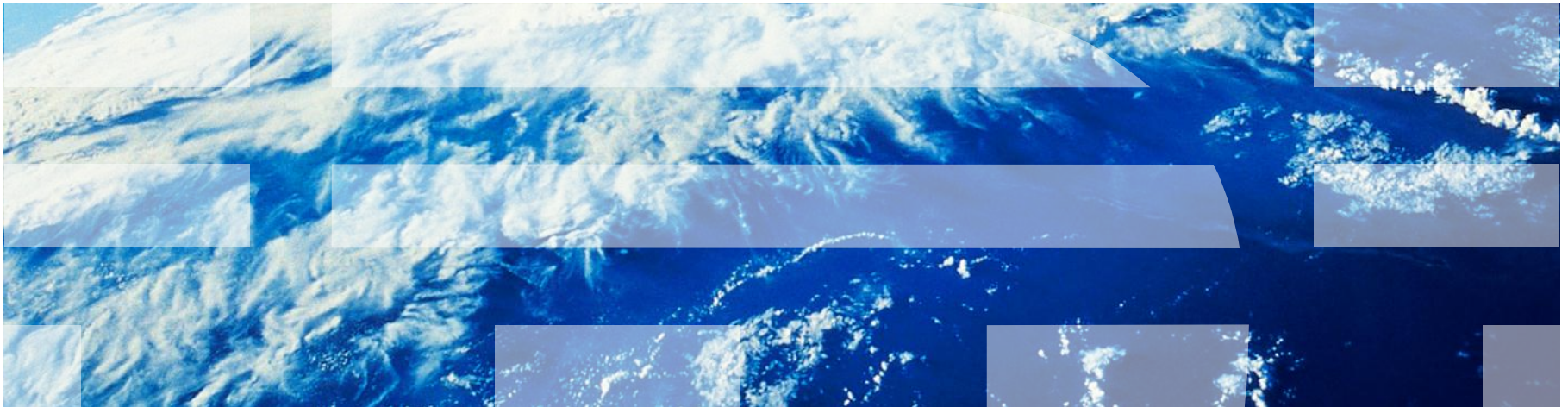


# ***IBM Worklight Foundation V6.2.0 Integrating with other products***

## **Cloudant integration**



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# *Agenda*

- Overview
- Using the adapter

## ***Using this module***

- This module is relevant if you have set up an account on [www.cloudant.com](http://www.cloudant.com) and want to use IBM Worklight® Foundation with Cloudant™.

## ***What is Cloudant?***

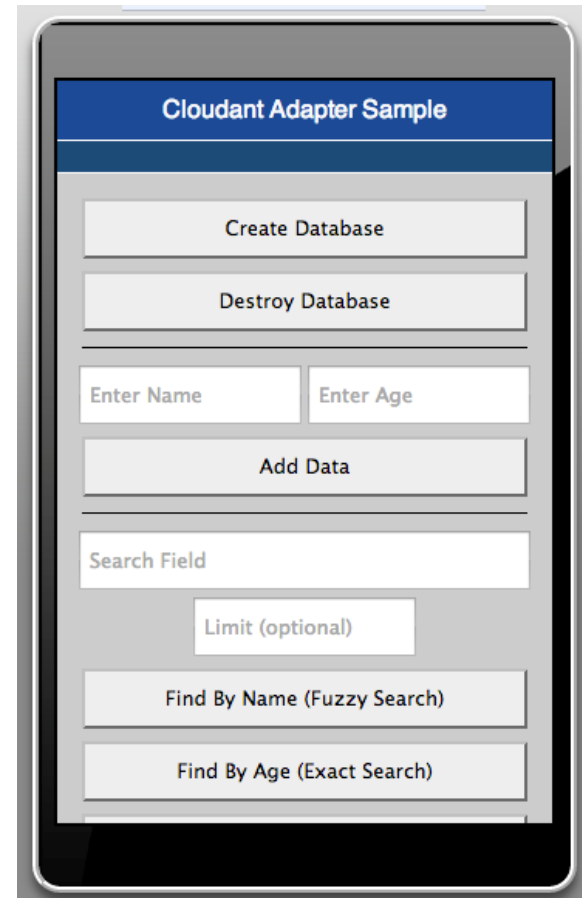
- Cloudant is a NoSQL Database as a Service (DBaaS) that is based on CouchDB available from cloudant.com.
- The Cloudant API is documented at <https://cloudant.com/wp-content/uploads/Cloudant-API-Reference.pdf>.

## ***Cloudbant adapter***

- You can create and use a Worklight adapter to communicate with Cloudbant.
- The adapter within the sample that is provided with this module is an HTTP adapter.
  - This adapter implements a subset of the Cloudbant API.
  - You can extend it to implement more Cloudbant 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.



# *Agenda*

- Overview
- Using the adapter



## ***Configuring the sample application (1 of 2)***

- 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.

## Configuring the sample application (2 of 2)

```
<connectionPolicy xsi:type="http:HTTPConnectionPolicyType">  
  <protocol>https</protocol>  
  <domain>mylogin.cloudant.com</domain>  
  <port>443</port>  
  <authentication>  
    <basic/>  
    <serverIdentity>  
      <username>mylogin</username>  
      <password>mypassword</password>  
    </serverIdentity>  
  </authentication>  
</connectionPolicy>
```

## *Starting the sample application and adapter*

- Right-click `adapters/CloudantAdapter` and select **Run As > Deploy Worklight Adapter**.
- Right-click `apps/CloudantSampleApp` and select **Run As > Run on Worklight Development Server**.
- From the Worklight Console, select **Preview as Common Resources** (or view the app in the environment of your choice).

## ***Cloudbant adapter methods (1 of 3)***

- `createDB (name)`
  - Returns JSON result statement
- `deleteDB (name)`
  - Returns JSON result statement
- `getAllDocs (name, limit, include_docs)`
  - Arguments: database name, limit on the number of docs, whether or not to include the full body of the docs in the return
  - Returns JSON object with document information
- `updateDocs (name, updates)`
  - Arguments: database name and list of objects to create or update
  - Returns JSON result statement

## ***Cloudbant adapter methods (2 of 3)***

- `createDoc (name, doc)`
  - Arguments: database name and JSON document to create
  - Returns JSON result statement
- `getDoc (name, docID)`
  - Arguments: database name and document ID
  - Returns JSON document
- `updateDoc (name, doc)`
  - Arguments: database name and JSON document to create
  - Returns JSON result statement

## ***Cloudbant adapter methods (3 of 3)***

- `createDesignDoc (name, docName, designDoc)`
  - Arguments: database name, design doc name, and JSON design document to create
  - Returns JSON result statement
- `search (name, designDocName, viewName, limit, include_docs, query)`
  - Arguments: database name, design doc name, view name, limit on number of results, whether to include the full body of the returned documents, and the query
  - Returns JSON document with results
- `getView (name, designDocName, viewName, group)`
  - Arguments: database name, design doc name, view name, JSON document to create, if results must be grouped
  - Returns JSON document with results

## *Using the Cloudant adapter in your app*

- To use the adapter in your app, copy the `CloudantAdapter` folder to your Worklight app.
- Extend the adapter as needed with the functionality for your app.

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