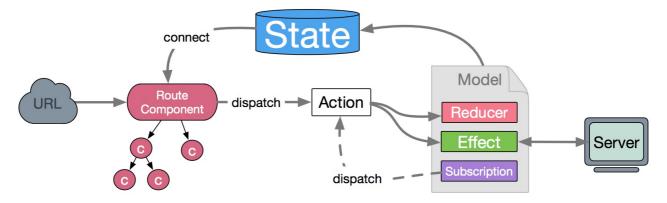
link null title: 珠峰架构师成长计划 description; null keywords: null author: null date: null publisher: 珠峰架构师成长计划 stats: paragraph=102 sentences=388, words=3358

## 1.dva介绍 #



## 1.1 前置知识 <u>#</u>

- react
- react-router-dom
- redux
- react-redux
- connected-react-router
   history
   dva

## 2. 初始化项目 #

```
create-react-app zhufeng-dva-source
cd zhufeng-dva-source
cnpm install dva redux react-redux react-router-dom connected-react-router history
```

## 3. 基本计数器 #

## 3.1 src\index.js #

src\index.js

```
import React from 'react';
import dva,{connect} from 'dva';
const app = dva();
app.model({
   namespace: 'counter',
    state:{number:0},
reducers:{
       add(state){
           return {number:state.number+1};
const Counter = connect(
   state=>state.counter
) (props=>(
   <div>
        <button onClick={()=>props.dispatch({type:"counter/add"})}>+button>
app.router(()=><Counter/>);
app.start('#root');
```

## 3.2 src\dva\index.js #

```
import React from 'react';
import ReactDOM from 'react-dom';
import {createStore,combineReducers} from 'redux';
import {connect,Provider} from 'react-redux';
export {connect};
  export default function() {
    const app = {
    _models:[],
    model,
    _router:null,
          router,
          start
     function model(model) {
           app._models.push(model);
     function router(routerConfig) {
          app._router = routerConfig;
     function start(root) {
          let reducers = {};
           for(let i=0;ilet model = app._models[i];
                model.reducers = refixNamespace(model.reducers,model.namespace);
reducers[model.namespace] = function(state = model.state, action) {
                     let actionType = action.type;
let reducer = model.reducers[actionType];
if (reducer) {
                         return reducer(state, action);
               };
          let rootReducer = combineReducers(reducers);
           let store = createStore(rootReducer);
          let App = app._router;
ReactDOM.render(<Provider store={store}><App/>Provider>,document.querySelector(root));
  function prefixNamespace(reducers, namespace) {
     return Object.keys(reducers,reduce((memo, key) => {
   const newKey = `${namespace}${NAMESPACE_SEPARATOR}${key}`;
   memo[newKey] = reducers[key];
           return memo;
```

### 4. 支持effects #

## 4.1 src\index.js #

src\index.js

```
import React from 'react';
import dva,{connect} from 'dva';
 import ava,{connect} rrom 'dva';
const app = dva();
+ function delay(ms) {
+    return new Promise((resolve,reject) => {
+        setTimeout(function () {
                 resolve();
           },ms);
     });
 app.model({
    namespace: 'counter',
     state:{number:0}, reducers:{
         add(state){
               return {number:state.number+1};
      effects:{
            *asyncAdd(action, {call,put}) {
             yield call(delay,1000);
yield put({type:'counter/add'});
 });
 const Counter = connect(
    state=>state.counter
 ) (props=>(
           props.dispatch({type:"counter/add"})}>+
            props.dispatch({type:"counter/asyncAdd"})}>异步+
app.router(()=>);
app.start('#root');
```

## 4.2 src\dva\index.js #

```
import React from 'react';
import ReactDOM from 'react-dom';
+import {createStore,combineReducers,applyMiddleware} from 'redux';
import {connect, Provider} from 'react-redux';
+import createSagaMiddleware from 'redux-saga';
+import * as sagaEffects from 'redux-saga/effects';
export {connect};
export default function(){
    const app = {
   _models:[],
         model,
         _router:null,
         router,
         start
    function model(model) {
         app._models.push(model);
    function router(routerConfig) {
    app._router = routerConfig;
    function start(root){
         let reducers = {};
                                    let sagaMiddleware = createSagaMiddleware();
          yield takeEvery(model.namespace+'/'+key,function*(action){
   yield model.effects[key](action,sagaEffects);
});
          let store = createStore(rootReducer,applyMiddleware(sagaMiddleware));
           sagaMiddleware.run(rootSaga);
         let App = app._router;
ReactDOM.render(,document.querySelector(root));
    return app;
```

