REMOTE WORK PROCEDURE ANALYSIS - SCREENSHOTS FROM AWS SERVICES

FIGURE 1

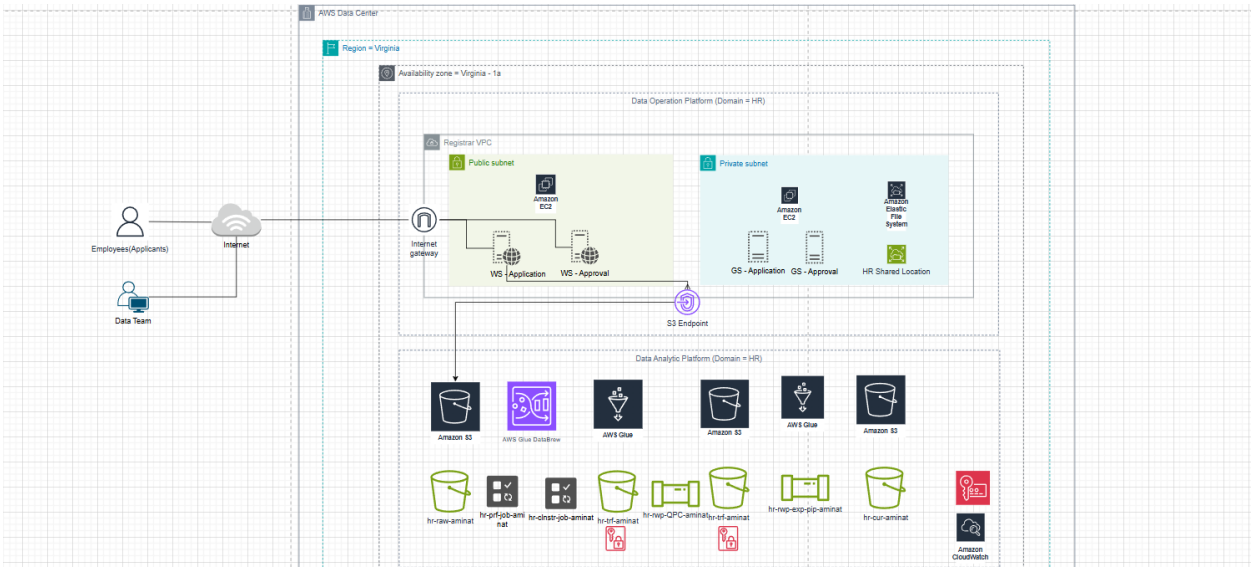
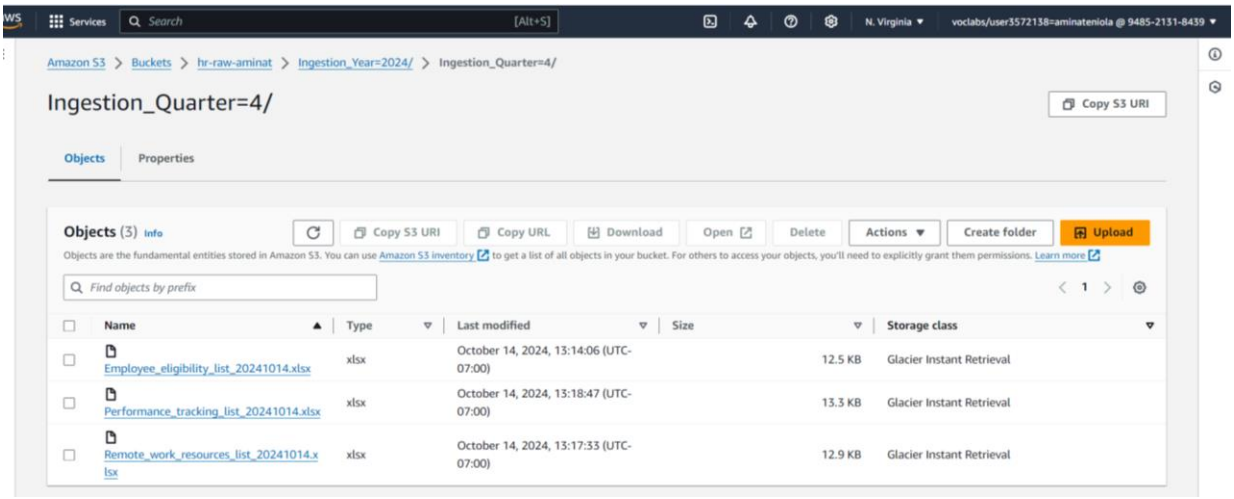


FIGURE 2 -



In this stage, the three datasets were cleaned using AWS Glue Databrew. It involved standardization of column naming and date formatting. These steps made the dataset accurate, consistent, and ready for further analysis. The use of AWS Glue Databrew for profiling and cleaning of the three datasets from

Remote work Procedure (namely) EMPLOYEES-ELIGIBITY-LIST, PERFORMANCE-TRACKING-LIST(HR), AND REMOTE RESOURCES LIST.

