
AWS
re:Invent
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PEX119

The migration and modernization 7 Rs and associated AWS tooling

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Agenda

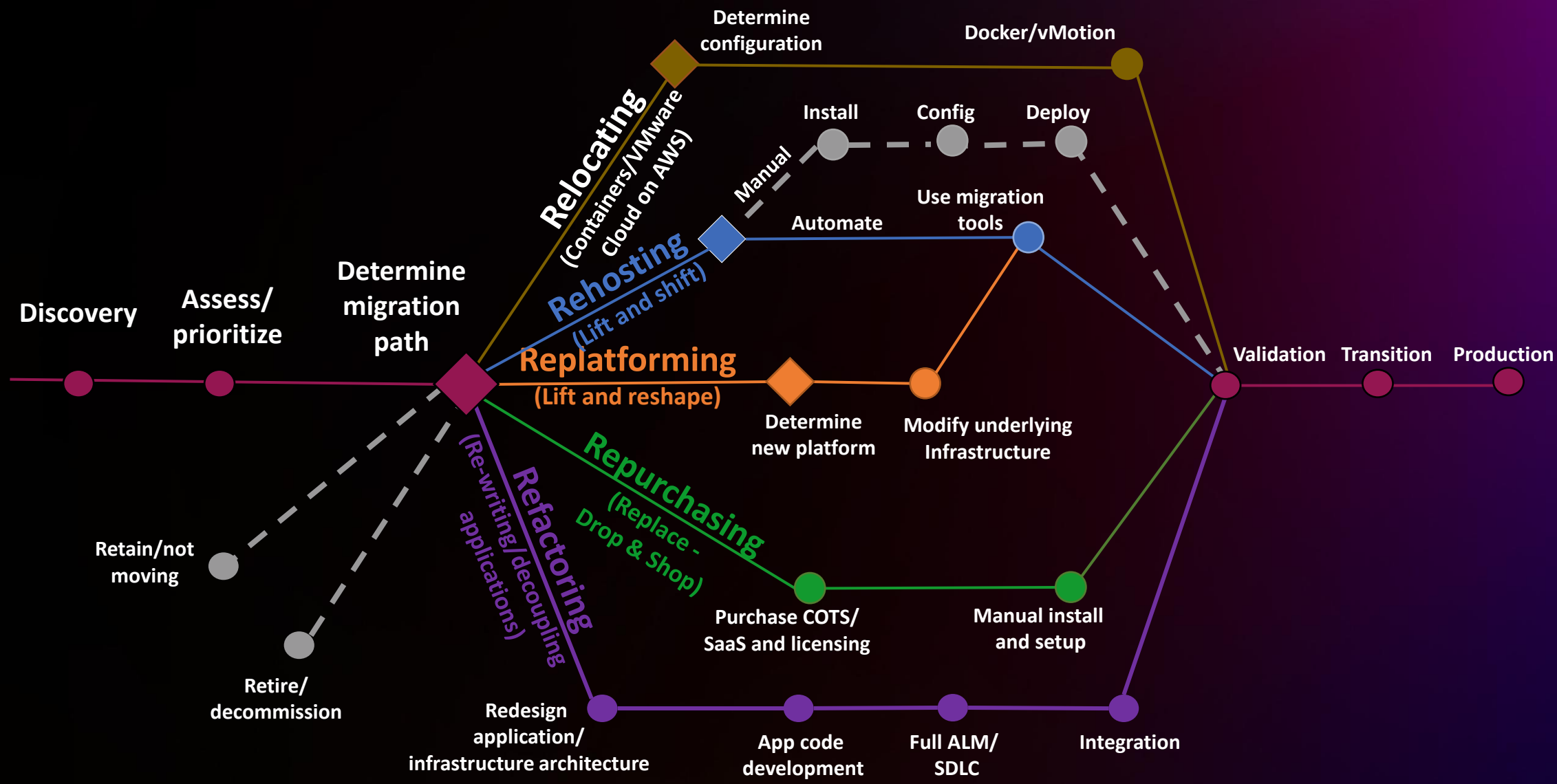
The 7 Rs

Modernization pathways

AWS tooling

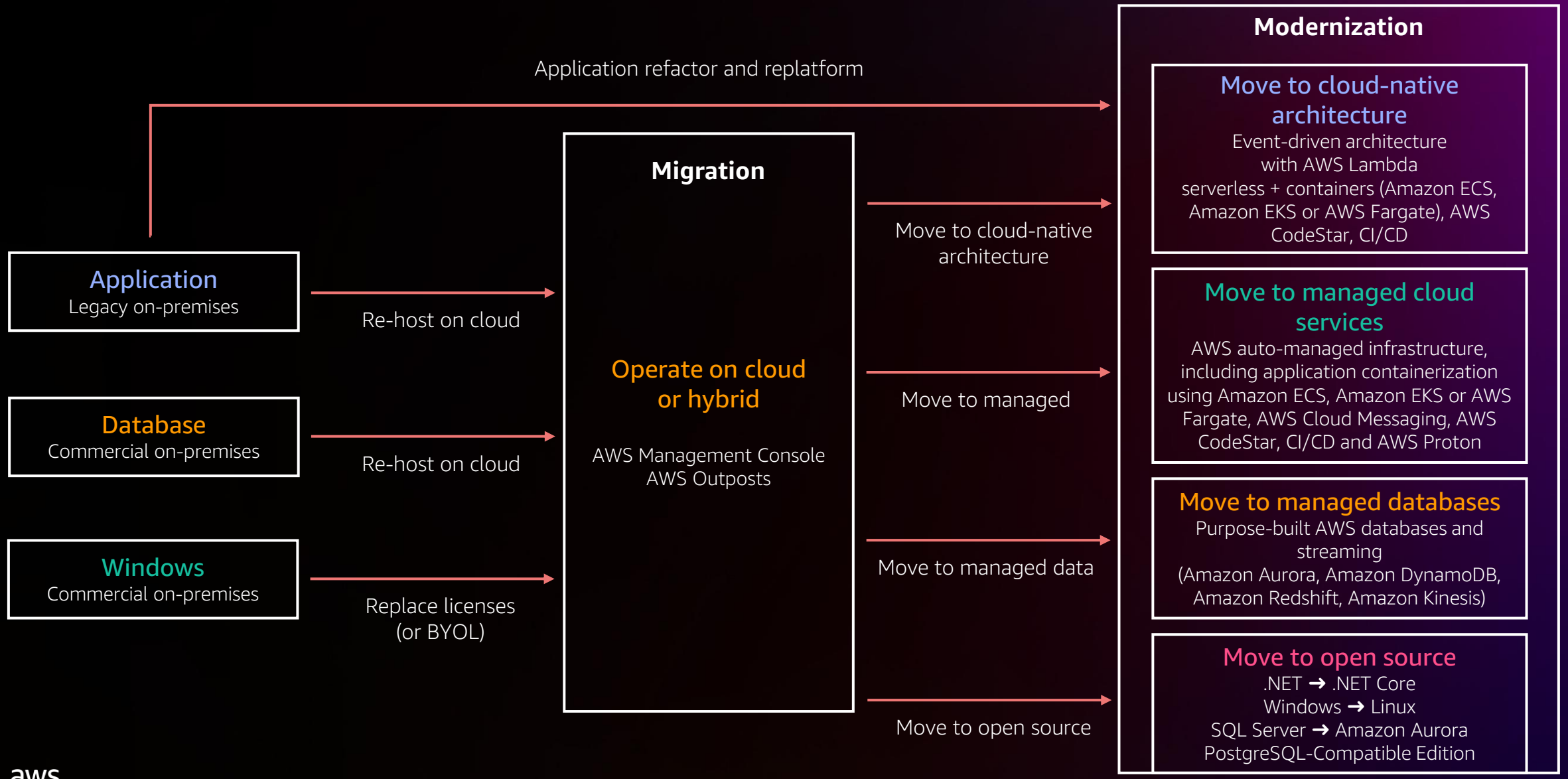
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Should you rehost or modernize?



