

Perform 2018

Mobile Performance Management for Native Mobile Applications

Hands-on Training Instructions

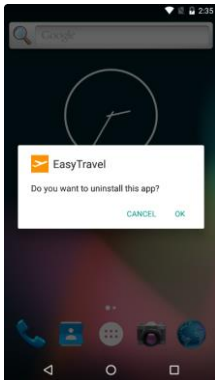
Lesson 4 – Connect the Android App to Dynatrace AppMon





Preparation – Uninstall the easyTravel app

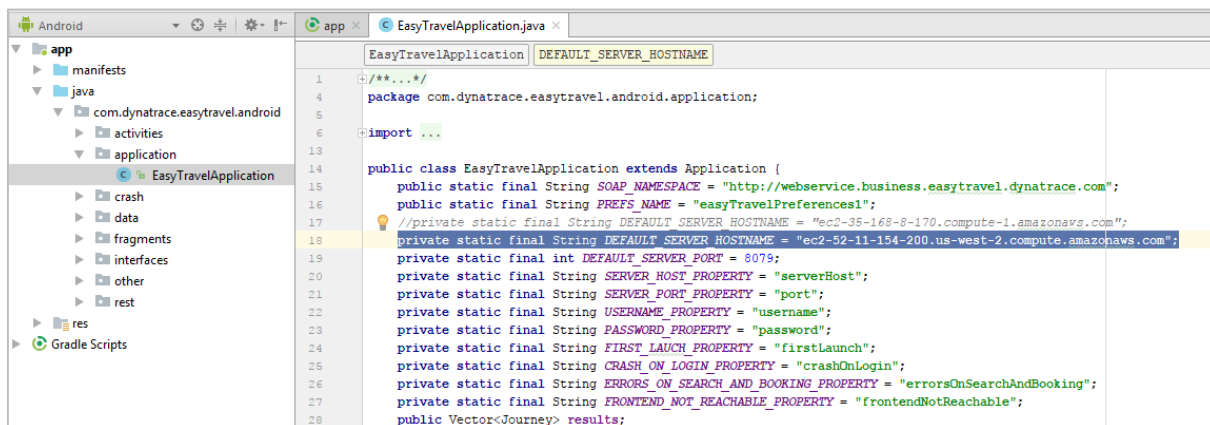
Uninstall the app in your emulator to ensure that it will start up with the new settings, the next time it is started.



Connect the app to the AppMon environment

1. Find the EasyTravelApplication class in Android Studio and change the DEFAULT_SERVER_HOSTNAME constant to the easyTravel that is connected to our AppMon instance.

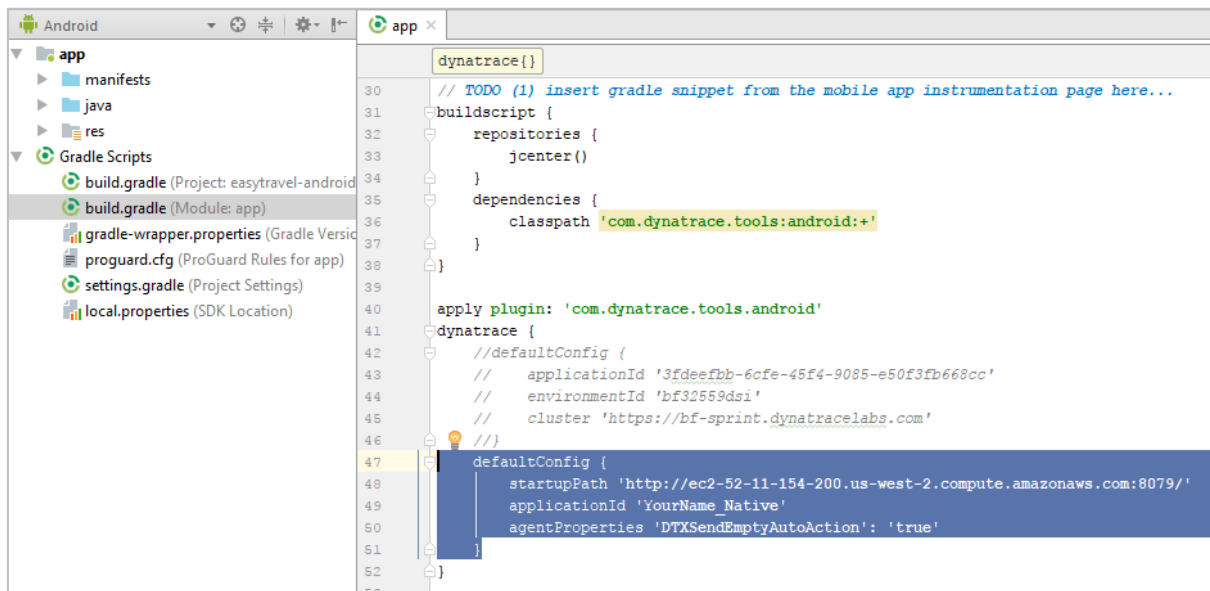
```
DEFAULT_SERVER_HOSTNAME = "ec2-52-11-154-200.us-west-2.compute.amazonaws.com"
```