## 5.支持路由 #

#### 5.1 src\index.js #

src\index.js

```
import React from 'react';
import dva,{connect} from 'dva';
+import {Router,Route} from 'dva/router';
const app = dva();
function delay(ms) {
    return new Promise((resolve, reject) => {
        setTimeout(function () {
  resolve();
   re.
},ms);
});
app.model({
    namespace:'counter',
state:{number:0},
    reducers:{
        add(state){
            return {number:state.number+1};
        }
       wsyncAdd(action,{call,put}){
  yield call(delay,1000);
  yield put({type:'counter/add'});
}
   }
});
const Counter = connect(
   state=>state.counter
) (props=>(
        {props.number}
         props.dispatch({type:"counter/add"})}>+
        props.dispatch({type:"counter/asyncAdd"})}>异步+
///
//index.js:1375 Warning: Please use `require("history").createHashHistory` instead of `require("history/createHashHistory")`. Support for the latter will be
removed in the next major release.
//index.js:1375 Warning: [sagaEffects.put] counter/add should not be prefixed with namespace counter
+app.router(({history})=>(
          <>
app.start('#root');
```

### 5.2 src\dva\index.js #

```
import React from 'react';
import ReactDOM from 'react-dom';
import {createStore,combineReducers,applyMiddleware} from 'redux';
import (createsore, commerce approximate are import (connect, Provider) from 'react-redux'; import createSagaMiddleware from 'redux-saga'; import * as sagaEffects from 'redux-saga/effects';
+import {createHashHistory} from 'history';
export {connect};
 export default function(){
    const app = {
         _models:[],
model,
          _router:null,
          router,
          start
    function model(model) {
          app._models.push(model);
     function router(routerConfig) {
          app._router = routerConfig;
     function start(root){
          let reducers = {};
          for(let i=0;i+
                                       let history = createHashHistory();
           let App = app._router({history});
ReactDOM.render({App}, document.querySelector(root));
     return app;
```

## 5.3 src\dva\router.js #

src\dva\router.is

```
export * from 'react-router-dom';
```

### 6.支持跳转 #

### 6.1 src\index.js #

src\index.js

```
import React from 'react':
import dva, (connect) from './dva';
+ import {Router,Route,routerRedux} from './dva/router';
const app = dva();
function delay(ms) {
    return new Promise((resolve, reject) => {
        setTimeout(function () {
             resolve();
         },ms);
    });
app.model({
    namespace: counter',
    state:{number:0},
    reducers:{
         add(state){
             return {number:state.number+1};
    effects:{
         *asyncAdd(action, {call, put}) {
          yield call(delay,1000);
yield put({type:'counter/add'});
        *goto({to}, { put }) {
  yield put(routerRedux.push(to));
}
(<sub>3.)</sub>;
const Counter = connect(
    state=>state.counter
) (props=>(
         {props.number}
props.dispatch({type:"counter/add"})}>+
         props.dispatch({type:"counter/asyncAdd"))}}异步+
props.dispatch({type:"counter/goto",to:'/'})}>跳转到/
//index.js:1375 Warning: Please use `require("history").createHashHistory` instead of `require("history/createHashHistory")`. Support for the latter will be
removed in the next major release.
//index.js:1375 Warning: [sagaEffects.put] counter/add should not be prefixed with namespace counter
const Home = ()=>Home
app.router(({history})=>(
         </>
app.start('#root');
```

### 6.2 src\dva\index.js #

```
import React from 'react';
import ReactDOM from 'react-dom';
import {createStore, combineReducers, applyMiddleware} from 'redux';
import {connect, Provider| from 'react-redux';
import createSagaMiddleware from 'redux-saga';
import * as sagaEffects from 'redux-saga/effects';
import {createHashHistory} from 'history';
+import {
   routerMiddleware,
   connectRouter,
   ConnectedRouter
+} from "connected-react-router";
+const NAMESPACE_SEPARATOR = "/";
export {connect};
export (connect);
export default function(){
    const app = {
         models:[],
         model,
    }
}
          _router:null, router,
          start
     function model (model) {
         app._models.push(model);
     function router(routerConfig) {
          app._router = routerConfig;
     function start(root)(
    let history = createHashHistory();
    const reducers = {
           router: connectRouter(history)
};
                          yield takeEvery(model.namespa
yield model.effects[key] (action, sagaEffects);
));
           for(let i=0;i+
                                                            yield takeEvery(model.namespace+NAMESPACE_SEPARATOR+key,function*(action){
               }
            let store = createStore(rootReducer,applyMiddleware(routerMiddleware(history),sagaMiddleware));
           sagaMiddleware.run(rootSaga);
let App = app._router({history,app});
            ReactDOM.render(
            ,document.querySelector(root));
     return app;
```