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Modernization pathways



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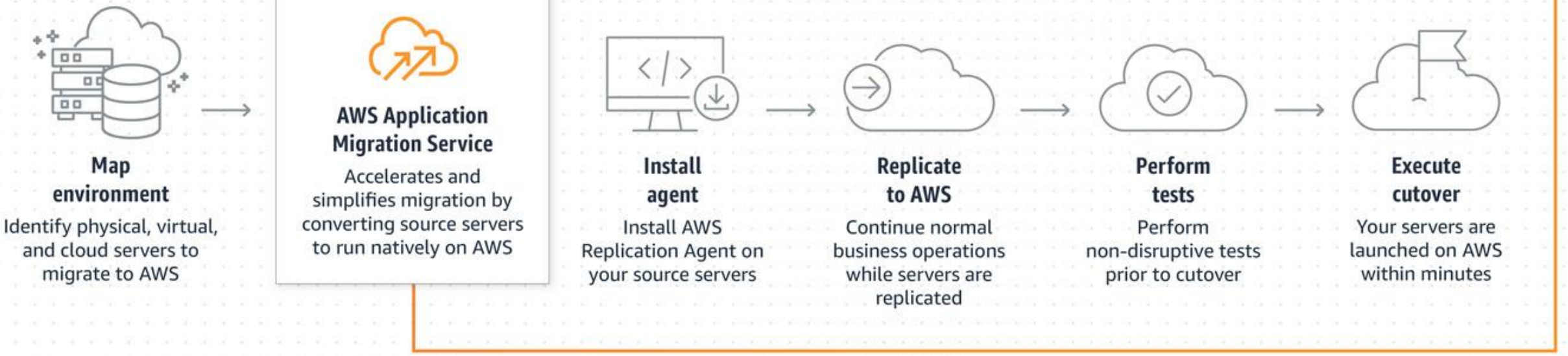
What tools can help me?

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AWS Application Migration Service (MGN)

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Flow



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AWS Database Migration Service (AWS DMS) and AWS Schema Conversion Tool (AWS SCT)

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What are AWS SCT and AWS DMS?



AWS Schema Conversion Tool (SCT) converts your commercial database and data warehouse schemas to open-source engines or AWS-native services, such as Amazon Aurora and Amazon Redshift

AWS Database Migration Service (DMS) easily and securely migrates and/or replicates your databases *and* data warehouses to AWS



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AWS SCT product highlights

Assessment report

- Assessment of migration compatibility of source databases with open-source database engines – Amazon Relational Database Service (Amazon RDS) for MySQL, Amazon RDS for PostgreSQL, and Amazon Aurora
- Recommends best target engine
- Provides detailed levels of effort to complete migration

Converts schema and code

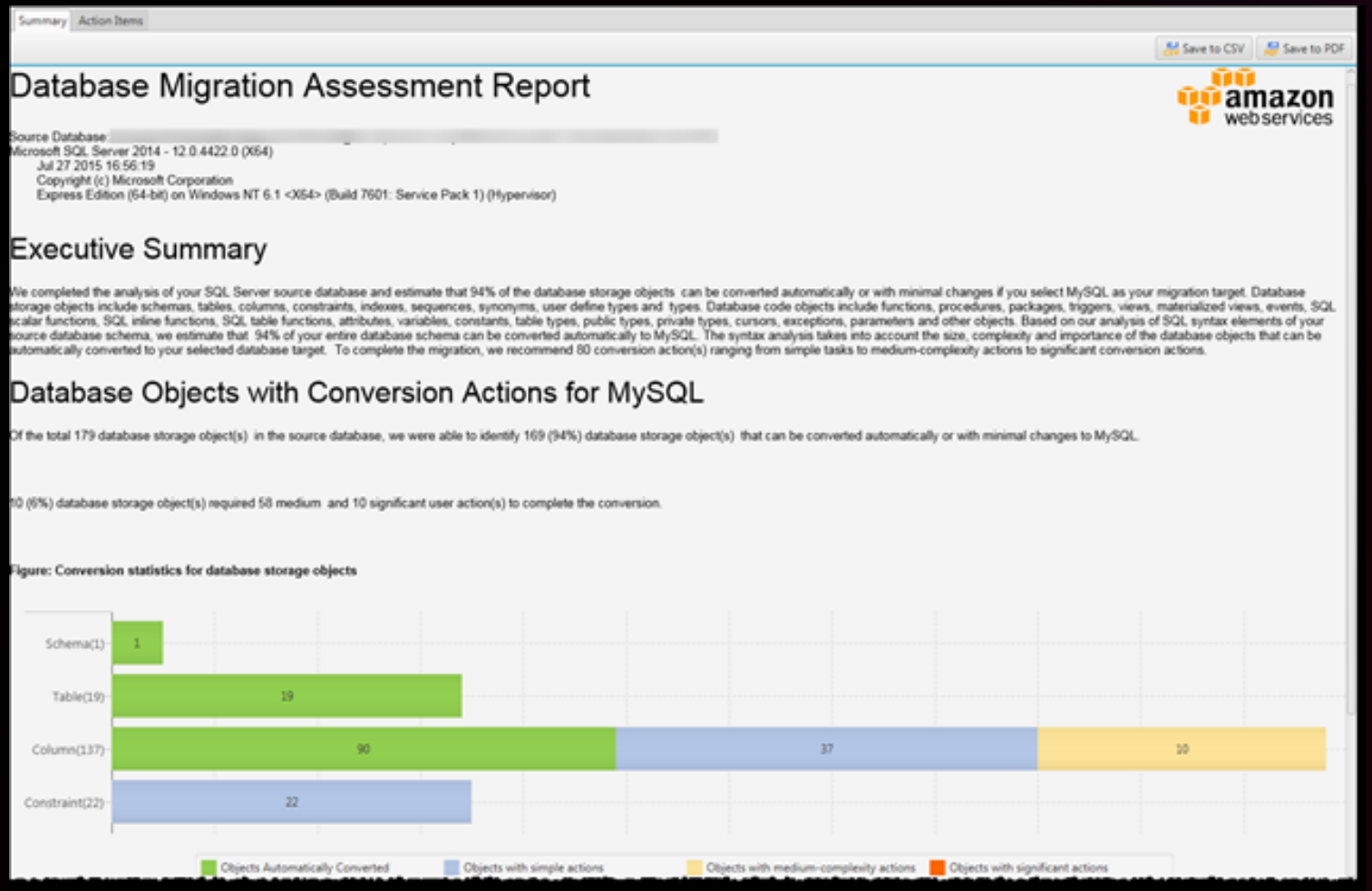
- Attempts to convert all schema and code objects to the target engine, including stored procedures and functions
- Scans and converts embedded SQL statements in app code
- Generates a report with recommendations