2. Open the app module's build.gradle file and change the default config of the dynatrace plugin:

```
defaultConfig {  
    startupPath 'http://ec2-52-11-154-200.us-west-2.compute.amazonaws.com:8079/'  
    applicationId 'YourName_Native'  
    agentProperties 'DTXSendEmptyAutoAction': 'true'  
}
```




3. Run the application : log in as a user, book a trip, generate a crash, etc...



Analyze the data in the AppMon Web interface

4. Launch the AppMon web interface in your browser : <https://ec2-52-11-154-200.us-west-2.compute.amazonaws.com:9911/>
5. If you get a page with a warning about your connection not being private (or a similar message, depending on your browser), please proceed (or accept) to continue to the site.



Your connection is not private

Attackers might be trying to steal your information from **ec2-52-11-154-200.us-west-2.compute.amazonaws.com** (for example, passwords, messages, or credit cards). [Learn more](#)

NET::ERR_CERT_COMMON_NAME_INVALID

☐ Automatically send some [system information and page content](#) to Google to help detect dangerous apps and sites. [Privacy policy](#)

HIDE ADVANCED


Back to safety

This server could not prove that it is **ec2-52-11-154-200.us-west-2.compute.amazonaws.com**; its security certificate does not specify Subject Alternative Names. This may be caused by a misconfiguration or an attacker intercepting your connection.

[Proceed to ec2-52-11-154-200.us-west-2.compute.amazonaws.com \(unsafe\)](https://ec2-52-11-154-200.us-west-2.compute.amazonaws.com:9911/)



- Please log in (see credentials in class github readme).

 dynatrace appmon

Username



Password

☐ Remember me

- Find your application in the **Applications** dashboard (left menu)





