

Localytics raw data exports (also known as log exports, customer exports, session exports) consist of JSON blobs representing every session (start and close) and event that is uploaded to Localytics.. Due to the nature of mobile applications and the on-device caching of app data, a log will mostly contain data for the day or hour of the log, but may also contain data from previous days or hours, which were not uploaded until a later time.

All exports are stored in an Amazon Web Service (AWS) S3 bucket. This makes it possible to leverage Amazon's S3 APIs to access data for any day that logs were recorded. All data is stored as collections of files in a path with the following hierarchy:

**<YourBucket>/YYYY/MM/DD/APPID**

So, data for appid **ABCD-1234-EFGH** from February 18th, 2019 will be found in:

**<YourBucket>/2019/02/18/ABCD-1234-EFGH/**

Each app directory will contain multiple gzip compressed log files using a two digit naming structure (00.log.gz, 01.log.gz, 23.log.gz, etc) each representing the hour that the data was collected and processed. Not all days and/or hours will be listed, depending on whether data was uploaded and processed on that day and hour for the specific application.

## Accessing the S3 Bucket

Localytics will maintain the S3 bucket. To get access you will need to:

1. Create an Amazon AWS Account or have access to an existing one
2. Provide Localytics with the AWS Account ID or IAM details for the account

Since the AWS bucket is hosted by Localytics, you will not see in the Amazon AWS console, but it is accessible via other tools with your credentials.

## Viewing the data

There are various methods to retrieving the data from the AWS S3 bucket depending on how you plan on leveraging the information. To simply download and view the contents of the log data you will need to download an application to view the data. Some examples include:

s3cmd (<http://s3tools.org/s3cmd>)

AWS CLI (<http://docs.aws.amazon.com/cli/latest/userguide/cli-chap-getting-set-up.html>)

CloudBerry (<http://www.cloudberrylab.com/>)

Transmit (<http://www.panic.com/transmit/>)

With these apps you can view and download the contents of the buckets shared with you. To set up any of these applications we recommend reviewing their respective documentation but in all cases the applications will require your Access Key information (ID & Secret Key) to login. The Access Key information is not provided by Localytics but rather are details specific to your AWS account.

The specific path to your S3 bucket will be provided by Localytics and typically flows the pattern of:  
**s3n://exports.localytics.<character-range>/<YourBucketName>/**

**Note: If you are interested in setting up a database or data pipeline using raw data please contact your Account Manager as we provide a variety of packages and custom services to do so.**

## Field Descriptions

Bold values are non-optional values for their respective data point line types.

<b>Field</b>	<b>Description</b>	<b>Type</b>
acquire_campaign	Name of campaign from app installation source	string
acquire_source	Name of source from app installation campaign	string
advertising_id	Device advertiser ID value	string
android_id	Android device ID value	string
<b>app</b>	The Localytics application ID (listed in Localytics Administration)	string
<b>app_ver</b>	The application version	string
<b>at</b>	When the session started or event occurred, in UTC	date time
<b>birth_date</b>	Epoch timestamp of first time device is seen	int
<b>browser</b>	Client web browser description	string
bundle_id	IOS Bundle ID	string
<b>carrier</b>	The wireless carrier	string
city_name	The city where the device is	string
<b>closed_at</b>	When the session close occurred, in UTC	date time
clv_change	Incrementing value for CLV / LTV total	int
clv_total	Sum of all clv_change values at write time	int
country	The country where device is located	string
custom	For events, this field contains the descriptive attributes	array
custom_x	Custom Dimension (0-9) value recorded as passed by the application	string
customer_ids	Series of information pertaining to a customer	array
data_conn	Connection type for the device, ie "wifi"	string
<b>device_new</b>	Whether or not this is the first session ever received for this device, for this app	boolean
<b>device_timezone</b>	Device GMT offset in seconds	int
<b>device_uuid</b>	A hashed ID used to distinguish individual devices	string
google_advertising_id	Google advertising ID for an android device	string
has_push	Whether or not the event has a push ID	boolean
<b>install_uuid</b>	A hashed ID used to distinguish installations	string
jailbroken	Whether or not the device is jailbroken	boolean
<b>language</b>	Language to which the device is set	string
lat	The latitude passed by the device if GPS is enabled and passed	double
<b>library_ver</b>	The version of the Localytics client library used in the app	string
lng	The longitude passed by the device if GPS is enabled and passed	double
marketing_campaign	Web campaign name from referrer URL source	string

