Practical Tips for Migrating your IBM Netezza Data Warehouse to the Cloud

Scale | Speed | Security | Simplicity | Cost-Efficiency | Data Lake Integration

Matt Scaer: Principal DW Specialist SA

Amazon Redshift is a cloud data warehouse that’s...

Most popular

More than 15K customers use Redshift and process more than 2 EB of data per day

Fastest

2x faster than the other cloud DWHs

Most cost-effective

Up to 75% less than other cloud DWHs

Integrated with the data lake

Query Exabytes of data directly in open formats with no loading required

Amazon Redshift

is the most popular cloud data warehouse

21ST CENTURY FOX
23andMe
amazon
AMGEN
ancestry
AstraZeneca

CIVIS
coinbase
coursera
DOW JONES
edmunds
EA

EQUINOX
FT FINANCIAL TIMES
FOURSQUARE
HEARST
iflix
intuit

Jack in the box
kik
Kimberly-Clark
Klarna
Liberty Mutual
London Stock Exchange

MANTHAN
MERCK
Nasdaq
The Ohio State University
OPTUM

PADDYPOWER betfair
Pfizer
Prezi
QANTAS
REDFIN

robinhood
SCHOLASTIC
Schumachergroup
SCOPELY SEIZE THE PLAY
SOUNDCLOUD
Sysco

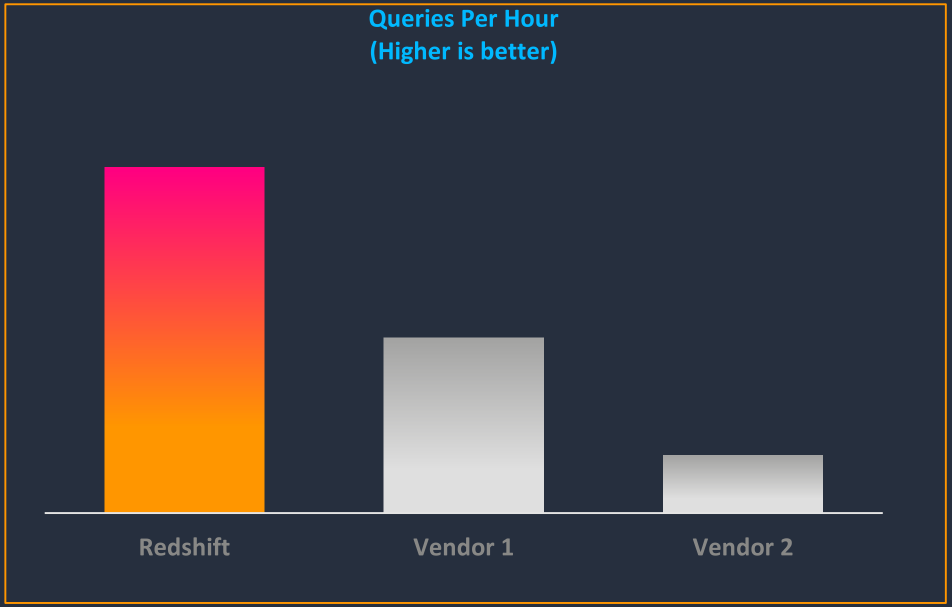
tinder
yelp

Amazon Redshift is the fastest cloud data warehouse

It reduces time to insights and gives you the **performance** you'll need as your business grows

Most popular | **Fastest** | Most cost-effective | Integrates with your data lake

up to **2x** faster than other cloud DWHs



Based on the cloud DWH benchmark derived from TPS-DS 30 TB dataset, 4-node cluster

10x faster than 2 years ago

Now delivers consistently fast performance scale even with virtually unlimited concurrent users

More than 200 features and enhancements delivered in the past 2 years, based on lessons from processing over 2 Exabytes of customer data every day

[3, 10 and 30TB: https://github.com/awslabs/amazon-redshift-utils/tree/master/src/CloudDataWarehouseBenchmark/Cloud-DWB-Derived-from-TPCDS](https://github.com/awslabs/amazon-redshift-utils/tree/master/src/CloudDataWarehouseBenchmark/Cloud-DWB-Derived-from-TPCDS)

Amazon Redshift is the most cost-effective

Moving to Redshift enables you run a 24x7 data warehouse cost-effectively

Most popular | Fastest | **Most cost-effective** | Integrates with your data lake

You can start small for just $0.25 per hour and scale to $1000 per terabyte per year, **less than one-tenth the cost of other solutions.**

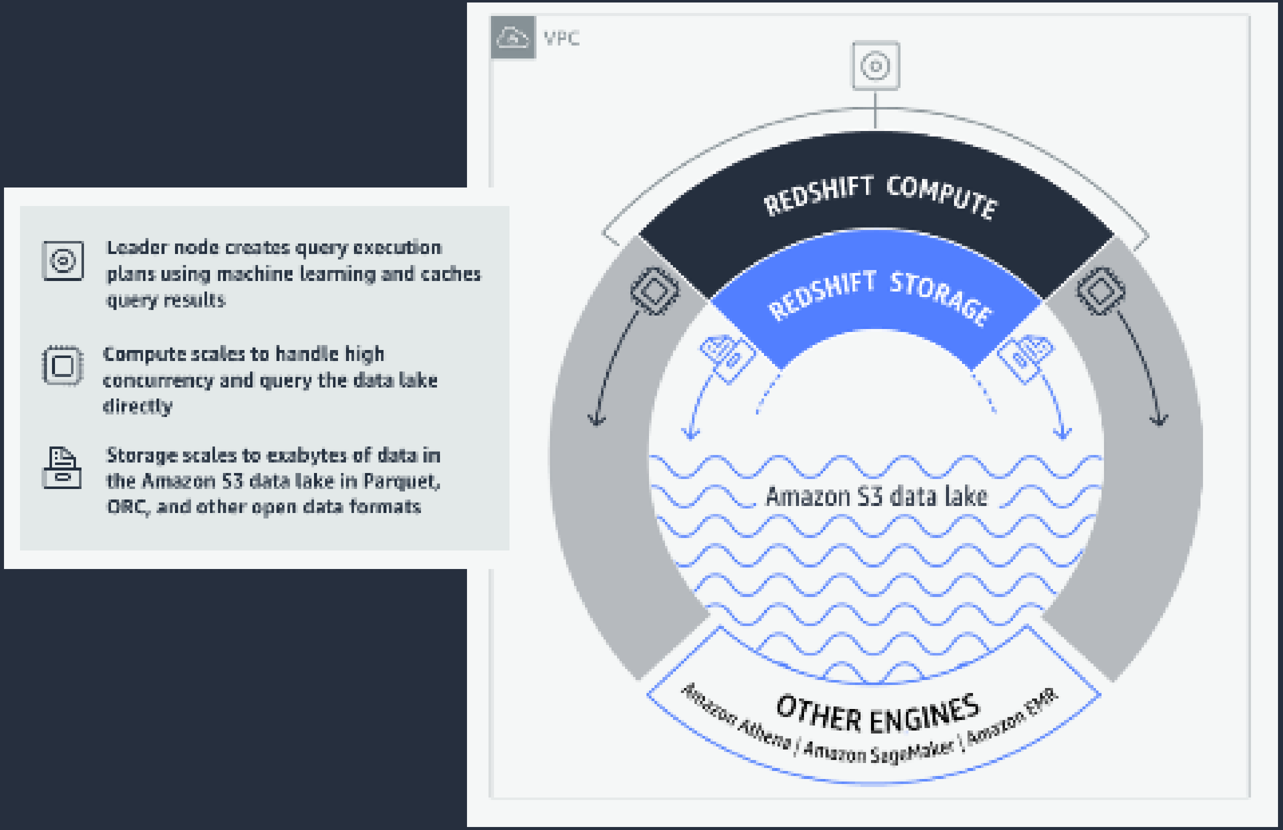
Use RI to reduce price up to 75% with Reserved Instances (RIs)

up to 75%

Amazon Redshift integrates with your data lake

Your Amazon Redshift Data Warehouse and Amazon S3 Data Lake enable all your workloads

Most popular | Fastest | Most cost-effective | **Integrates with your data lake**



Leader node creates query execution plans using machine learning and caches query results

Compute scales to handle high concurrency and query the data lake directly

Storage scales to exabytes of data in the Amazon S3 data lake in Parquet, ORC, and other open data formats

Exabyte scale

Store and analyze relational and non-relational data

Purpose-built analytics tools

Cost effective

- Store at 2.3 cents per GB-month in Amazon S3
- Query with Redshift Spectrum at $5/TB scanned
- DW with Amazon Redshift for $1000/TB/year

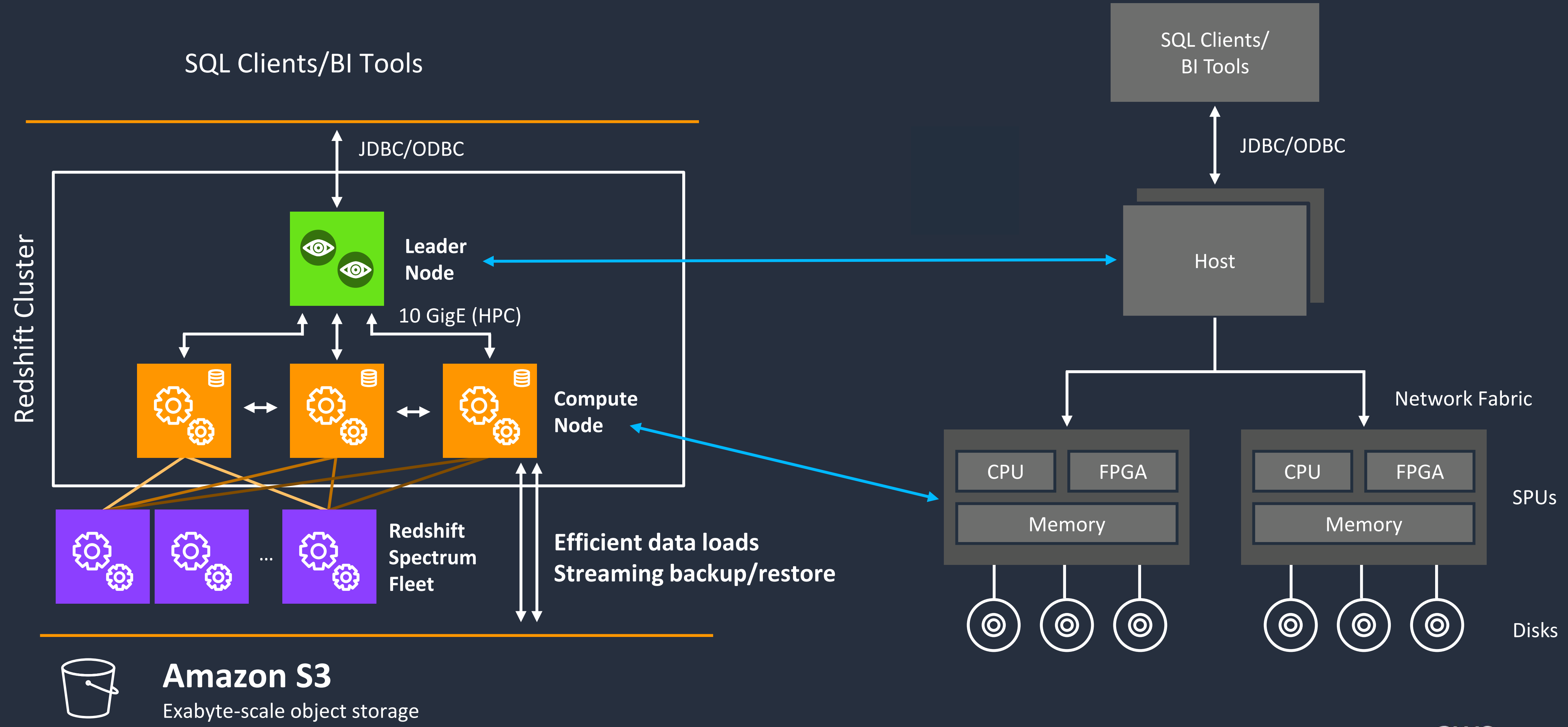
Give access to everyone

- Amazon QuickSight: $0.30 for 30 minutes of use

Redshift and Netezza:
Similarities Easing Migration to the Cloud

1. Shared PostgreSQL lineage
2. Many similar concepts should be familiar to Netezza experts.
3. Architecture has parallels to a pre-Spectrum Redshift.

