Importing data from S3 to DynamoDB

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Introduction

In this lab, our objective is to transfer data from AWS S3 to DynamoDB. To begin, we'll create an S3 bucket to store our files and upload sample data into it. Next, we'll configure DynamoDB to directly import data from our S3 bucket. Additionally, we'll utilize AWS CloudWatch, the monitoring service, to monitor and analyze logs throughout the process. This setup will enable seamless data integration and efficient monitoring within our AWS environment.

Observations and Screenshots

In the first part of the lab, we will begin by creating a new s3 storage. The bucket is created in such a manner that it is available to the public. Afterward, we uploaded the provided five json files to our bucket. Moving to the next part, we navigated to the DynamoDB in the database service. We selected the Import from S3 option to import the data from our s3 and selected S3 bucket account as my AWS account, set no compression for file compressions, and the import file format to DynamoDB json. Furthermore, we created a new DynamoDB table with the name s23dbb and set PK and SK as our partition key and sort key name respectively. We created a table with provisioned capacity of 5 RCU and 5 WCU.

At the time of import, we received an error prompting import failed. We navigated to the Management and Governance services and selected CloudWatch to analyze our work. We selected the Log Groups and selected the corresponding error. We analyzed the error and identified the issue successfully.

Create a Bucket in S3

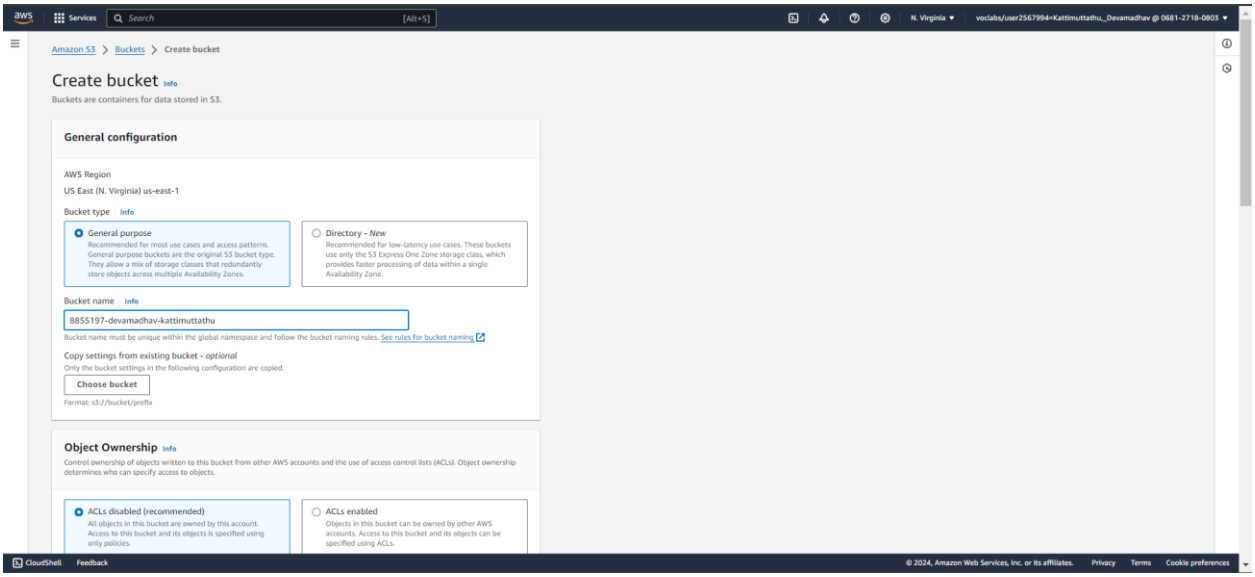

Figure 1 - Creating a new bucket in s3 with the name 8855197-devamadhav-kattimuttathu