 dynatrace appmon 

Dashboards

My dashboards

Favorites

Shared

Business

Business analytics

World map

User analytics

Omni channel

Visits

User actions

App owner

Applications

Response time hotspots

Errors

Transaction flow

PurePaths

PurePath analytics

Operations

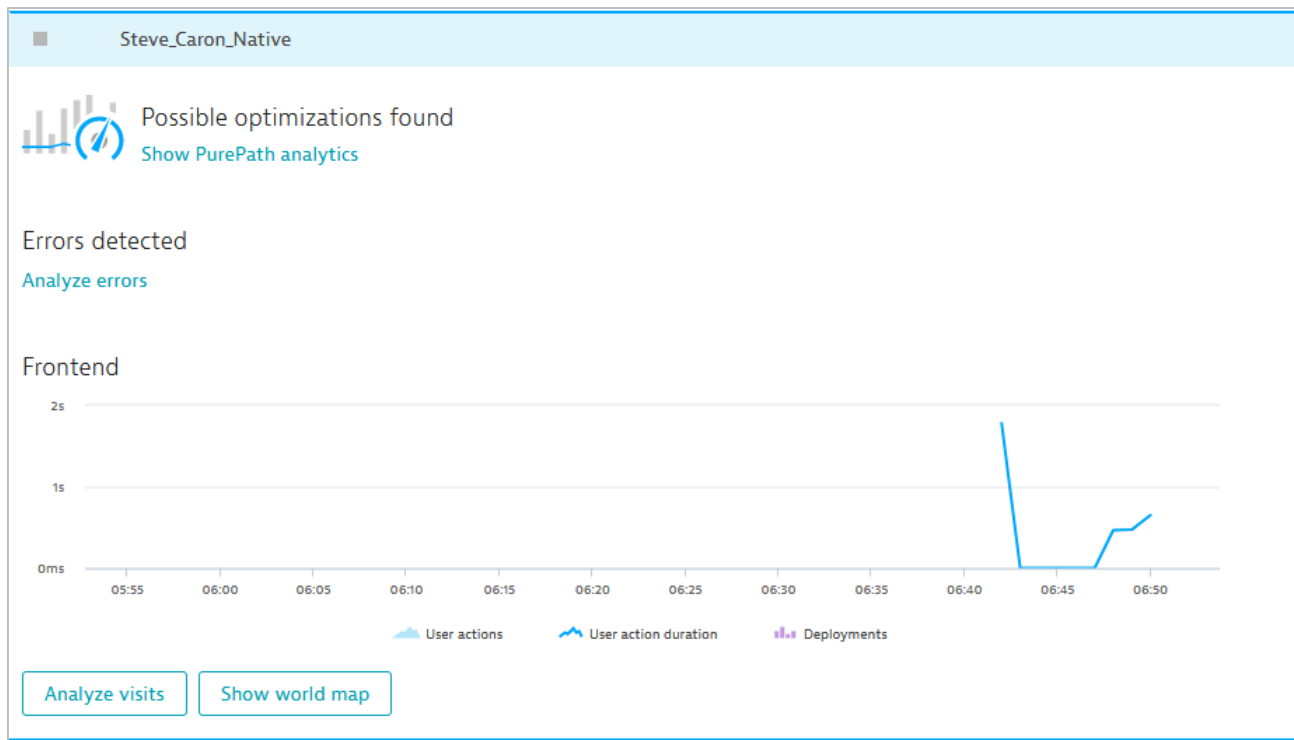
Infrastructure

Hosts

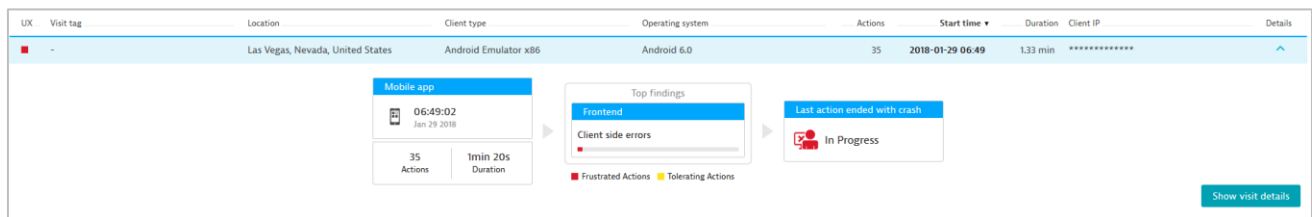
Processes

Databases





8. Click on Analyze visits



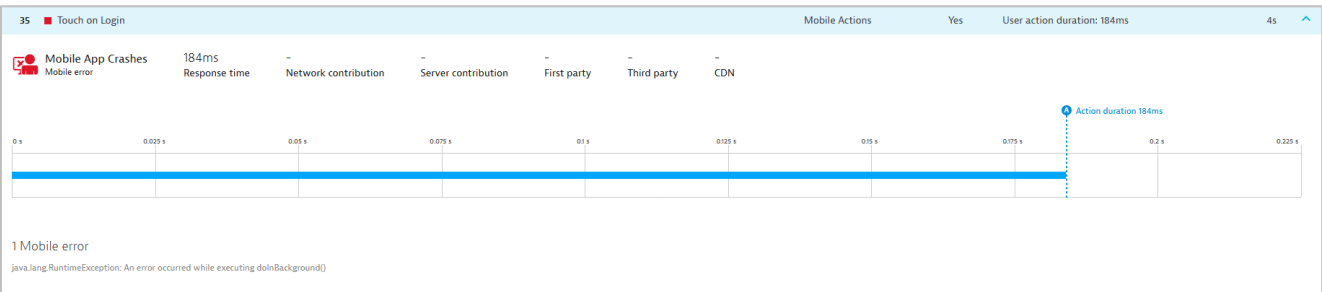


9. Click on Show Visit Details to see individual user actions.

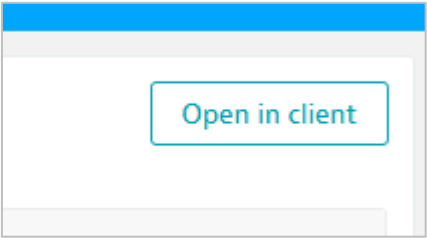
Visit with 35 actions Filter user actions