FIGURE 3- s3

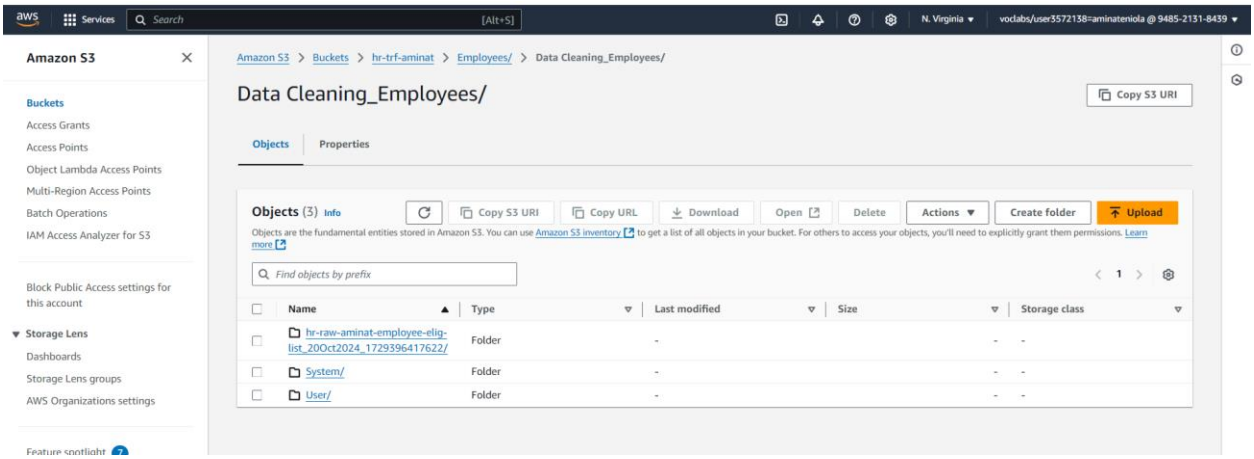


FIGURE 4

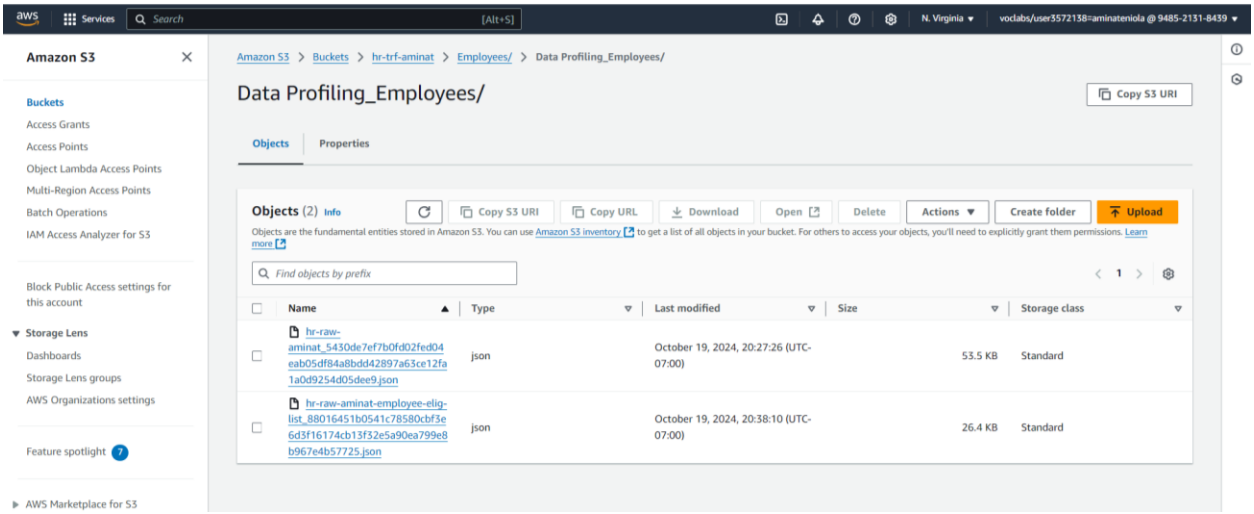
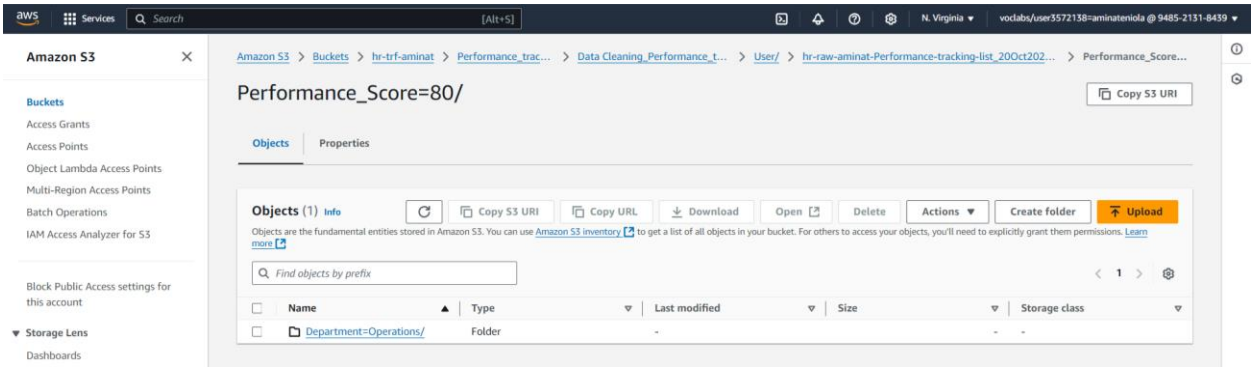


FIGURE 5



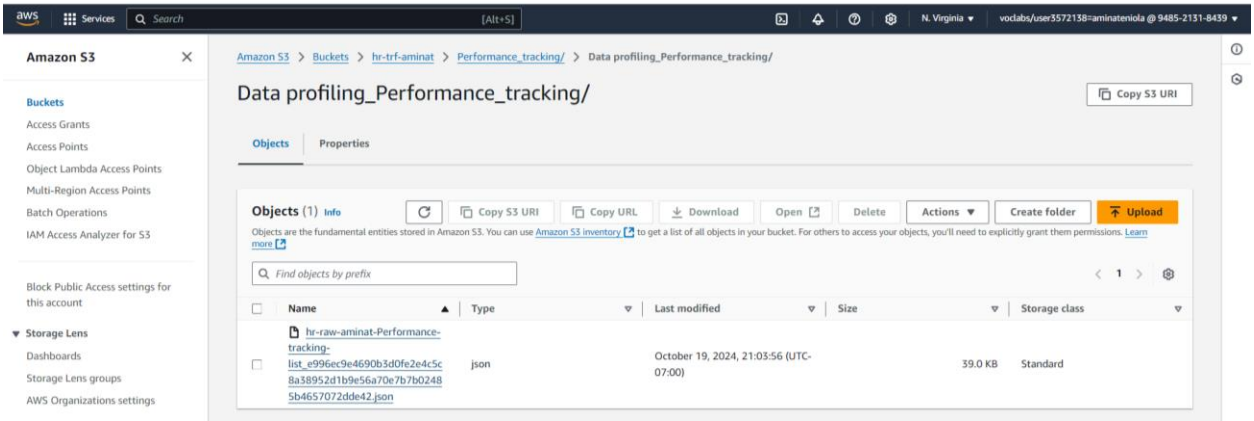
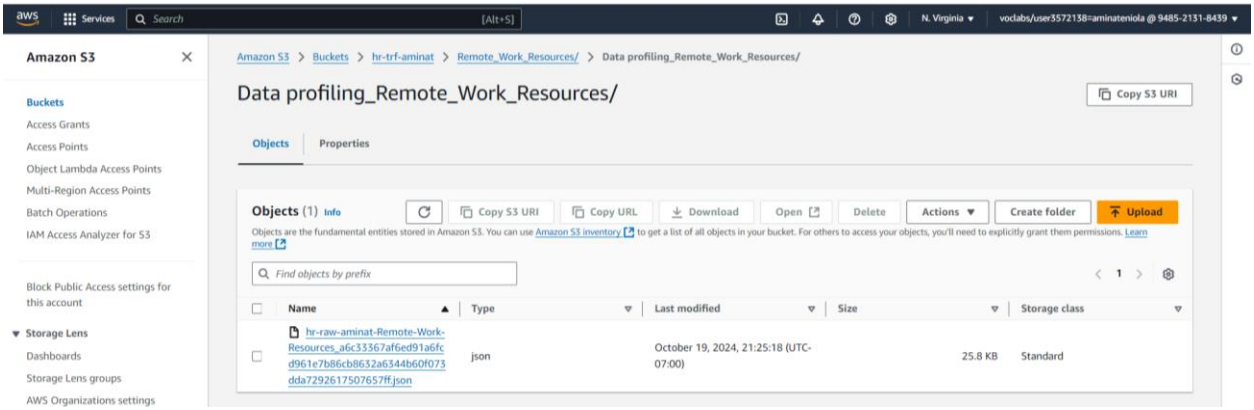
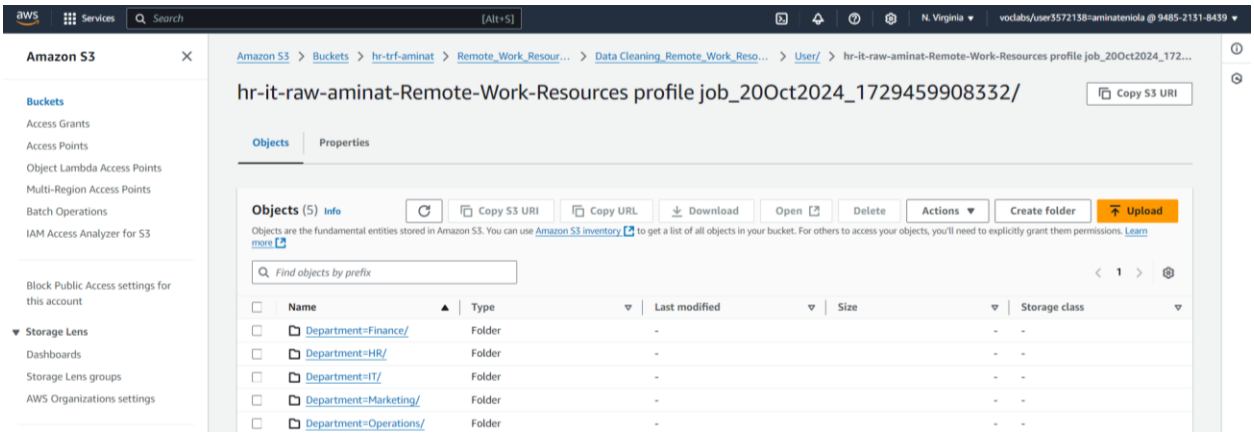


