

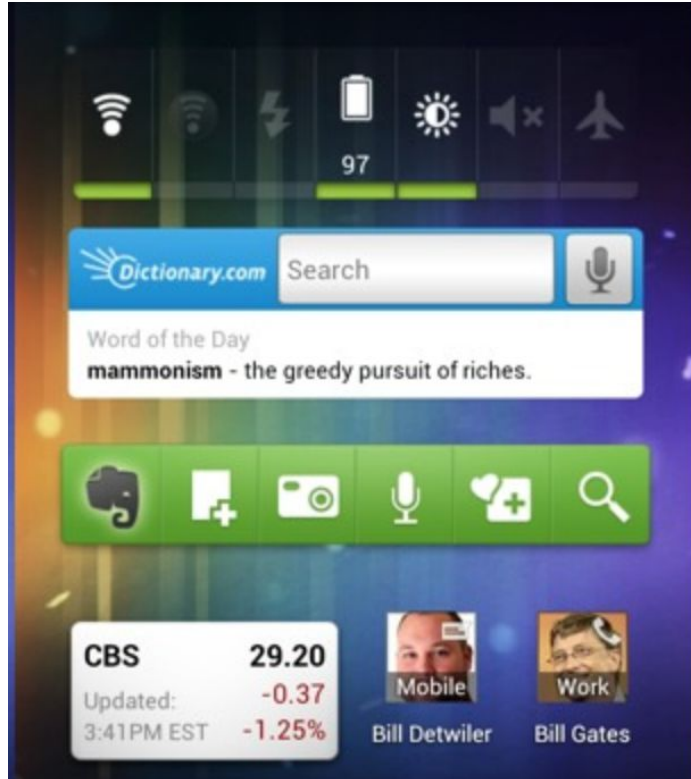


# Native Widgets with React Native

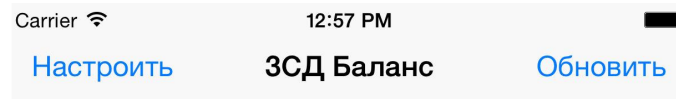
Maxim Erekhinskiy, Frontend developer @



# Terminology



2015



621,25 руб.