Redshift & Netezza Architectures



Amazon Redshift Spectrum

Extend the data warehouse to exabytes of data in Amazon S3 Data Lake

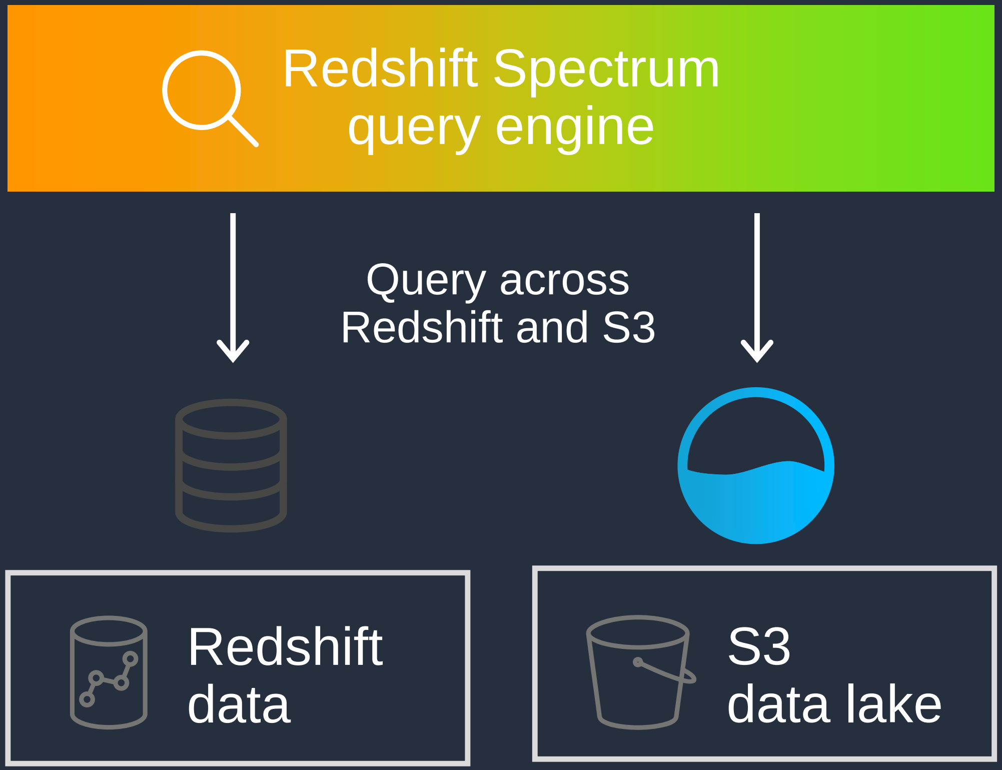
No data loading required

Scale compute and storage separately

Directly query data stored in Amazon S3

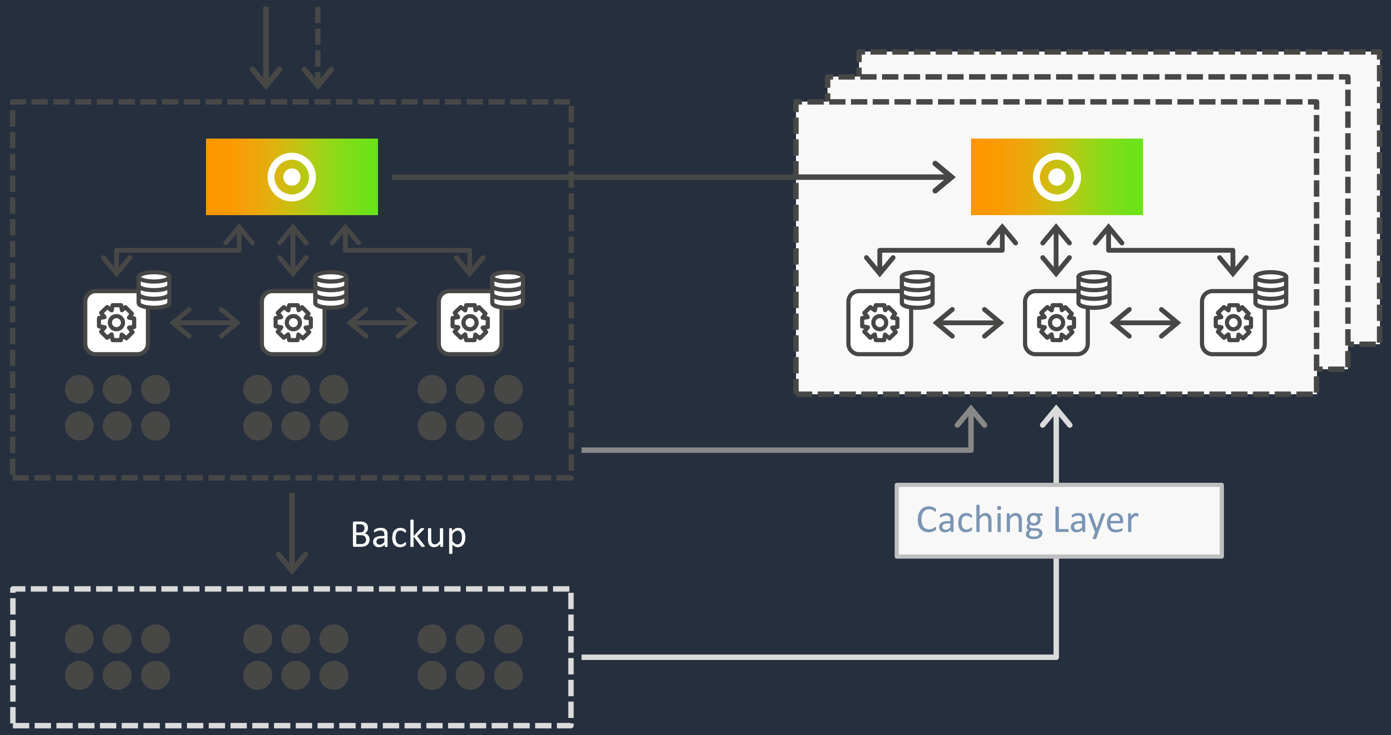
Parquet, ORC, Avro, JSON, and CSV data formats

Spectrum Request Accelerator



Concurrency Scaling

Redshift automatically adds transient clusters,
in seconds, to serve sudden spike in concurrent requests with consistently fast performance. No hydration required.



For every 24 hours that your main cluster is in use, you accrue a one hour credit for Concurrency Scaling. This means that Concurrency Scaling is **free** for > 97% of customers.

How it works:

1 All queries go to the leader node, user only sees less wait for queries.

2 When queries in designated WLM queue begin queuing, Redshift automatically routes them to the new clusters, enabling Concurrency Scaling automatically.

3 Redshift automatically spins up a new cluster, processes waiting queries and automatically shuts down the Concurrency Scaling cluster.

> *Concurrency Scaling is a powerful new feature of Amazon Redshift. We were really impressed by the performance of the feature, especially with its ability to instantly add transient capacity with nothing to manage on our end. As Redshift administrators at Yelp, we think that Concurrency Scaling will keep our many users happy, even under peak load. We're excited that Concurrency Scaling provides the flexibility to handle significant variance in our workloads over the course of a day.*

-**Shahid Chohan**,
Software Engineer, Yelp

Redshift Elastic Resize

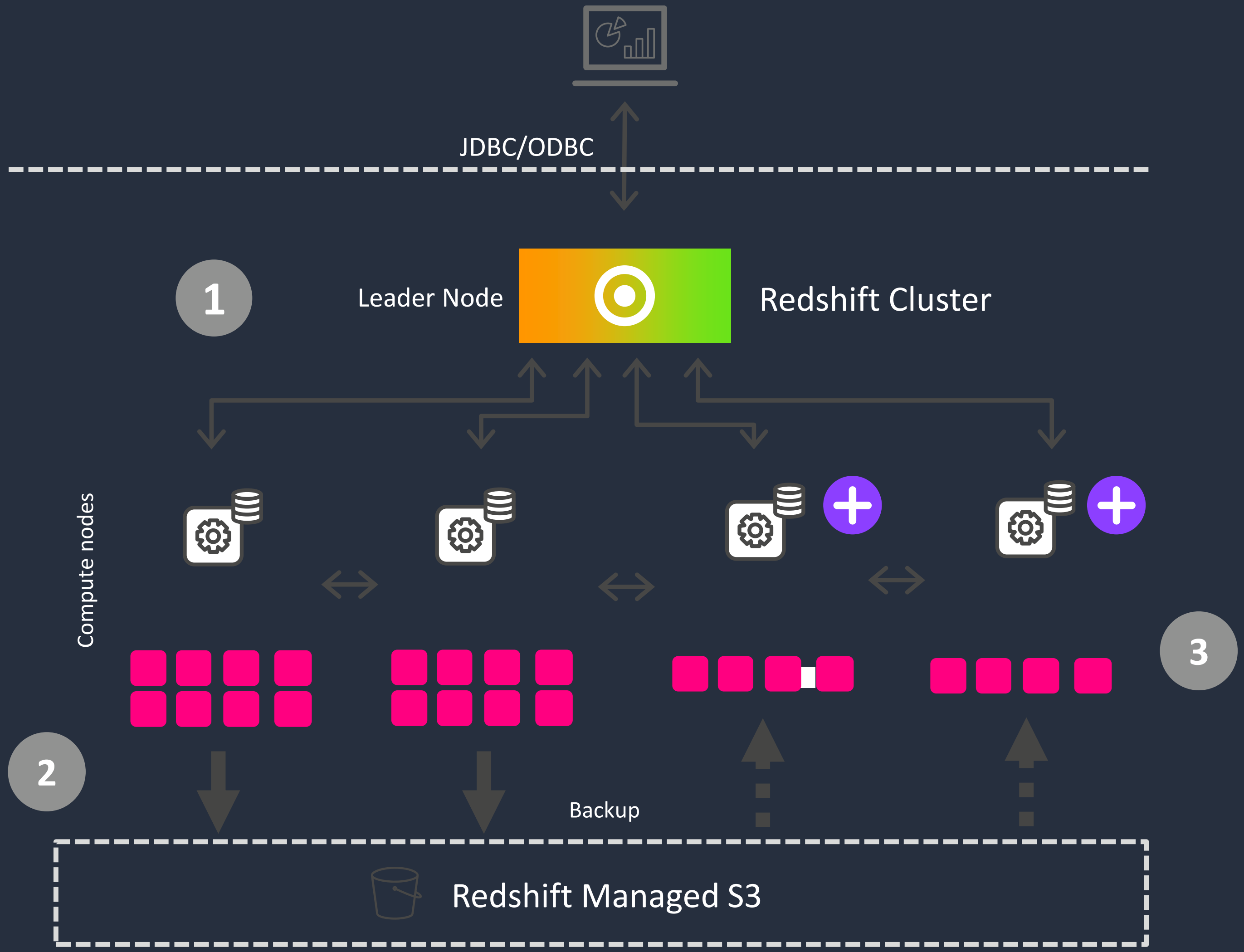
Scale your Redshift clusters up and down in minutes to get **the optimal performance.**