FIGURE 6





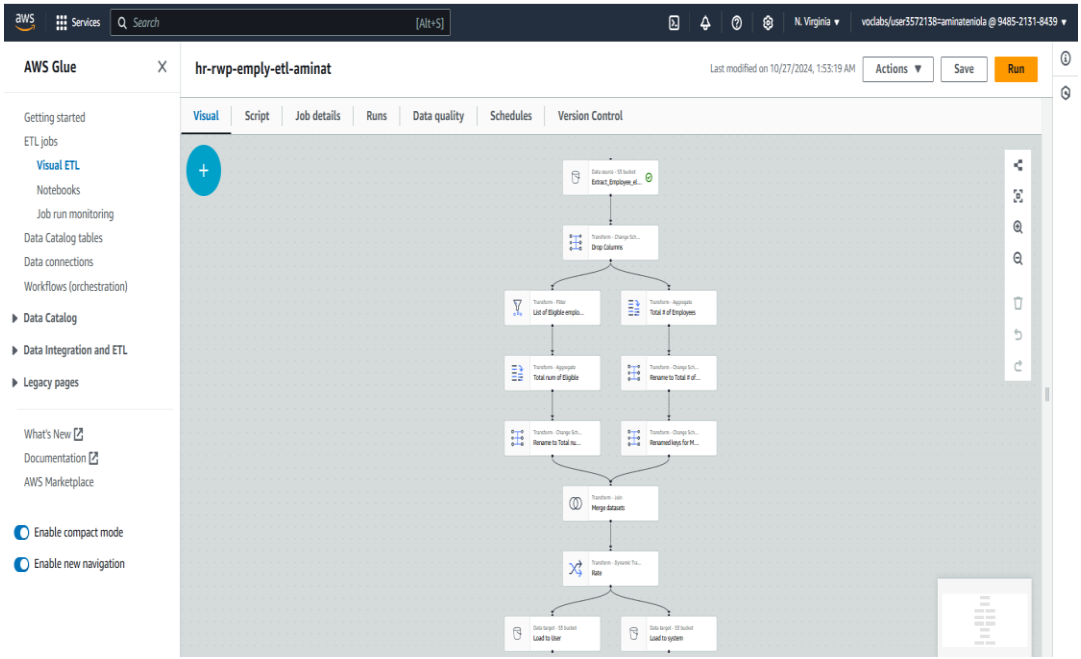
Business question (Dataset 1)

"How does remote work eligibility vary across employees and departments, and what implications does this have for resource allocation and policy adjustments?"

The question for **descriptive analysis** on the **Employee Eligibility List** :

1. **What percentage of employees are eligible for remote work?**
    - **Metric**: Count and percentage of eligible vs. ineligible employees. This provides a quick overview of the organization's stance on remote work eligibility and helps assess potential remote work policy impacts.

FIGURE 7



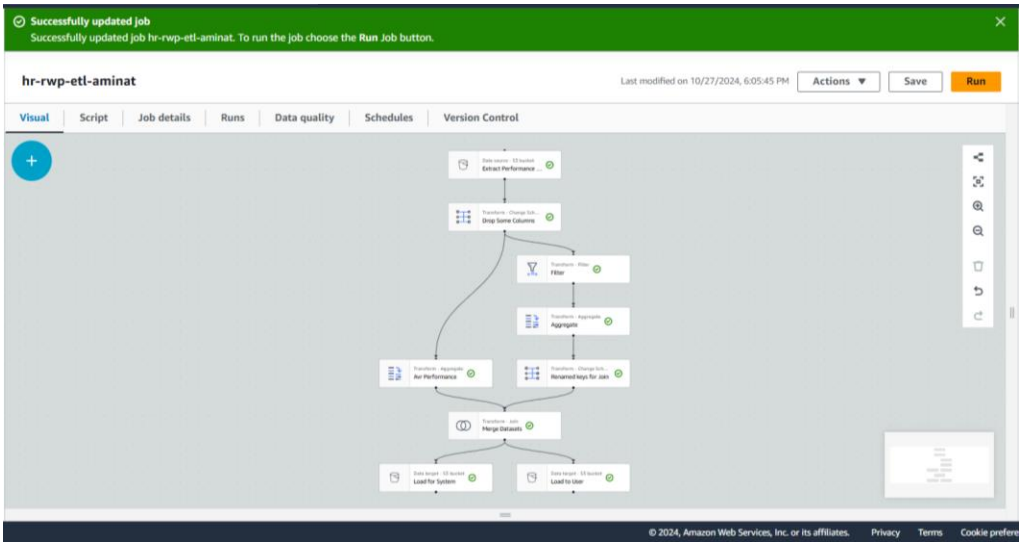
Business Question (Dataset 2):

"How is employee performance distributed across roles and departments, and what factors contribute to higher productivity levels in remote work?"

Data Question:

1. **What is the average performance score across positions?**
    - Metric: Average performance score by role, highlighting roles with higher or lower productivity. And the distribution of feedback ratings among employees

FIGURE 8



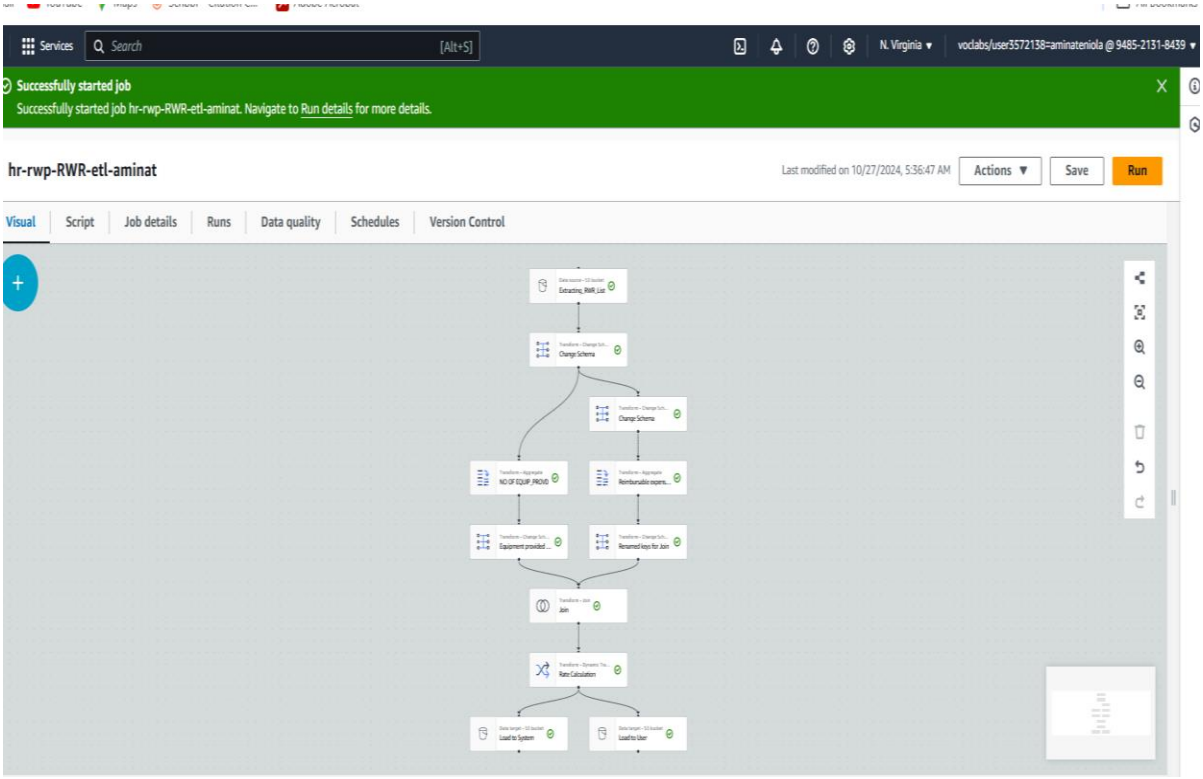
Business Question (Dataset 3):

"How effectively are remote work resources distributed across departments, and are they aligned with employee needs to support productivity?"