19.06.2015 21:33:45

Build

Upload Date



1

Jun 23, 2015 at 7:33 PM

Then



## Feature request

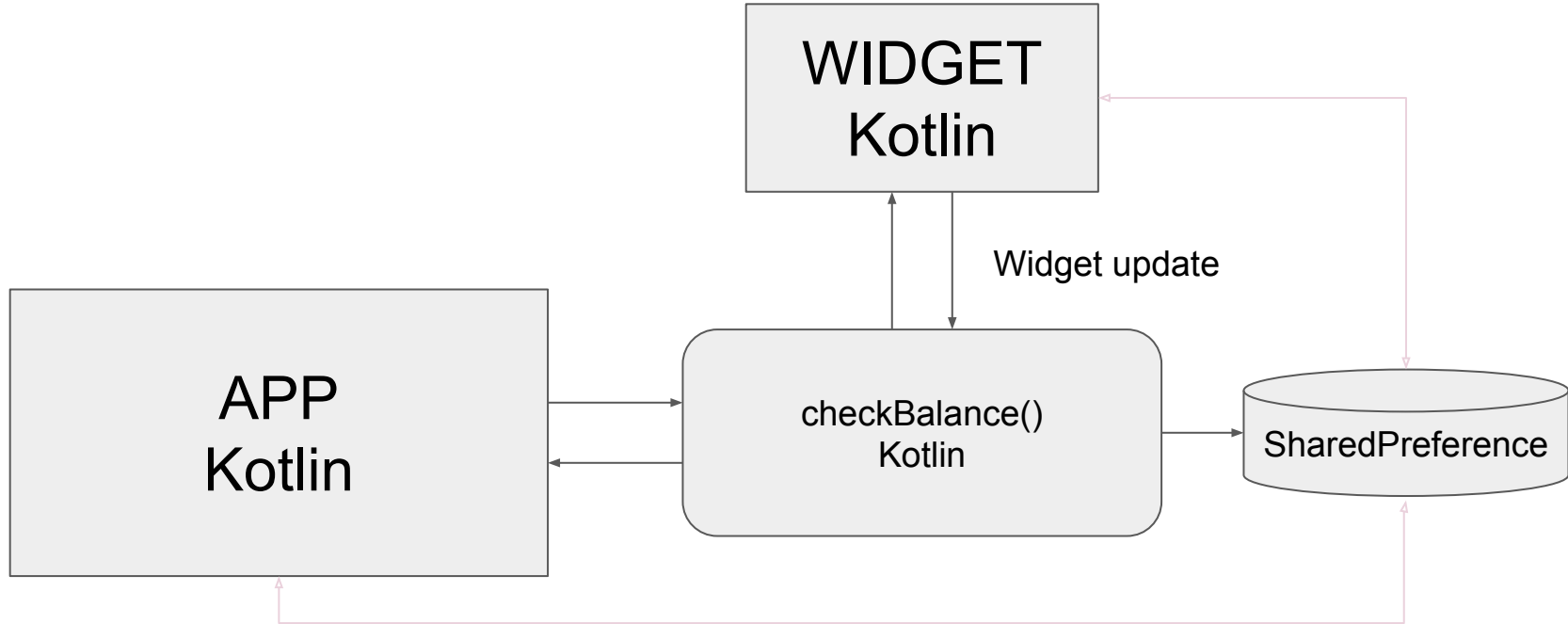


**Константин Земсков**, 4 нояб. 2015 г. в 23:10  1  0

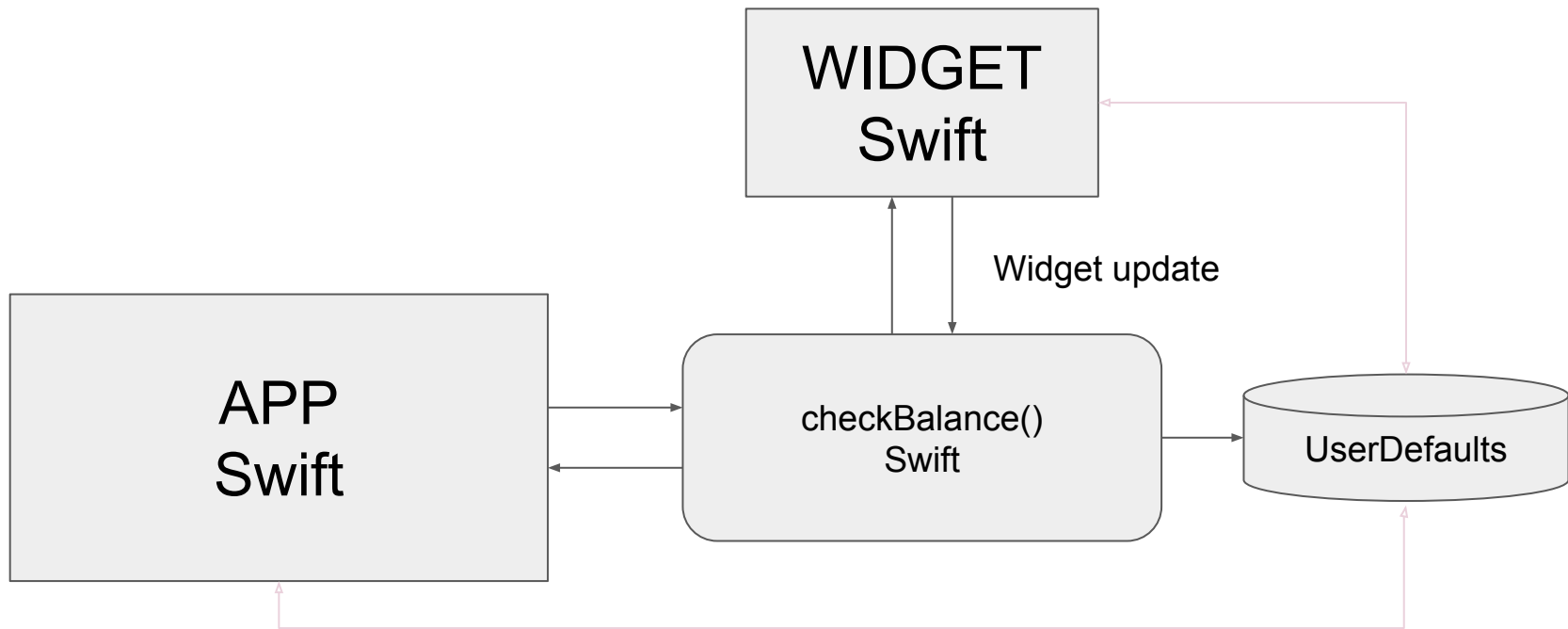


Ещё бы виджет на рабочий стол. Можно было бы б ставить

# Android (native app)



# iOS (native app)

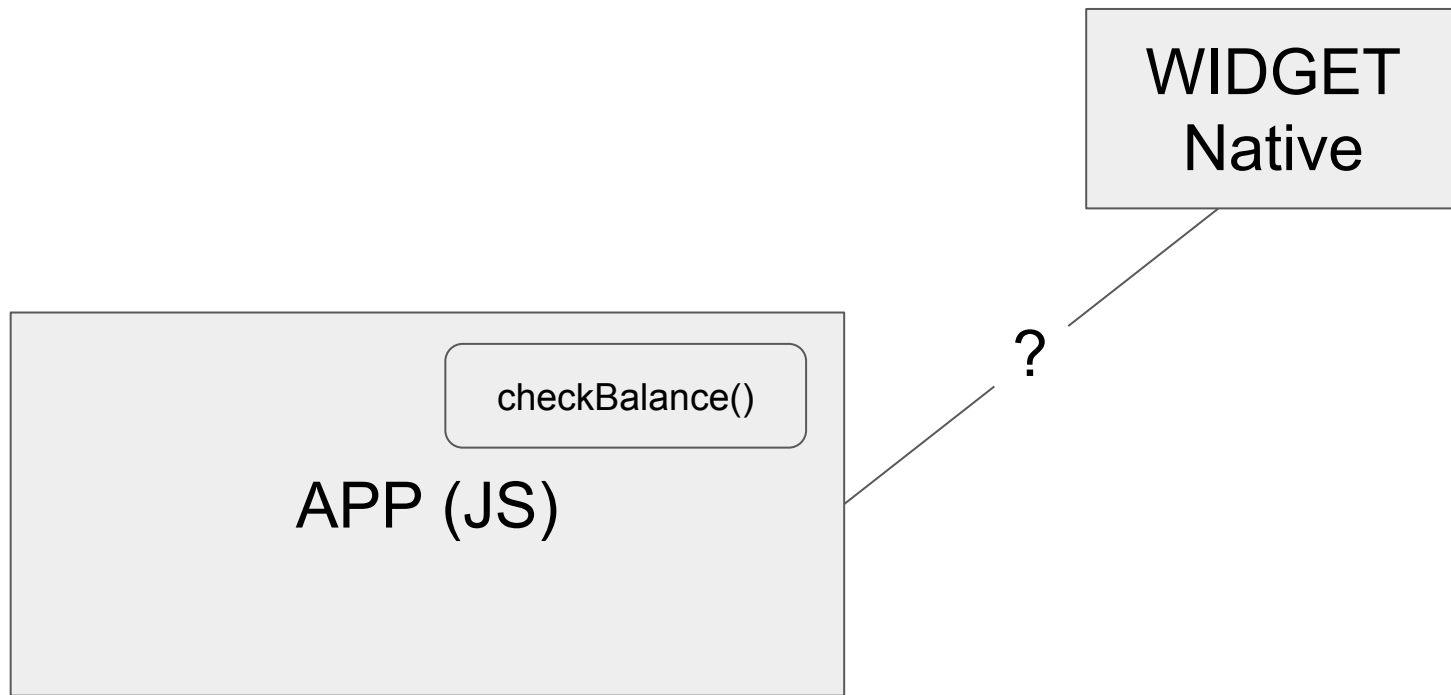


# Requirements

- Widget should work from the device's launch and through device restarts
- Fresh data should be fetched in the background (somehow) and it should be available in the widget immediately



# React Native



# Questions

1. How can we check the balance from the widget?
2. How can we transfer data between the app & widget?
3. How can we update (reload) the widget? (Android only)

