

# Configure DynamoDB with the AWS JavaScript SDK

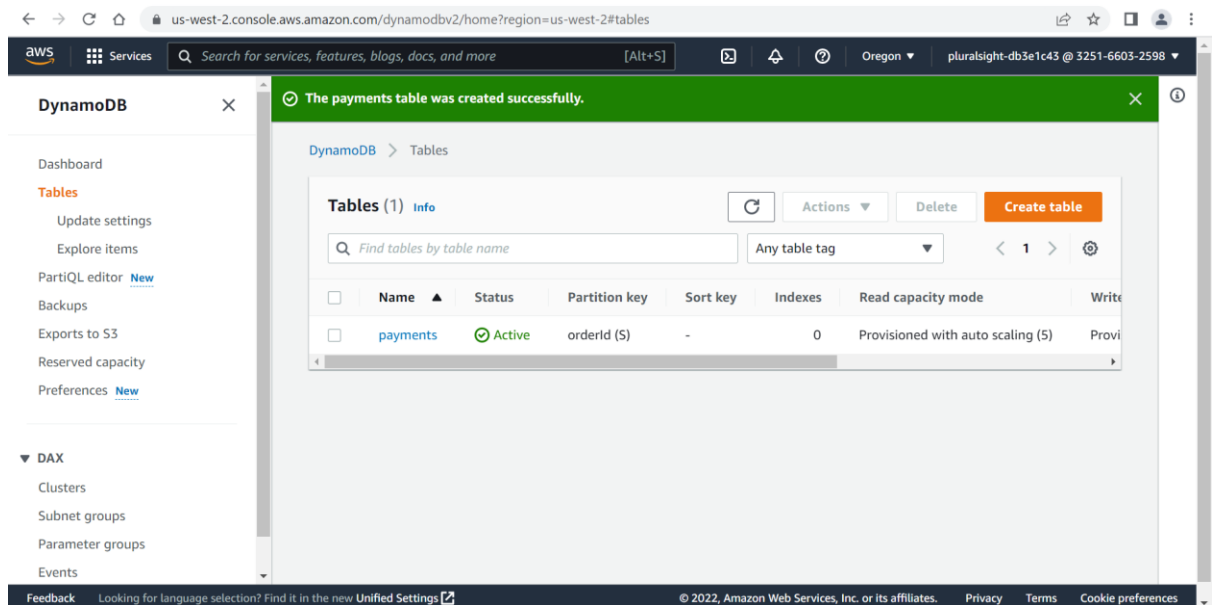
## 1. Create a DynamoDB Table

The screenshot shows the AWS Management Console 'Create table' page for DynamoDB. The browser address bar shows the URL: `us-west-2.console.aws.amazon.com/dynamodbv2/home?region=us-west-2#create-table`. The page header includes the AWS logo, a search bar, and navigation links for 'Services', 'Oregon', and account information 'pluralsight-db3e1c43 @ 3251-6603-2598'.

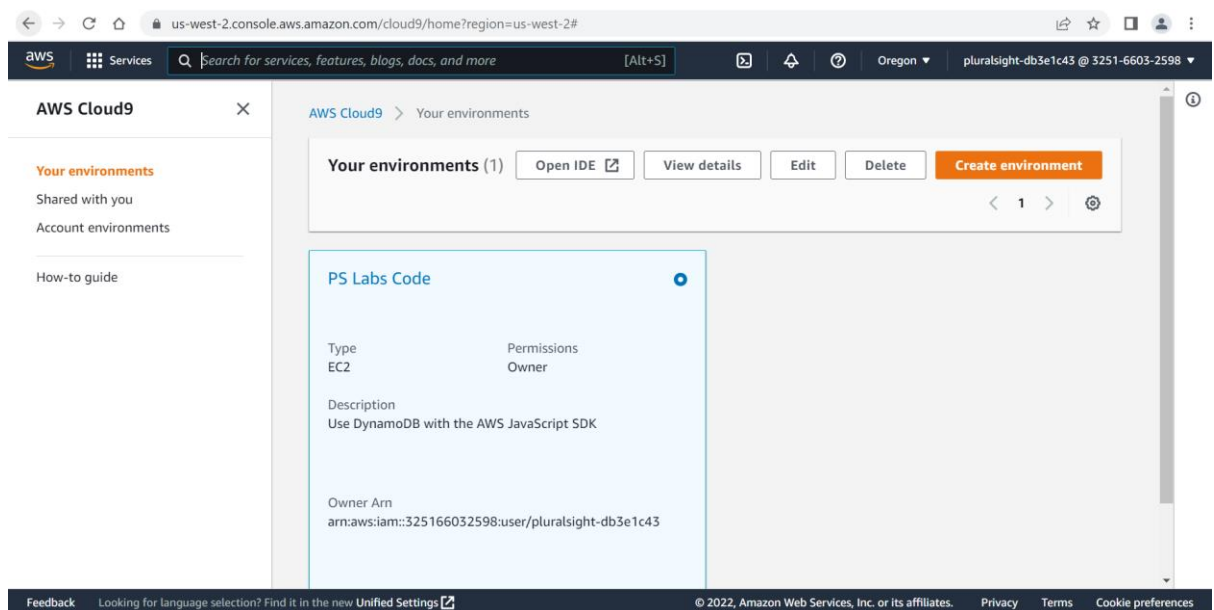
The main content area is titled 'Create table' and includes a 'Table details' section with the following fields:

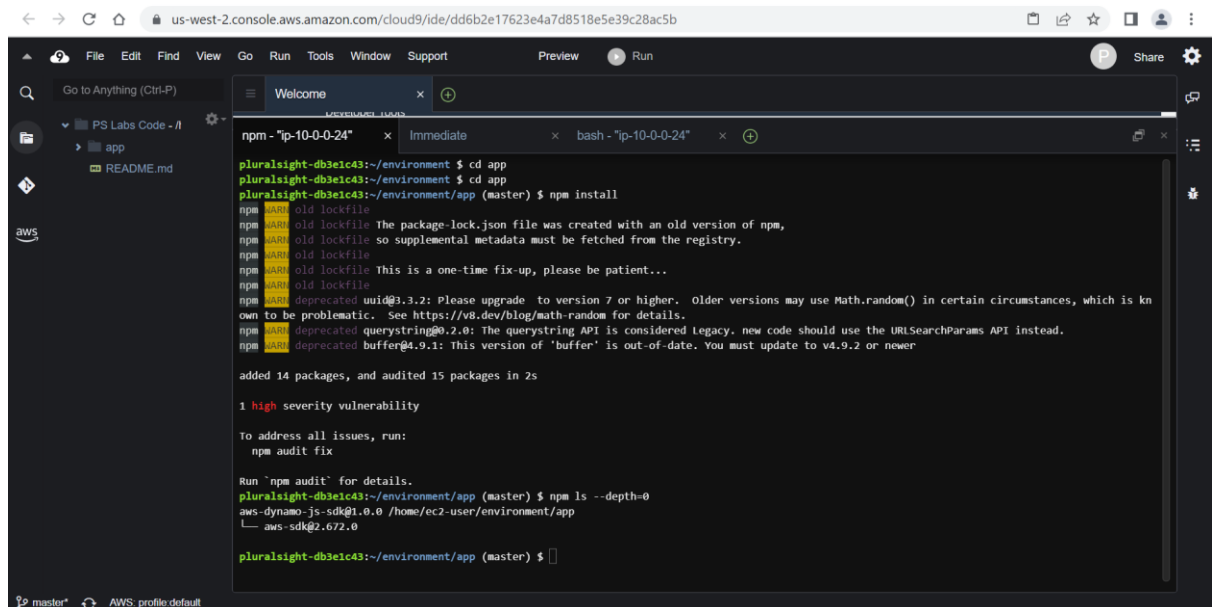
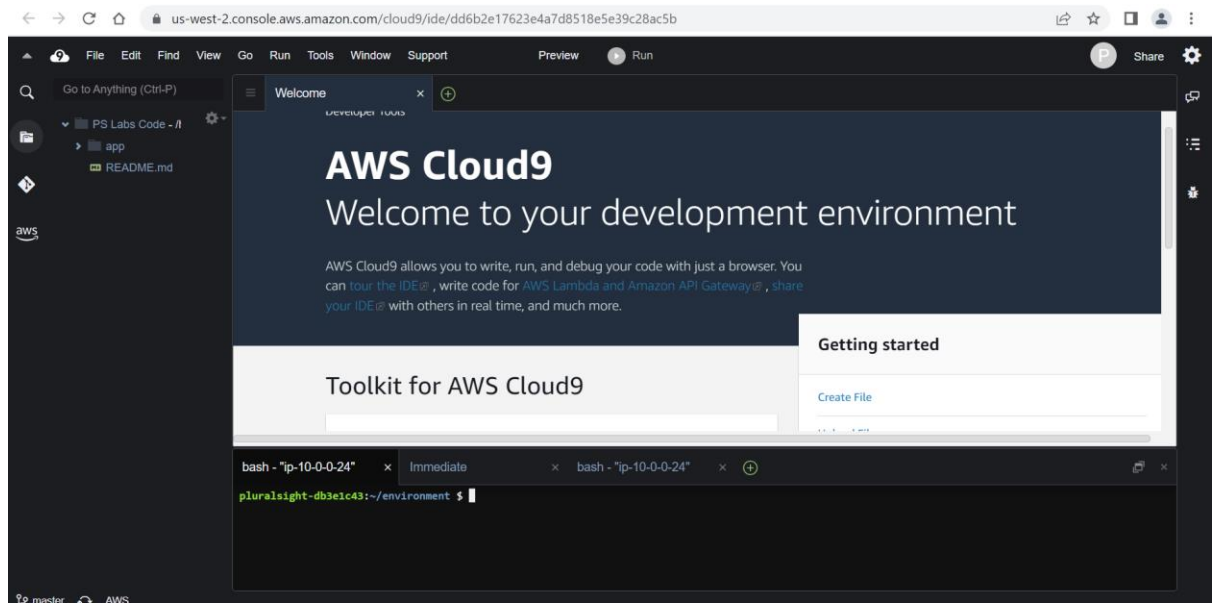
- Table name:** A text input field containing 'payments'. Below the field, a note states: 'Between 3 and 255 characters, containing only letters, numbers, underscores (\_), hyphens (-), and periods (.).'
- Partition key:** A text input field containing 'orderId' and a dropdown menu set to 'String'. Below the field, a note states: '1 to 255 characters and case sensitive.'
- Sort key - optional:** A section with a note: 'You can use a sort key as the second part of a table's primary key. The sort key allows you to sort or search among all items sharing the'.