### 6.3 src\dva\router.js #

src\dva\router.js

```
+module.exports = require('react-router-dom');
+module.exports.routerRedux = require('connected-react-router');
```

# 7.支持自定义effects <u>#</u>

## 7.1 src\index.js #

src\index.js

```
import React from 'react';
import dva,{connect} from 'dva';
import dva, (connect) from 'dva';
import {Router,Route, routerRedux} from 'dva/router';
const app = dva();
function delay(ms) {
    return new Promise((resolve,reject) => {
           setTimeout(function () {
   resolve();
    re:
},ms);
});
app.model({
     namespace:'counter',
state:{number:0},
      reducers:{
           add(state,){
           return {number:state.number+1};
},
           ...
increment(state,{payload}){
  return {number:state.number+payload||1};
}
      effects:{
          *asyncAdd(action, {call,put}) {
              yield call(delay,1000);
yield put({type:'counter/add'});
           *goto({to}, { put }) {
          yield put(routerRedux.push(to));
},
            addWatchers:[
                 function*({take,put,call}){
                        for(let i=0;i
                            const {payload} = yield take('counter/addWatcher');
                             yield call(delay,1000);
yield put({type:'counter/increment',payload});
                       alert('不能再加了');
                  {type:'watcher'}
     }
 });
 const Counter = connect(
     state=>state.counter
 ) (props=>(
            {props.number}
           {props.number}
props.dispatch({type:"counter/add"})}>+
props.dispatch({type:"counter/asyncAdd"})}>异步+
props.dispatch({type:"counter/addWatcher",payload:2})}>自定义异步+2
props.dispatch({type:"counter/goto",to:'/'})}>號转到/
const Home = ()=>Home
app.router(({history})=>(
           </>
app.start('#root');
```

7.2 src\dva\index.js #

```
import React from 'react';
import ReactDOM from 'react-dom';
import {createStore,combineReducers,applyMiddleware} from 'redux';
import {connect, Provider} from 'react-redux';
import createSagaMiddleware from 'redux-saga';
import * as sagaEffects from 'redux-saga/effects';
import {createHashHistory} from 'history';
import {
 routerMiddleware.
 connectRouter,
 ConnectedRouter
 from "connected-react-router";
export {connect};
export default function(){
   const app = {
   _models:[],
        model,
        _router:null,
        router,
    function model(model) {
        app._models.push(model);
    function router(routerConfig) {
        app._router = routerConfig;
    function start(root){
        let history = createHashHistory();
const reducers = {
            router: connectRouter(history)
        for(let i=0;i+
                                            for(const key in model.effects) {
                       let effect = model.effects[key];
                       if(Array(effect) && effect[1].type == 'watcher'){
    yield sagaEffects.fork(effect[0],sagaEffects);
                        }else{
                         yield takeEvery(model.namespace+'/'+key,function*(action){
                         yield model.effects[key](action,sagaEffects);
});
        let store = createStore(rootReducer,applyMiddleware(routerMiddleware(history),saqaMiddleware));
        sagaMiddleware.run(rootSaga);
        let App = app._router({history,app});
ReactDOM.render(
        ,document.querySelector(root));
    return app;
```

