

Launch Cloudant DB

Step 1: Opening your service instance on IBM Cloudant dashboard

Open your IBM Cloudant service instance by following these steps.

1. Go to the IBM Cloud dashboard.
2. Click **Services** in the Resource list.
3. From the Services section, click the `Cloudant-o7` instance that you created in the *Getting started* tutorial, and click **Launch Dashboard**. The IBM Cloudant dashboard opens.

Now, you can create a database, and run queries against it.

Step 2: Creating a database

In this exercise, you create the `dashboard-demo` database, which is the database that you use in this tutorial.

1. From the IBM Cloudant dashboard, click **Create database**.

The Create database window opens.

2. Enter the database name `dashboard-demo`.
3. Select **Non-partitioned**, and click **Create**.

The `dashboard-demo` database opens automatically.

Now, you can create some documents.

Step 3: Adding documents to the database

that you create in this exercise include the data that you use to query the `dashboard-demo` database in later exercises.

1. Click **Create document**.

The New Document window opens.

2. Copy the following sample text and replace the existing text in the new document.
Use the following sample text for document 1:

```
3. {  
4.   "firstname": "Sally",  
5.   "lastname": "Brown",  
6.   "age": 16,  
7.   "location": "New York City, NY",  
8.   "_id": "doc1"  
9. }
```

10. Repeat steps 1 and 2 to add the remaining four documents to the database.
Use the following sample text for document 2:

```
11. {  
12.   "firstname": "John",  
13.   "lastname": "Brown",
```

```
14.     "age": 21,
15.     "location": "New York City, NY",
16.     "_id": "doc2"
17. }
```

Use the following sample text for document 3:

```
{
  "firstname": "Greg",
  "lastname": "Greene",
  "age": 35,
  "location": "San Diego, CA",
  "_id": "doc3"
}
```






Use the following sample text for document 4:

```
{
  "firstname": "Anna",
  "lastname": "Greene",
  "age": 44,
  "location": "Baton Rouge, LA",
  "_id": "doc4"
}
```

Use the following sample text for document 5:

```
{
  "firstname": "Lois",
  "lastname": "Brown",
  "age": 33,
  "location": "New York City, NY",
  "_id": "doc5"
}
```

You populated the `dashboard-demo` with five documents. You can see the documents from the Table view in the following screen capture:

| | <div><div>_id</div><div></div></div> | <div><div>age</div><div></div></div> | <div><div>firstname</div><div></div></div> | <div><div>lastname</div><div></div></div> | <div><div>location</div><div></div></div> |
|--------------------------|--|--------------------------------------|--|---|---|
| <input type="checkbox"/> |  . doc1 | 16 | Sally | Brown | New York City, NY |
| <input type="checkbox"/> |  . doc2 | 21 | John | Brown | New York City, NY |
| <input type="checkbox"/> |  . doc3 | 35 | Greg | Greene | San Diego, CA |
| <input type="checkbox"/> |  . doc4 | 44 | Anna | Greene | Baton Rouge, LA |
| <input type="checkbox"/> |  . doc5 | 33 | Lois | Brown | New York City, NY |

Running a simple query


This example demonstrates how IBM Cloudant Query finds documents based on the `lastname` and the `firstname`.

1. Click **Query**.
2. Copy the following sample JSON and replace the existing text in the new query window:

```
3. {
4.   "selector": {
5.     "lastname" : "Greene",
6.     "firstname" : "Anna"
7.   }
8. }
```

9. Click **Run Query**.

The query displays the results. You can see them from the Table view in the following screen capture:

| | | | | | |
|--------------------------|--|----|------|--------|-----------------|
| <input type="checkbox"/> |  . doc4 | 44 | Anna | Greene | Baton Rouge, LA |
|--------------------------|--|----|------|--------|-----------------|

For more information, see the [IBM Cloudant Query](#) tutorial or the API reference on [IBM Cloudant Query](#).

Step 4: Replicating a database

When you replicate a database, it synchronizes the state of two databases: source and target. A replication copies all the changes that happened in the source database to the target database. When a document is deleted from the source database, the document is also deleted from the target database.

For more information, see [Replication](#).

1. Click **Replication**.
2. Click **New Replication**.

The Job configuration page opens.

Additionally, you can create a replication from the databases page by clicking **Replicate** in the Actions column.

3. Enter the following information for your replication job.

Step 5: Monitoring active tasks

The Active tasks page displays a list of all running tasks. When you monitor your system's performance, this list can help you find potential issues. You can see a list of active tasks, which includes compaction, replication, and indexing. For more information, see the [Managing tasks](#) guide.