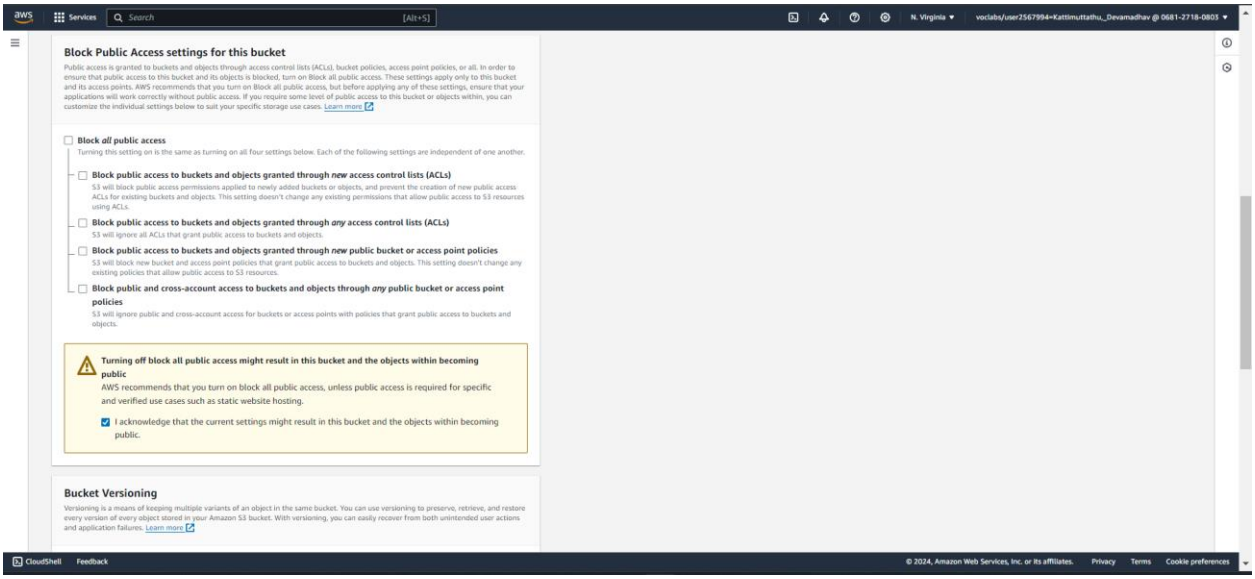

Figure 2 - Allowing public access to the bucket by disabling the check box for blocking public access