# Background Job Android

## Headless JS

<https://facebook.github.io/react-native/docs/headless-js-android.html>

## react-native-background-job

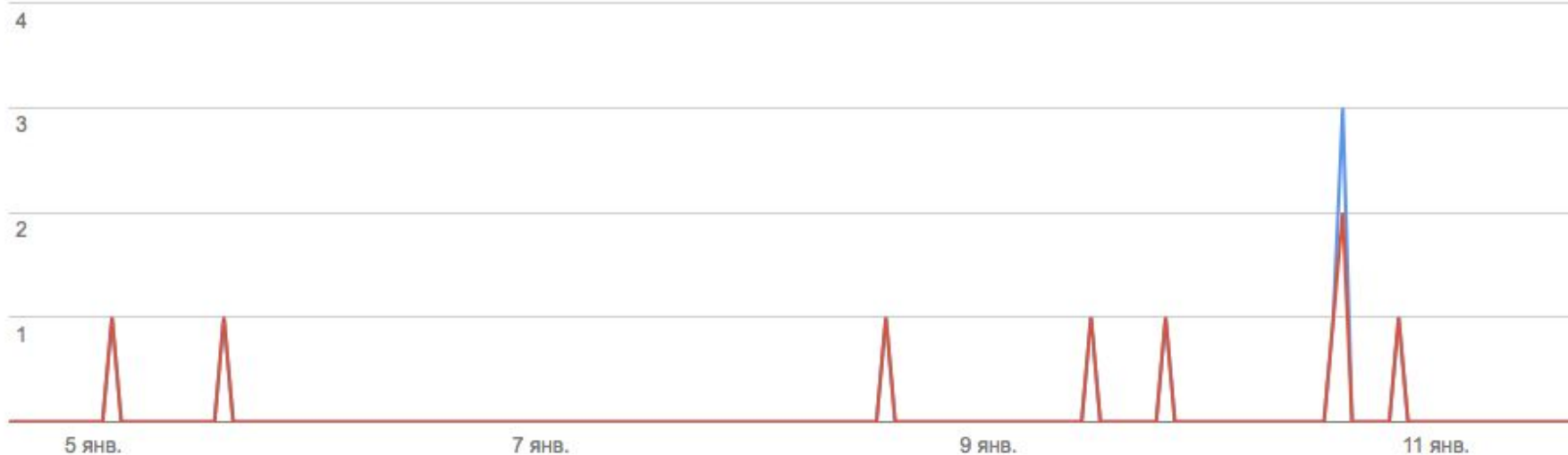
<https://github.com/vikeri/react-native-background-job>

```
BackgroundJob.register({  
  jobKey: JOB_KEY,  
  job: () => this.checkAccounts()  
})
```

```
BackgroundJob.schedule({  
  jobKey: JOB_KEY,  
  timeout: 30000, // running at max 30 sec  
  period: 900000, // run every 15 min  
  persist: true, // over device restarts  
  override: true, // override Jobs with same ID  
  allowExecutionInForeground: false,  
  networkType: BackgroundJob.NETWORK_TYPE_ANY  
});
```

# java.lang.IllegalStateException

Количество отчетов об этой ошибке с 4 янв. 2018 г. по 11 янв. 2018 г.



# Background Fetch iOS

react-native-background-fetch

<https://github.com/transistorsoft/react-native-background-fetch>

```
BackgroundFetch.configure({  
  stopOnTerminate: false  
}, () => this.checkAccounts());
```

```
BackgroundFetch.finish();
```

# iOS BG Fetch Restrictions

- 30 seconds limit
- Unpredictable (when)
- Uncontrollable (how often)

Xcode → Debug → Simulate Background Fetch

# App storage & state

Redux → Async Storage

<https://github.com/rt2zz/redux-persist>

<https://github.com/nightflash/react-native-redux-persist>

```
import {createStore} from 'redux'  
import reducer from './reducer';  
const store = createStore(reducer);  
export const persist = persistStore(store, reducer);  
export default store;
```



# AsyncStorage

- Not accessible until the RN app is initialized
- Is not designed to access the native code
- Is an abstraction on top of RocksDB or SQLite (Android)

<https://facebook.github.io/react-native/docs/asyncstorage.html>

# SharedPreferences & UserDefaults

Redux → Async Storage → **SharedPreferences**

<https://github.com/kevinresol/react-native-default-preference>

```
persist.addEventListener('save', state => {  
  state.settings && DefaultPreference.set(  
    'state-settings',  
    JSON.stringify(state.settings)  
  );  
});
```

# React Native Widget Manager

<https://github.com/nightflash/react-native-widget-manager>

@Override

```
protected List<ReactPackage> getPackages() {  
    return Arrays.<ReactPackage>asList(  
        new MainReactPackage(),  
        ...  
        new RNDefaultPreferencePackage(),  
        new BackgroundJobPackage(),  
        new WidgetManagerPackage(Widget.class, Widget.IDS_EXTRA)  
    );  
}
```

WidgetManager.reloadWidgets();

# But...

You can create a native widget for iOS using React Native

**But you should NOT do that**

- One more Target in project and App in AppRegistry
- Troubles with updating React Native
- Memory issues

<https://github.com/matejkriz/react-native-today-widget/>

# Conclusion

- React Native is ok for building interfaces
- React Native is ok if you need background tasks
- React Native can't help you with Widgets, you will have to do it with Java/Kotlin or Obj-C/Swift



Отлично, что обещано и ожидаешь, то и выполняет



Все работает отлично. Спасибо!



Прекрасно работает без проблем, показывает выписку,из аккаунта не вылетает всем водила советую.автору решпект и уважуха!



Счёт отображает корректно. В отличии от официального, есть виджет. Платить через него не пробовал.