How it works:

1 Redshift updates the snapshot on S3 with the most recent data.

2 New nodes are added (for scaling up) or removed (for scaling down) during this period.

3 The cluster is fully available for read and write queries. Queries that were being held are queued for execution automatically.



Leverage Redshift Ease of Use

- **Auto Analyze** - automatically collects table statistics to deliver enhanced query performance
- **Auto Data Distribution** - automatically selects table distribution style based on table size
- **Auto Vacuum Delete** - automatically re-sorts and reclaims space from deleted rows, improving performance and space utilization
- **Auto Workload Management** – Dynamic Concurrency with Query Priorities - Redshift manages query traffic and executes based on your priority. Scale compute resources based on priority
- **Snapshot Scheduler Enhancements** – more control over automated snapshot schedule and allows setting snapshot expiration date, bulk removal of expired manual snapshots
- **Stored Procedures in Redshift** - makes migration to Redshift easier, you can bring your existing Stored Procedures

Architecture Comparison, Common Ground

Physical level

Netezza	Redshift
Host	Leader Node
Snippet Processing Unit (SPU) on an S-Blade	Compute Node
SPU contains CPU, FPGA, RAM and points to disk.	Compute Node contains CPU, Memory and Disk.
Users don't interact directly with the SPUs	Users don't interact directly with the Compute Nodes

Architecture Comparison, Common Ground

Database level

Netezza	Redshift
Relies on compression and zone maps to minimize I/O	Relies on compression and zone maps to minimize I/O
Compression is at the column level	Compression is at the column level
Data is distributed by a distribution key across the SPUs	Data is distributed by a distribution key across the Compute Nodes
Data can be distributed by the key, or RANDOM	Data can be distributed by the key, EVEN, ALL or Auto
External data can be queried, but is processed locally	External data can be queried, but may be processed externally
No indexes	No indexes
No partitioning	No partitioning
No enforcement of PKs	No enforcement of PKs
Employs caching strategies	Employs caching strategies

Other Areas of Common Ground

Database level (Continued)

Netezza	Redshift
Allows a column alias to be referenced in the same SELECT clause supported	Allows a column alias to be referenced in the same SELECT clause supported (called lateral column alias reference in the Redshift documentation).
Use “groom” to physically delete logically delete rows	Use “vacuum delete” to physically delete logically delete rows. **Now automated**.
“sequence” column data type	“identity” column data
Stored procedure support	Stored procedure support (and SCT conversion from Netezza)
WLM: Prioritized Query Execution (PQE)	WLM: Auto WLM with Query Priorities
WLM: Short Query Bias	WLM: Short Query Acceleration

Redshift Functionality for Netezza Experts to Leverage

Categories	Redshift Managed Service
Operations	Automated patches and upgrades
	Automated backups, and cross region replication
	Hardware and networking on the cluster is AWS's responsibility
Easy to scale	Changing node count and types
	Elastic Resize in matters of minutes
	Redshift Spectrum – storage and compute layer
	Concurrency Scaling to handle additional concurrent spiky workload
Automated Administration	Automation of analyze, vacuum (delete), dist key recommendations
	Redshift Advisor
Data Lake Integration	Ease of operations on open formats within the data lake
Pace of Innovation	Rate of change and roadmap

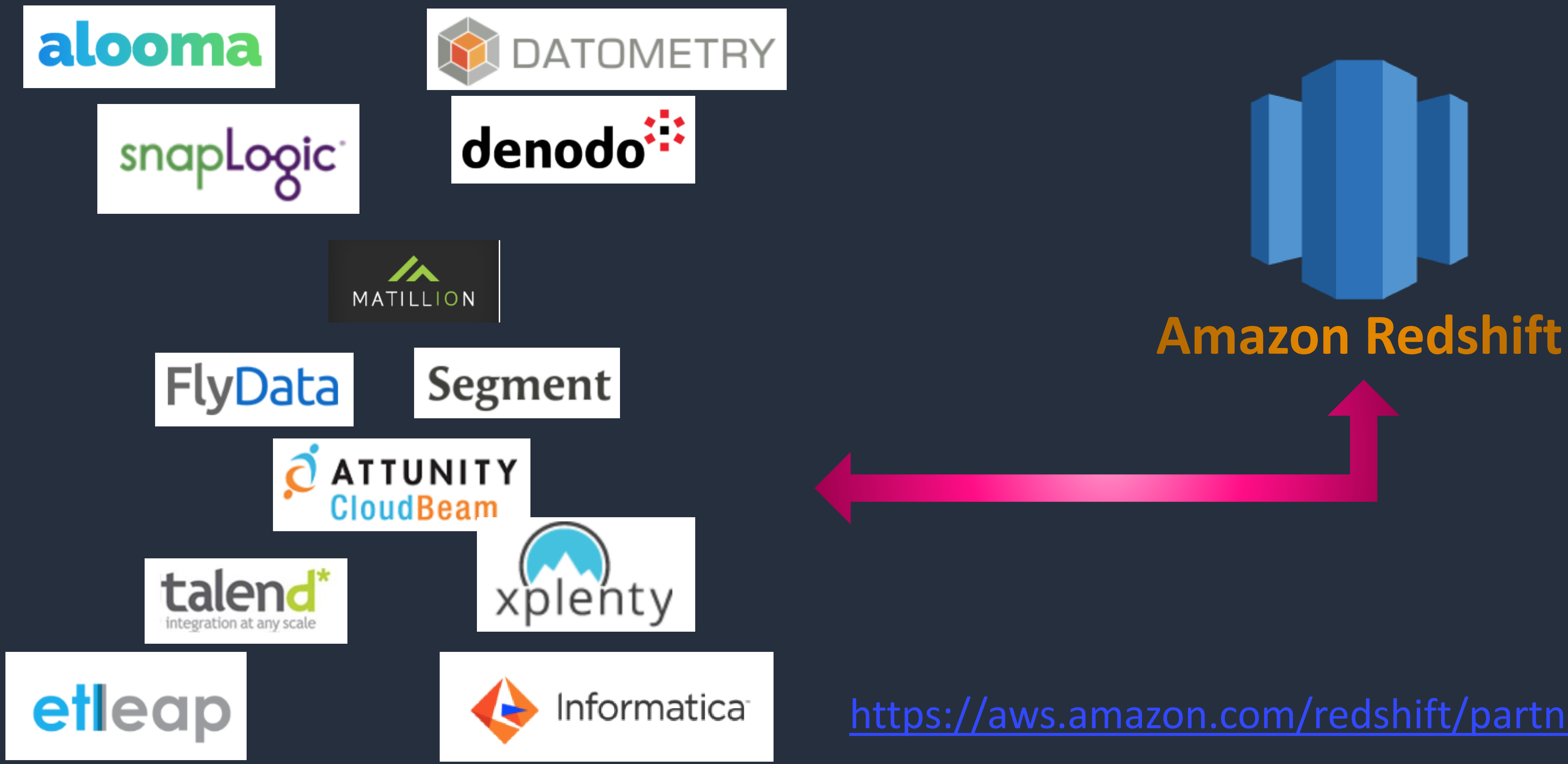
AWS Ecosystem for Netezza Experts to Leverage

Categories	Redshift
Schema Conversion	Schema Conversion Tool for schema/stored proc conversion
Data Movement	Schema Conversion Tool Data Extractors
Near Real Time / Streaming	Kinesis Firehose and/or Redshift Spectrum
	Redshift as a data source for machine learning
	Redshift as a destination for DynamoDB
For Data Lake Integration + column level security	Lake Formation
Data Integration	AWS Glue + AWS EMR
Data Visualization	QuickSight
Monitoring and alerting	Cloud Watch
Launching Resources	Cloud Formation
Security	IAM

ETL/BI Tool Support

1. **Note:** Tools that support a connection via JDBC/ODBC will connect to Redshift.
2. **Strong relationships with leading ETL/BI tool vendors.**
3. **This relationship has helped the vendor to generate efficient SQL against Redshift**
4. **Examples:**
    1. Tableau's whitepaper "Optimizing your Amazon Redshift and Tableau Software Deployment for Better Performance"
    2. MicroStrategy's whitepaper "Amazon Redshift Best Practices for Performance"
5. **Redshift Quick Starts:** https://aws.amazon.com/quickstart/architecture/amazon-redshift/