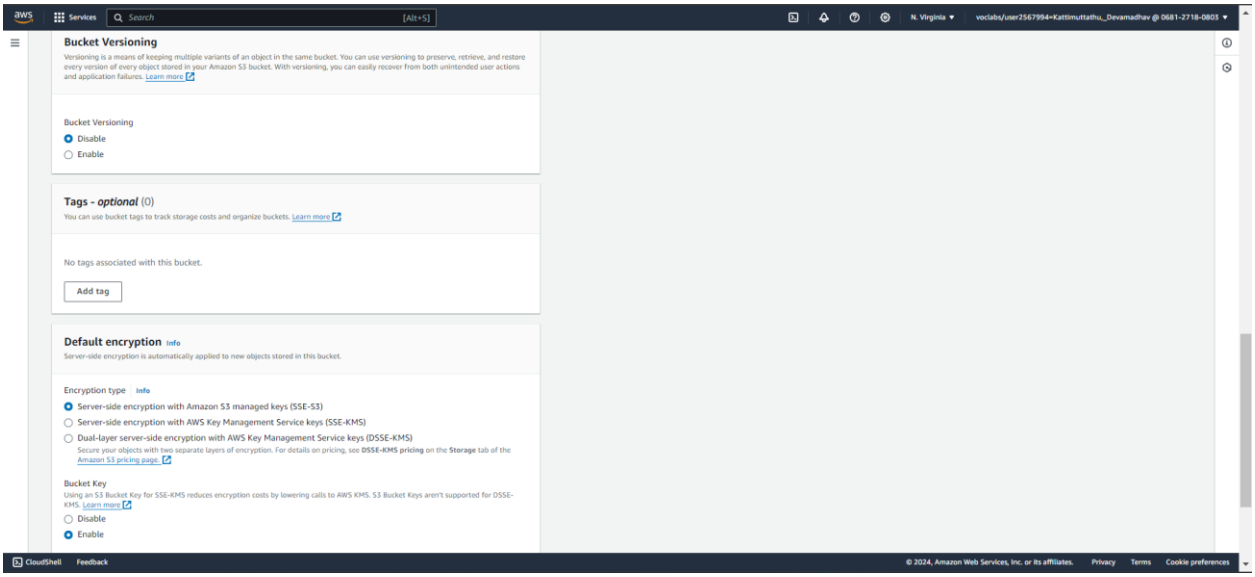

Figure 3 - kept rest of the settings as default for the bucket creation

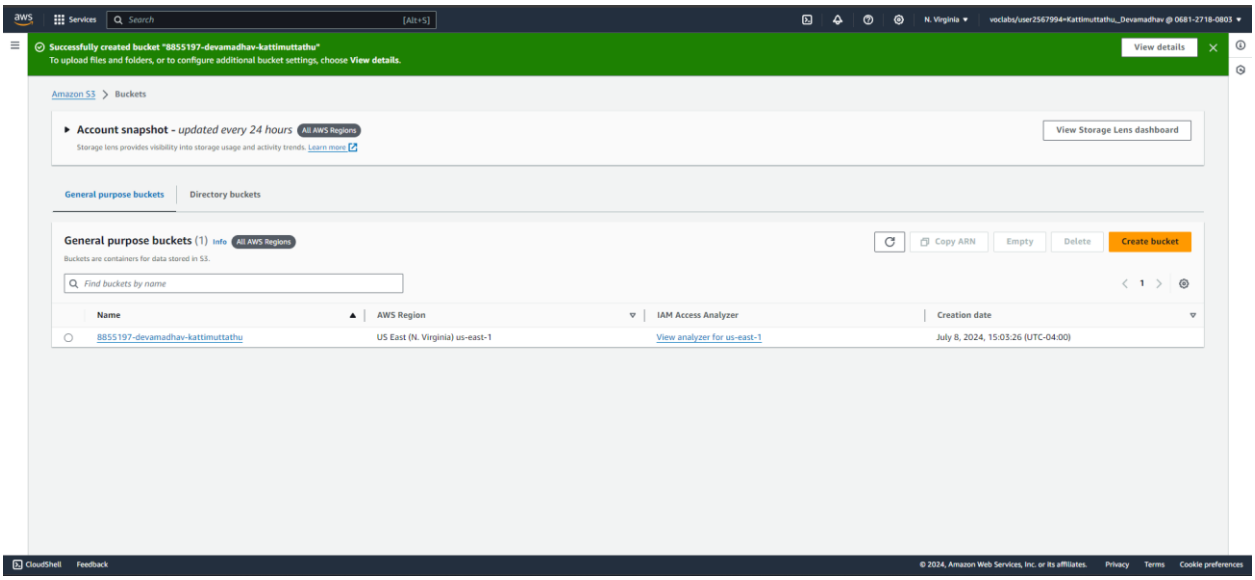

Figure 4 - Successfully created a new bucket named 8855197-devamadhav-kattimuttathu