<b>marketing_medium</b>	Web medium name from referrer URL source	string
<b>marketing_source</b>	Web source name from referrer URL source	string
<b>model</b>	The model reported by the device	string
<b>name</b>	The name of the event recorded	string
<b>nth</b>	This is the nth session on the device	int
<b>os_ver</b>	Version of the operating system reported by the device	string
<b>platform</b>	The library platform (e.g. Android, BlackBerry, iPhone)	string
<b>region</b>	The region for the city/country	string
<b>report_attrs</b>	For events, this field contains the highly unique descriptive attributes not presented in the Localytics Dashboard	array
<b>screen_flow</b>	The series of screens viewed by the app user	array
<b>sec_since_last_session</b>	Number of seconds since the last session	int
<b>session_uuid</b>	Unique ID used to distinguish sessions in event data points. Directly related to uuid on session open and close data points.	string
<b>total_session_sec</b>	The number of seconds for the entire duration of the session, once closed	int
<b>type</b>	The type of session behavior (s = open, c = close, e = event)	string
<b>uuid</b>	A unique ID used for each event, or session start and close pair. Each event will have a unique value and the session start and close (for a given session) will share a value.	string

## Data Format

### Session Start

```
{
  "acquire_campaign": "Men_25-34_GetMoreUsers",
  "acquire_source": "Fiksu",
  "advertising_id": "A1B2C3-D4E5-ABCD-1234-0987POIU65YT",
  "android_id": "123456",
  "app": "abcdefghi-1234567890",
  "app_ver": "6.3",
  "at": "2014-03-31 01:37:41",
  "birth_date": 1362663686,
  "browser": "Other",
  "bundle_id": "8764523",
  "carrier": "Frontier Communications",
  "city_name": "Fort Wayne",
  "country": "us",
  "custom_0": "Annual",
  "custom_1": "International",
  "custom_2": "Premium",
  "custom_3": "Native Login",
  "custom_4": "Useful Information",
  "custom_5": "More Info",
  "custom_6": "Something Important",
  "customer_ids": {
    "customer_id": "9128734650"
  },
  "data_conn": "wifi",
  "device_new": false,
  "device_timezone": -14400,
  "device_uuid": "8bbca4bcb93e94bc7220ef0df77bb5c282567d17",
  "google_advertising_id": "ab3456f12349",
  "has_push": false,
  "install_uuid": "fa01c512046a4ca27d2fc74afba3686e610893c1",
  "jailbroken": false,
  "language": "en",
  "lat": 34.5,
  "library_ver": "iOSa_2.21.0",
  "lng": 56.4,
  "marketing_campaign": "campaign",
  "marketing_medium": "medium",
  "marketing_source": "source",
  "model": "iPhone 5",
  "nth": 29,
  "os_ver": "7.1",
  "platform": "iPhone",
  "region": "New England",
  "sec_since_last_session": 26,
  "type": "s",
  "uuid": "7946e8ec86bf9acc8ae404f49b2e5157894ec618"
}
```

### Session Close with Screens

```
{
  "acquire_campaign": "Men_25-34_GetMoreUsers",
  "acquire_source": "Fiksu",
  "advertising_id": "A1B2C3-D4E5-ABCD-1234-0987POIU65YT",
  "app": "abcdefghi-1234567890",
  "app_ver": "6.3",
  "at": "2014-03-31 00:34:01",
  "birth_date": 1390152419,
  "browser": "Other",
  "bundle_id": "5498211",
  "carrier": "AT&T",
  "city_name": "Boston",
  "closed_at": "2014-03-31 00:34:11",
  "country": "us",
  "custom_0": "Annual",
  "customer_ids": {
    "customer_id": "9128734650"
  },
  "data_conn": "wifi",
  "device_new": false,
  "device_timezone": -25200,
  "device_uuid": "04a770b098fe4c7befe902373f7e79619a8fcac7",
  "has_push": true,
  "install_uuid": "534716b7a7673d711148fbf370283afa884d7012",
  "jailbroken": false,
  "language": "en",
  "lat": 23.5,
  "library_ver": "iOSa_2.21.0",
  "lng": 55.8,
  "marketing_campaign": "campaign",
  "marketing_medium": "medium",
  "marketing_source": "source",
  "model": "iPhone 5",
  "nth": 53,
  "os_ver": "7.0.6",
  "platform": "iPhone",
  "region": "New England",
  "screen_flow": [
    "Main",
    "Login",
    "Options",
    "User Details",
    "Options",
    "Main",
  ],
  "session_uuid": "0593916b0e6b12cbbe957f1be5d1d5dd22fa6d65",
  "total_session_sec": 9,
  "type": "c",
  "uuid": "d953c9d885eb1d9fc9e0f9427c8327a45053a3ca"
}
```