The bottom of the page features a 'Settings' section with two radio buttons: 'Default settings' (selected) and 'Customize settings'. Below this, the 'Default settings' section includes information about 'Read/write capacity', 'Secondary indexes', 'Key management for encryption at rest', and 'Table class'.



## 1. Use the Cloud9 Environment





## 2. Write Items to DynamoDB

us-west-2.console.aws.amazon.com/cloud9/ide/dd6b2e17623e4a7d8518e5e39c28ac5b

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PS Labs Code - /l

- app
  - node\_modules
    - JS index.js
    - package-lock.json
    - package.json
    - payments.js
    - store.js
    - README.md

```
9 },
10 ReturnConsumedCapacity: 'TOTAL',
11 };
12
13 function buildItem(r) {
14   return {
15     PutRequest: {
16       Item: {
17         orderId: r.order,
18         paidAt: r.date,
19         totalAmount: r.total,
20       },
21     },
22   };
23 };
24
25 function loadPayments() {
26   return db.batchWrite(paymentItems).promise();
27 }
28 module.exports = {
29   loadPayments
30 }
31
32
```

29:15 JavaScript Spaces: 2

npm - "ip-10-0-0-24" x Immediate x bash - "ip-10-0-0-24" x

Run 'npm audit' for details.

```
pluralsight-db3e1c43:~/environment/app (master) $ npm ls --depth=0
aws-dynamo-js-sdk@1.0.0 /home/ec2-user/environment/app
└─ aws-sdk@2.672.0

pluralsight-db3e1c43:~/environment/app (master) $
```

master AWS profile default

us-west-2.console.aws.amazon.com/cloud9/ide/dd6b2e17623e4a7d8518e5e39c28ac5b

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```
1 const store = require('./store');
2
3 async function run() {
4   // add new code here
5   const result = await store.loadPayments();
6   console.log(result);
7 }
8
9
10 run();
11
```

6:3 JavaScript Spaces: 4

npm - "ip-10-0-0-24" x Immediate x bash - "ip-10-0-0-24" x

Run 'npm audit' for details.

```
pluralsight-db3e1c43:~/environment/app (master) $ npm ls --depth=0
aws-dynamo-js-sdk@1.0.0 /home/ec2-user/environment/app
└─ aws-sdk@2.672.0

pluralsight-db3e1c43:~/environment/app (master) $
```

master AWS profile default

```
const store = require('./store');

async function run() {
  // add new code here
  const result = await store.loadPayments();
  console.log(result);
}
```