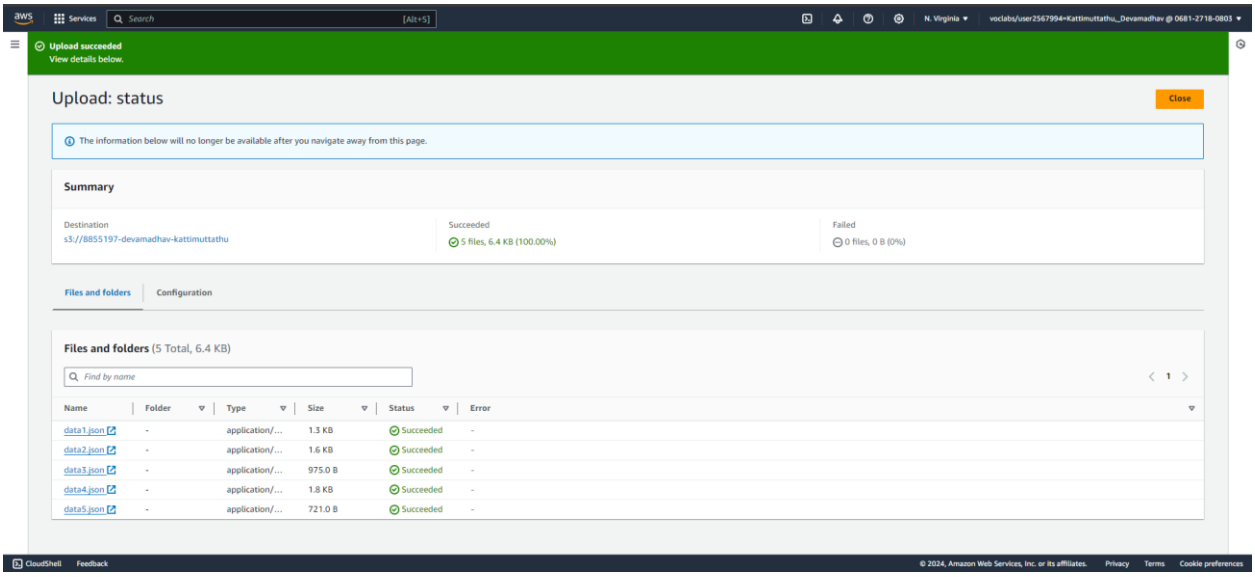

Figure 5 - Successfully uploaded 5 items into the bucket

Create a DynamoDB table and Import from S3

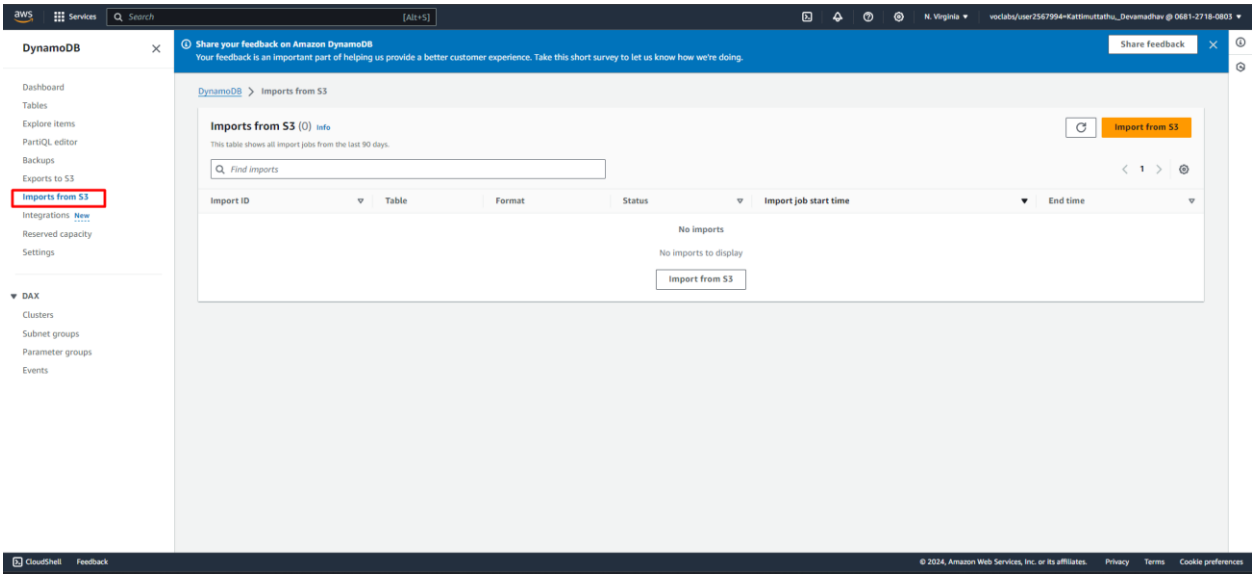

Figure 6 - Accessing import form s3 option in DynamoDB