Data Question:

1. **What percentage of employees have been provided with each type of equipment?**
    - Metric: Count and percentage of employees with specific equipment (e.g., laptops, monitors) to determine resource allocation patterns.

FIGURE 9



Employees and Employees Eligibility Status – Diagnostic Analysis

The power of employee application clickstream sample data, captured through logins on a web virtual server (public subnet), to assess employee eligibility status comprehensively. This system tracks login frequencies, durations, and activities, providing real-time insights into employee engagement and compliance with remote work protocols. By mapping these data points against established eligibility criteria, the process not only identifies potential discrepancies but also pinpoints areas for proactive engagement and support, ensuring all employees meet the necessary standards for remote work eligibility.

FIGURE 10

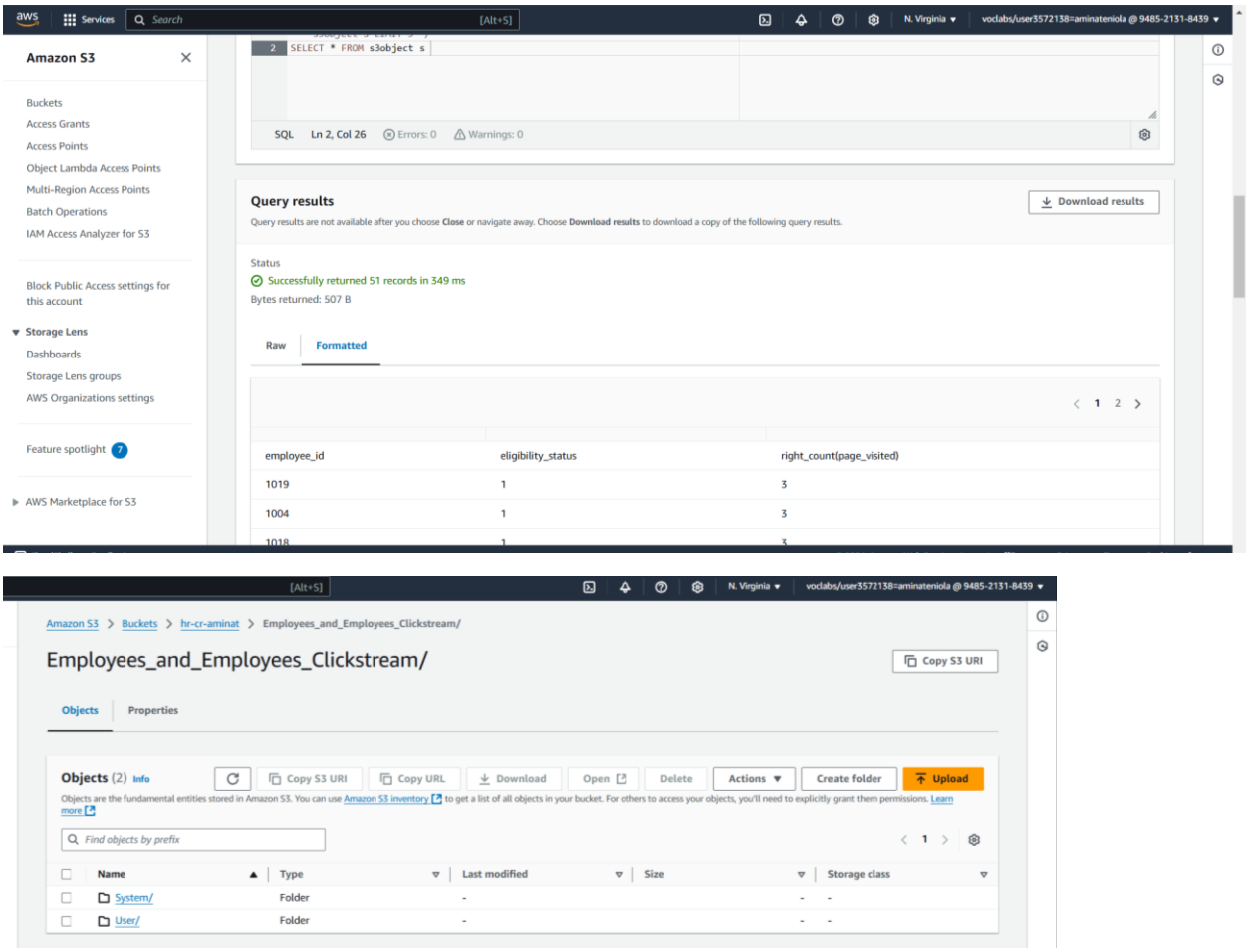
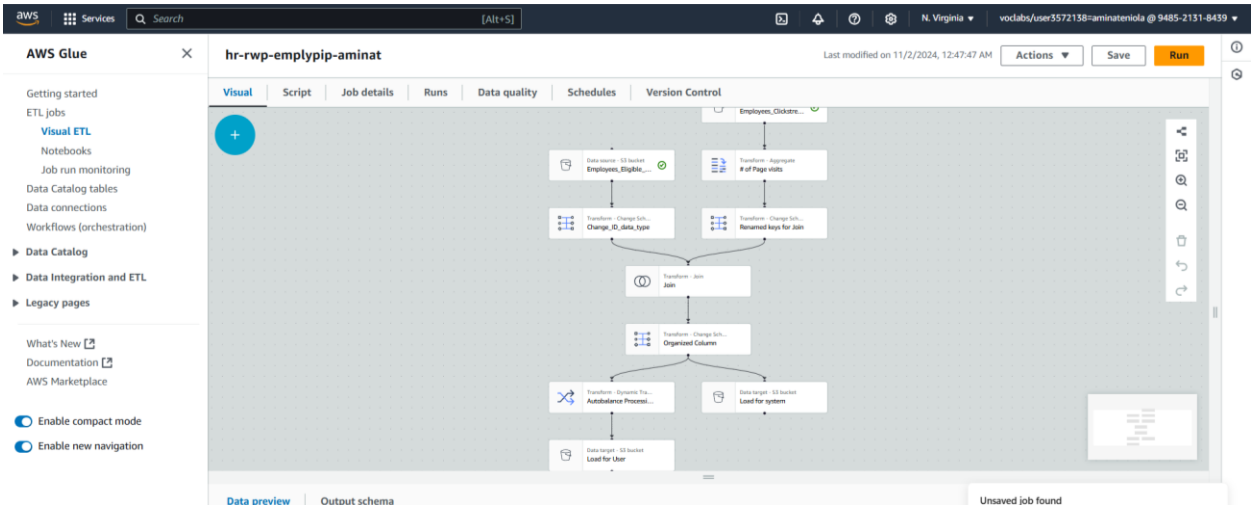


