

BBC Box – Flickr Driver

The Flickr driver is written to pull public and private photos in from a user's Flickr account, primarily to be used with the BBC Box Photo App. The driver asks the user to authenticate and 'store' their photos in a Databox store which can be accessed by any apps which have been given permission through the manifest.

A canned account has been setup for demonstration and testing purposes:

Username	Jamie_Dutton_IRL_2
Email	Jamie.Dutton@sharklasers.com
Password	Dutt0n123

Installing the driver

In order to install the driver, the manifest file (available from the Github repository), needs to be uploaded to the App Store settings page.

The driver will then be displayed within the App Store and can be installed in the same way as any other driver/app.

The GitHub repository is linked to Docker Hub and is configured to automatically build when the repository is updated. When the app is reinstalled, the latest version is pulled from Docker Hub.

API Key

The API Key and secret key have been setup using the Jamie Dutton canned account:

API Key	86d990038ab6911643c3e05d8d62ec2f
API Secret Key	4c5ed23a22933a61

How the Flickr Driver works

The Flickr API is used to pull the latest images from a user's Flickr account. The URL's of the photos are then stored in a key-value databox store. The main driver UI is configured to show the current images, as well as provide the ability to clear both the store and authentication details.

The driver is written in NodeJS and makes use of the Node Databox library (<https://github.com/me-box/lib-node-databox>).

The driver also uses the Flickr SDK, to authenticate and pull data from Flickr (<https://github.com/flickr/flickr-sdk>).

Endpoints

/ui	Main user interface which is only accessed when going directly to the Flickr driver. This displays the current images stored in the key value store and gives options to 'Logout', 'Clear' or 'Authenticate & Update'.
/checkauth	This endpoint is accessed when the user selects 'Authenticate & Update' or can be accessed externally through an app. The URL contains a post_auth_callback parameter where the user will be redirected after successfully authenticating. The endpoint checks if a user is already authenticated - if so, they are redirected back to the post_auth_callback URL, otherwise they are redirected to /getauth.
/getauth	This endpoint calls a function to request an OAuth token and redirects the user to Flickr's website to login and authenticate.
/callback	Once the user has authenticated through Flickr's site, they are redirected back to this endpoint with an OAuth token, secret token and OAuth verifier. The tokens are verified using the Flickr SDK and are assigned to environment variables and the user is then redirected to /update.
/update	This uses the people.getphotos method, provided by Flickr, to pull the URL's of the photographs stored on a user's Flickr account. This is returned in JSON format and is then converted into an array of URL's. The resulting array is then stored to a databox key value store.

Store

The photo data can be accessed with the FlickrDataStore, using the key "photodata".

DataSourceType	flickr::photodata
DataSourceID	FlickrDataStore
Store Type	Key Value