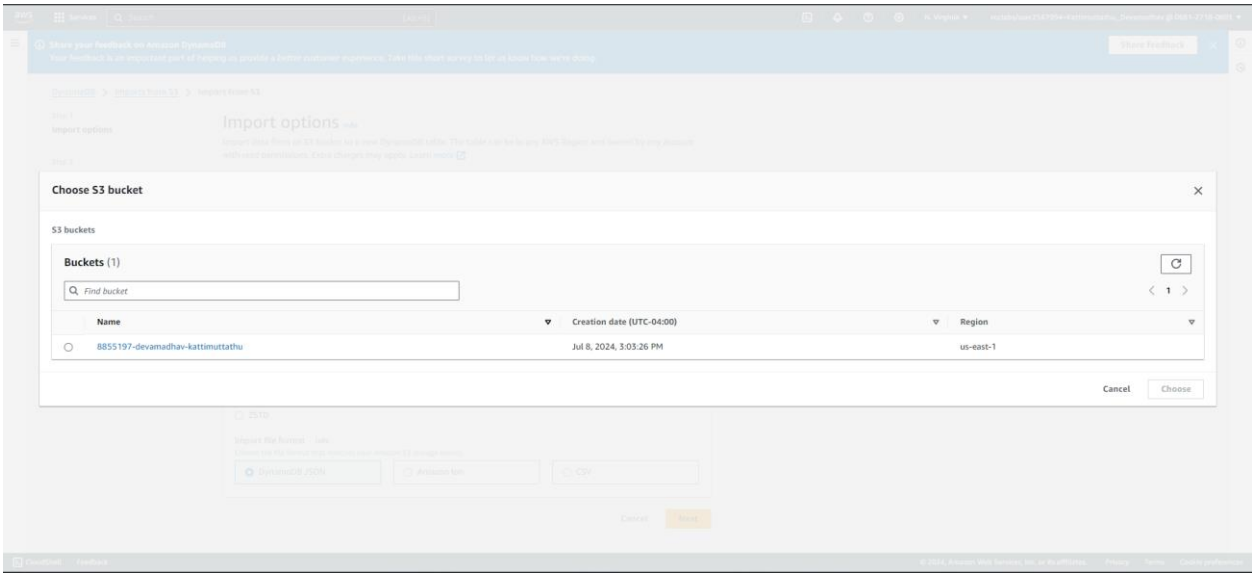

Figure 7 - Selecting our bucket for import

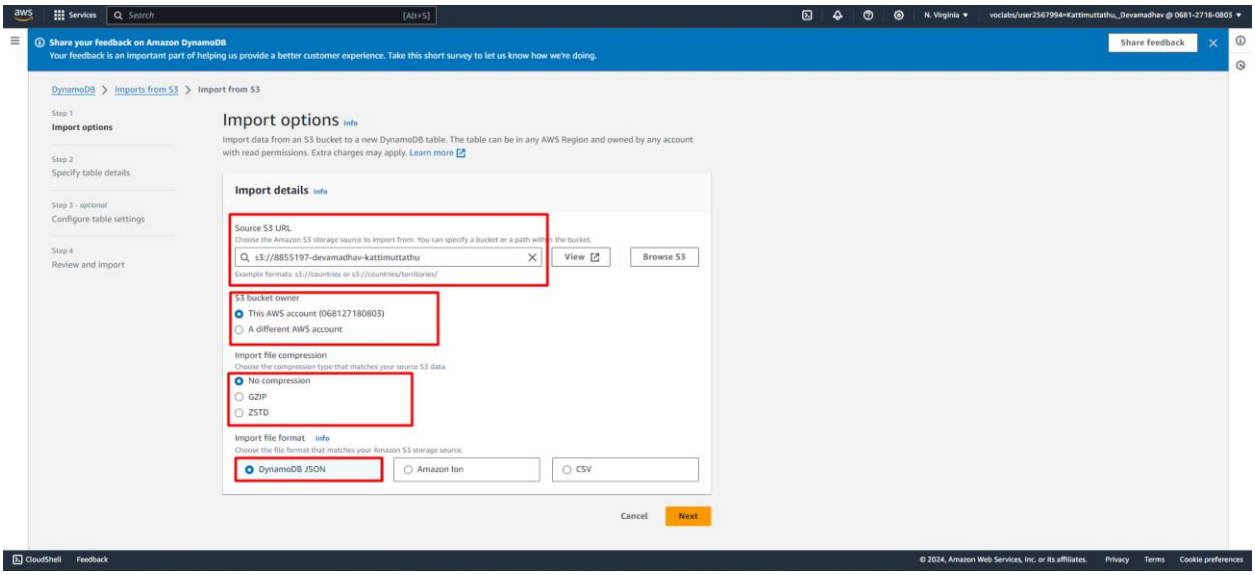

Figure 8 – Set the s3 bucket owner as our Aws account, set no compression for the import file and set the import file format as DynamoDB JSON

