-060b1ef6.js (no sourcemap ref)
- warning: could not determine a source map reference (Could not auto-detect referenced sourcemap for ~/dist/js/chunk-060b1ef6.js.)
~/dist/js/chunk-184f4b3e.js (no sourcemap ref)
- warning: could not determine a source map reference (Could not auto-detect referenced sourcemap for ~/dist/js/chunk-184f4b3e.js.)
~/dist/js/chunk-2d0c1175.js (no sourcemap ref)
- warning: could not determine a source map reference (Could not auto-detect referenced sourcemap for ~/dist/js/chunk-2d0c1175.js.)
~/dist/js/chunk-2d0c4a05.js (no sourcemap ref)
- warning: could not determine a source map reference (Could not auto-detect referenced sourcemap for ~/dist/js/chunk-2d0c4a05.js.)
~/dist/js/chunk-2d0d374d.js (no sourcemap ref)
- warning: could not determine a source map reference (Could not auto-detect referenced sourcemap for ~/dist/js/chunk-2d0d374d.js.)
~/dist/js/chunk-2d0e4add.js (no sourcemap ref)
- warning: could not determine a source map reference (Could not auto-detect referenced sourcemap for ~/dist/js/chunk-2d0e4add.js.)
~/dist/js/chunk-2d0e6363.js (no sourcemap ref)

```

这里需要将map文件和js文件输出在同一个目录，所以在vue.config.js中，我们需要修改如下：

productionSourceMap: true

这样map文件和js文件生成在同一个目录，sentry的插件会自动识别并上传。注：不要用SourceMapDevToolPlugin这个插件，生成的文件路径在根目录，插件识别不了。

献上插件配置

```

1  new SentryWebpackPlugin({
2    release: "202006191603",
3    include: './dist/',
4    urlPrefix: "http://127.0.0.1:8080",
5    ignoreFile: '.sentrycliignore',
6    ignore: ['node_modules', 'vue.config.js'],
7    configFile: 'sentry.properties'
8  })

```

注意的是：include 和 urlPrefix，使得最后线上的地址能够访问得到js文件

Building for production...

Source Map Upload Report

Minified Scripts

```
http://127.0.0.1:8080/js/app.js (sourcemap at app.js.map)
http://127.0.0.1:8080/js/chunk-03806d90.js (sourcemap at chunk-03806d90.js.map)
http://127.0.0.1:8080/js/chunk-060b1ef6.js (sourcemap at chunk-060b1ef6.js.map)
http://127.0.0.1:8080/js/chunk-184f4b3e.js (sourcemap at chunk-184f4b3e.js.map)
http://127.0.0.1:8080/js/chunk-2d0c1175.js (sourcemap at chunk-2d0c1175.js.map)
http://127.0.0.1:8080/js/chunk-2d0c4a05.js (sourcemap at chunk-2d0c4a05.js.map)
http://127.0.0.1:8080/js/chunk-2d0d374d.js (sourcemap at chunk-2d0d374d.js.map)
http://127.0.0.1:8080/js/chunk-2d0e4add.js (sourcemap at chunk-2d0e4add.js.map)
http://127.0.0.1:8080/js/chunk-2d0e6363.js (sourcemap at chunk-2d0e6363.js.map)
http://127.0.0.1:8080/js/chunk-2d210098.js (sourcemap at chunk-2d210098.js.map)
http://127.0.0.1:8080/js/chunk-2d230890.js (sourcemap at chunk-2d230890.js.map)
http://127.0.0.1:8080/js/chunk-5105bcd9.js (sourcemap at chunk-5105bcd9.js.map)
http://127.0.0.1:8080/js/chunk-56ecaf18.js (sourcemap at chunk-56ecaf18.js.map)
http://127.0.0.1:8080/js/chunk-5ae84624.js (sourcemap at chunk-5ae84624.js.map)
http://127.0.0.1:8080/js/chunk-6ba1d848.js (sourcemap at chunk-6ba1d848.js.map)
http://127.0.0.1:8080/js/chunk-700aff4a.js (sourcemap at chunk-700aff4a.js.map)
http://127.0.0.1:8080/js/chunk-7772be04.js (sourcemap at chunk-7772be04.js.map)
http://127.0.0.1:8080/js/chunk-7821aaf4.js (sourcemap at chunk-7821aaf4.js.map)
http://127.0.0.1:8080/js/chunk-7ad9a0a8.js (sourcemap at chunk-7ad9a0a8.js.map)
http://127.0.0.1:8080/js/chunk-7f33b350.js (sourcemap at chunk-7f33b350.js.map)
http://127.0.0.1:8080/js/chunk-85b30404.js (sourcemap at chunk-85b30404.js.map)
http://127.0.0.1:8080/js/chunk-983f20a4.js (sourcemap at chunk-983f20a4.js.map)
http://127.0.0.1:8080/js/chunk-99db9ff0.js (sourcemap at chunk-99db9ff0.js.map)
http://127.0.0.1:8080/js/chunk-b018d584.js (sourcemap at chunk-b018d584.js.map)
http://127.0.0.1:8080/js/chunk-b0b432e8.js (sourcemap at chunk-b0b432e8.js.map)
http://127.0.0.1:8080/js/chunk-f6e19b6e.js (sourcemap at chunk-f6e19b6e.js.map)
http://127.0.0.1:8080/js/chunk-vendors.js (sourcemap at chunk-vendors.js.map)
```

Source Maps

