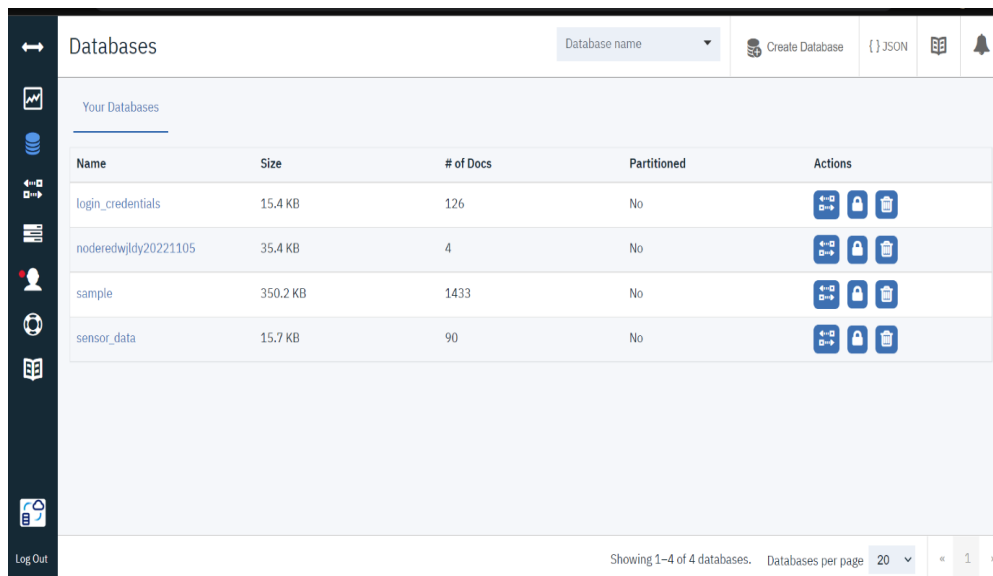














# DATA TRANSFER FROM SENSOR TO IBM CLOUD

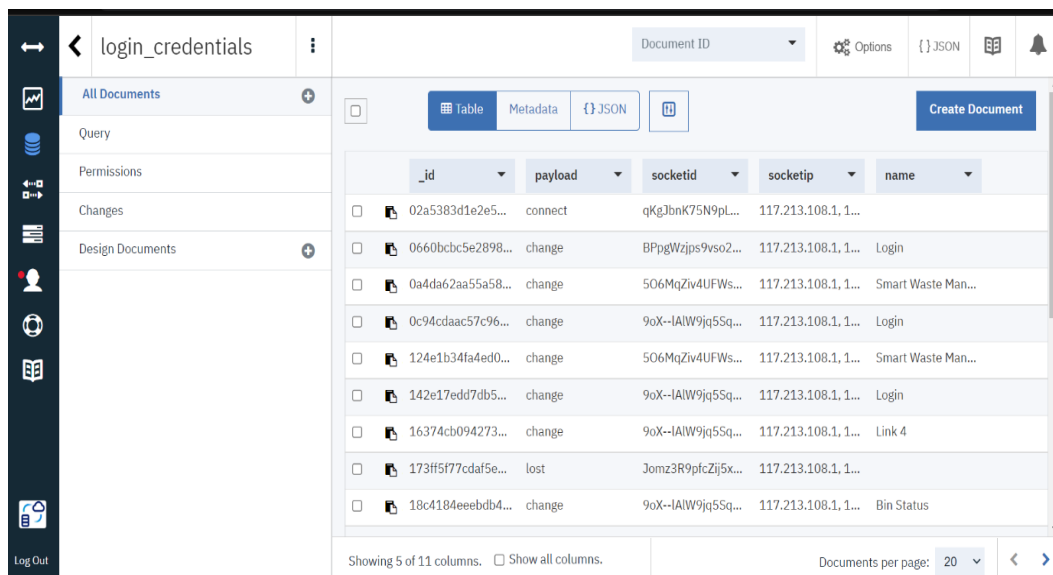
- IBM Cloud data Storage



The screenshot shows the 'Databases' page in the IBM Cloud console. It features a sidebar with navigation icons and a main content area with a table of databases. The table has columns for Name, Size, # of Docs, Partitioned, and Actions. Four databases are listed: login\_credentials, noderedwjdy20221105, sample, and sensor\_data. Each database has a size, a number of documents, and is marked as 'No' for partitioned. The Actions column contains icons for adding, deleting, and locking documents. At the bottom, there is a pagination bar showing 'Showing 1-4 of 4 databases' and 'Databases per page: 20'.

Name	Size	# of Docs	Partitioned	Actions
login_credentials	15.4 KB	126	No	  
noderedwjdy20221105	35.4 KB	4	No	  
sample	350.2 KB	1433	No	  
sensor_data	15.7 KB	90	No	  