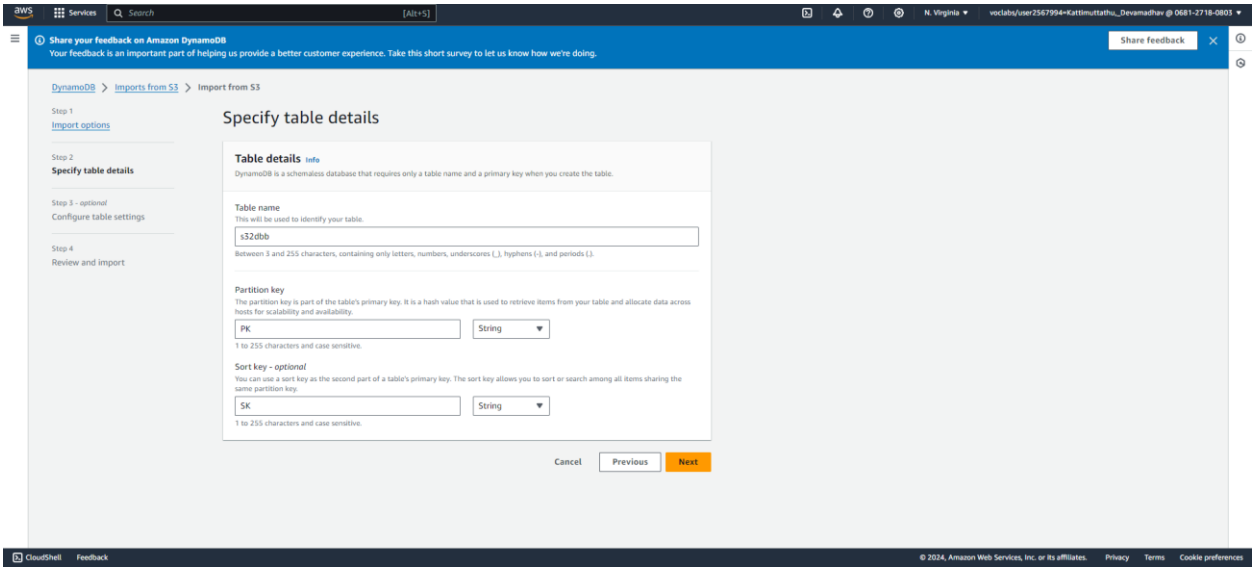

Figure 9 - Creating a new table by specifing the partition and sort key values

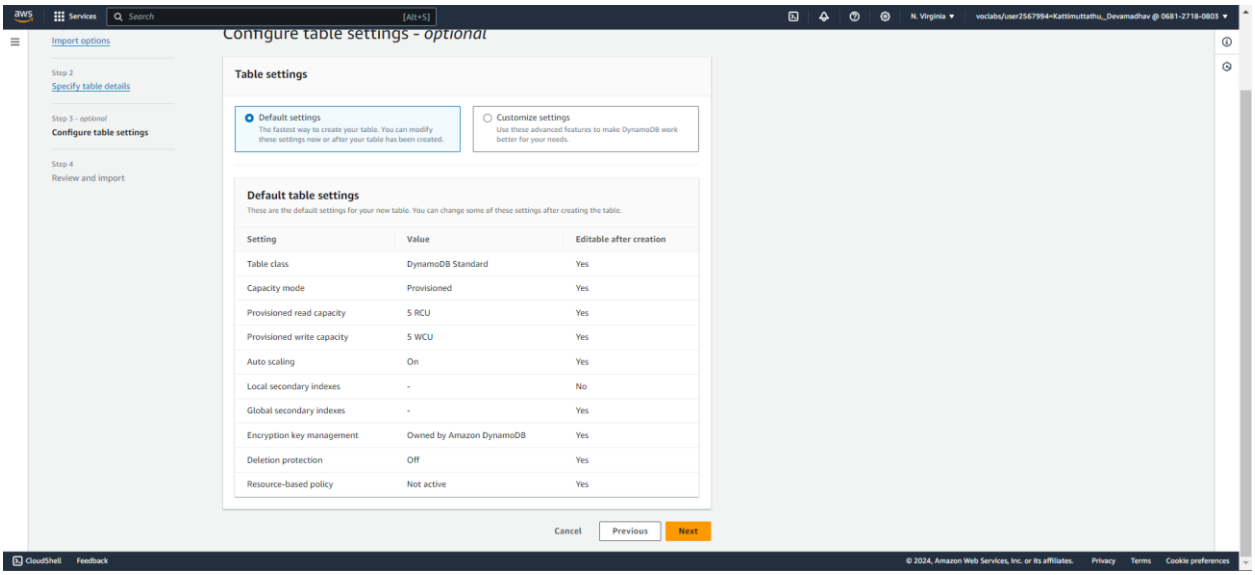

Figure 10 - Proceeding with 5RCU and 5 WCU

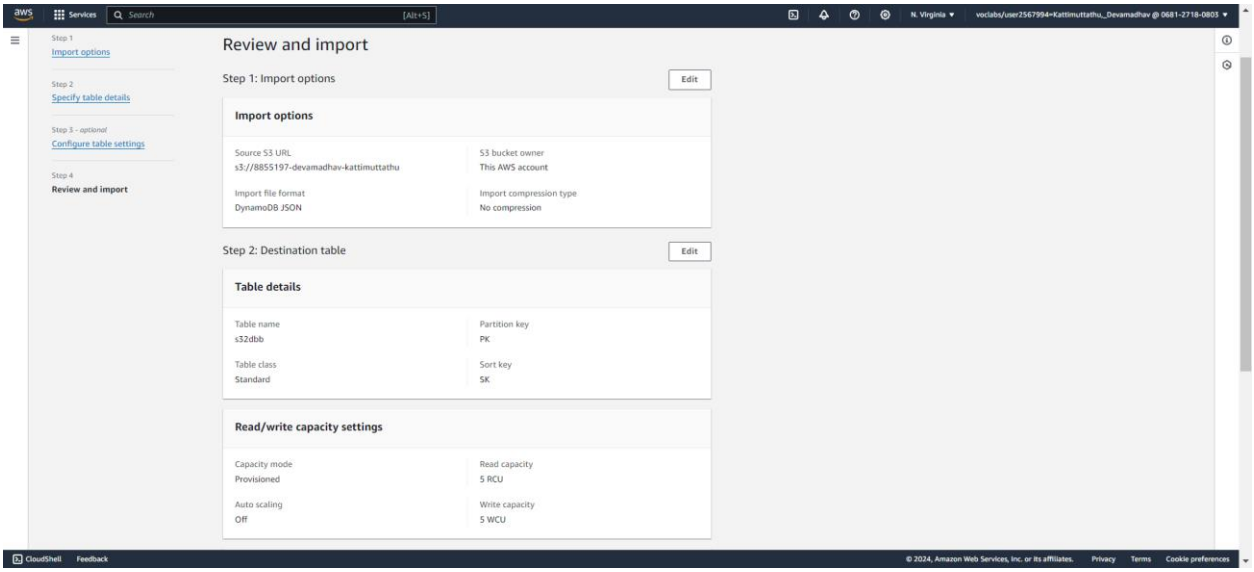