Migration using Amazon Redshift Partners Products



https://aws.amazon.com/redshift/partners/

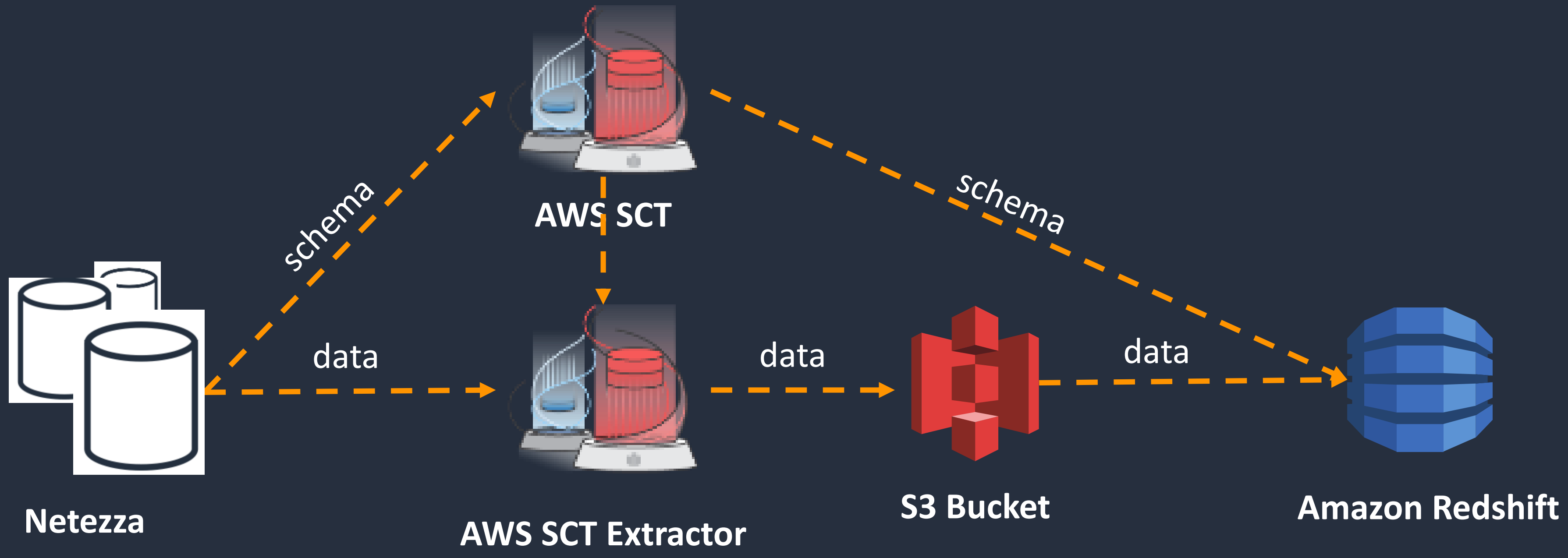
Migration using AWS Schema Conversion Tool

Run AWS Schema Conversion Tool

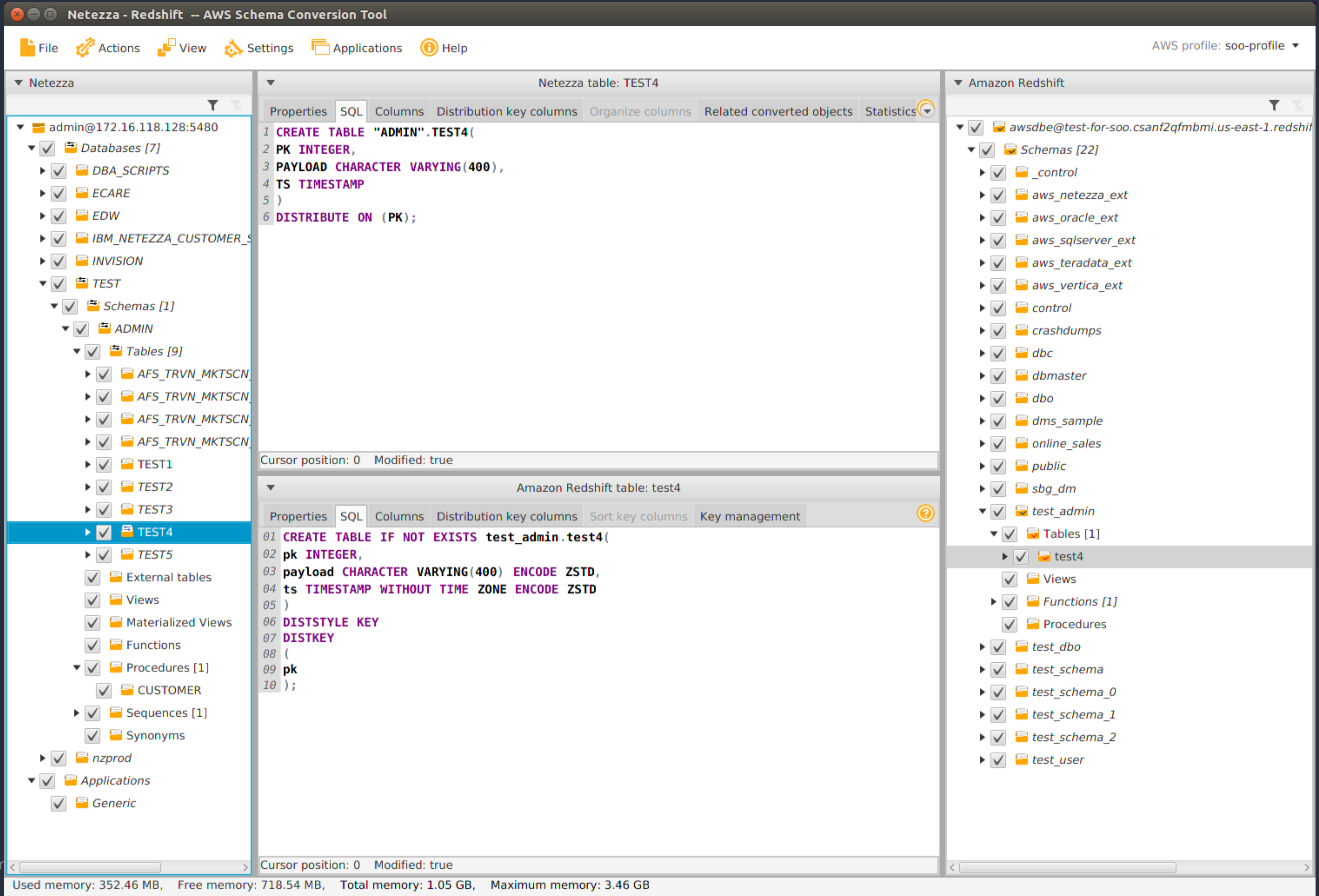
- To evaluate complexity of migration
- To identify supported/unsupported objects
- To migrate your schema

Use AWS SCT Data Extraction Agents

- To migrate your data
- Parallelize, scale out and scale up for performance
- Encrypt command and data streams for security



Schema Conversion Tool Data Migration Walk Though



AWS profile: soo-profile

Netezza

- ☐ admin@172.16.118.128:5480
  - ☑ Databases [7]
    - ☑ DBA_SCRIPTS
    - ☑ ECARE
    - ☑ EDW
    - ☑ IBM_NETEZZA_CUSTOMER_S
    - ☑ INVISION
    - ☑ TEST
      - ☑ Schemas [1]
        - ☑ ADMIN
          - ☑ Tables [9]
            - ☑ AFS_TRVN_MKTSCN
            - ☑ AFS_TRVN_MKTSCN
            - ☑ AFS_TRVN_MKTSCN
            - ☑ AFS_TRVN_MKTSCN
            - ☑ TEST1
            - ☑ TEST2
            - ☑ TEST3
            - ☑ TEST4
            - ☑ TEST5
          - ☑ External tables
          - ☑ Views
          - ☑ Materialized Views
          - ☑ Functions
          - ☑ Procedures [1]
            - ☑ CUSTOMER
          - ☑ Sequences [1]
          - ☑ Synonyms
    - ☑ nzprod
  - ☑ Applications
    - ☑ Generic

Netezza table: TEST4

```
CREATE TABLE "ADMIN".TEST4(
PK INTEGER,
PAYLOAD CHARACTER VARYING(400),
TS TIMESTAMP
)
DISTRIBUTE ON (PK);
```

Cursor position: 0   Modified: true

Amazon Redshift table: test4

```
CREATE TABLE IF NOT EXISTS test_admin.test4(
pk INTEGER,
payload CHARACTER VARYING(400) ENCODE ZSTD,
ts TIMESTAMP WITHOUT TIME ZONE ENCODE ZSTD
)
DISTSTYLE KEY
DISTKEY
(
pk
);
```

Cursor position: 0   Modified: true

Amazon Redshift

- ☑ awsdbe@test-for-soo.csanf2qfmbmi.us-east-1.redshif
  - ☑ Schemas [22]
    - ☑ _control
    - ☑ aws_netezza_ext
    - ☑ aws_oracle_ext
    - ☑ aws_sqlserver_ext
    - ☑ aws_teradata_ext
    - ☑ aws_vertica_ext
    - ☑ control
    - ☑ crashdumps
    - ☑ dbc
    - ☑ dbmaster
    - ☑ dbo
    - ☑ dms_sample
    - ☑ online_sales
    - ☑ public
    - ☑ sbg_dm
    - ☑ test_admin
      - ☑ Tables [1]
        - ☑ test4
      - ☑ Views
      - ☑ Functions [1]
      - ☑ Procedures
    - ☑ test_dbo
    - ☑ test_schema
    - ☑ test_schema_0
    - ☑ test_schema_1
    - ☑ test_schema_2
    - ☑ test_user

Used memory: 352.46 MB,   Free memory: 718.54 MB,   Total memory: 1.05 GB,   Maximum memory: 3.46 GB