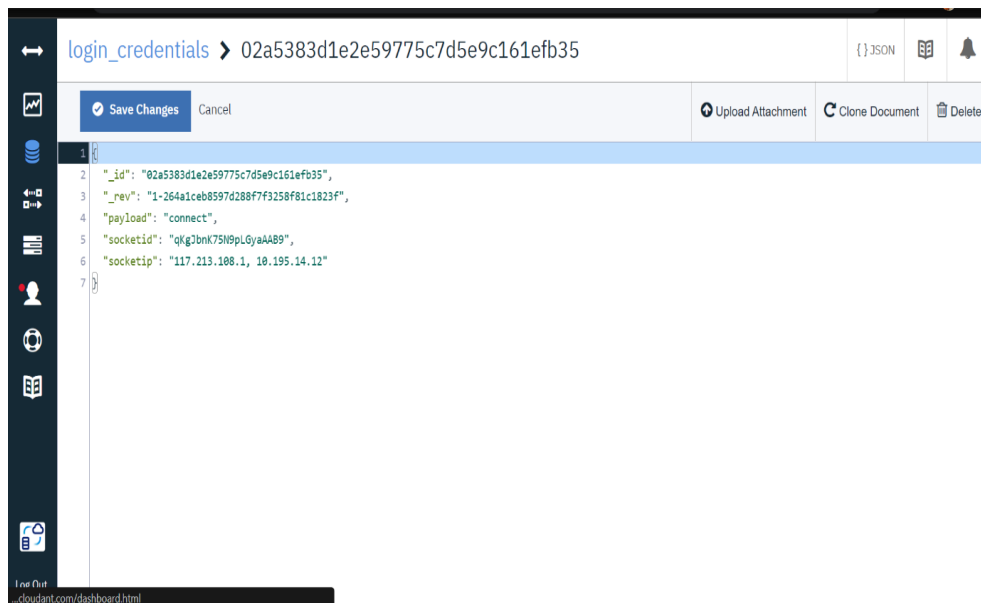
- User Login Data Storage



The screenshot shows the 'login\_credentials' database page in the IBM Cloud console. It features a sidebar with navigation icons and a main content area with a table of documents. The table has columns for \_id, payload, socketid, socketip, and name. Eleven documents are listed, each with a unique ID, a payload (e.g., 'connect', 'change', 'lost'), a socket ID, a socket IP, and a name (e.g., 'Login', 'Smart Waste Man...', 'Link 4', 'Bin Status'). The Actions column contains icons for adding, deleting, and locking documents. At the bottom, there is a pagination bar showing 'Showing 5 of 11 columns' and 'Documents per page: 20'.

_id	payload	socketid	socketip	name
02a5383d1e2e5...	connect	qKgJbnK75N9pL...	117.213.108.1, 1...	
0660bcb5e2898...	change	BPpgWzjps9vso2...	117.213.108.1, 1...	Login
0a4da62aa55a58...	change	506MqZiv4UFWs...	117.213.108.1, 1...	Smart Waste Man...
0c94cdaac57c96...	change	9oX--IAIW9jq5Sq...	117.213.108.1, 1...	Login
124e1b34fa4ed0...	change	506MqZiv4UFWs...	117.213.108.1, 1...	Smart Waste Man...
142e17edd7db5...	change	9oX--IAIW9jq5Sq...	117.213.108.1, 1...	Login
16374cb094273...	change	9oX--IAIW9jq5Sq...	117.213.108.1, 1...	Link 4
173f5f77cdf5e...	lost	Jomz3R9pfcZij5x...	117.213.108.1, 1...	
18c4184eeebdb4...	change	9oX--IAIW9jq5Sq...	117.213.108.1, 1...	Bin Status

- JSON Format of Data Storage



- Data transmission of sensor from bin

The screenshot shows a document list view for "sensor\_data". The table displays a list of documents with columns: "\_id", "deviceId", "deviceType", "eventType", and "format". The documents are sorted by "\_id" in descending order. The first document has "\_id" "0198213c192cb..." and "format" "json". The last document has "\_id" "20a854e5445fa8..." and "format" "json". The interface includes a sidebar with various icons, a top bar with "Document ID", "Options", and "JSON" buttons, and a bottom bar with "Showing 5 of 8 columns" and "Showing document 1 - 20".

_id	deviceId	deviceType	eventType	format
0198213c192cb...	ibmproject	SWMSMC	data	json
0198213c192cb...	ibmproject	SWMSMC	data	json
0198213c192cb...	ibmproject	SWMSMC	data	json
0198213c192cb...	ibmproject	SWMSMC	data	json
1a921f21cbe229...	ibmproject	SWMSMC	data	json
1a921f21cbe229...	ibmproject	SWMSMC	data	json
20a854e5445fa8...	ibmproject	SWMSMC	data	json
20a854e5445fa8...	ibmproject	SWMSMC	data	json
20a854e5445fa8...	ibmproject	SWMSMC	data	json

- JSON Format of Data Storage

```
1 {
2   "_id": "0198213c192cb2c244cc2433f1802b91",
3   "_rev": "1-cde2dd17c519394dfeb774730c495f8b",
4   "topic": "iot-2/type/SNMSMC/id/ibmproject/evt/data/fmt/json",
5   "payload": {
6     "Warning!!": "244.97left"
7   },
8   "deviceId": "ibmproject",
9   "deviceType": "SNMSMC",
10  "eventType": "data",
11  "format": "json"
12 }
```

```
1 {
2   "_id": "20a854e5445fa818e6c1de0493390d28",
3   "_rev": "1-3ad288ecad57f039e086909b7e08c723",
4   "topic": "iot-2/type/SNMSMC/id/ibmproject/evt/data/fmt/json",
5   "payload": {
6     "High Alert!!": "1.99left"
7   },
8   "deviceId": "ibmproject",
9   "deviceType": "SNMSMC",
10  "eventType": "data",
11  "format": "json"
12 }
```