# 8.支持钩子 **#**

### 8.1 src\index.is #

### src\index.js

```
import React from 'react';
import dva, {connect} from 'dva';
import {Router,Route,routerRedux} from 'dva/router';
+import { message } from 'antd';
+import logger from 'redux-logger';
+import {createBrowserHistory} from 'history';
+import 'antd/dist/antd.css'
+const SHOW = 'SHOW';
+const HIDE = 'HIDE';
 const initialState =
     global: false,
     effects: {}
 const app = dva({
     history:createBrowserHistory(),//自定义history
     initialState:{counter:{number:5}},///自定义初始状态
//effect 执行错误或 subscription 通过 done 主劲抛错时触发,可用于管理全局出错状态
     onError:((err, dispatch) => {message.error(err.message)}),
//在 action 被 dispatch 时触发,用于注册 redux 中间件。支持函数或函数数组格式
     onAction:logger.
     //state 改变时触发,可用于同步 state 到 localStorage,服务器端等
     onStateChange:(state)=>{console.log(state)},
//封装 reducer 执行。比如借助 redux-undo 实现 redo/undo
     onReducer:reducer=>(state,action)=>{//增加额外的reducer
       localStorage.setItem('action', JSON.stringify(action));
       return reducer(state,action);
     //封装 effect 执行。比如 dva-loading 基于此实现了自动处理 loading 状态。
     onEffect:(effect, { put }, model, actionType)=>{
  const { namespace } = model;
        return function*(...args) {
         yield put({ type: SHOW, payload: { namespace, actionType } });
yield effect(...args);
          yield put({ type: HIDE, payload: { namespace, actionType } });
     //指定额外的 reducer, 比如 redux-form 需要指定额外的 form reducer:
     extraReducers:{
       loading(state = initialState, { type, payload }) {
          const { namespace, actionType } = payload || {};
```

```
switch(type){
              return {global:true,models: { ...state.models, [namespace]: true }, effects: { ...state.effects, [actionType]: true },};
              const effects = { ...state.effects, [actionType]: false };
const models = { ...state.models, [namespace]: false };
const global = Object.keys(models).some(namespace => {
              return models[namespace];
});
               return {global,models,effects};
            default:
              return state;
       }
     //指定额外的 StoreEnhancer , 比如结合 redux-persist 的使用:
     //指定额外的 StoreEnhancer
     //它的参数是创建store的函数 (store creator), 返回值是一个可以创建功能更加强大的store的函数 (enhanced store creator)
     extraEnhancers: (createStore) =>{
        return (...args)=>{
            let store = createStore(...args);
console.log('返回更强大的store')
             return {...store,more(){console.log('更强大的强能')}};
    }
+});
function delay(ms) {
    return new Promise((resolve, reject) => {
        setTimeout(function () {
              resolve();
        },ms);
    });
app.model({
    namespace: counter,
    state:{number:0},
    reducers:{
        add(state,){
         return {number:state.number+1};
},
        return {number:state.number+payload||1};
}
    effects:{
       *asyncAdd(action, {call,put}) {
  yield call(delay,1000);
           yield put({type:'counter/add'});
        *goto({to}, { put }) {
         yield put(routerRedux.push(to));
        addWatchers:[
           function*({take,put,call}){
                for(let i=0;istate.counter
) (props=>(
         {props.number}
         props.dispatch({type:"counter/add"})}>+
         props.dispatch({type:"counter/asyncAdd"})}>异步+
props.dispatch({type:"counter/addWatcher",payload:2})}>自定义异步+2
props.dispatch({type:"counter/goto",to:'/'})}>跳转到/
const Home = ()=>Home
app.router(({history})=>(
        <>
        </>
app.start('#root');
```