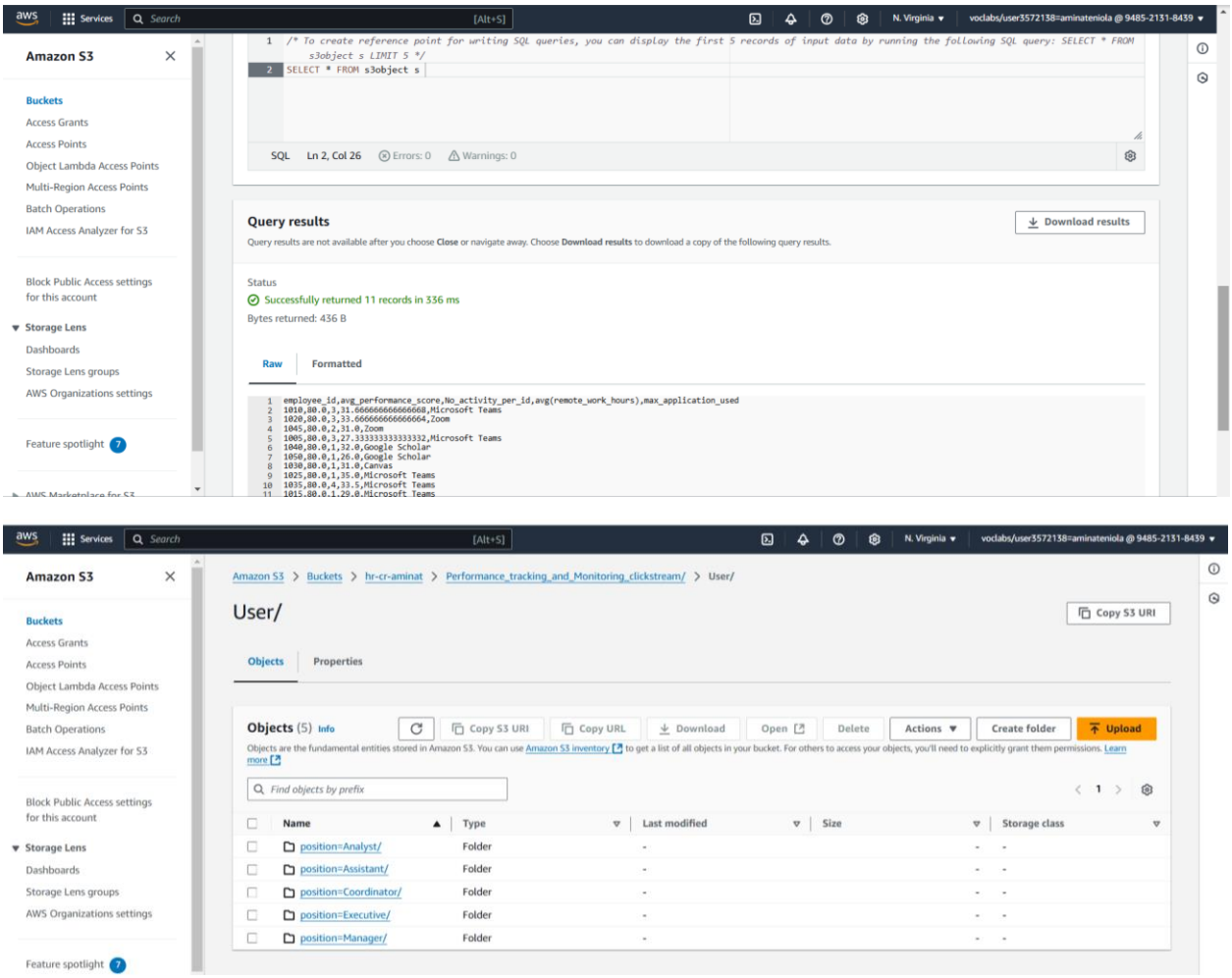
FIGURE 11

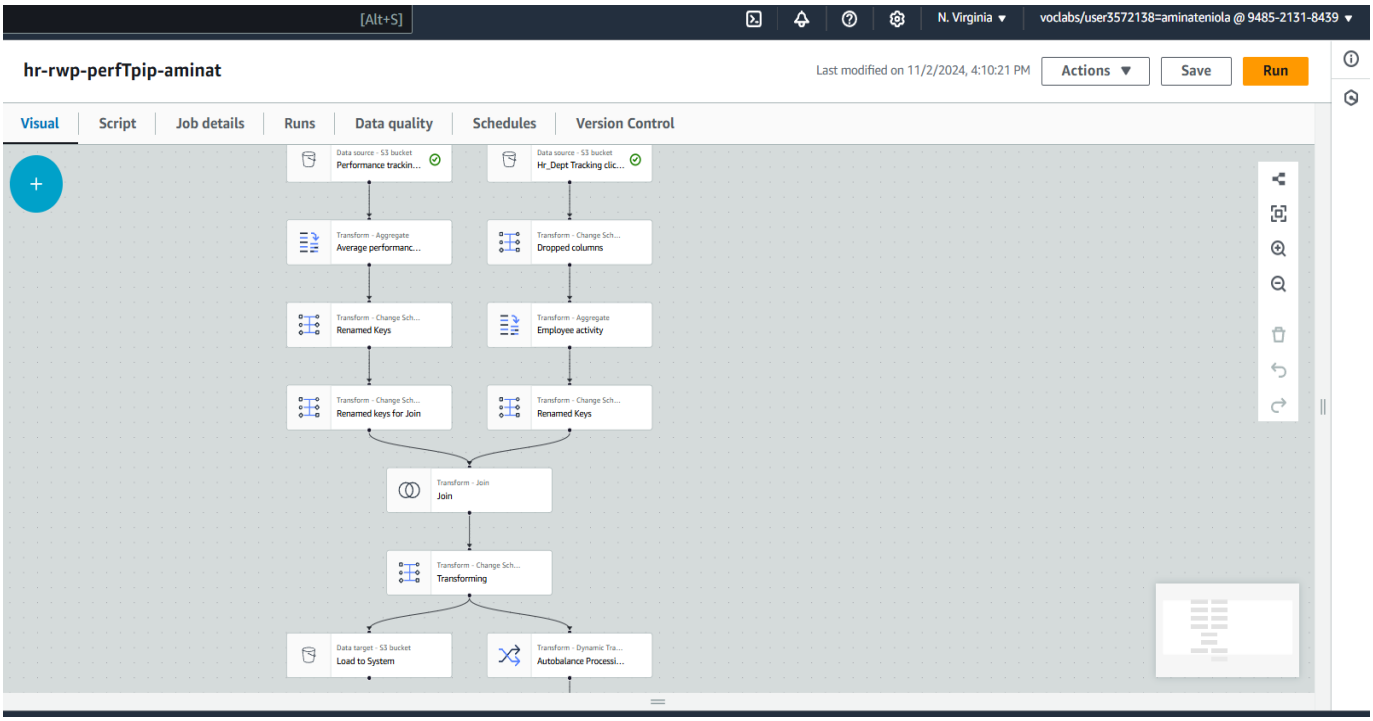


Performance tracking and monitoring analysis (Dataset 2)

Leveraging AWS ETL and Glue, I designed a robust data processing pipeline focused on extracting and analyzing clickstream data from HR departmental logs on a secure private subnet. This setup meticulously correlates employees' remote login activities and work hours with their performance scores, ensuring that remote work does not compromise productivity.