Extracts and migrates DW to Amazon Redshift

- Extracts data through local migration agents
- Files are loaded to an Amazon S3 bucket and to Amazon Redshift
- Netezza
- Vertica
- Greenplum
- Teradata
- Oracle
- SQL Server

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SCT migration assessment report



- Assessment of migration compatibility of source databases with open-source database engines – RDS for MySQL, RDS for PostgreSQL, and Aurora
- Recommends best target engine
- Provides detailed levels of effort to complete migration

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AWS DMS product highlights

Pre-migration assessment

- Checks migration task settings prior to launch
- Alerts for potential issues, such as unsupported data types
- Prevents unnecessary, time-consuming runtime migration failures

Data validation

- Validates that all data selected for migration migrated properly
- Includes both stages of full load and CDC
- Applies for both homogeneous and heterogeneous migrations

AWS Snowball integration

Use AWS Snowball and AWS DMS to migrate data to AWS

- Migrate large databases (over 5TB)
- Migrate many databases at once
- Migrate over slow network
- Push vs. pull

aws

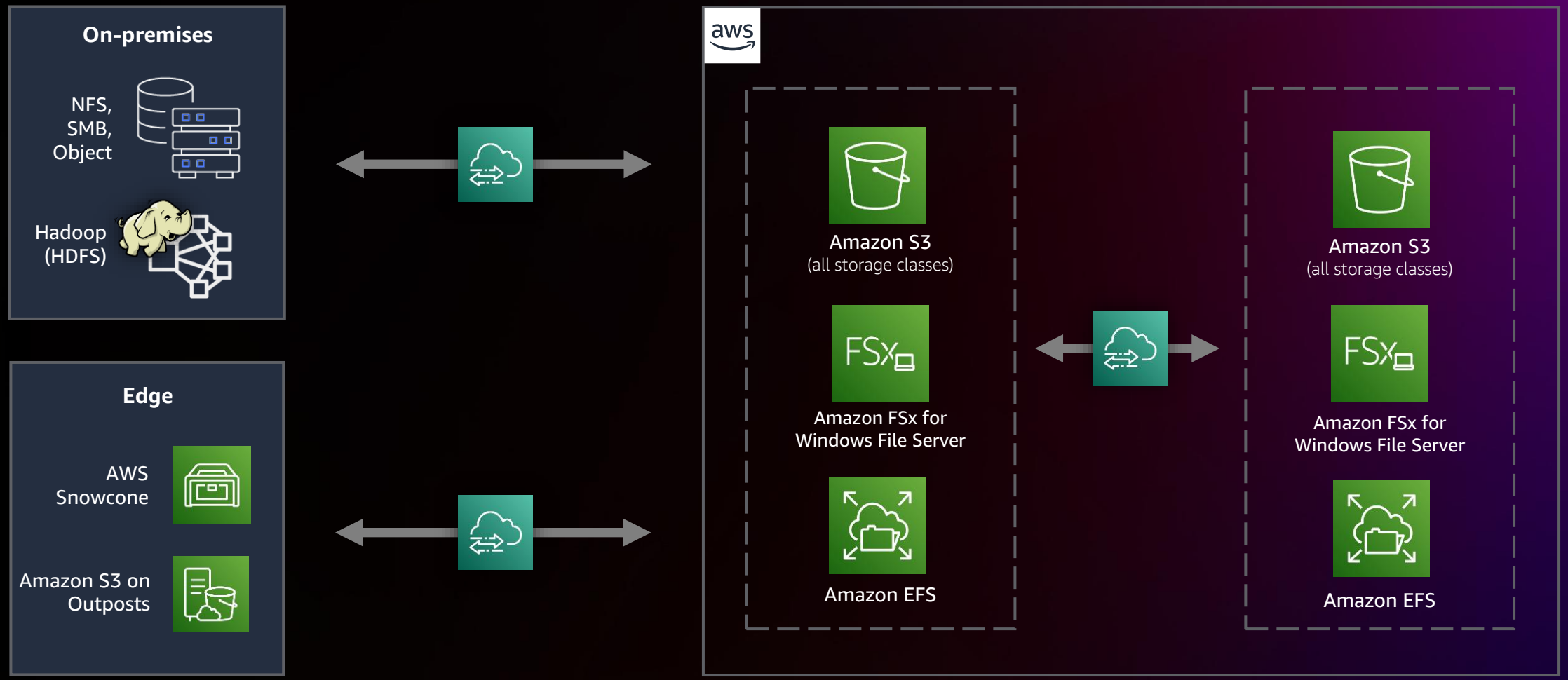
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AWS DataSync