# 8.2 src\dva\index.js #

```
import React from "react";
import ReactDOM from "react-dom";
import { createStore, combineReducers, applyMiddleware } from "redux";
import { connect, Provider } from "react-redux";
import createSagaMiddleware from "redux-saga";
import * as sagaEffects from "redux-saga/effects";
import { createHashHistory } from "history";
 import {
  routerMiddleware,
  connectRouter,
   ConnectedRouter
  from "connected-react-router";
onst NAMESPACE_SEPARATOR = "/";
 export { connect };
export default function(options) {
  const app =
    _models: [],
    model,
_router: null,
     router,
    start
   function model (model)
    app._models.push(model);
  function router(routerConfig) {
```

```
app._router = routerConfig;
let history = options.history||createHashHistory();
function start(root) {
   let reducers = {
     router: connectRouter(history)
   if (options.extraReducers) {
        reducers = {...reducers,...options.extraReducers};
  for (let i = 0; i < app. models.length; i++) {
  let model = app. models[i];
  reducers[model.namespace] = function(state = model.state, action) {</pre>
       let actionType = action.type;
       let values = actionType.split(NAMESPACE_SEPARATOR);
       if (values[0]
         let reducer = model.reducers[values[1]];
if (reducer) {
            return reducer(state, action);
       return state;
   let combinedReducer = combineReducers(reducers);
   let rootReducer = function(state,action){
        let newState = combinedReducer(state,action);
options.onStateChange&&options.onStateChange(newState);
        return newState;
   if (options.onReducer) {
        rootReducer = options.onReducer(rootReducer);
  let sagaMiddleware = createSagaMiddleware();
  function* rootSaga() {
    unction* rootsaga() {
    let { takeEvery } = sagaEffects;
    for (const model of app._models) {
        for (const key in model.effects) {
            let effect = model.effects[key];
            if (Array.isArray(effect) %% effect[1].type == "watcher") {
            yield sagaEffects.fork(effect[0], sagaEffects);
          } else {
           yield takeEvery(
              model.namespace + NAMESPACE SEPARATOR + key,
              function*(action) {
  yield model.effects[key](action, sagaEffects);
}
           );
         }
      }
   if (options.onAction) {
        if(typeof options.onAction == 'function'){
             options.onAction = [options.onAction];
   }else{
        options.onAction=[];
   let enhancedCreateStore;
   if(options.extraEnhancers){
        enhancedCreateStore = options.extraEnhancers(createStore);
   let store = enhancedCreateStore(
     rootReducer,
     applyMiddleware(routerMiddleware(history), sagaMiddleware,...options.onAction)
  sagaMiddleware.run(rootSaga);
 let App = app._router({ history, app });
ReactDOM.render(
      {App}
     document.querySelector(root)
 );
return app;
```

## 8.版本 #

# 8.1 src\index.js #

src\index.js

```
import React from 'react';
import dva, {connect} from './dva';
import {Router, Route, routerRedux} from './dva/router';
import {createBrowserHistory} from 'history';
import {createBrowserHistory} from 'history';
import 'antd/dist/antd.css';
import logger from 'redux-logger';
const SINOW 'sHOW';
const HIDE = 'HIDE';
const initialLoadingState = {
    global:false, //Afaftem - react-kyfferfore sagakffore s
```

```
initialState:{counter:{number:5}}, //初始状态
    onError: (err, dispatch) => {message.error(err.toString())},
    //值可能是一个中间件函数,也可能是一个中间件的数组
    onAction:logger,
//当仓库中状态发生改变的时候,执行此函数
    onStateChange:state=>console.log('onStateChange', state),
                  是用来增强reducer的
    onReducer:reducer=>(state,action)=>{
         let newState = reducer(state,action);
//newState.counter.number*=2;
     ..
//封闭effect的执行 dva-loading 老的saga effects model 动作类型
    onEffect: (effect, {put}, model, actionType) => {
        const {namespace} = model;
return function*(...args) {
             yield put({type:SHOW,payload:{namespace,actionType}});//namespace=counter actionType asyncAdd
             yield effect(...args);
             yield put({type:HIDE,payload:{namespace,actionType}});
    },
//额外的reducer对象
    extraReducers:{
//当向仓库派发动作的时候
         loading(state=initialLoadingState, {type,payload}) {
             const {namespace,actionType} = payload||{};//namespace =counter actionType -counter/asyncAdd
             switch(type) {
                 case SHOW:
                         global:true,//只要有一个effect执行了,它就为true
                         models:{...state.models,[namespace]:true},
                         effects: { . . . state.effects, [actionType]: true}
                  case HIDE:
                    const effects = {...state.effects, [actionType]:false};
const models = {...state.models, [namespace]:false};
const global = Object.keys(models).some(namespace=>models[namespace]);
                    return {effects, models, global};
                  default:
                    return state;
        }
    //额外的增强器 用来增强createStore
    extraEnhancers:createStore=>{
        return (...args) => {
            let store = createStore(...args);
             console.log('我正在创建仓库');
             return store;
 onst delay = ms=>new Promise(function(resolve){
    setTimeout(() => {resolve();}, ms);
app.model({
    namespace: 'counter',
    state:{number:0},
    reducers:{
         add(state, {payload}) {
            return {number:state.number+(payload||1)};
    effects:{
         *asyncAdd(action, {put, call}) {
             yield call(delay,1000);
throw new Error('异步加1失败');
             yield put({type:'counter/add'});
         *goto({payload}, {put}){
    yield put(routerRedux.push(payload));//connected-react-router
         addWatcher:[
             function*({take,put,call}){
                 for(let i=0;istate.counter
  props=>(
         props.dispatch({type:'counter/add'})}>+
        props.dispatch({type:'counter/asyncAdd'})}>异步加1
props.dispatch({type:'counter/addWatcher'})}>addWatcher
props.dispatch({type:'counter/goto',payload:'/'})}>跳转到/路径里
app.router(({history})=>(
      <>
      </>
app.start('#root');
```

