

Capture Data

Capturing data

Agenda

- Network Activities
- Notification Activities
- Server Logs
- Client Logs
- Sample Application

Different types of analytics events are captured by the MobileFirst Operational Analytics server: network activities, notification activities, server logs, and client logs.

Network Activities

- Client interacting with the server

When a network activity occurs, the event is captured automatically and forwarded to the MobileFirst Operational Analytics server.

- The following API call results in a *session hit* that is visualized on MobileFirst Operational Analytics:

```
javascript
// a 'session hit' will be recorded upon a successful connection
WL.Client.connect();
```

- The following API call results in an *adapter hit* and a *session hit* that are visualized on the MobileFirst Operational Analytics dashboard:

```
javascript
// an 'adapter hit' and a 'session hit' will be recorded upon a successful
adapter invocation
WLResourceRequest.send();
```

Total Sessions

2,048

Device Sessions

2,048

Web Sessions

0

Sessions ⓘ



(<https://developer.ibm.com/mobilefirstplatform/wp-content/uploads/sites/32/2015/04/71AnalyticsOnlySessions.png>)

Notification activities

- Push notifications

When a push notification occurs, the event is captured automatically and forwarded to the MobileFirst Operational Analytics server.

Notifications By Mediator



● GCM ● APNS

| Mediator | Requests |
|----------|----------|
| GCM | 506 |
| APNS | 395 |

(<https://developer.ibm.com/mobilefirstplatform/wp-content/uploads/sites/32/2015/04/71AnalyticsPush.png>)

Server Logs

- Server events
- Server stack traces

The log data that is generated by MobileFirst Server is automatically forwarded to the MobileFirst Operational Analytics server, where the data can be searched and downloaded.

Weekly Log Severities





Server Logs

| Date | Severe | Warn | Info | Fine | Download |
|---------------------------------|--------|------|------|------|-------------------|
| Tuesday, Jun 23, 2015, 12:00 AM | 0 | 116 | 53 | 0 | ↓ |
| Tuesday, Jun 23, 2015, 1:00 AM | 0 | 100 | 30 | 0 | ↓ |

| | | | | | |
|--------------------------------|---|-----|----|---|-------------------|
| Tuesday, Jun 23, 2015, 2:00 AM | 0 | 89 | 45 | 0 | ↓ |
| Tuesday, Jun 23, 2015, 3:00 AM | 0 | 137 | 67 | 0 | ↓ |
| Tuesday, Jun 23, 2015, 4:00 AM | 0 | 149 | 54 | 0 | ↓ |
| Tuesday, Jun 23, 2015, 5:00 AM | 0 | 127 | 56 | 0 | ↓ |
| Tuesday, Jun 23, 2015, 6:00 AM | 0 | 111 | 56 | 0 | ↓ |

(<https://developer.ibm.com/mobilefirstplatform/wp-content/uploads/sites/32/2015/04/71AnalyticsServer.png>)

To disable this behavior, set the `wl.analytics.logs.forward` property to `false`.

Client Logs

- Debug logs
- Crashes
- Custom events
- Network latency information

You can instrument a MobileFirst application with client logs to record client debugging information and events.

You can use the following APIs to create client logs which are then forwarded to the MobileFirst Operational Analytics server, where they can be searched and downloaded.

```
// Set the log level to trace so that all logs are captured
WL.Logger.config({"level": "TRACE"});
// Create a client side log that is persisted locally until it is sent to the server
WL.Logger.trace("Create a client log at the TRACE level.");
WL.Logger.debug("Create a client log at the DEBUG level.");
WL.Logger.info("Create a client log at the INFO level.");
WL.Logger.warn("Create a client log at the WARN level.");
WL.Logger.error("Create a client log at the ERROR level.");
WL.Logger.fatal("Create a client log at the FATAL level.");
```