Capture Data

Capturing data

Agenda

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

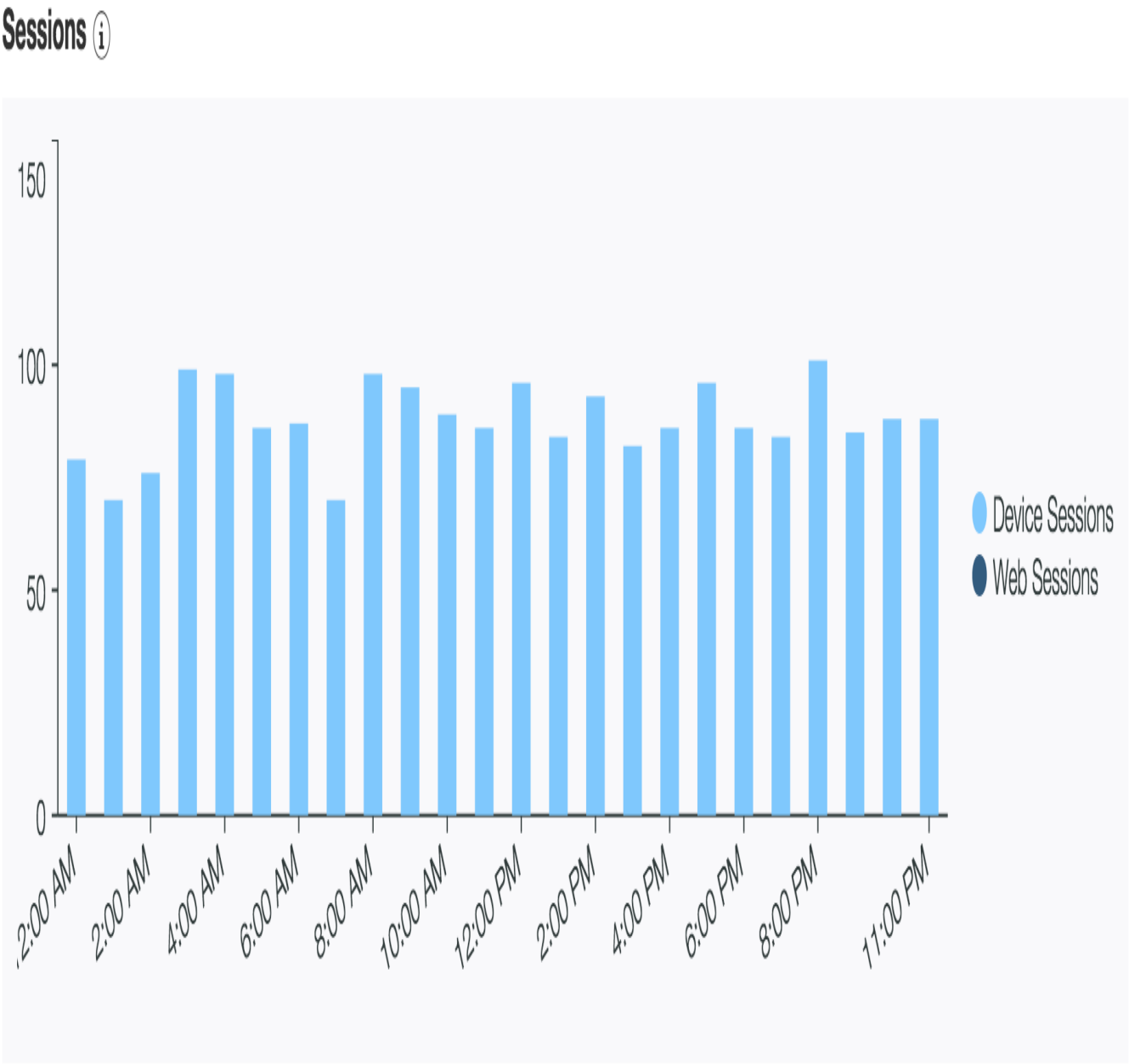
Different types of analytics events are captured by the MobileFirst Operational Analytics server: network activities, notification activities, server logs, and client logs.