Figure 11 - Reviewing the import options in DynamoDB

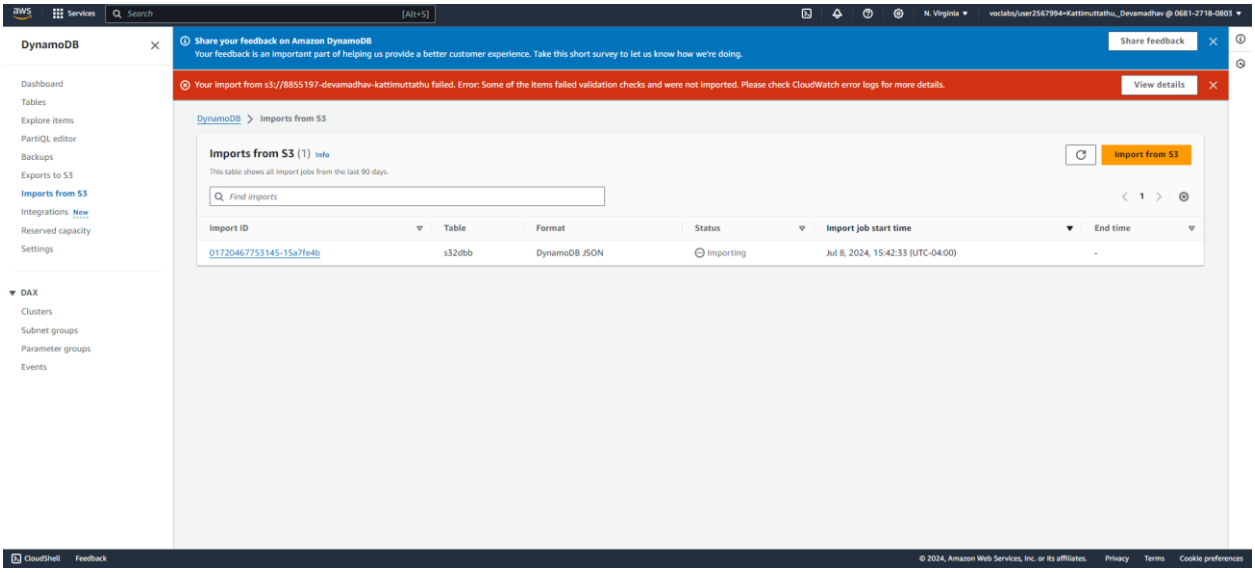

Figure 12 - Failed to import from s3

Analyze CloudWatch Error logs for the failures

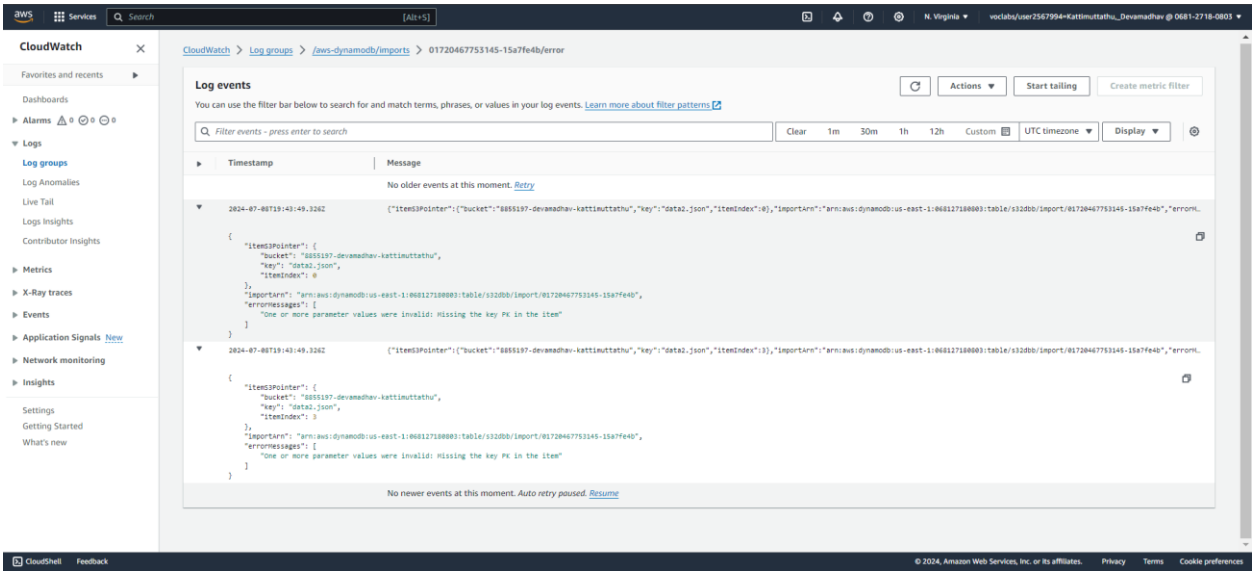

Figure 13 - Displaying the error in CloudWatch

