

Cloudant

What is Cloudant?

Cloudant is a NoSQL Database as a Service (DBaaS) that is based on CouchDB and available from cloudant.com

The Cloudant API is documented at <https://docs.cloudant.com/index.html>
(<https://docs.cloudant.com/index.html>)

Cloudant adapter

You can create and use a MobileFirst adapter to communicate with Cloudant.

The adapter within the sample that is provided with this module is an HTTP adapter.

- This adapter implements a subset of the Cloudant API.
- You can extend it to implement more Cloudant API

Sample Application

The sample module contains an application that demonstrates the use of the adapter to store, list, and query a set of names and ages in a Cloudant-hosted database. A download link can be found at the bottom of this tutorial.

Configuring the sample application

First, download and import the sample module.

Then, open the `CloudantAdapterDemo/adapters/CloudantAdapter/CloudantAdapter.xml` file.

The adapter uses basic authentication to connect to the Cloudant database. Enter your database location and username and password into the `CloudantAdapter.xml` file. You can obtain this information from Cloudant.

To avoid exposing the user credentials in `CloudantAdapter.xml`, you can leverage Cloudant support for API keys and passwords.

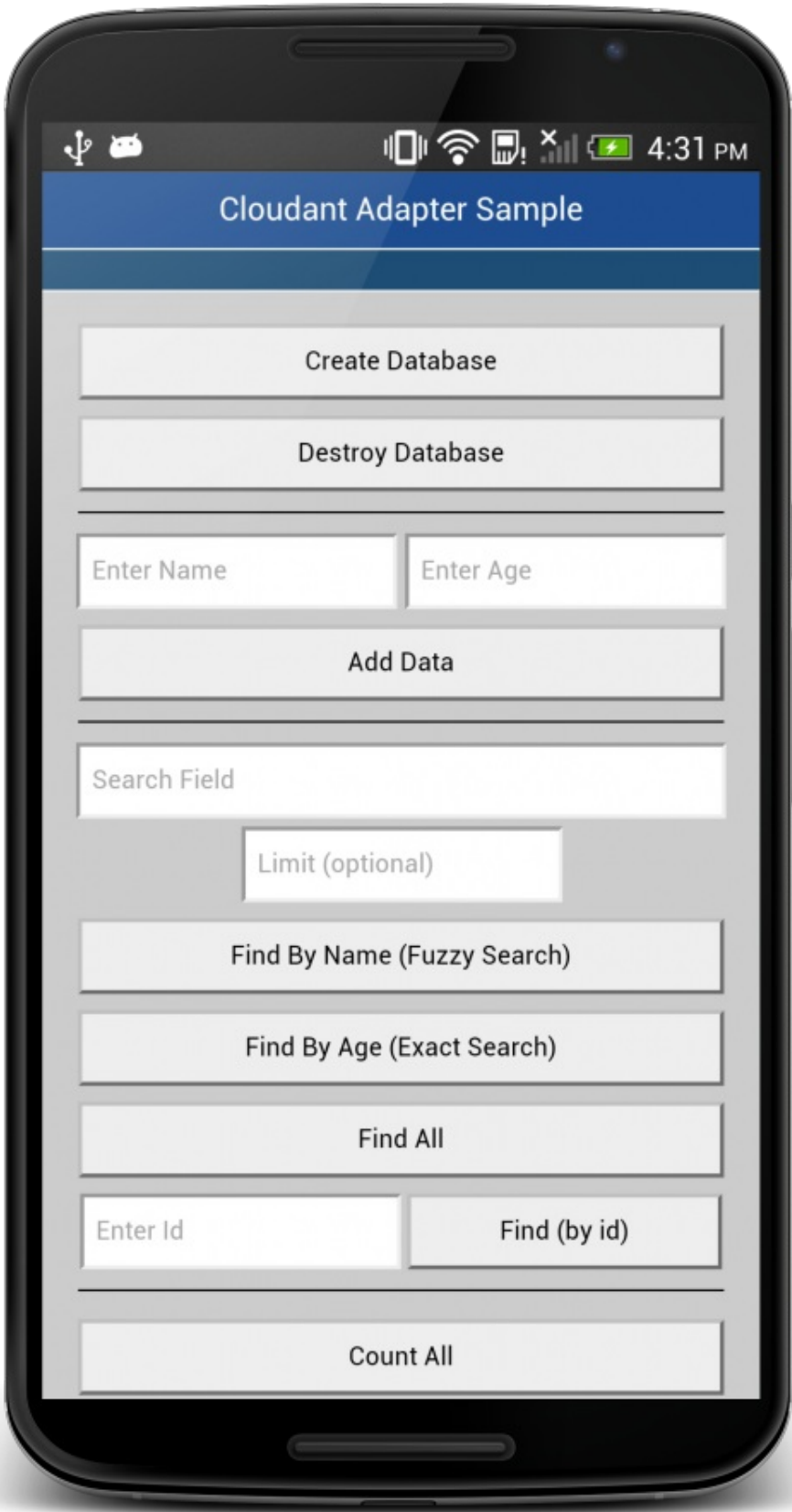
```

1 <?xml versi
2 <wl:adapter
3 xmlns:xsi="
4 xmlns:wl="r
5 xmlns:http=
6 <displayNai
7 <descriptio
8 <connectiv
9 <connect
10 <proto
11 <doma
12 <port>
13 <conn
14 <socke
15 <authe
16 <basi
17 <serv
18 <use
19 <pa:
20 </ser
21 </auth
22 <maxC
23 <!-- Fc
24 <ss/C
25 <ss/C
26 -->
27 </connec
28 </connecti
29 <procedur
30 <procedur
31 <procedur
32 <procedur
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39 <procedur
40 </wl:adapte