Schema Conversion Tool Data Migration Walk Though

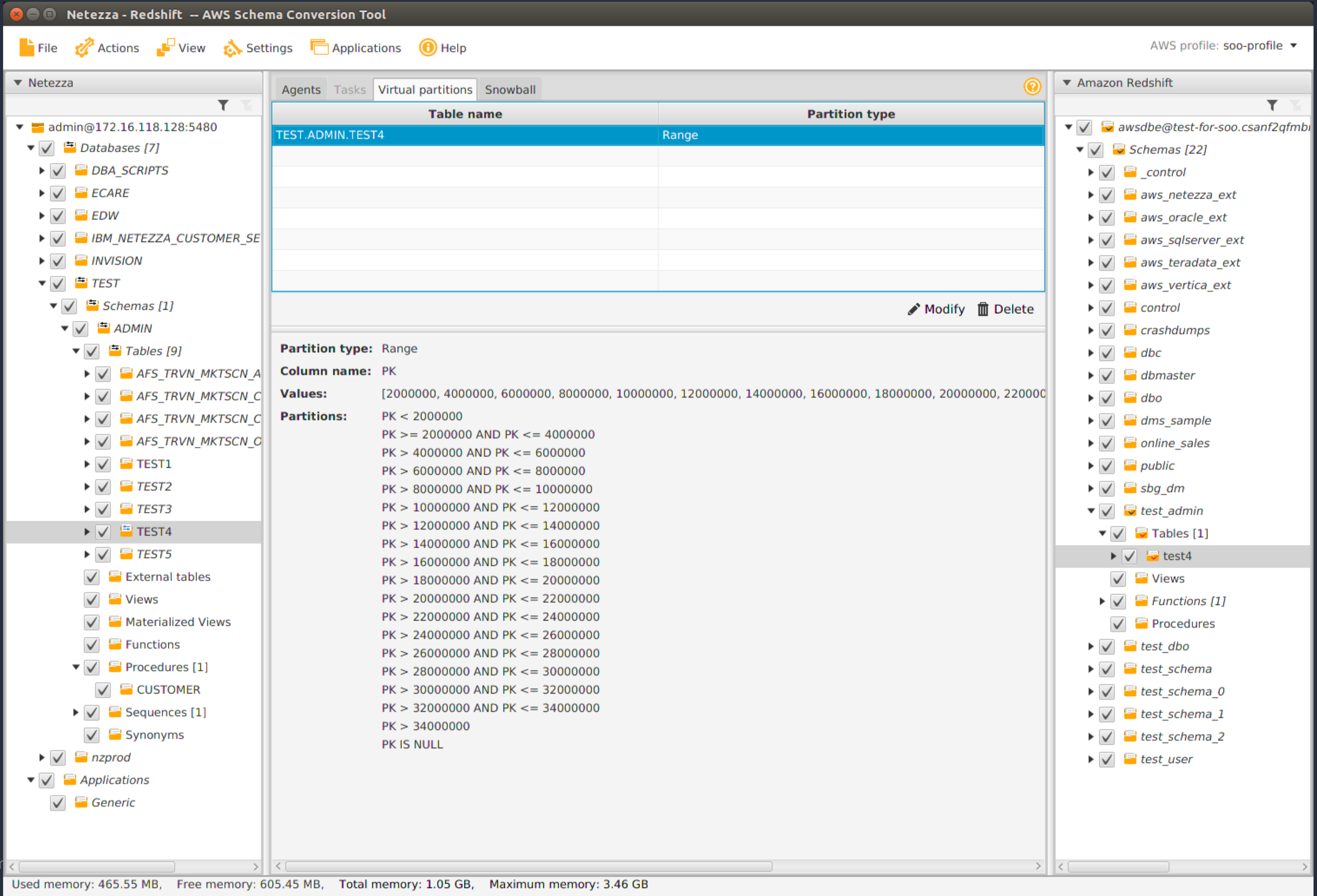


Table name	Partition type
TEST.ADMIN.TEST4	Range

Partition type: Range

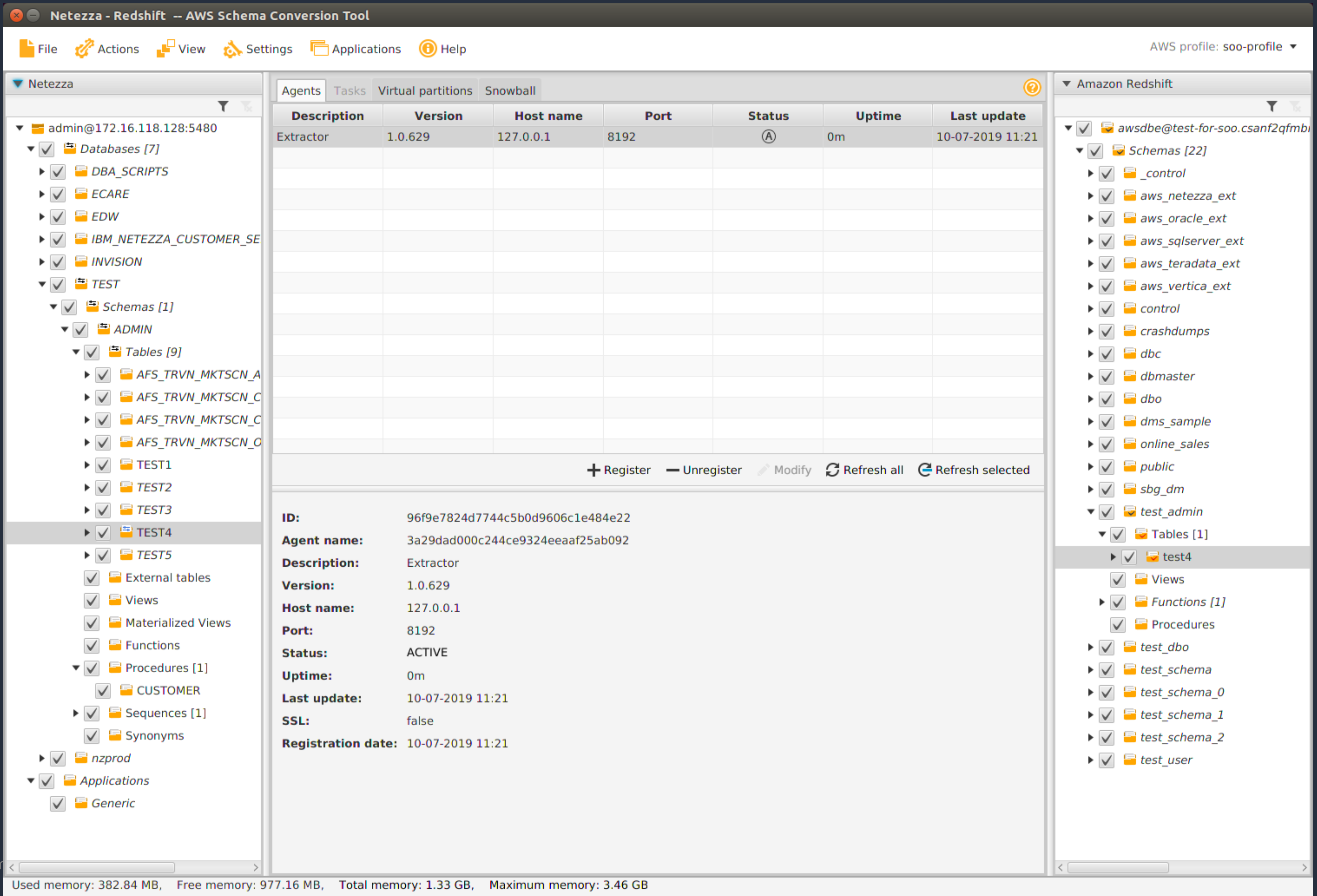
Column name: PK

Values: [2000000, 4000000, 6000000, 8000000, 10000000, 12000000, 14000000, 16000000, 18000000, 20000000, 220000

Partitions:
PK < 2000000
PK >= 2000000 AND PK <= 4000000
PK > 4000000 AND PK <= 6000000
PK > 6000000 AND PK <= 8000000
PK > 8000000 AND PK <= 10000000
PK > 10000000 AND PK <= 12000000
PK > 12000000 AND PK <= 14000000
PK > 14000000 AND PK <= 16000000
PK > 16000000 AND PK <= 18000000
PK > 18000000 AND PK <= 20000000
PK > 20000000 AND PK <= 22000000
PK > 22000000 AND PK <= 24000000
PK > 24000000 AND PK <= 26000000
PK > 26000000 AND PK <= 28000000
PK > 28000000 AND PK <= 30000000
PK > 30000000 AND PK <= 32000000
PK > 32000000 AND PK <= 34000000
PK > 34000000
PK IS NULL

Used memory: 465.55 MB, Free memory: 605.45 MB, Total memory: 1.05 GB, Maximum memory: 3.46 GB

Schema Conversion Tool Data Migration Walk Though



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        - ☑ ADMIN
          - ☑ Tables [9]
            - ☑ AFS_TRVN_MKTSCN_A
            - ☑ AFS_TRVN_MKTSCN_C
            - ☑ AFS_TRVN_MKTSCN_C
            - ☑ AFS_TRVN_MKTSCN_O
            - ☑ TEST1
            - ☑ TEST2
            - ☑ TEST3
            - ☑ TEST4
            - ☑ TEST5
          - ☑ External tables
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          - ☑ Sequences [1]
          - ☑ Synonyms
    - ☑ nzprod
  - ☑ Applications
    - ☑ Generic

Description	Version	Host name	Port	Status	Uptime	Last update
Extractor	1.0.629	127.0.0.1	8192	Ⓐ	0m	10-07-2019 11:21

ID: 96f9e7824d7744c5b0d9606c1e484e22
Agent name: 3a29dad000c244ce9324eeaaf25ab092
Description: Extractor
Version: 1.0.629
Host name: 127.0.0.1
Port: 8192
Status: ACTIVE
Uptime: 0m
Last update: 10-07-2019 11:21
SSL: false
Registration date: 10-07-2019 11:21

- ☑ awsdbe@test-for-soo.csanf2qfmbi
  - ☑ Schemas [22]
    - ☑ _control
    - ☑ aws_netezza_ext
    - ☑ aws_oracle_ext
    - ☑ aws_sqlserver_ext
    - ☑ aws_teradata_ext
    - ☑ aws_vertica_ext
    - ☑ control
    - ☑ crashdumps
    - ☑ dbc
    - ☑ dbmaster
    - ☑ dbo
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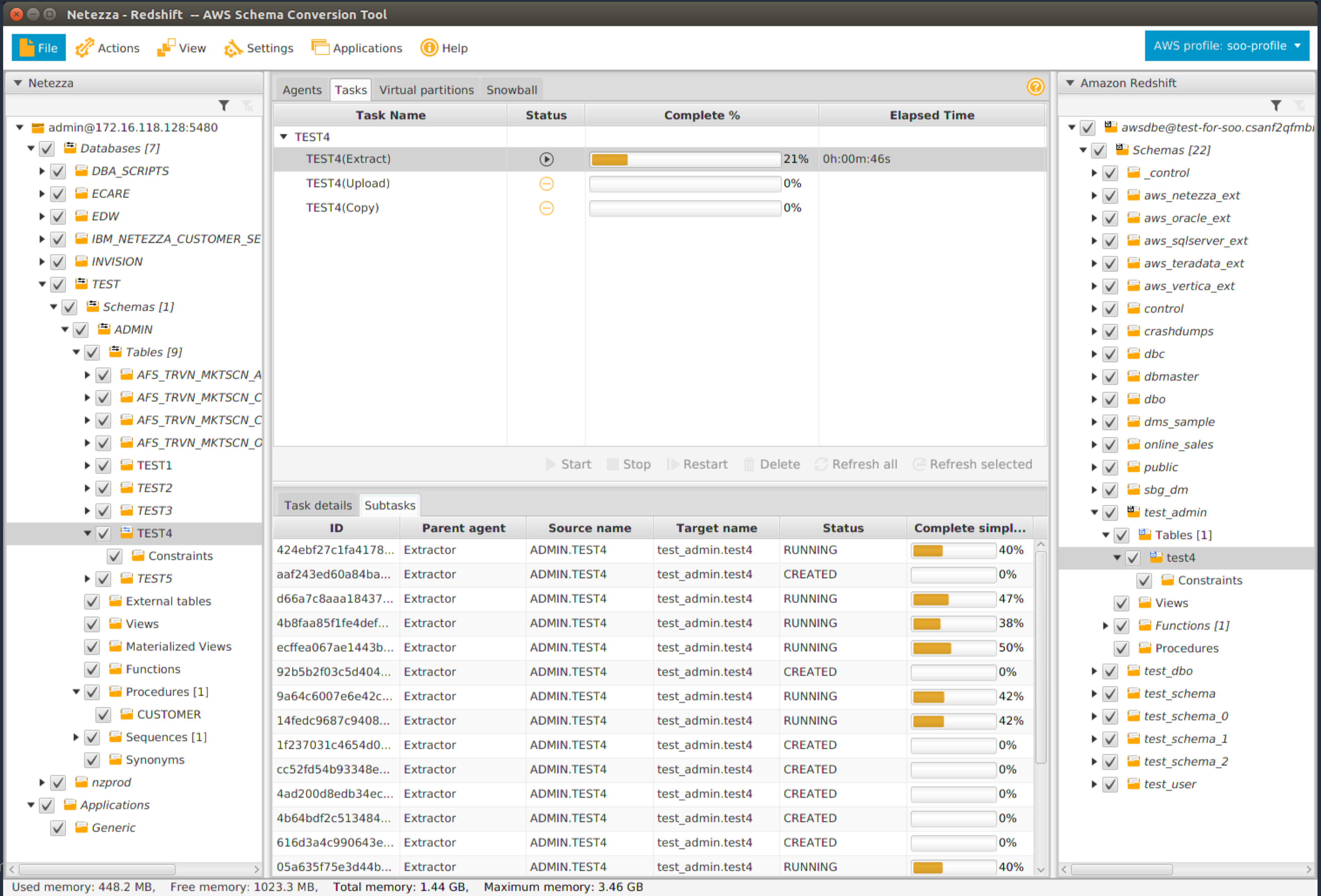
    - ☑ test_schema
    - ☑ test_schema_0
    - ☑ test_schema_1
    - ☑ test_schema_2
    - ☑ test_user