Step	User action	Action group	Failed	Performance metric	Threshold	Details
1	Loading EasyTravel	Mobile Actions	No	User action duration: 166s	4s	✓
2	Touch on Open navigation drawer	Mobile Actions	No	User action duration: 512ms	4s	✓
3	Touch on NavigationMenuItemView	Mobile Actions	No	User action duration: 516ms	4s	✓
4	Touch on Save	Mobile Actions	No	User action duration: 515ms	4s	✓
5	Touch on Open navigation drawer	Mobile Actions	No	User action duration: 505ms	4s	✓
6	Touch on NavigationMenuItemView	Mobile Actions	No	User action duration: 506ms	4s	✓
7	Touch on Login	Mobile Actions	No	User action duration: 179ms	4s	✓
8	Touch on Open navigation drawer	Mobile Actions	No	User action duration: 508ms	4s	✓
9	Touch on NavigationMenuItemView	Mobile Actions	No	User action duration: 513ms	4s	✓
10	WebRequest(ec2-35-168-8-170.compute-1.amazonaws.com)	Mobile ADK Actions	No	User action duration: 146ms	4s	✓
11	WebRequest(ec2-35-168-8-170.compute-1.amazonaws.com)	Mobile ADK Actions	No	User action duration: 111ms	4s	✓
12	WebRequest(ec2-35-168-8-170.compute-1.amazonaws.com)	Mobile ADK Actions	No	User action duration: 106ms	4s	✓
13	WebRequest(ec2-35-168-8-170.compute-1.amazonaws.com)	Mobile ADK Actions	No	User action duration: 119ms	4s	✓
14	WebRequest(ec2-35-168-8-170.compute-1.amazonaws.com)	Mobile ADK Actions	No	User action duration: 100ms	4s	✓
15	Touch on SEARCH	Mobile Actions	No	User action duration: 103ms	4s	✓
16	Touch on Book Journey	Mobile Actions	No	User action duration: 512ms	4s	✓
17	Touch on Book Journey	Mobile Actions	No	User action duration: 139s	4s	✓
18	Touch on ok	Mobile Actions	No	User action duration: 511ms	4s	✓
19	Touch on Navigate up	Mobile Actions	No	User action duration: 513ms	4s	✓

10. Expanding one action provides more details. For example, here we see the application crash on login.

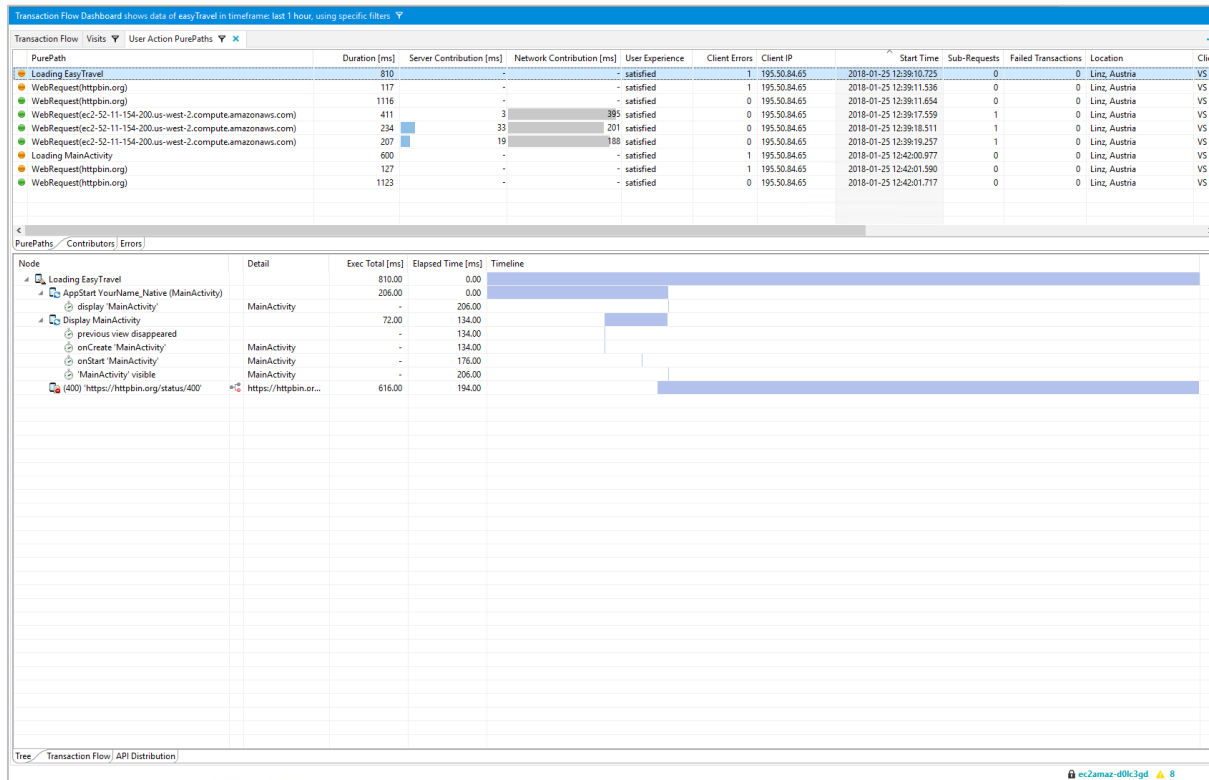


11. To get more details, such as the crash report with stacktrace, you would open this user action in the AppMon rich client (button at the top right of the screen). Rich client is not part of the exercise.