```
npm - "ip-10-0-0-24" x Immediate x bash - "ip-10-0-0-24" x
npm WARN deprecated querystring@0.2.0: The querystring API is considered Legacy. new code should use the URLSearchParams API instead.
npm WARN deprecated buffer@4.9.1: This version of 'buffer' is out-of-date. You must update to v4.9.2 or newer

added 14 packages, and audited 15 packages in 2s

1 high severity vulnerability

To address all issues, run:
  npm audit fix

Run 'npm audit' for details.
pluralsight-db3e1c43:~/environment/app (master) $ npm ls --depth=0
aws-dynamo-js-sdk@1.0.0 /home/ec2-user/environment/app
├─ aws-sdk@2.672.0

pluralsight-db3e1c43:~/environment/app (master) $ node index.js
{
  UnprocessedItems: {},
  ConsumedCapacity: [ { TableName: 'payments', CapacityUnits: 5 } ]
}
```

	orderId	paidAt	totalAmount
<input type="checkbox"/>	222	2018-11-03	15.73
<input type="checkbox"/>	666	2019-03-02	35.12
<input type="checkbox"/>	555	2019-02-02	45.35
<input type="checkbox"/>	444	2019-01-01	21.99
<input type="checkbox"/>	333	2018-12-25	17.22

### 3. Get Item from DynamoDB

us-west-2.console.aws.amazon.com/cloud9/ide/dd6b2e17623e4a7d8518e5e39c28ac5b

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JS store.js

```
19      totalAmount: r.total,
20    },
21  },
22  };
23  };
24  };
25  function loadPayments() {
26    return db.batchWrite(paymentItems).promise();
27  }
28  module.exports = {
29    loadPayments
30  }
31  };
32  function listAllPayments() {
33    return db.scan({
34      TableName: 'payments'
35    }).promise();
36  });
37  };
38  module.exports = {
39    loadPayments,
40    listAllPayments
41  }
42  };
43  };
44  };
45  }
46  }
```

45.2 JavaScript Spaces: 2

npm - "ip-10-0-0-24" x Immediate x bash - "ip-10-0-0-24" x

pluralsight-db3e1c43:~/environment/app (master) \$

us-west-2.console.aws.amazon.com/cloud9/ide/dd6b2e17623e4a7d8518e5e39c28ac5b

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JS store.js

```
1  const store = require('./store');
2
3  async function run() {
4    // add new code here
5    const result = await store.loadPayments();
6    console.log(result);
7    const allItems = await store.listAllPayments();
8    console.log(allItems.Items);
9  }
10 }
11
12 run();
13
```

8.3 JavaScript Spaces: 4

npm - "ip-10-0-0-24" x Immediate x bash - "ip-10-0-0-24" x

pluralsight-db3e1c43:~/environment/app (master) \$

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7   const allItems = await store.listAllPayments();
8   console.log(allItems.Items);
9 }
10
11 run();
12
13
```

13:1 JavaScript Spaces: 4

node - "p-10-0-0-24" x Immediate x

```
pluralsight-db3e1c43:~/environment/app (master) $ node index.js
{
  UnprocessedItems: {},
  ConsumedCapacity: [ { TableName: 'payments', CapacityUnits: 5 } ]
}
[
  { totalAmount: '15.73', paidAt: '2018-11-03', orderId: '222' },
  { totalAmount: '35.12', paidAt: '2019-03-02', orderId: '666' },
  { totalAmount: '45.35', paidAt: '2019-02-02', orderId: '555' },
  { totalAmount: '21.99', paidAt: '2019-01-01', orderId: '444' },
  { totalAmount: '17.22', paidAt: '2018-12-25', orderId: '333' }
]
pluralsight-db3e1c43:~/environment/app (master) $
```

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```
1 const store = require('./store');
2
3 async function run() {
4   // add new code here
5   const result = await store.loadPayments();
6   console.log(result);
7   const allItems = await store.listAllPayments();
8   console.log(allItems.Items);
9   const order = await store.getOrderId('444');
10  console.log(order);
11 }
12
```

10:3 JavaScript Spaces: 4

node - "p-10-0-0-24" x Immediate x

```
pluralsight-db3e1c43:~/environment/app (master) $ node index.js
{
  UnprocessedItems: {},
  ConsumedCapacity: [ { TableName: 'payments', CapacityUnits: 5 } ]
}
[
  { totalAmount: '15.73', paidAt: '2018-11-03', orderId: '222' },
  { totalAmount: '35.12', paidAt: '2019-03-02', orderId: '666' },
  { totalAmount: '45.35', paidAt: '2019-02-02', orderId: '555' },
  { totalAmount: '21.99', paidAt: '2019-01-01', orderId: '444' },
  { totalAmount: '17.22', paidAt: '2018-12-25', orderId: '333' }
]
{
  Item: { totalAmount: '21.99', paidAt: '2019-01-01', orderId: '444' }
}
pluralsight-db3e1c43:~/environment/app (master) $
```