FIGURE 12

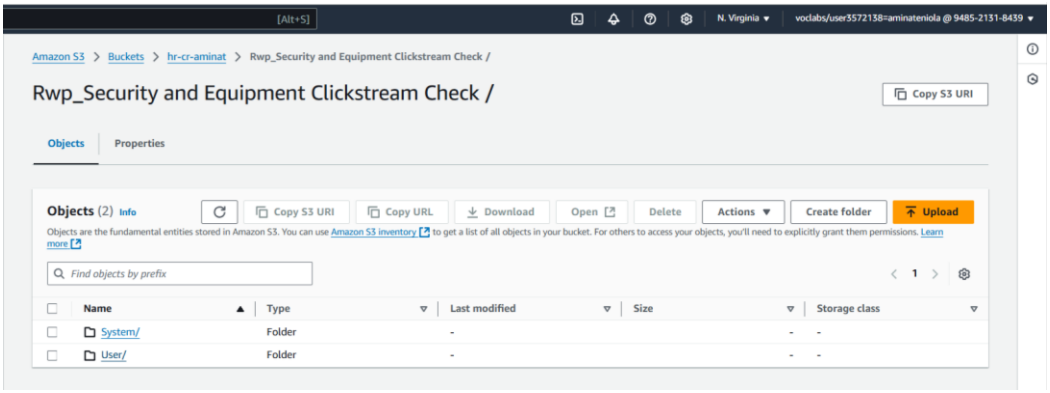




Remote Work Resources_Security and Equipment Clickstream Check

Using AWS ETL and Glue, I built a secure data pipeline that merges remote work resource data with clickstream logs, offering insights into resource usage and security compliance. By joining HR resource lists with activity logs, this setup reveals how provided equipment, reimbursable expenses, and security measures align with employee activity patterns. This streamlined view enables validation of reimbursement claims, assessment of equipment usage, and monitoring of security standards, supporting informed decisions in managing remote work effectively.

FIGURE 13



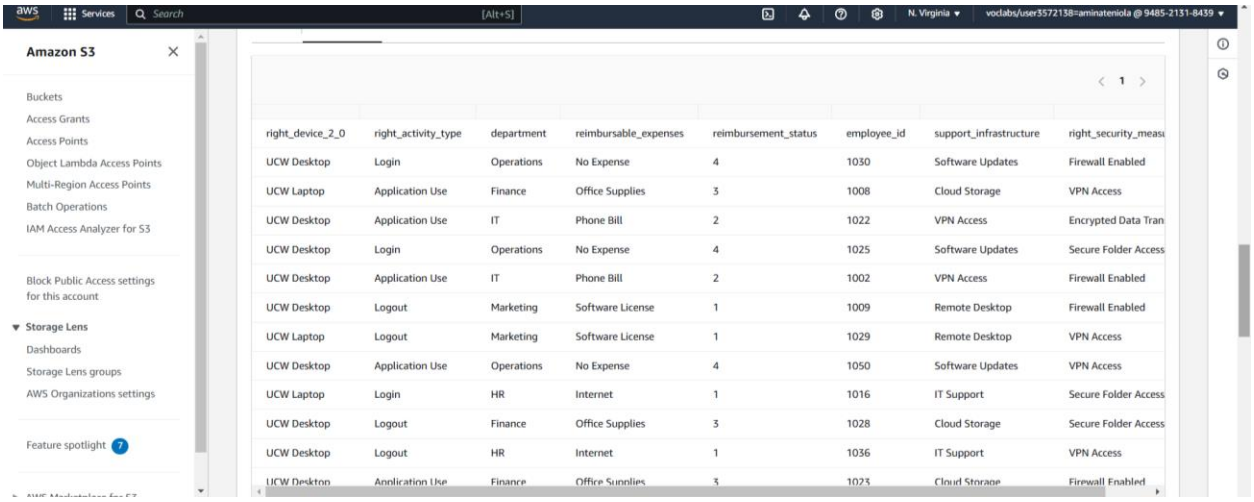
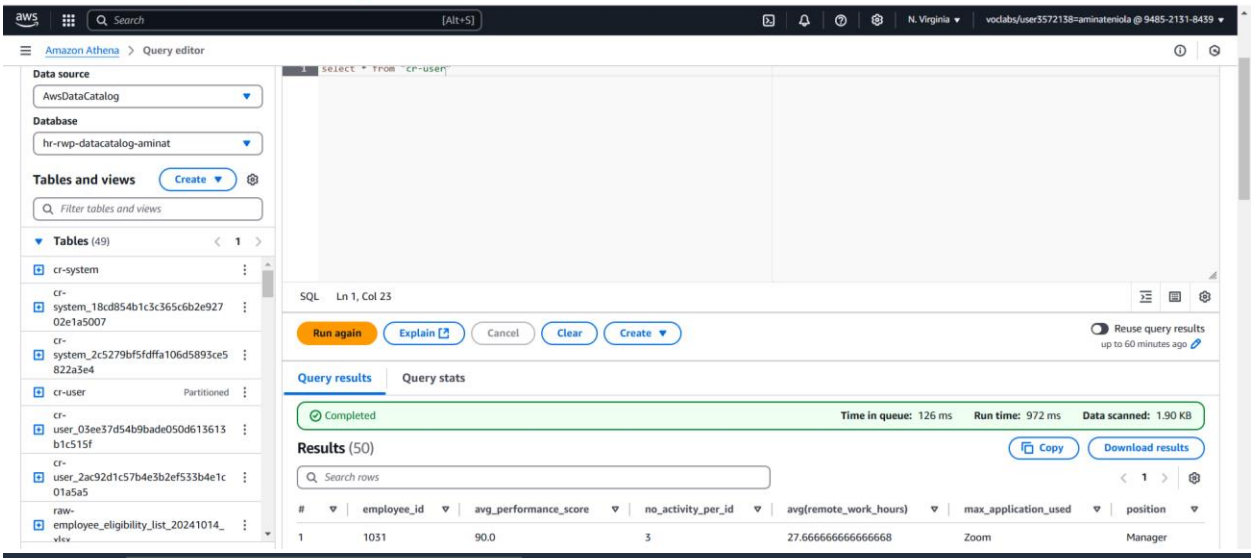

Amazon S3
Buckets
Access Grants
Access Points
Object Lambda Access Points
Multi-Region Access Points
Batch Operations
IAM Access Analyzer for S3
Block Public Access settings for this account
Storage Lens
Dashboards
Storage Lens groups
AWS Organizations settings
Feature spotlight
right_device_2_0 | right_activity_type | department | reimbursable_expenses | reimbursement_status | employee_id | support_infrastructure | right_security_meas
UCW Desktop | Login | Operations | No Expense | 4 | 1030 | Software Updates | Firewall Enabled
UCW Laptop | Application Use | Finance | Office Supplies | 3 | 1008 | Cloud Storage | VPN Access
UCW Desktop | Application Use | IT | Phone Bill | 2 | 1022 | VPN Access | Encrypted Data Tran
UCW Desktop | Login | Operations | No Expense | 4 | 1025 | Software Updates | Secure Folder Access
UCW Desktop | Application Use | IT | Phone Bill | 2 | 1002 | VPN Access | Firewall Enabled
UCW Desktop | Logout | Marketing | Software License | 1 | 1009 | Remote Desktop | Firewall Enabled
UCW Laptop | Logout | Marketing | Software License | 1 | 1029 | Remote Desktop | VPN Access
UCW Desktop | Application Use | Operations | No Expense | 4 | 1050 | Software Updates | VPN Access
UCW Laptop | Login | HR | Internet | 1 | 1016 | IT Support | Secure Folder Access
UCW Desktop | Logout | Finance | Office Supplies | 3 | 1028 | Cloud Storage | Secure Folder Access
UCW Desktop | Logout | HR | Internet | 1 | 1036 | IT Support | VPN Access
UCW Desktop | Application Use | Finance | Office Supplies | 3 | 1023 | Cloud Storage | Firewall Enabled

FIGURE 14


Amazon Athena > Query editor
Data source
AwsDataCatalog
Database
hr-rwp-datacatalog-aminat
Tables and views
Create
Filter tables and views
Tables (49)
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cr-system_2c5279bf5fdffa106d5893ce5822a3e4
cr-user
Partitioned
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select * from "cr-user"
SQL Ln 1, Col 23
Run again
Explain
Cancel
Clear
Create
Reuse query results
up to 60 minutes ago
Query results
Query stats
Completed
Time in queue: 126 ms
Run time: 972 ms
Data scanned: 1.90 KB
Results (50)
Copy
Download results
Search rows
| employee_id | avg_performance_score | no_activity_per_id | avg(remote_work_hours) | max_application_used | position
1 | 1031 | 90.0 | 3 | 27.666666666666668 | Zoom | Manager

