Client-side log collection

fork and edit tutorial (https://github.ibm.com/MFPSamples/DevCenter/tree/master/tutorials/en/foundation/8.0/analytics/remote-controlled-client-side-log-collection/index.md) | report issue (https://github.ibm.com/MFPSamples/DevCenter/issues/new)

Overview

Logging is the instrumentation of source code that uses API calls to record messages in order to facilitate diagnostics and debugging. The MobileFirst Platform foundation Logger can be used with iOS, Android, and Cordova applications. The Logger API is similar to commonly used logger APIs, such as console.log (JavaScript), java.util.logging (Java™), and NSLog (Objective-C).

The MobileFirst Logger API has the additional capability of persistently capturing logged data for sending to the server to be used for analytics gathering and developer inspection. Use the Logger APIs to report log data at appropriate levels so that developers who inspect logs can triage and fix problems without having to reproduce problems in their labs.

Logging libraries typically have verbosity controls, that are frequently called **levels**. From least to most verbose: ERROR, WARN, INFO, LOG and DEBUG.

> **Note:** Using FATAL will result in collecting an app crash. To not skew your app crash data we recommend not using this keyword.

Log Capture

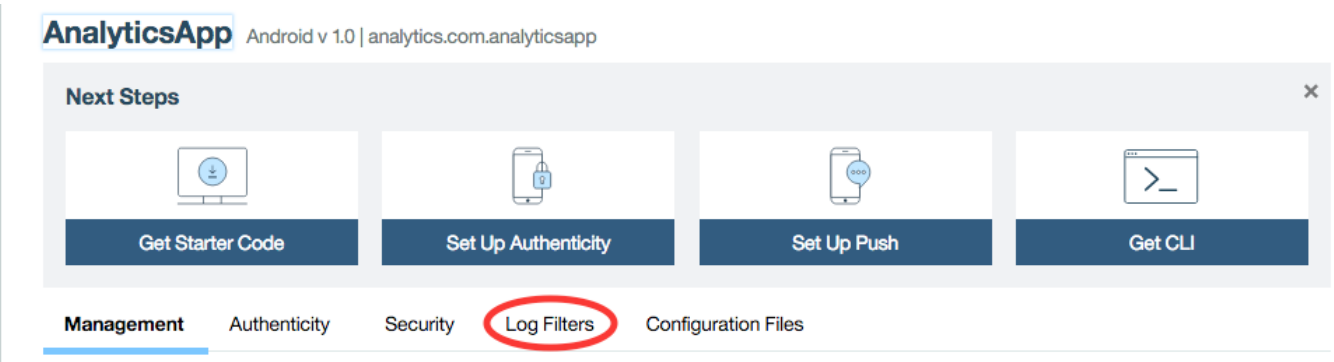
Client log capture can be controlled in two different areas. Client log capture can be controlled by the client itself or by the MobileFirst Runtime Server, more on server control below in Server Control of client log capture.

The logging level can be controlled by code with API calls that are specific to the platform:

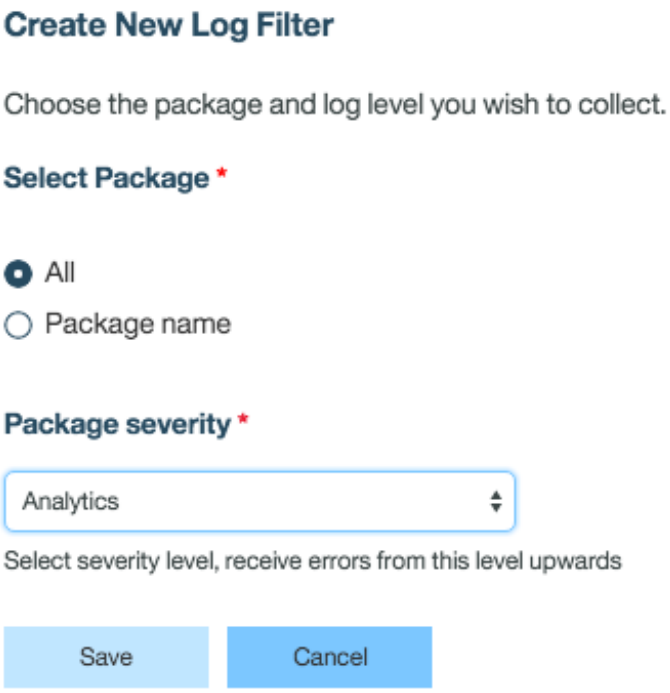
- Logging in Cordova applications (cordova/)
- Logging in iOS applications (ios/)
- Logging in Android applications (android/)

Server Control of Client Log Capture

To configure log capture preferences for applications in production, use the MobileFirst Operations Console. Administrators can control the MobileFirst client SDK log capture and levels from the MobileFirst Operations Console.



Through `Log Filters` you are able to create a filter level that you can log at.



In order to use the server configuration the client has to use the `updateConfigFromServer` method in the Logger API.

Andoird

```
Logger.updateConfigFromServer();
```

iOS

```
[OCLogger updateConfigFromServer];
```

JavaScript

```
WL.Logger.updateConfigFromServer();
```

The Logger config values returned from the server will take precidence over any value set on the client side. When the Client Log Profile is removed and the client tries to retrieve the Client Log Profile the client will receive an empty payload. When the client receives and empty payload the logger config will default to what was origonally configured on the client.

Crash capture

The MobileFirst client SDK, on Android and iOS, captures a stack trace upon application crash and logs it at FATAL level. This type of crash is a true crash where the UI disappears from the user's view.

The MobileFirst client SDK, in JavaScript, captures JavaScript global errors and if possible, a JavaScript call stack, and logs it at FATAL level. This type of crash is not a crash event, and might or might not have any adverse consequences to the user experience at run time.

Crash, uncaught exceptions, and global errors are caught and logged automatically.

For more information

> For more information about logging and log capture, see the user documentation.