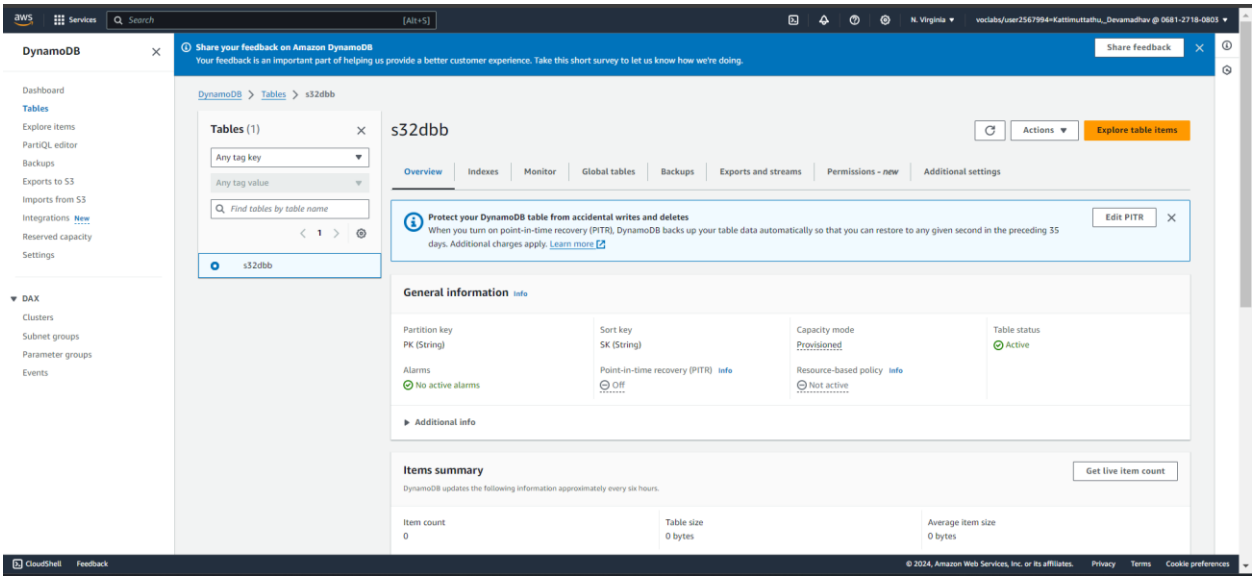

Figure 14 - Displaying the table

Figure 15 - Displaying the updated json file

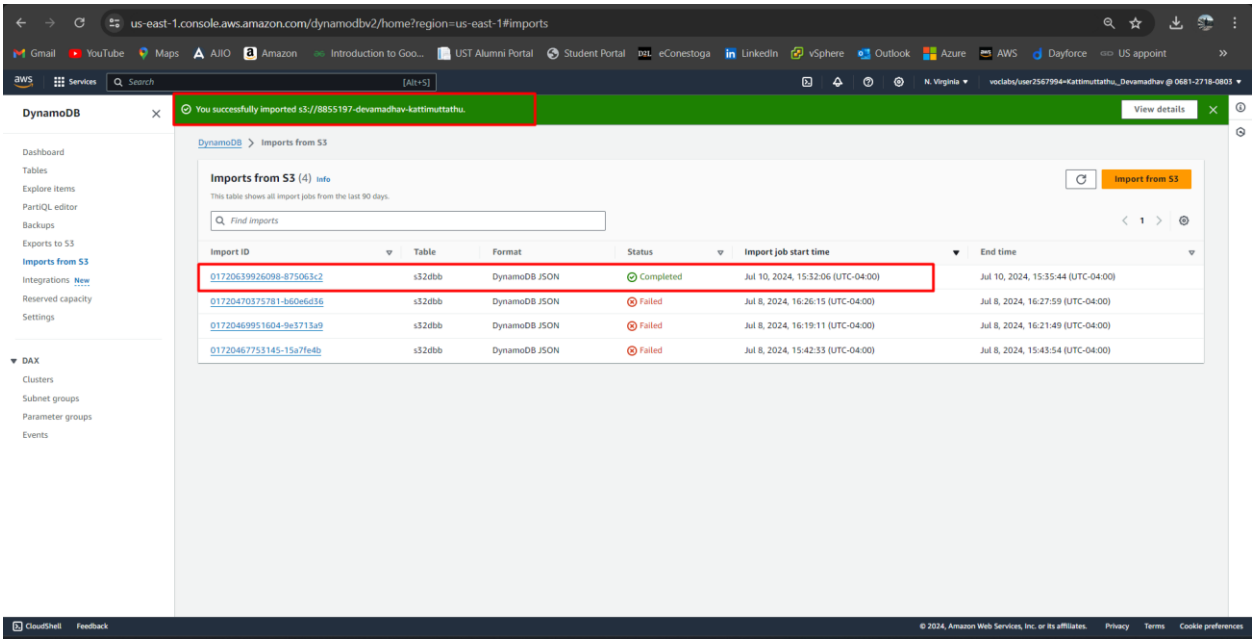

Figure 16 - Successfully imported the files from s3 after modifying json file