**Events without Attributes or Customer ID**

```
{
  "acquire_campaign": "Men_25-34_GetMoreUsers",
  "acquire_source": "Fiksu",
  "android_id": "234ggda56211",
  "app": "abcdefghi-1234567890",
  "app_ver": "6.3",
  "at": "2014-03-31 01:41:03",
  "birth_date": 1374768747,
  "browser": "Other",
  "bundle_id": "23411569",
  "carrier": "Comcast Cable",
  "city_name": "Chicago",
  "clv_total": "2499",
  "clv_change": "175",
  "country": "us",
  "device_new": false,
  "device_timezone": -18000,
  "device_uuid": "94e2c8dd0ec50f219d484586d63f6b4bcae4b586",
  "google_advertising_id": "eeee4321",
  "has_push": false,
  "install_uuid": "07c19ee343a492fe567e36413ff8310bbf36cec7",
  "jailbroken": false,
  "language": "en",
  "lat": 12.5,
  "library_ver": "iOSa_2.21.0",
  "lng": 89.4,
  "marketing_campaign": "campaign",
  "marketing_medium": "medium",
  "marketing_source": "source",
  "model": "iPhone 5",
  "name": "Add To Cart",
  "nth": 35,
  "os_ver": "7.1",
  "platform": "iPhone",
  "region": "Midwest",
  "session_uuid": "8cfc5d6388f55ec858dd4c19f3aa8eccc762746d",
  "type": "e",
  "uuid": "eecda51462269488d77b1708848f91c851dd2fbc"
}
```

**Events with Event Attributes, Custom Dimensions, and Customer IDs**

```
{
  "acquire_campaign": "Men_25-34_GetMoreUsers",
  "acquire_source": "Fiksu",
  "android_id": "234ggda56211",
  "app": "abcdefghi-1234567890",
  "app_ver": "6.3",
  "at": "2014-03-31 01:41:03",
  "birth_date": 1374768747,
  "browser": "Other",
  "bundle_id": "23411569",
  "carrier": "Comcast Cable",
  "city_name": "Chicago",
  "clv_total": "2499",
  "clv_change": "175",
  "country": "us",
  "custom": {
    "order quantity": "3-5 items",
    "item price range": "$25-50",
    "subtotal price range": "$75-100",
    "promo code": "No",
    "size": "XL"
  },
  "custom_0": "Annual",
  "custom_1": "International",
  "customer_ids": {
    "customer_id": "9128734650"
  },
  "device_new": false,
  "device_timezone": -18000,
  "device_uuid": "94e2c8dd0ec50f219d484586d63f6b4bcae4b586",
  "google_advertising_id": "eeee4321",
  "has_push": false,
  "install_uuid": "07c19ee343a492fe567e36413ff8310bbf36cec7",
  "jailbroken": false,
  "language": "en",
  "lat": 12.5,
  "library_ver": "iOSa_2.21.0",
  "lng": 89.4,
  "marketing_campaign": "campaign",
  "marketing_medium": "medium",
  "marketing_source": "source",
  "model": "iPhone 5",
  "name": "Add To Cart",
  "nth": 35,
  "os_ver": "7.1",
  "platform": "iPhone",
  "region": "Midwest",
  "session_uuid": "8cfc5d6388f55ec858dd4c19f3aa8eccc762746d",
  "type": "e",
  "uuid": "eecda51462269488d77b1708848f91c851dd2fbc"
}
```

**Events with Event and Report Attributes without Customer ID**

```
{
  "acquire_campaign": "Men_25-34_GetMoreUsers",
  "acquire_source": "Fiksu",
  "android_id": "234ggda56211",
  "app": "abcdefghi-1234567890",
  "app_ver": "6.3",
  "at": "2014-03-31 01:41:03",
  "birth_date": 1374768747,
  "browser": "Other",
  "bundle_id": "23411569",
  "carrier": "Comcast Cable",
  "city_name": "Chicago",
  "clv_total": "2499",
  "clv_change": "175",
  "country": "us",
  "custom": {
    "order quantity": "3-5 items",
    "item price range": "$25-50",
    "subtotal price range": "$75-100",
    "promo code": "No",
    "size": "XL"
  },
  "device_new": false,
  "device_timezone": -18000,
  "device_uuid": "94e2c8dd0ec50f219d484586d63f6b4bcae4b586",
  "google_advertising_id": "eeee4321",
  "has_push": false,
  "install_uuid": "07c19ee343a492fe567e36413ff8310bbf36cec7",
  "jailbroken": false,
  "language": "en",
  "lat": 12.5,
  "library_ver": "iOSa_2.21.0",
  "lng": 89.4,
  "marketing_campaign": "campaign",
  "marketing_medium": "medium",
  "marketing_source": "source",
  "model": "iPhone 5",
  "name": "Add To Cart",
  "nth": 35,
  "os_ver": "7.1",
  "platform": "iPhone",
  "report_attrs": {
    "SKU": "XYZ123",
    "Unit Price": "32.25",
    "Qty": "3"
  },
  "region": "Midwest",
  "session_uuid": "8cfc5d6388f55ec858dd4c19f3aa8eccc762746d",
  "type": "e",
  "uuid": "eecda51462269488d77b1708848f91c851dd2fbc"
}
```