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What can you do with DataSync?

QUICKLY, EASILY, AND SECURELY TRANSFER YOUR DATA TO AND FROM AWS STORAGE SERVICES



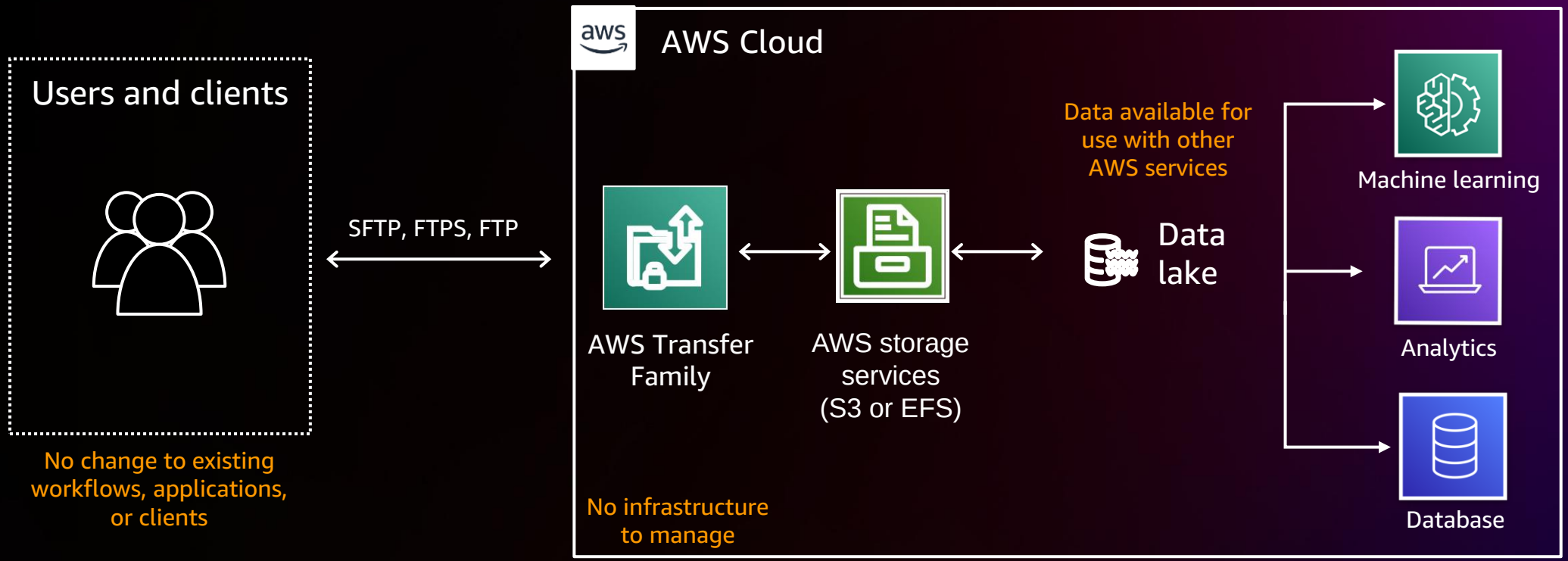
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AWS Transfer Family