If your instance does not have any active tasks, you can return to the previous step, delete the `query-movies` database, and then replicate it again. If you open the Active Tasks page immediately, you can see your replication.

1. Click **Active Tasks**.

The Active Tasks page opens.

| Active Tasks | | | | | |
|--------------|--|---|---|-----------------|---|
| | | | Polling Interval | 15 seconds | { } JSON |
| All Tasks | Replication | Database Compaction | Indexer | View Compaction | Search for databases... |
| Type | Database | Started on | Updated on | PID | Status |
| replication | From: https://d360fd11-57ef-46cd-af46-496f14ace2bb-bluemix.cloudant.com/orders/ To: https://d360fd11-57ef-46cd-af46-496f14ace2bb-bluemix.cloudant.com/orders-replica/ | Jun 9th, 10:34:20 am a minute ago | Jun 9th, 10:35:40 am a few seconds ago | 0.27010.5142 | 7341 docs written. 44301 pending changes. |
| indexer | shards/b0000000-bffffff/d360fd11-57ef-46cd-af46-496f14ace2bb-bluemix/orders.1549538088 (View: _design/app) | Jun 9th, 10:35:38 am a few seconds ago | Jun 9th, 10:35:41 am a few seconds ago | 0.12427.5145 | Progress: 96% Processed 2929 of 3029 changes. 2929 Changes done. |
| indexer | shards/60000000-6ffffff/d360fd11-57ef-46cd-af46-496f14ace2bb-bluemix/orders.1549538088 (View: _design/app) | Jun 9th, 10:35:38 am a few seconds ago | Jun 9th, 10:35:41 am a few seconds ago | 0.19505.5145 | Progress: 100% Processed 3074 of 3073 changes. 3074 Changes done. |
| indexer | shards/e0000000-0ffffff/d360fd11-57ef-46cd-af46-496f14ace2bb-bluemix/orders.1549538088 (View: _design/app) | Jun 9th, 10:35:38 am a few seconds ago | Jun 9th, 10:35:41 am a few seconds ago | 0.21199.5144 | Progress: 93% Processed 2929 of 3123 changes. 2929 Changes done. |
| indexer | shards/d0000000-0ffffff/d360fd11-57ef-46cd-af46-496f14ace2bb-bluemix/orders.1549538088 (View: _design/app) | Jun 9th, 10:35:38 am a few seconds ago | Jun 9th, 10:35:41 am a few seconds ago | 0.21474.5145 | Progress: 91% Processed 2929 of 3187 changes. 2929 Changes done. |
| indexer | shards/a0000000-affffff/d360fd11-57ef-46cd-af46-496f14ace2bb-bluemix/orders.1549538088 (View: _design/app) | Jun 9th, 10:35:38 am a few seconds ago | Jun 9th, 10:35:41 am a few seconds ago | 0.22817.5145 | Progress: 94% |

2. Click the associated tab to see task-specific information.

Step 6: Monitoring with IBM Cloudant

Monitor your usage with a graph that shows your throughput by reads, writes, and global queries. You can see your current operations, denied requests, and storage usage.

Your service instance contains no data because it is for demonstration purposes only. However, you can see what monitoring information is available to you by following these steps.

1. Click **Monitoring**.

The Monitoring page opens to the Current Operations tab. Review recent consumption of provisioned throughput capacity by looking at requests broken down by reads, writes, and global queries. The dotted line is the peak capacity that is allowed for your instance. Peak capacity is based on what is set for your provisioned throughput capacity.

Monitoring

Current Operations

Denied Requests

Storage

Throughput

Your provisioned throughput capacity includes a reserved number of database operations (reads, writes, and queries) per second.



2. Click Denied Requests.

Review the number of denied requests from a given second that are shown by the number of **429: too many requests.** responses. Requests are denied when they exceed the provisioned throughput capacity set for the instance. The graph shows the denied requests that are broken down by reads, writes, and global queries.

Monitoring

Current Operations Denied Requests Storage

Rate Limited Requests (429 status code)



3. Click **Storage**.

Periodically review your storage, so you are prepared if your plan's provisioning needs to be changed.

Monitoring

Current Operations Denied Requests Storage

Stored data includes your JSON documents, indexes, and attachments. Storage assessments occur once every 24 hours.

Lite accounts that contain over 1 GB of data during storage-assessment will be locked. To unlock a locked account, upgrade to a paid plan, or delete data to return storage to under the 1 GB limit, and then wait for daily storage assessment to complete.

