



Mobile User Experience Monitoring
Hybrid Apps – React Native

Environment

React Native CLI	2.0.x
React	>16.x.x
React-native	>0.40.x
NodeJS	v10x
NPM	6x
Java	8
OS	Windows 10/ iOS

Steps for Bundling eG Mobile Agent with Application

The following steps are required to bundle the 'eG Mobile Agent' into Hybrid apps (React Native) to activate user experience monitoring. React Native apps monitored using following components.

1. eG React Native Agent

The above components need to be installed on the apps to activate mobile user experience

How to Install eG React Native Agent

- a) Install eG React Native agent by running the below command inside application's root directory. Here <PATH> refers full path of the extracted plugin zip file

```
npm install <PATH>/@eginnovations/react-native-eg-agent --save
```

- a) Add the following lines into android **project level build.gradle** file

```
buildscript {
    repositories {
        flatDir {
            dirs '../node_modules/@eginnovations/react-native-eg-agent/android/eg-agent'
        }
    }
    dependencies {
        classpath fileTree(include: ['*.jar'], dir: '../node_modules/@eginnovations/react-native-eg-agent/android/eg-agent')
    }
}
```

- b) Add the following lines into **application level build.gradle** file

```
repositories {
    flatDir {
        dirs '../..node_modules/@eginnovations/react-native-eg-agent/android/eg-agent'
    }
}
apply plugin: 'eg'
dependencies {
    implementation fileTree(dir: '../..node_modules/@eginnovations/react-native-eg-agent/android/eg-agent', include: ['*.jar'])
}
```

In the same file under default config in android, add the following

```
android {...
defaultConfig {...
multiDexEnabled true
..}}
dependencies {...
implementation 'androidx.multidex:multidex:2.0.1'
,,}
```

In **gradle.properties** add the line below **android.enableJetifier=true**. If you already have this line with some jars appended these two jars at the end

```
android.jetifier.blacklist = rewriter-agent-2.0.0.jar
```

Note: if you are using gradle >7.x then change the above code to

```
android.jetifier.ignorelist = rewriter-agent-2.0.0.jar
```

c) Set application permissions

Ensure that application requests **INTERNET** and **ACCESS_NETWORK_STATE** permissions by adding below lines to application's AndroidManifest.xml under manifest tag. Add only if it's not already present.

```
<uses-permission android:name="android.permission.INTERNET" />
<uses-permission android:name="android.permission.ACCESS_NETWORK_STATE"/>
```

Also add **android:usesCleartextTraffic="true"** in the application tag of the AndroidManifest.xml file as shown below.

```
<application android:name=".MyApplication"
android:allowBackup="true"
android:icon="@mipmap/logo"
android:label="@string/app_name"
android:roundIcon="@mipmap/logo"
android:supportsRtl="true"
android:theme="@style/AppTheme"
android:usesCleartextTraffic="true">
```

- d) Start the agent

Start the eG Mobile agent while starting the application by implementing the below steps in application's **index.tsx** under **src** folder.

- e) In application's **index.js** or **index.tsx** file, import the eG Mobile Agent Module as mentioned in the below box.

```
import eGAgent from '@eginnovations/react-native-eg-agent';
```

- f) Copy paste the marked content as shown in the screen shot below which is present in the add/modify component page, into application's **index.js** file.

```
eGAgent.configure({ appToken: ' ', host: ' ', port: , }).useReactNative().connect()
```

- g) Open the application in android studio or any IDE and open the MainActivity.java Add the below import statements

```
import com.eg.agent.android.eGAndroidAgent;  
import com.eg.agent.android.AppPlatform;
```

In the same file, inside onCreate method, add the below bolded lines and replace the app token and URL values that are obtained from add component page.

```
eGAndroidAgent.withCollectorHost("<APP_TOKEN>", "URL").start(getApplicationContext());  
eGAndroidAgent.setAppliacionPlatform(AppPlatform.React);
```

Build and run the application

Clean the project and build the application. After successful build, run the application in an emulator or mobile device and login to eG manager application to start seeing data.

To run the application run the below command

```
react-native run-android
```

For any issues, just try reinstalling all the modules by running below commands from application's root directory

```
rm -rdf node_modules  
yarn install
```