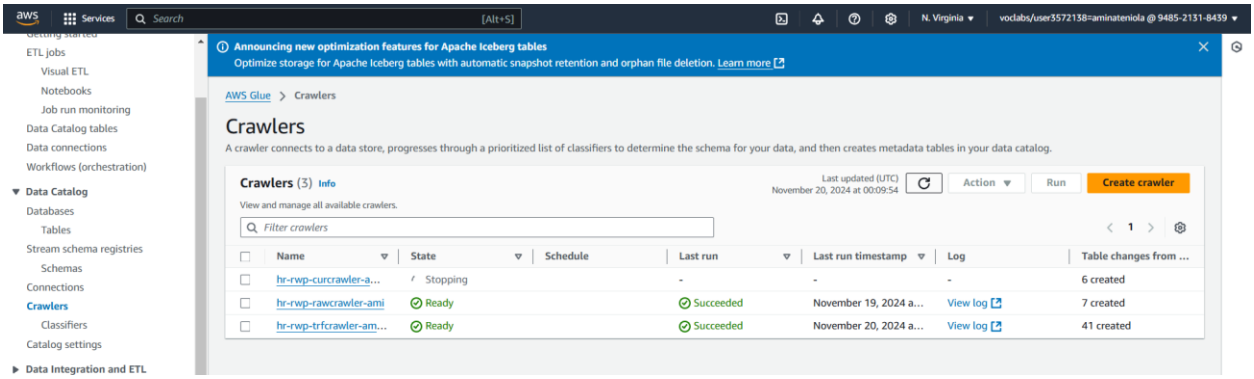

Announcing new optimization features for Apache Iceberg tables
Optimize storage for Apache Iceberg tables with automatic snapshot retention and orphan file deletion. Learn more
AWS Glue > Crawlers
Crawlers
A crawler connects to a data store, progresses through a prioritized list of classifiers to determine the schema for your data, and then creates metadata tables in your data catalog.
ETL jobs
Visual ETL
Notebooks
Job run monitoring
Data Catalog tables
Data connections
Workflows (orchestration)
Data Catalog
Databases
Tables
Stream schema registries
Schemas
Connections
Crawlers
Classifiers
Catalog settings
Data Integration and ETL
Crawlers (3) Info
View and manage all available crawlers.
Last updated (UTC) November 20, 2024 at 00:09:54
Action
Run
Create crawler
Filter crawlers
Name | State | Schedule | Last run | Last run timestamp | Log | Table changes from ...
hr-rwp-curcrawler-a... | Stopping | - | - | - | 6 created
hr-rwp-rawcrawler-ami | Ready | Succeeded | November 19, 2024 a... | View log | 7 created
hr-rwp-trfcrawler-am... | Ready | Succeeded | November 20, 2024 a... | View log | 41 created

FIGURE 15

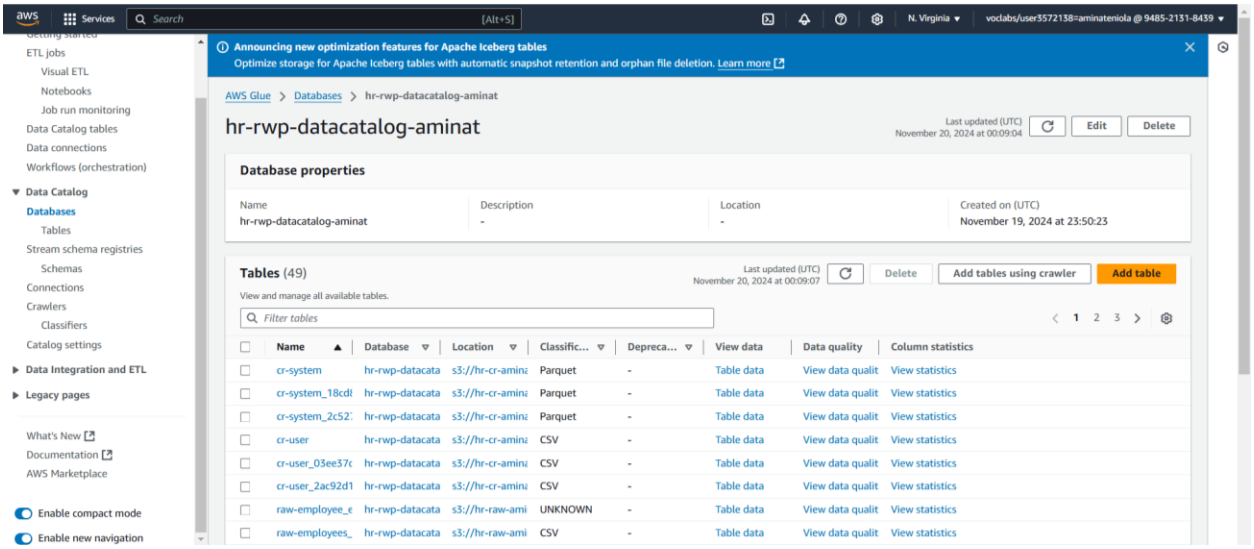


FIGURE 16-

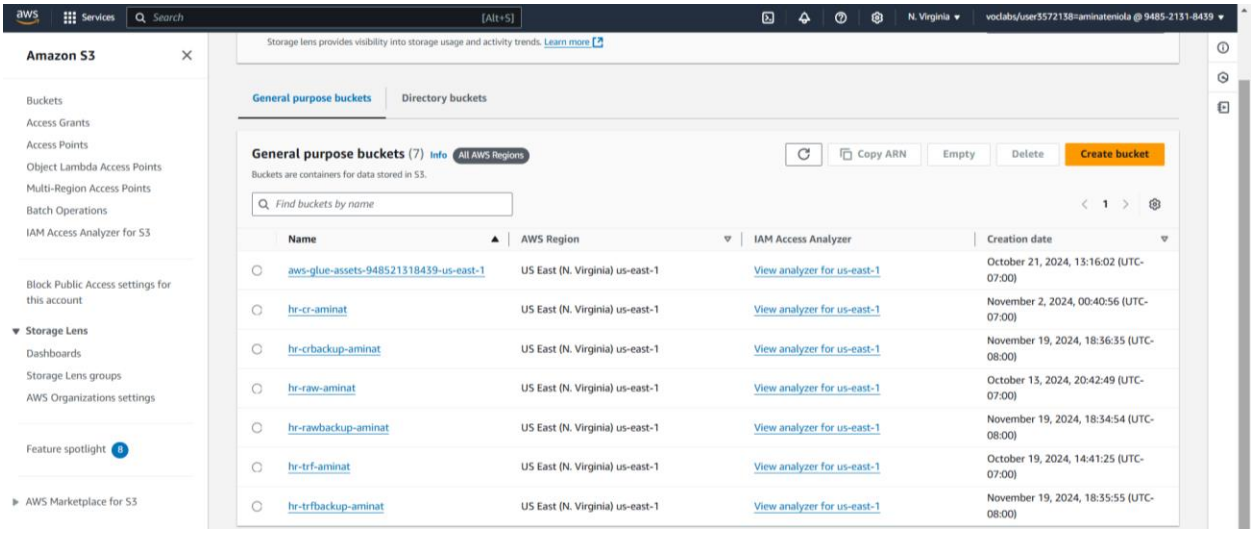
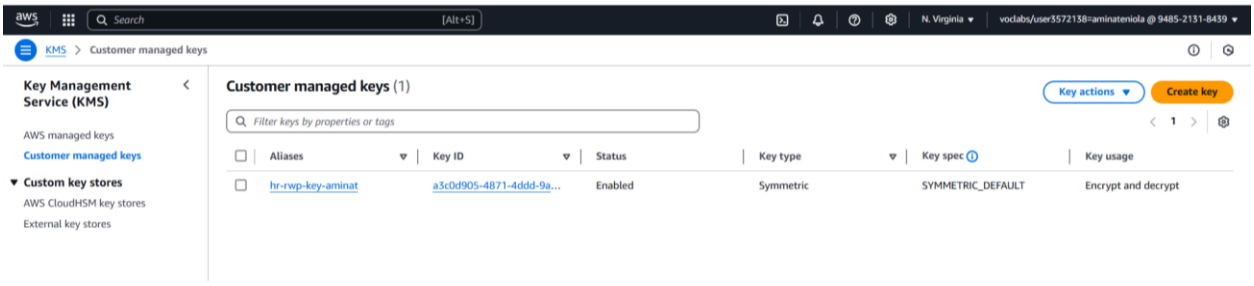