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AWS Transfer Family value

SEAMLESSLY MIGRATE WITHOUT IMPACTING YOUR WORKFLOWS



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AWS Snowball

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AWS Snow Family evolution

Data movement

Edge computing



Customer sites

Edge sites

Set of services and functionality on the partially to fully disconnected and secure edge

Allows data collection, data processing, and data movement from the edge to AWS

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AWS App2Container

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AWS App2Container: How it works

TRANSFORMING APPLICATIONS RUNNING IN VM TO CONTAINERS AND DEPLOY TO AWS



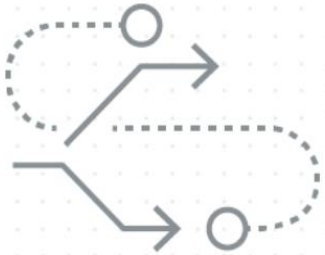
Discover and Analyze

Create application inventory and analyze runtime dependencies



Extract and Containerize

Extract Application with dependencies and create a docker image



Create Deployment Artifacts

Generate the ECS task and Kubernetes pod definitions and create CI/CD pipelines



Deploy to AWS Cloud

Store image in Amazon ECR and deploy to Amazon ECS and Amazon EKS

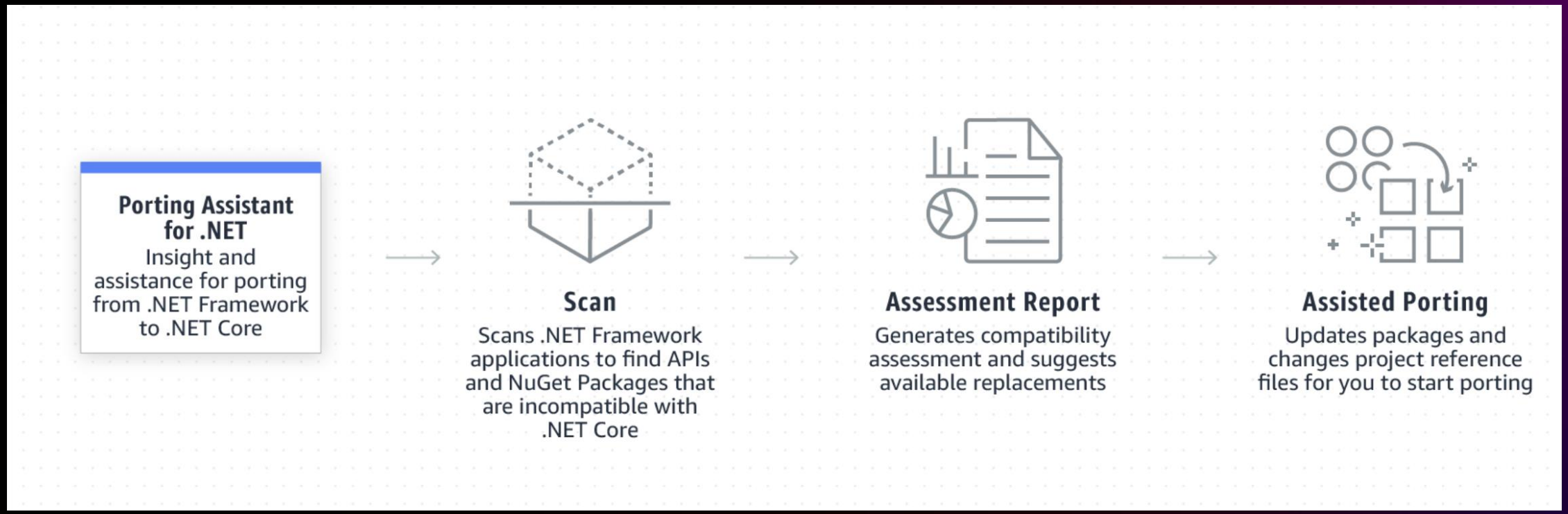
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Porting Assistant for .NET

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Porting Assistant for .NET

ASSESSMENT AND PORTING .NET FRAMEWORK APP TO .NET CORE ON LINUX



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Thank you!



Please complete the session survey in the **mobile app**

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