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();
  ```



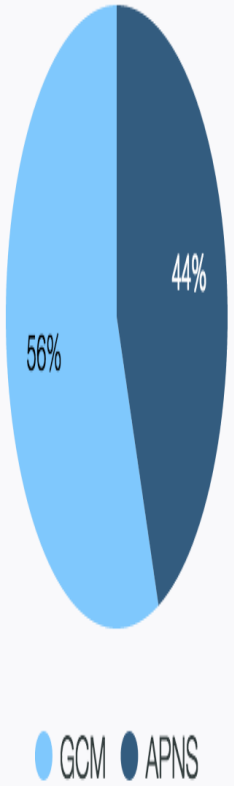
(https://developer.ibm.com/mobilefirstplatform/wp-content/uploads/sites/32/2015/04/71AnalyticsOnlySessions.png)

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



Mediator	Requests
GCM	506
APNS	395

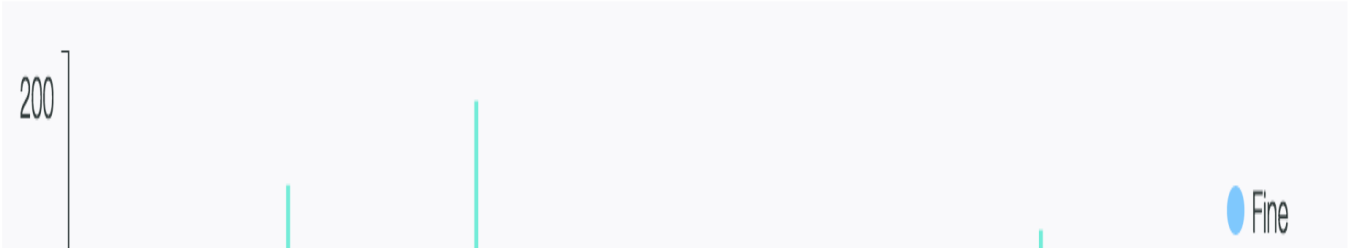
(https://developer.ibm.com/mobilefirstplatform/wp-content/uploads/sites/32/2015/04/71AnalyticsPush.png)

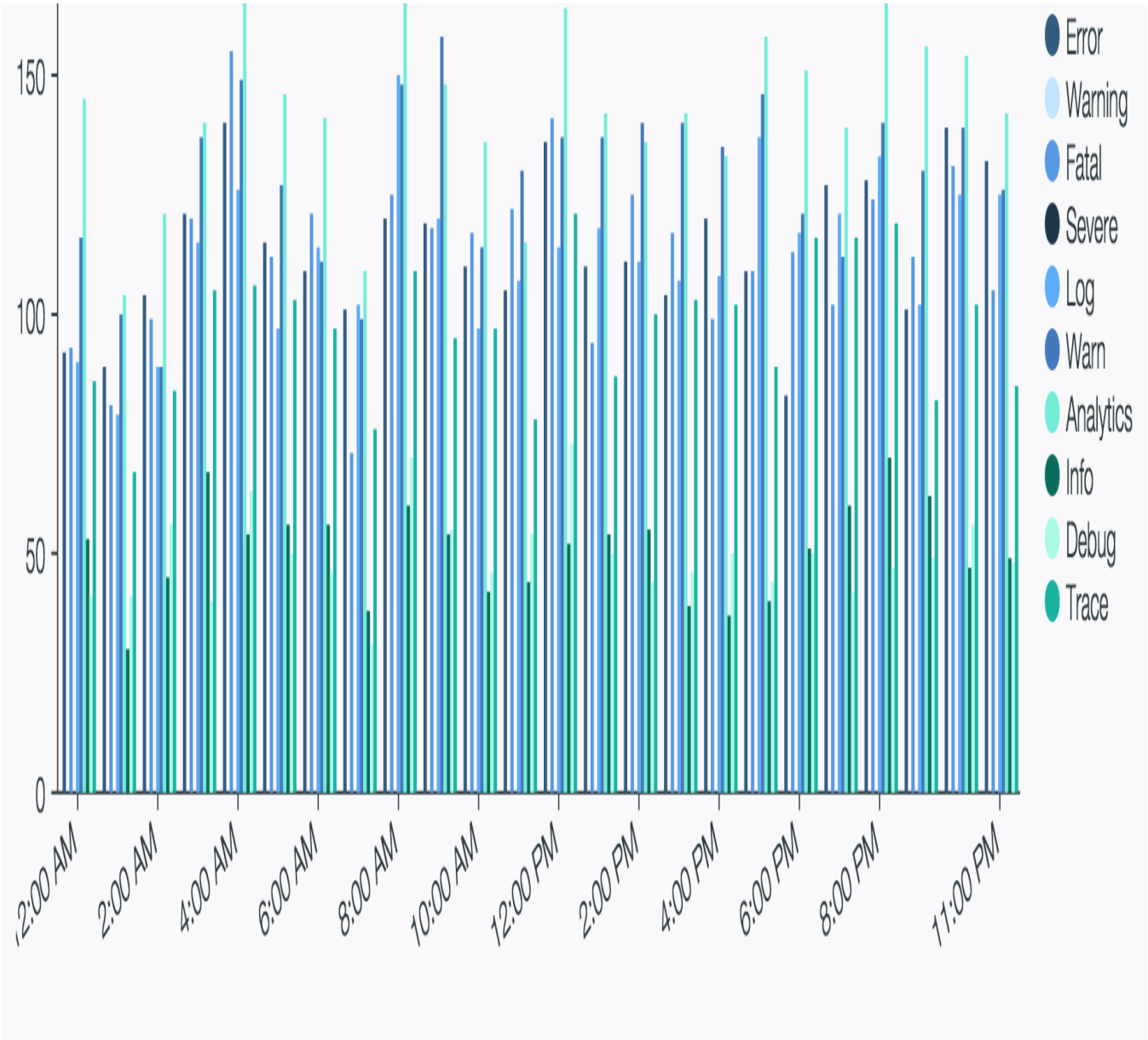
Server Logs

- 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.");
```