## 8.2 dva\index.js #

```
import React from 'react';
import ReactDOM from 'react-dom';
import {createStore,combineReducers,applyMiddleware} from 'redux';
import {connect,Provider} from 'react-redux';
import createSagaMiddleware from 'redux-saga';
import * as effects from 'redux-saga/effects';
import createRootSaga from './createRootSaga';
import createReducers from './createReducers';
import {createHashHistory} from 'history';
import {routerMiddleware,connectRouter,ConnectedRouter} from 'connected-react-router';
import {prefix} from './utils';
 xport {connect}
export default function(opts) {
    const app = {
   _models:[],
         model,
         _router:null,
         router,
    function model (model) {
         app._models.push(model);
    function router(routerConfig) {
         app._router = routerConfig;
    function start(selector) {
        let history = opts.history||createHashHistory();
let rootReducer = createReducers(app._models,history,opts.extraReducers);
         let finalReducer = function(state,action) {
    let newRootReducer = opts.onReducer(rootReducer);
              let newState = newRootReducer(state.action);
              if(opts.onStateChange){
                   opts.onStateChange(newState);
              return newState;
         let sagaMiddleware = createSagaMiddleware();
         let rootSaga = createRootSaga(app._models,opts.onError||function(){},opts.onEffect);
         if (opts.onAction) {
              if(!Array.isArray(opts.onAction)){
                  opts.onAction=[opts.onAction];
         }else {
          opts.onAction=[]
         let newCreateStore = createStore;
         if(opts.extraEnhancers){
             newCreateStore = opts.extraEnhancers(createStore);
         let store = newCreateStore(finalReducer,opts.initialState||undefined,
         applyMiddleware(routerMiddleware(history),sagaMiddleware,...opts.onAction));
          sagaMiddleware.run(rootSaga);
         let App = app._router({history});
ReactDOM.render(
             <Provider store={store}>
                  <ConnectedRouter history={history}>
                      {App}
                 ConnectedRouter>
             Provider>
              ,document.querySelector(selector));
    return app;
```

### 8.3 router.js #

src\dva\router.js

```
module.exports = require('react-router-dom');
module.exports.routerRedux = require('connected-react-router');
```

### 8.4 createReducers.js #

src\dva\createReducers.js

```
import {combineReducers} from 'redux';
import {prefix} from './utils';
import {connectRouter} from 'connected-react-router';
export default function createReducers (models, history, extraReducers) {
    let reducers = {router:connectRouter(history),...extraReducers};
    for (let model of models) {
        let { namespace, state: initialState, reducers: modelReducers} = model;
        let reducersWithPrefix = prefix(modelReducers, namespace);
        reducers[namespace] = function(state = initialState, action) {
            let reducer = reducersWithPrefix[action.type];
            if (reducer) {
                return reducer(state, action);
            }
            return state;
            };
        }
        return combineReducers(reducers);
    }
}
```

### 8.5 createRootSaga.js #

src\dva\createRootSaga.js

```
import {prefix} from './utils';
import * as sagafffects from 'redux-saga/effects';
export default function createRootSaga(models,onError,onEffect){
       function* rootSaga() {
                try{
  for(let model of models) {
                           or(let model or models){
model.effects = prefix(model.effects,model.namespace);
for(let key in model.effects){
  let effect = model.effects[key];
  if(Array.isArray(effect)&&effect[1].type == 'watcher'){
    let effect = model.effects[key];
    yield sagaEffects.fork(effect[0],sagaEffects);
}
                        yield sagaEffects.takeEvery(key,function*(action){
    let oldEffect = model.effects[key];
    let newEffect = onEffect(oldEffect, sagaEffects, model, action.type);
    yield newEffect(action, sagaEffects);
});
}
                 }catch(error){
                           onError(error);
      return rootSaga;
```

### 8.参考#

- dvais (https://dvais.com/)
   zhufeng-dva-source4 (https://gitee.com/zhufengpeixun/zhufeng-dva-source4.git)