Used memory: 382.84 MB, Free memory: 977.16 MB, Total memory: 1.33 GB, Maximum memory: 3.46 GB

Schema Conversion Tool Data Migration Walk Though

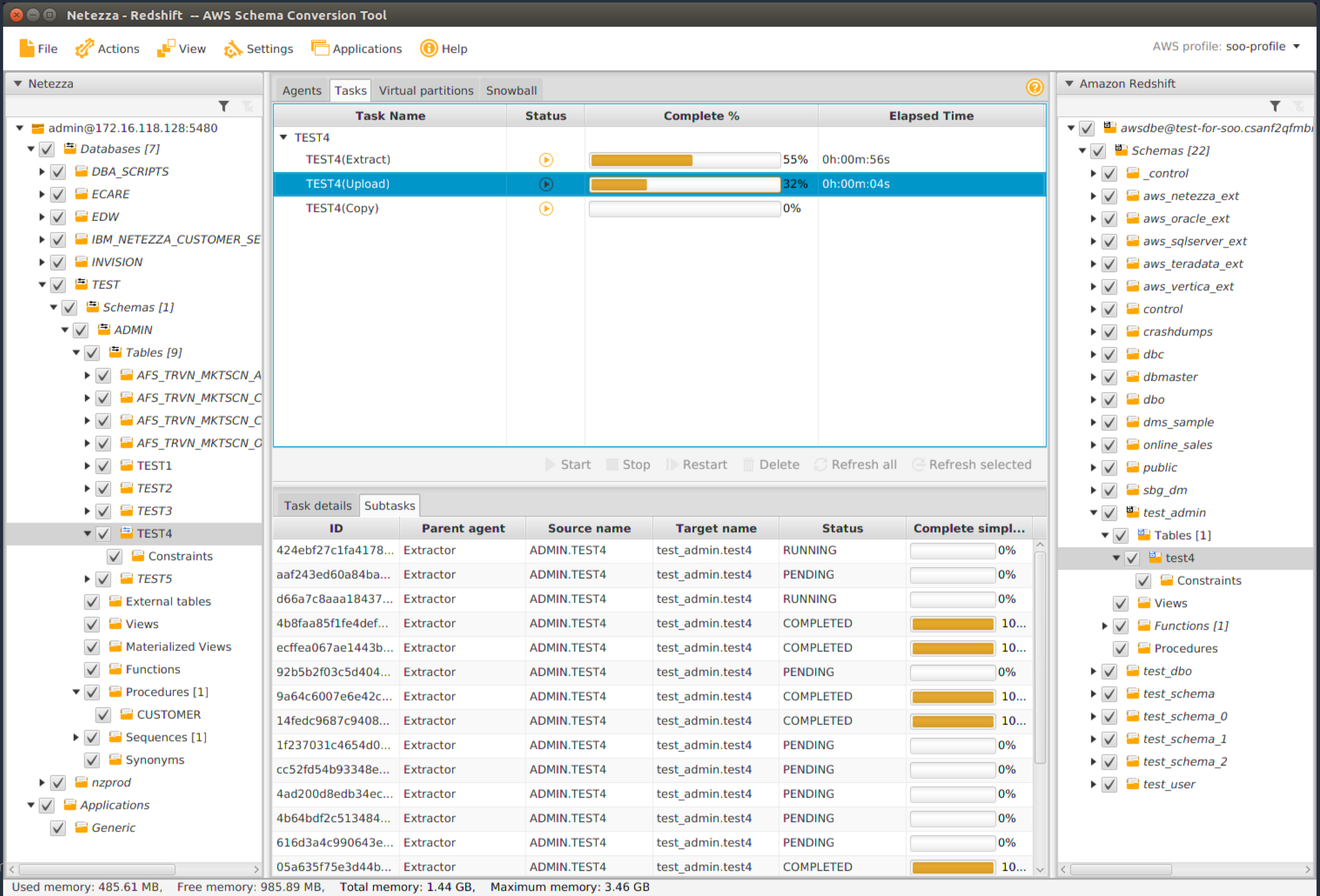


Task Name	Status	Complete %	Elapsed Time
TEST4			
TEST4(Extract)	▶	21%	0h:00m:46s
TEST4(Upload)	⋯	0%	
TEST4(Copy)	⋯	0%	

ID	Parent agent	Source name	Target name	Status	Complete simpl...
424ebf27c1fa4178...	Extractor	ADMIN.TEST4	test_admin.test4	RUNNING	40%
aaf243ed60a84ba...	Extractor	ADMIN.TEST4	test_admin.test4	CREATED	0%
d66a7c8aaa18437...	Extractor	ADMIN.TEST4	test_admin.test4	RUNNING	47%
4b8faa85f1fe4def...	Extractor	ADMIN.TEST4	test_admin.test4	RUNNING	38%
ecffea067ae1443b...	Extractor	ADMIN.TEST4	test_admin.test4	RUNNING	50%
92b5b2f03c5d404...	Extractor	ADMIN.TEST4	test_admin.test4	CREATED	0%
9a64c6007e6e42c...	Extractor	ADMIN.TEST4	test_admin.test4	RUNNING	42%
14fedc9687c9408...	Extractor	ADMIN.TEST4	test_admin.test4	RUNNING	42%
1f237031c4654d0...	Extractor	ADMIN.TEST4	test_admin.test4	CREATED	0%
cc52fd54b93348e...	Extractor	ADMIN.TEST4	test_admin.test4	CREATED	0%
4ad200d8edb34ec...	Extractor	ADMIN.TEST4	test_admin.test4	CREATED	0%
4b64bdf2c513484...	Extractor	ADMIN.TEST4	test_admin.test4	CREATED	0%
616d3a4c990643e...	Extractor	ADMIN.TEST4	test_admin.test4	CREATED	0%
05a635f75e3d44b...	Extractor	ADMIN.TEST4	test_admin.test4	RUNNING	40%

Used memory: 448.2 MB, Free memory: 1023.3 MB, Total memory: 1.44 GB, Maximum memory: 3.46 GB

Schema Conversion Tool Data Migration Walk Though



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Task Name	Status	Complete %	Elapsed Time
TEST4			
TEST4(Extract)	▶	55%	0h:00m:56s
TEST4(Upload)	▶	32%	0h:00m:04s
TEST4(Copy)	▶	0%	

ID	Parent agent	Source name	Target name	Status	Complete simpl...
424ebf27c1fa4178...	Extractor	ADMIN.TEST4	test_admin.test4	RUNNING	0%
aaf243ed60a84ba...	Extractor	ADMIN.TEST4	test_admin.test4	PENDING	0%
d66a7c8aaa18437...	Extractor	ADMIN.TEST4	test_admin.test4	RUNNING	0%
4b8faa85f1fe4def...	Extractor	ADMIN.TEST4	test_admin.test4	COMPLETED	10...
ecffea067ae1443b...	Extractor	ADMIN.TEST4	test_admin.test4	COMPLETED	10...
92b5b2f03c5d404...	Extractor	ADMIN.TEST4	test_admin.test4	PENDING	0%
9a64c6007e6e42c...	Extractor	ADMIN.TEST4	test_admin.test4	COMPLETED	10...
14fedc9687c9408...	Extractor	ADMIN.TEST4	test_admin.test4	COMPLETED	10...
1f237031c4654d0...	Extractor	ADMIN.TEST4	test_admin.test4	PENDING	0%
cc52fd54b93348e...	Extractor	ADMIN.TEST4	test_admin.test4	PENDING	0%
4ad200d8edb34ec...	Extractor	ADMIN.TEST4	test_admin.test4	PENDING	0%
4b64bdf2c513484...	Extractor	ADMIN.TEST4	test_admin.test4	PENDING	0%
616d3a4c990643e...	Extractor	ADMIN.TEST4	test_admin.test4	PENDING	0%
05a635f75e3d44b...	Extractor	ADMIN.TEST4	test_admin.test4	COMPLETED	10...

Amazon Redshift

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    - ☑ aws_oracle_ext
    - ☑ aws_sqlserver_ext
    - ☑ aws_teradata_ext
    - ☑ aws_vertica_ext
    - ☑ control
    - ☑ crashdumps
    - ☑ dbc
    - ☑ dbmaster
    - ☑ dbo
    - ☑ dms_sample
    - ☑ online_sales
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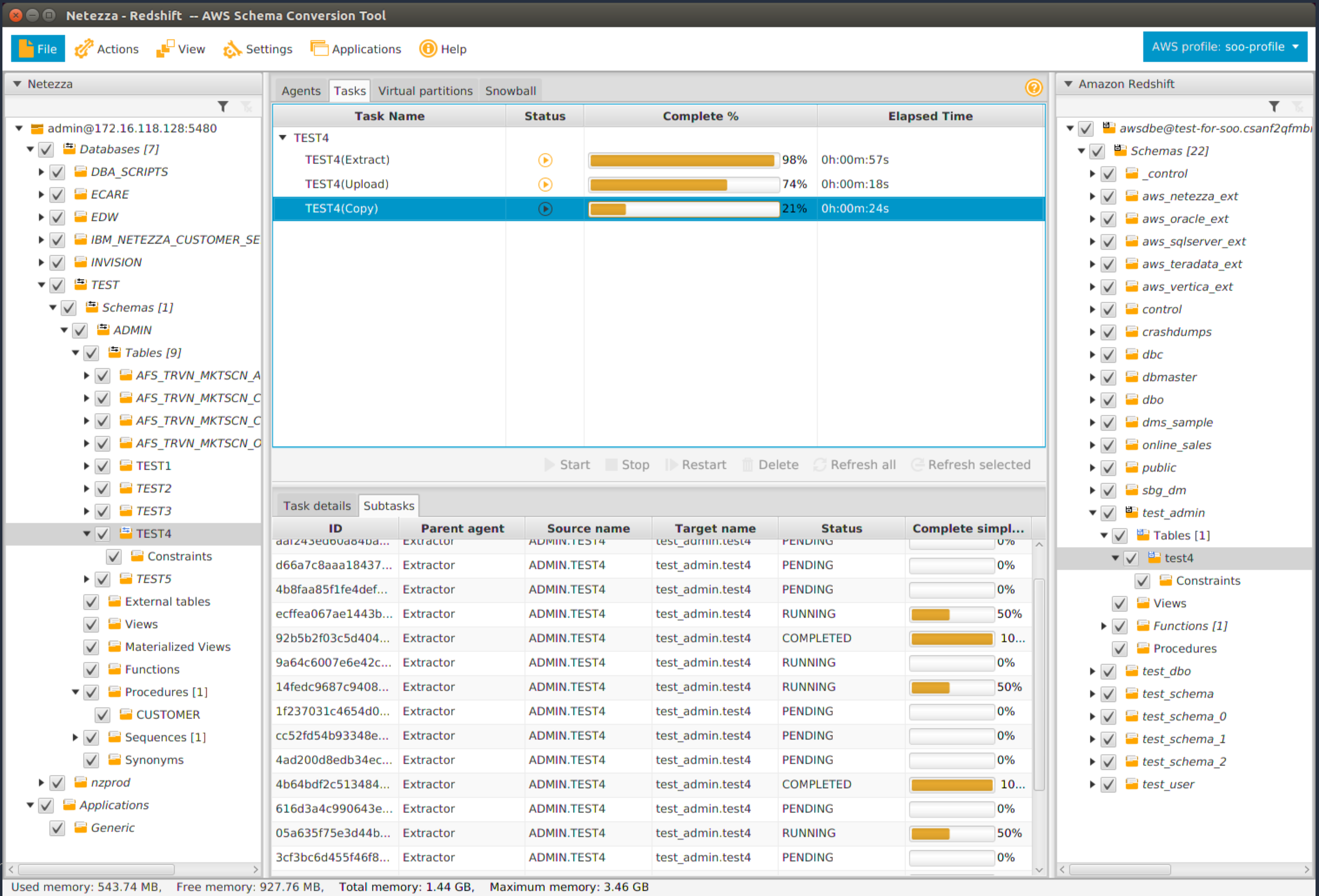
    - ☑ test_schema_2
    - ☑ test_user