FIGURE 17



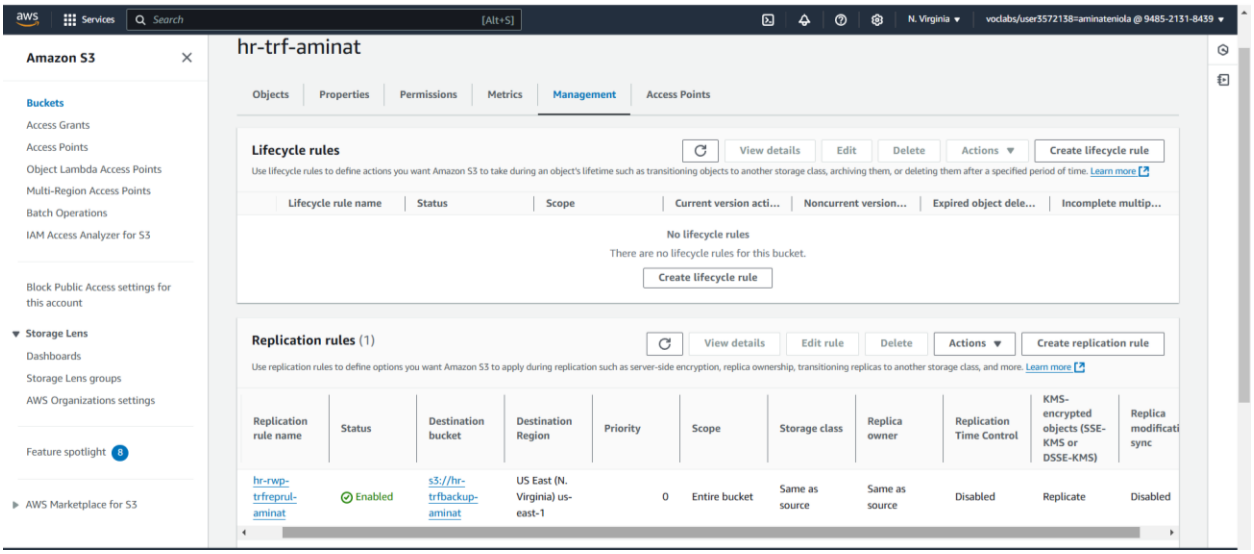
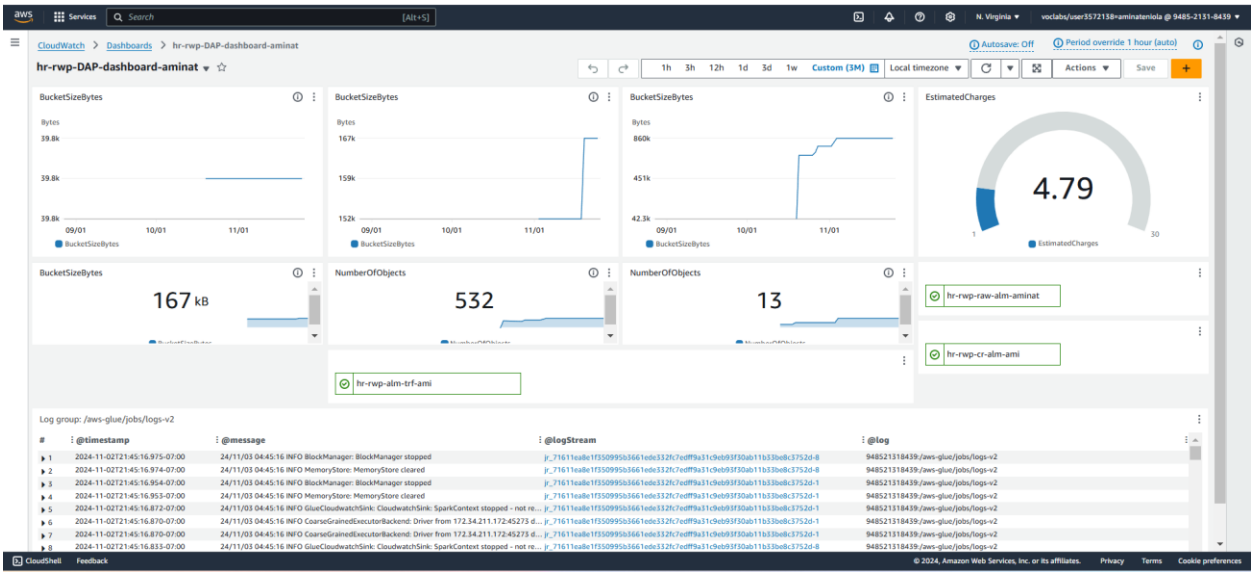


FIGURE 18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BucketSizeBytes
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hr-rwp-raw-alm-aminat
hr-rwp-cr-alm-ami
hr-rwp-alm-trf-ami
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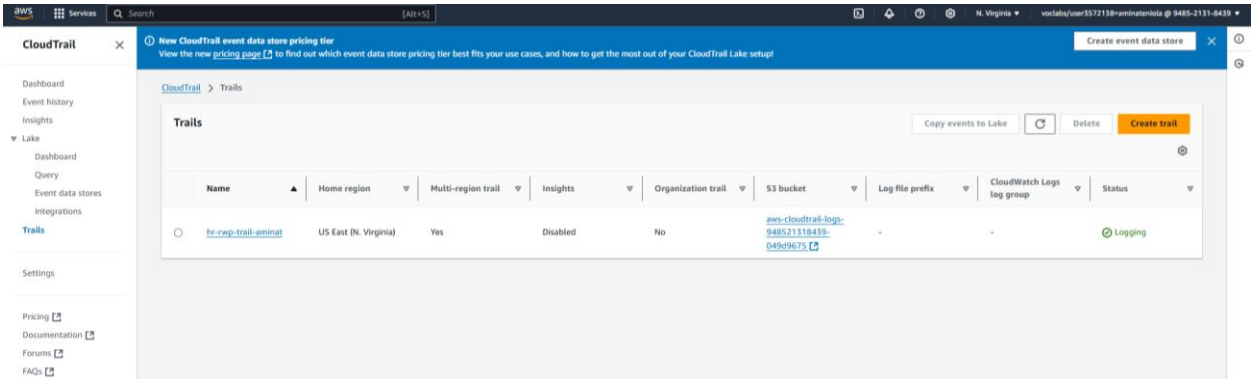
CloudTrail
New CloudTrail event data store pricing tier
Create event data store
Trails
Copy events to Lake
Delete
Create trail
hr-rwp-trail-aminat
US East (N. Virginia)
Logging