```
http://127.0.0.1:8080/js/app.js.map
http://127.0.0.1:8080/js/chunk-03806d90.js.map
http://127.0.0.1:8080/js/chunk-060b1ef6.js.map
http://127.0.0.1:8080/js/chunk-184f4b3e.js.map
http://127.0.0.1:8080/js/chunk-2d0c1175.js.map
http://127.0.0.1:8080/js/chunk-2d0c4a05.js.map
http://127.0.0.1:8080/js/chunk-2d0d374d.js.map
http://127.0.0.1:8080/js/chunk-2d0e4add.js.map
http://127.0.0.1:8080/js/chunk-2d0e6363.js.map
http://127.0.0.1:8080/js/chunk-2d210098.js.map
http://127.0.0.1:8080/js/chunk-2d230890.js.map
http://127.0.0.1:8080/js/chunk-5105bcd9.js.map
http://127.0.0.1:8080/js/chunk-56ecaf18.js.map
http://127.0.0.1:8080/js/chunk-5ae84624.js.map
http://127.0.0.1:8080/js/chunk-6ba1d848.js.map
http://127.0.0.1:8080/js/chunk-700aff4a.js.map
http://127.0.0.1:8080/js/chunk-7772be04.js.map
http://127.0.0.1:8080/js/chunk-7821aaf4.js.map
http://127.0.0.1:8080/js/chunk-7ad9a0a8.js.map
http://127.0.0.1:8080/js/chunk-7f33b350.js.map
http://127.0.0.1:8080/js/chunk-85b30404.js.map
http://127.0.0.1:8080/js/chunk-983f20a4.js.map
http://127.0.0.1:8080/js/chunk-99db9ff0.js.map
http://127.0.0.1:8080/js/chunk-b018d584.js.map
http://127.0.0.1:8080/js/chunk-b0b432e8.js.map
http://127.0.0.1:8080/js/chunk-f6e19b6e.js.map
http://127.0.0.1:8080/js/chunk-vendors.js.map
```

Building for production...

最后，控制台中就可以看到源码解析的文件了。

TypeError

Cannot read property 'id' of undefined

mechanism

generic

handled

yes

JS

src/page/product/detail.vue in call at line 148:39