Used memory: 485.61 MB, Free memory: 985.89 MB, Total memory: 1.44 GB, Maximum memory: 3.46 GB

Schema Conversion Tool Data Migration Walk Though

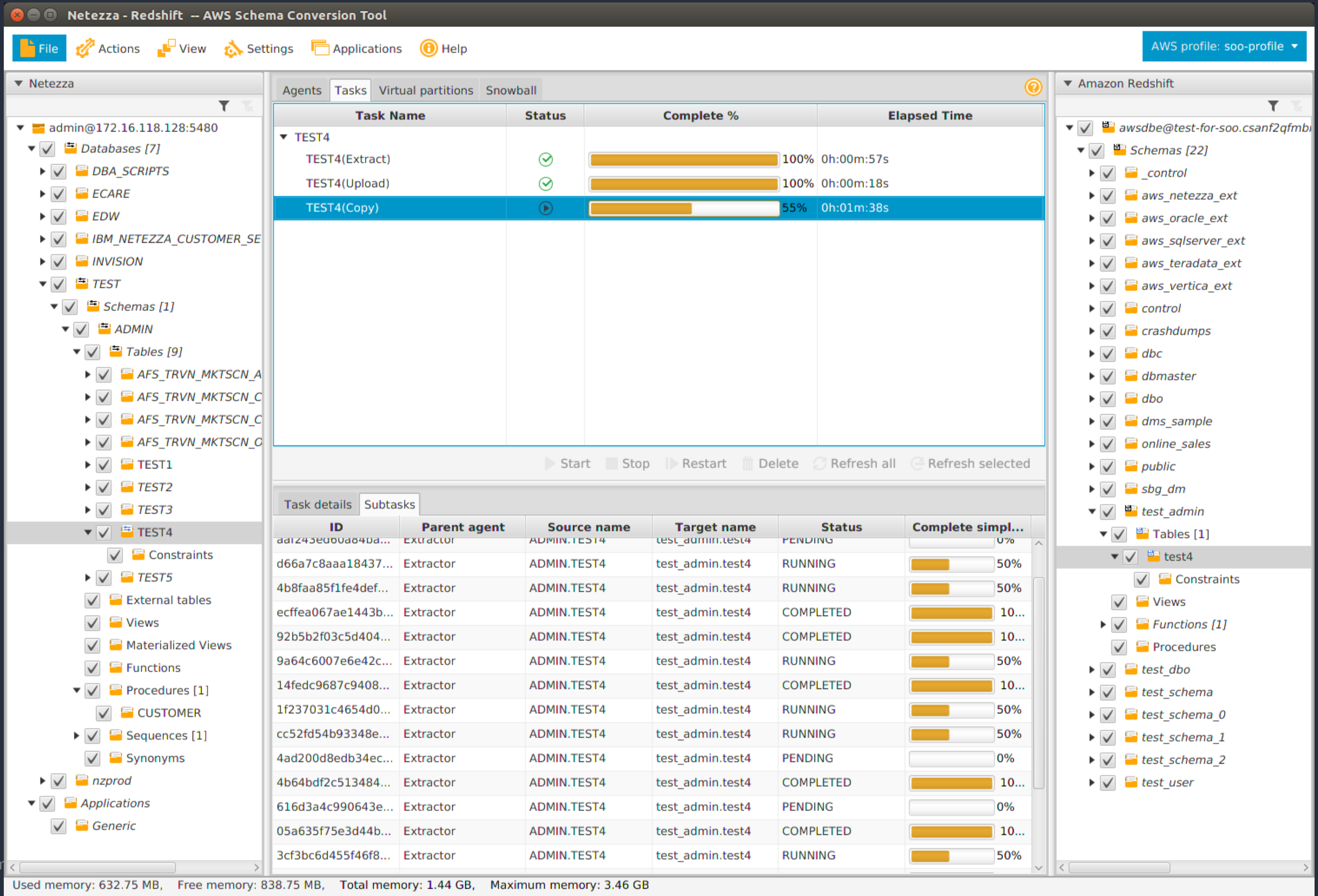


Task Name	Status	Complete %	Elapsed Time
TEST4			
TEST4(Extract)	▷	98%	0h:00m:57s
TEST4(Upload)	▷	74%	0h:00m:18s
TEST4(Copy)	▷	21%	0h:00m:24s

ID	Parent agent	Source name	Target name	Status	Complete simpl...
daf243ed0a84ba...	Extractor	ADMIN.TEST4	test_admin.test4	PENDING	0%
d66a7c8aaa18437...	Extractor	ADMIN.TEST4	test_admin.test4	PENDING	0%
4b8faa85f1fe4def...	Extractor	ADMIN.TEST4	test_admin.test4	PENDING	0%
ecffea067ae1443b...	Extractor	ADMIN.TEST4	test_admin.test4	RUNNING	50%
92b5b2f03c5d404...	Extractor	ADMIN.TEST4	test_admin.test4	COMPLETED	10...
9a64c6007e6e42c...	Extractor	ADMIN.TEST4	test_admin.test4	RUNNING	0%
14fedc9687c9408...	Extractor	ADMIN.TEST4	test_admin.test4	RUNNING	50%
1f237031c4654d0...	Extractor	ADMIN.TEST4	test_admin.test4	PENDING	0%
cc52fd54b93348e...	Extractor	ADMIN.TEST4	test_admin.test4	PENDING	0%
4ad200d8edb34ec...	Extractor	ADMIN.TEST4	test_admin.test4	PENDING	0%
4b64bdf2c513484...	Extractor	ADMIN.TEST4	test_admin.test4	COMPLETED	10...
616d3a4c990643e...	Extractor	ADMIN.TEST4	test_admin.test4	PENDING	0%
05a635f75e3d44b...	Extractor	ADMIN.TEST4	test_admin.test4	RUNNING	50%
3cf3bc6d455f46f8...	Extractor	ADMIN.TEST4	test_admin.test4	PENDING	0%

Used memory: 543.74 MB, Free memory: 927.76 MB, Total memory: 1.44 GB, Maximum memory: 3.46 GB

Schema Conversion Tool Data Migration Walk Though

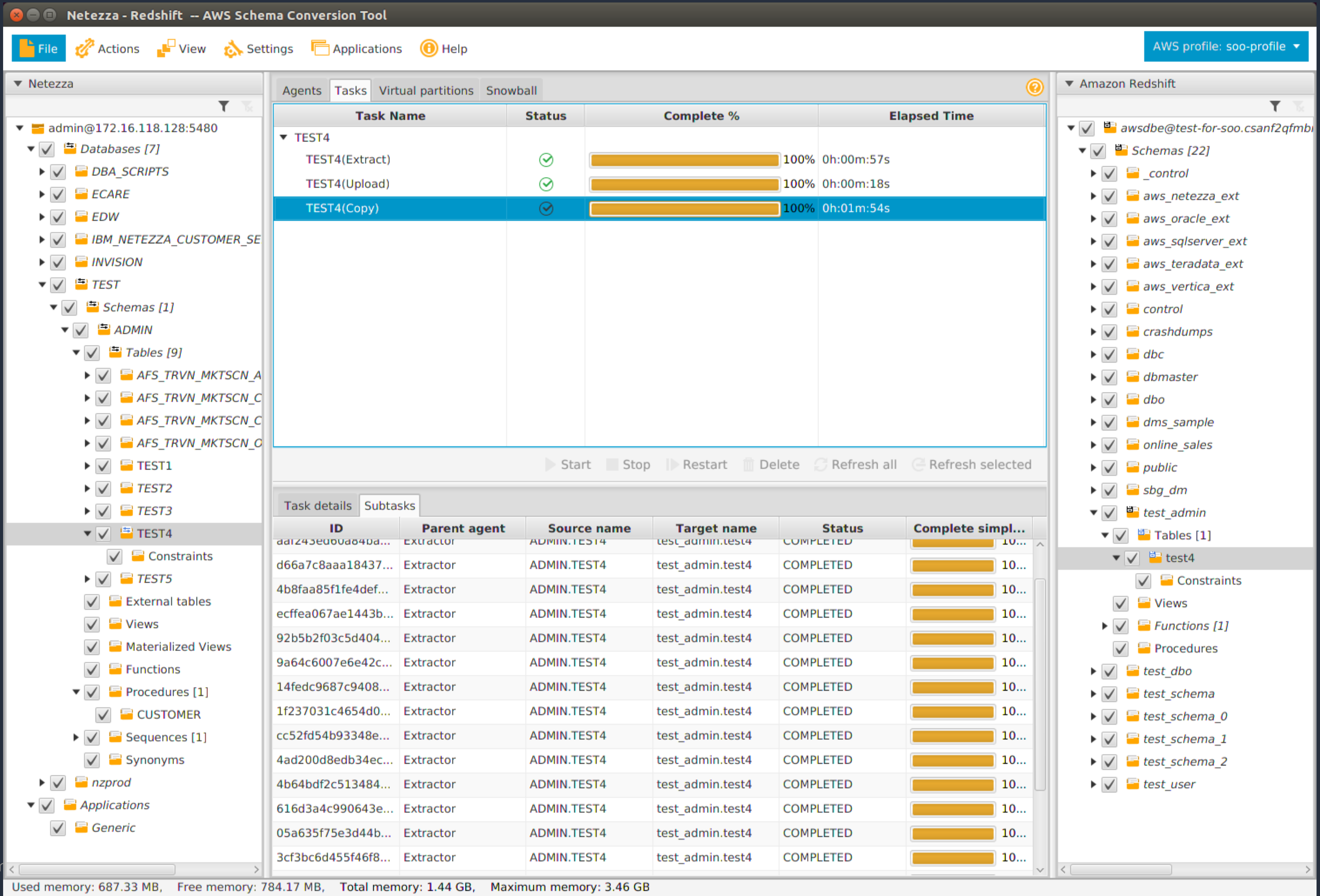


Task Name	Status	Complete %	Elapsed Time
TEST4			
TEST4(Extract)	✓	100%	0h:00m:57s
TEST4(Upload)	✓	100%	0h:00m:18s
TEST4(Copy)	▶	55%	0h:01m:38s