```



Starting the sample



Right-click adapters/CloudantAdapter and select **Run As > Deploy MobileFirst Adapter**.

Right-click apps/CloudantSampleApp and select **Run As > Run on MobileFirst Development Server**.

From the MobileFirst Platform Operations Console, select **Preview as Common Resources** (or view the app in the environment of your choice).

Cloudant adapter methods

- `createdB (name)`
Returns JSON result statement
- `deletedB (name)`
Returns JSON result statement
- `getAllDocs (name, limit, include_docs)`
Arguments:
 - `name` - database name
 - `limit` - limit on the number of docs
 - `include_docs` - whether or not to include the full body of the docs in the returnReturns JSON object with document information
- `updateDocs (name, updates)`
Arguments:
 - `name` - database name
 - `updates` - list of objects to create or updateReturns JSON result statement
- `createDoc (name, doc)`
Arguments:
 - `name` - database name
 - `doc` - JSON document to createReturns JSON result statement
- `getDoc (name, docID)`
Arguments:
 - `name` - database name
 - `docID` - document IDReturns JSON document
- `updateDoc (name, doc)`
Arguments:
 - `name` - database name
 - `docID` - document to updateReturns JSON result statement
- `createDesignDoc (name, docName, designDoc)`
Arguments:
 - `name` - database name
 - `docName` - design doc name
 - `designDoc` - JSON design document to createReturns JSON result statement
- `search (name, designDocName, viewName, limit, include_docs, query)`
Arguments:
 - `name` - database name

- `designDocName` - design doc name
- `viewName` - view name
- `limit` - limit on number of results
- `include_docs` - whether or not to include the full body of the docs in the return
- `query` - the query

Returns JSON document with results

- `getView (name, designDocName, viewName, group)`

Arguments:

- `name` - database name
- `designDocName` - design doc name
- `viewName` - view name
- `group` - if results must be grouped

Returns JSON documents from the view

Using the Cloudant adapter in your app

To use the adapter in your app, copy the `CloudantAdapter` folder to your MobileFirst app.

Extend the adapter as needed with the functionality for your app.

Sample application

Click to download

(<http://public.dhe.ibm.com/software/products/en/MobileFirstPlatform/docs/v630/CloudantAdapterDemoProject.zip>)
the Studio project.