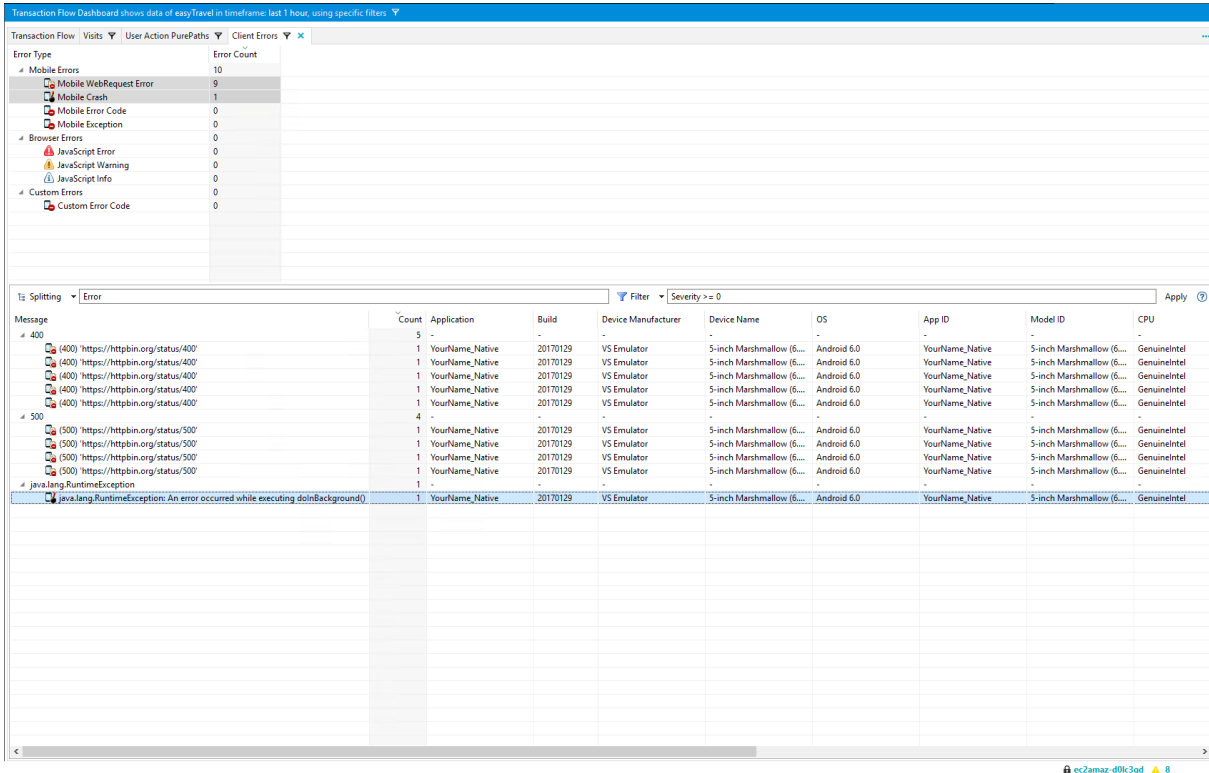




User Action details in rich client



Client errors





Crashe report with stack trace

Mobile Crash Details	
Basic Crash Information:	1 / 2
<pre>java.lang.RuntimeException: An error occurred while executing doInBackground() at android.os.AsyncTask\$3.done(AsyncTask.java:309) at java.util.concurrent.FutureTask.finishCompletion(FutureTask.java:354) at java.util.concurrent.FutureTask.setException(FutureTask.java:223) at java.util.concurrent.FutureTask.run(FutureTask.java:242) at android.os.AsyncTask\$SerialExecutor\$1.run(AsyncTask.java:234) at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1 113) at java.util.concurrent.ThreadPoolExecutor\$Worker.run(ThreadPoolExecutor.java:5 88) at java.lang.Thread.run(Thread.java:818) Caused by: java.lang.RuntimeException: Intentionally triggered crash! ID: 13 at cs.j(SourceFile:56) at cs.h(SourceFile:44) at cs.g(SourceFile:39) at cs.f(SourceFile:35) at cs.e(SourceFile:31) at cs.d(SourceFile:27) at cs.c(SourceFile:23) at cs.a(SourceFile:14) at com.dynatrace.easytravel.android.fragments.UserFragment\$a.a(SourceFile:106) at</pre>	