```
143.     this.$router.push("/cart");
144.   });
145. }
146. },
147. created() {
148.   this.itemId = this.$router.params.id;
149.   getDetail(this.itemId).then(data => {
150.     this.goods = data;
151.   });
152. }
153. };
```

其他功能介绍

- 配置邮件提醒，让你第一时间收到通知进行处理
- 根据不同条件筛选错误，默认是未解决的错误，聚焦未解决的错误
- 可以添加成员，并根据错误信息，设置分配规则，分配错误给owner
- 可以忽略错误，或者设置忽略的阈值（包括忽略时长，发生次数和影响人数）
- 分享错误详情，请项目外高手看一看错误信息，帮助解决

Issues (1)

Sort by: Last Seen

Unresolved Issues ^ 🔍 is:unresolved

✕ ⚙ + ≡

☐ Resolve ☐ Ignore ☐ Merge ... ▶

☐ Error createError(webpack-interna... [node_modules/axios/lib/core/createError.js]
Request failed with status code 500
🔍 NOP-31-1 ⌚ 8 minutes ago - 21 minutes old

Assigned To Me • is:unresolved assigned:me

Errors Only • is:unresolved level:error

My Bookmarks • is:unresolved bookmarks:me

Needs Triage • is:unresolved is:unassigned

New Today • is:unresolved age:-24h

Unresolved Issues • is:unresolved

ITS ⌵ USERS ⌵ ASSIGNEE

5 1 👤 ▾

< >

Create Ownership Rule

✕

Match against Issue Data: (globbing syntax *, ? supported)

⊕ webpack-internal:///./node_modules/vue/dist/vue.runtime.esm.js [PATH]

⊕ webpack-internal:///./node_modules/cache-loader/dist/cjs.js?!./node_modules/babel-loader/lib/index.js!.node_modules/cache-loader/dist/cjs.js?!./node_modules/vue-... [PATH]

⊕ http://localhost:8000/ [URL]

Path ▾ src/example/* > owners ▾ Ⓢ

#example usage
path:src/example/pipeline/* person@sentry.io #infra
url:http://example.com/settings/* #product
tags.sku_class:enterprise #enterprise

Save Changes

TAGS

When: 18 min
Jun 18, 2020 8:54:2
Release: not c
LAST SEEN

TypeError VueComponent.created(webpack-internal:///./node_modules/cache-loader/dist/cj. Cannot read property 'id' of undefined

● Resolve Ignore For... Share


Details Comments 0 Events Merged Similar Issues

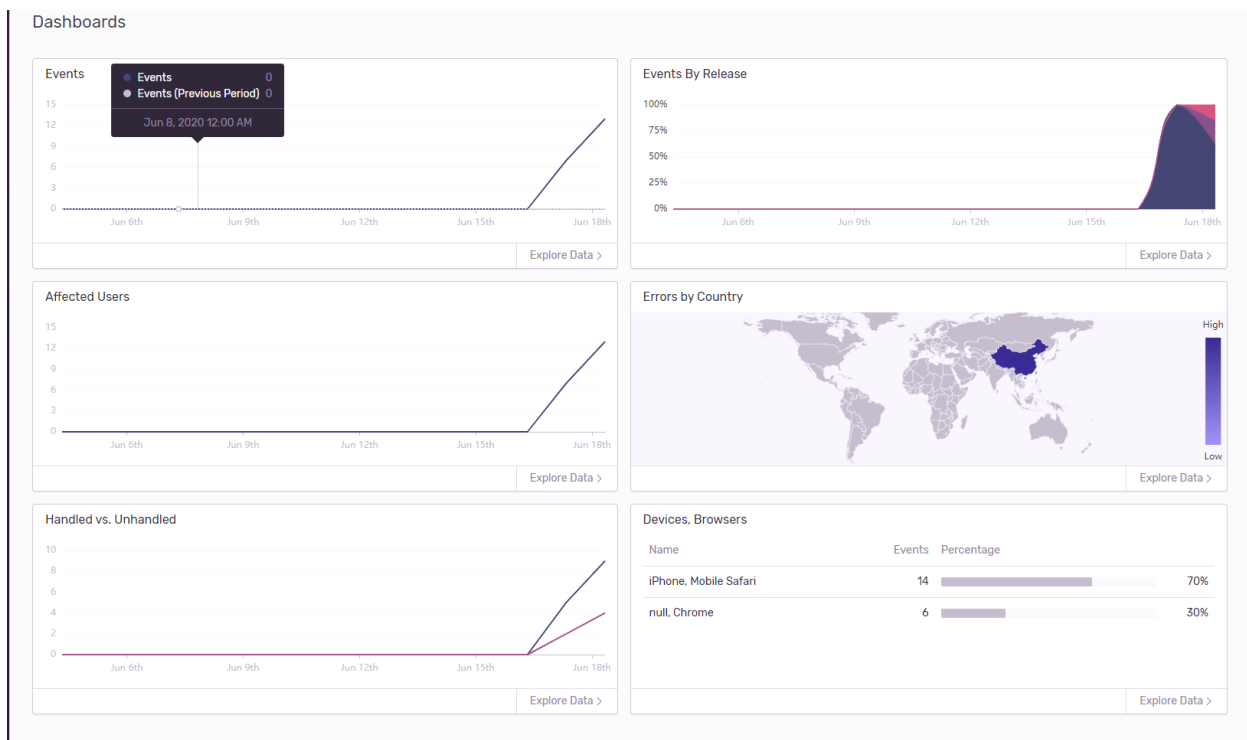
Event c1d49c556d494c1a Jun 18, 2020 8:54:56 AM

Ignore For... Until this occurs again... Until this affects an additional...

one user... 10 users... 100 users... 1,000 users... 10,000 users... 100,000 users... Custom

CONFIGURE SUSPECT COMMITS
To identify which commit caused this issue

 This example commit broke something
codesworth committed 3 days ago



自托管搭建

由于免费版的功能限制，比如只能一个人玩，一个月的错误数量也是限制在5000以下等，我们考虑可以自己来托管Sentry的服务端。

在docker环境中运行监控服务端

可按照官方github仓库部署到私有云：<https://github.com/getsentry/onpremise>

- 环境要求： Docker 17.05.0+ / Compose 1.23.0+ / RAM 2400MB+

克隆git仓库，并根据需要配置相关文件，也可直接执行安装脚本。

config.yml

可以配置邮件设置（错误上报时邮件提醒），系统设置（重置密钥，redis集群设置），文件存储设置（修改文件保存位置如文件系统或s3云存储），github,slack的插件集成

sentry.conf.py

django框架的相关配置，诸如数据库链接，缓存链接，消息队列，web服务器等其他配置

.env

环境相关的配置项

配置完后相关文件之后，就可以执行安装了，安装完毕后，会在9000端口提供控制台面板web服务，进入后即可开始项目的配置与安装。

it_sentry地址：<http://itsentry.yunjiglobal.com/>