ID	Parent agent	Source name	Target name	Status	Complete simpl...
aaf243ed0a84ba...	Extractor	ADMIN.TEST4	test_admin.test4	PENDING	0%
d66a7c8aaa18437...	Extractor	ADMIN.TEST4	test_admin.test4	RUNNING	50%
4b8faa85f1fe4def...	Extractor	ADMIN.TEST4	test_admin.test4	RUNNING	50%
ecffea067ae1443b...	Extractor	ADMIN.TEST4	test_admin.test4	COMPLETED	10...
92b5b2f03c5d404...	Extractor	ADMIN.TEST4	test_admin.test4	COMPLETED	10...
9a64c6007e6e42c...	Extractor	ADMIN.TEST4	test_admin.test4	RUNNING	50%
14fedc9687c9408...	Extractor	ADMIN.TEST4	test_admin.test4	COMPLETED	10...
1f237031c4654d0...	Extractor	ADMIN.TEST4	test_admin.test4	RUNNING	50%
cc52fd54b93348e...	Extractor	ADMIN.TEST4	test_admin.test4	RUNNING	50%
4ad200d8edb34ec...	Extractor	ADMIN.TEST4	test_admin.test4	PENDING	0%
4b64bdf2c513484...	Extractor	ADMIN.TEST4	test_admin.test4	COMPLETED	10...
616d3a4c990643e...	Extractor	ADMIN.TEST4	test_admin.test4	PENDING	0%
05a635f75e3d44b...	Extractor	ADMIN.TEST4	test_admin.test4	COMPLETED	10...
3cf3bc6d455f46f8...	Extractor	ADMIN.TEST4	test_admin.test4	RUNNING	50%

Used memory: 632.75 MB, Free memory: 838.75 MB, Total memory: 1.44 GB, Maximum memory: 3.46 GB

Schema Conversion Tool Data Migration Walk Though



Netezza

- admin@172.16.118.128:5480
  - Databases [7]
    - DBA_SCRIPTS
    - ECARE
    - EDW
    - IBM_NETEZZA_CUSTOMER_SE
    - INVISION
    - TEST
      - Schemas [1]
        - ADMIN
          - Tables [9]
            - AFS_TRVN_MKTSCN_A
            - AFS_TRVN_MKTSCN_C
            - AFS_TRVN_MKTSCN_C
            - AFS_TRVN_MKTSCN_O
            - TEST1
            - TEST2
            - TEST3
            - TEST4
              - Constraints
            - TEST5
          - External tables
          - Views
          - Materialized Views
          - Functions
          - Procedures [1]
            - CUSTOMER
          - Sequences [1]
          - Synonyms
    - nzprod
  - Applications
    - Generic

Task Name	Status	Complete %	Elapsed Time
TEST4			
TEST4(Extract)	✓	100%	0h:00m:57s
TEST4(Upload)	✓	100%	0h:00m:18s
TEST4(Copy)	✓	100%	0h:01m:54s

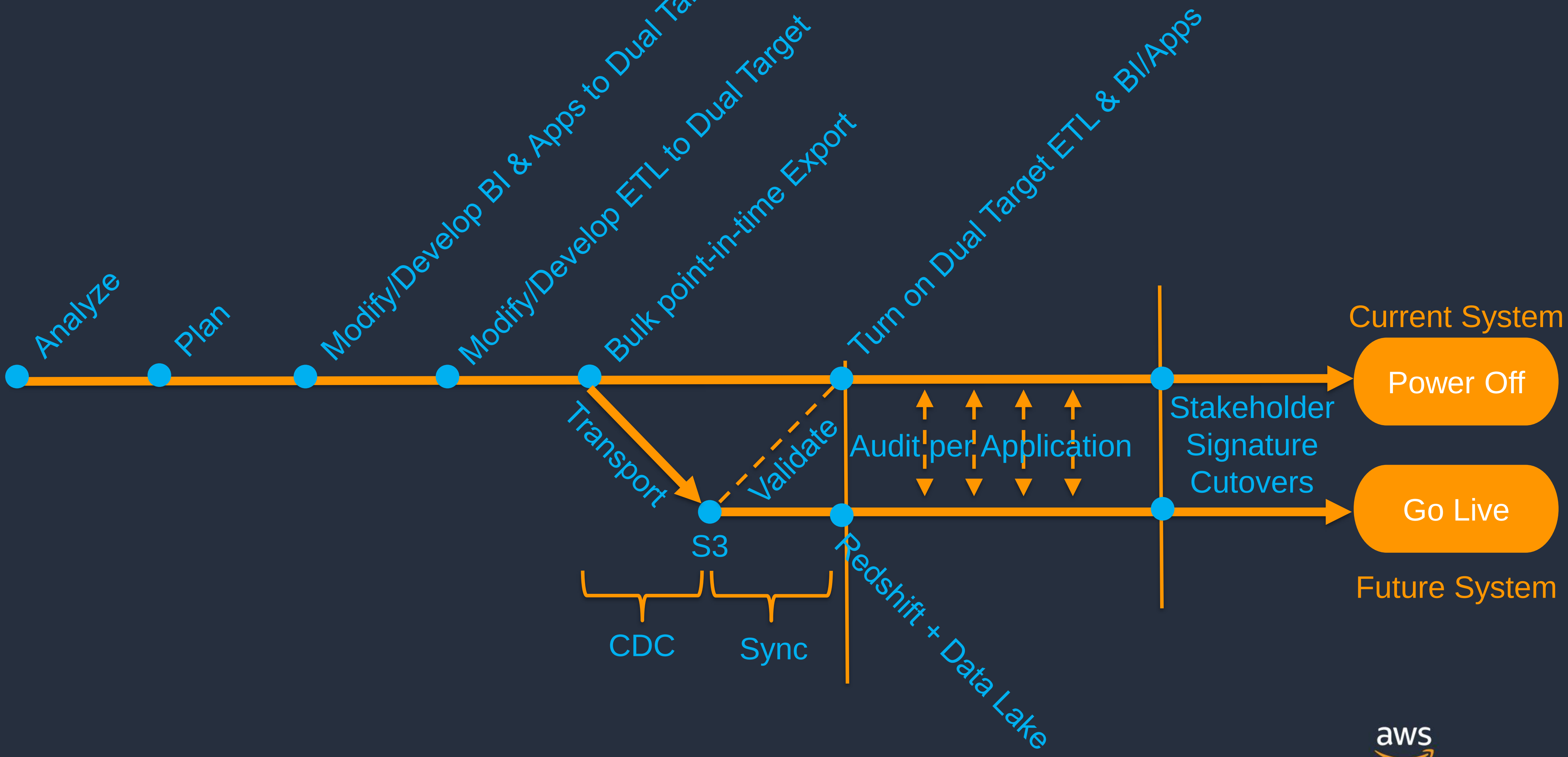
ID	Parent agent	Source name	Target name	Status	Complete simpl...
aaf243ed60a84ba...	Extractor	ADMIN.TEST4	test_admin.test4	COMPLETED	10...
d66a7c8aaa18437...	Extractor	ADMIN.TEST4	test_admin.test4	COMPLETED	10...
4b8faa85f1fe4def...	Extractor	ADMIN.TEST4	test_admin.test4	COMPLETED	10...
ecffea067ae1443b...	Extractor	ADMIN.TEST4	test_admin.test4	COMPLETED	10...
92b5b2f03c5d404...	Extractor	ADMIN.TEST4	test_admin.test4	COMPLETED	10...
9a64c6007e6e42c...	Extractor	ADMIN.TEST4	test_admin.test4	COMPLETED	10...
14fedc9687c9408...	Extractor	ADMIN.TEST4	test_admin.test4	COMPLETED	10...
1f237031c4654d0...	Extractor	ADMIN.TEST4	test_admin.test4	COMPLETED	10...
cc52fd54b93348e...	Extractor	ADMIN.TEST4	test_admin.test4	COMPLETED	10...
4ad200d8edb34ec...	Extractor	ADMIN.TEST4	test_admin.test4	COMPLETED	10...
4b64bdf2c513484...	Extractor	ADMIN.TEST4	test_admin.test4	COMPLETED	10...
616d3a4c990643e...	Extractor	ADMIN.TEST4	test_admin.test4	COMPLETED	10...
05a635f75e3d44b...	Extractor	ADMIN.TEST4	test_admin.test4	COMPLETED	10...
3cf3bc6d455f46f8...	Extractor	ADMIN.TEST4	test_admin.test4	COMPLETED	10...

Amazon Redshift

- awsdbe@test-for-soo.csanf2qfmbi
  - Schemas [22]
    - _control
    - aws_netezza_ext
    - aws_oracle_ext
    - aws_sqlserver_ext
    - aws_teradata_ext
    - aws_vertica_ext
    - control
    - crashdumps
    - dbc
    - dbmaster
    - dbo
    - dms_sample
    - online_sales
    - public
    - sbg_dm
    - test_admin
      - Tables [1]
        - test4
          - Constraints
      - Views
      - Functions [1]
      - Procedures
    - test_dbo
    - test_schema
    - test_schema_0
    - test_schema_1
    - test_schema_2
    - test_user

Used memory: 687.33 MB, Free memory: 784.17 MB, Total memory: 1.44 GB, Maximum memory: 3.46 GB

MPP Migration Timeline



Resources

- Try it out for yourself: https://aws.amazon.com/redshift/
- Redshift Quick Start: https://aws.amazon.com/quickstart/architecture/amazon-redshift/
- Netezza to Redshift Migration without downtime:

  https://aws.amazon.com/blogs/big-data/how-to-migrate-from-ibm-netezza-to-amazon-redshift-with-no-downtime/
- Data Warehouse Migration using ASWS Schema Conversion Tool:

  https://aws.amazon.com/blogs/database/how-to-migrate-your-data-warehouse-to-amazon-redshift-using-the-aws-schema-conversion-tool-data-extractors/
- Github Lab on On-Premises DW to Amazon Redshift with AWS SCT: https://github.com/wrbaldwin/da-week/tree/master/Labs/DW-Migration-to-Redshift-using-SCT
- Use virtual partitioning in the AWS Schema Conversion Tool:

  https://aws.amazon.com/blogs/database/use-virtual-partitioning-in-the-aws-schema-conversion-tool/

Questions?

Thanks!