
AWS
re:Invent
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How to prepare for the next evolution of cyberattacks

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Agenda

- Don’t become a statistic
- Evolving cyberattacks and how to counter them
- Best practices to secure your data
- The importance of data security at Amgen
- Key takeaways

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Don’t Become a Statistic. Prepare Now.

55%

of organizations will have **adopted a cloud-centric strategy** toward their data protection by 2025

46%

of organizations have experienced **successful ransomware events** in the past three years

92%

said their data resiliency tools were “efficient” or “highly efficient,” yet **nearly 50% experienced data loss**

Source: IDC White Paper, You Think Ransomware Is Your Only Problem? Think Again, Sponsored by: Druva, September 2022

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Druva: The Data Resiliency Cloud



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Druva: Among Industry's First At-Scale SaaS Platforms for Data Resiliency

4B+
backups/year

50%
YoY growth in data managed

80+
certified NPS

60+
Fortune 500

16
global regions

300 PB+
data under management

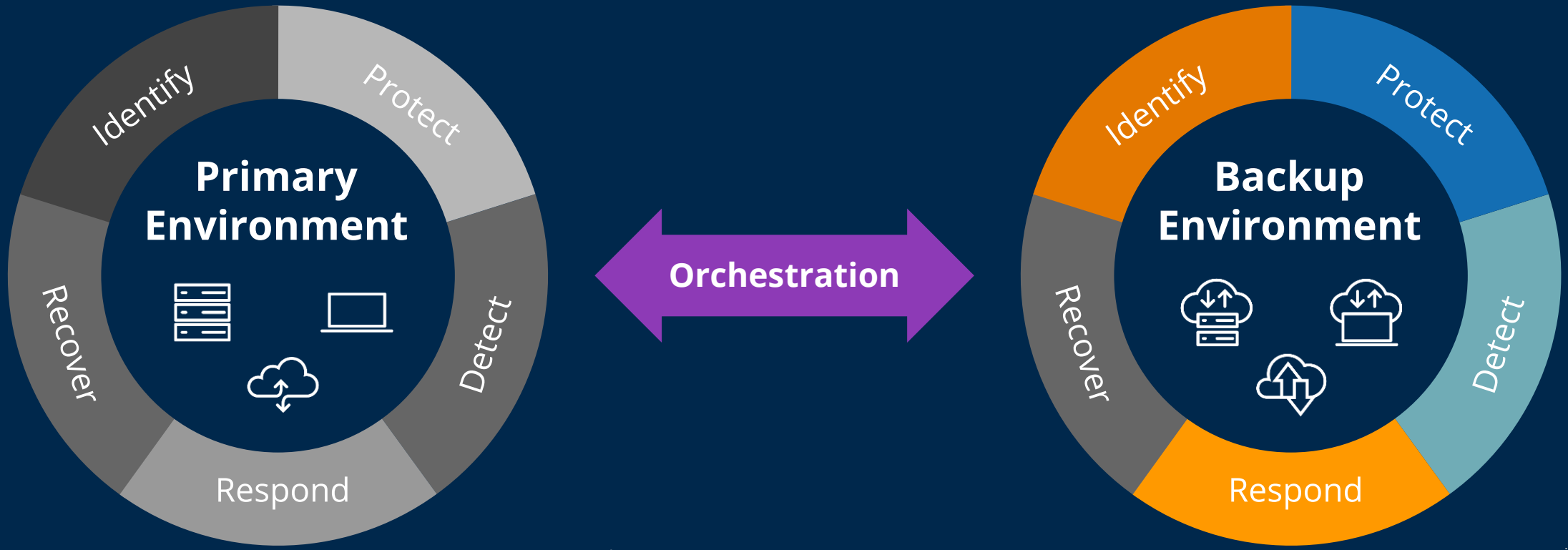
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Evolving Cyberattacks and How to Counter Them

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Two Key Parts to Data Protection



Cybersecurity vendors for firewalls, email gateways, network security

paloalto NETWORKS

CROWDSTRIKE

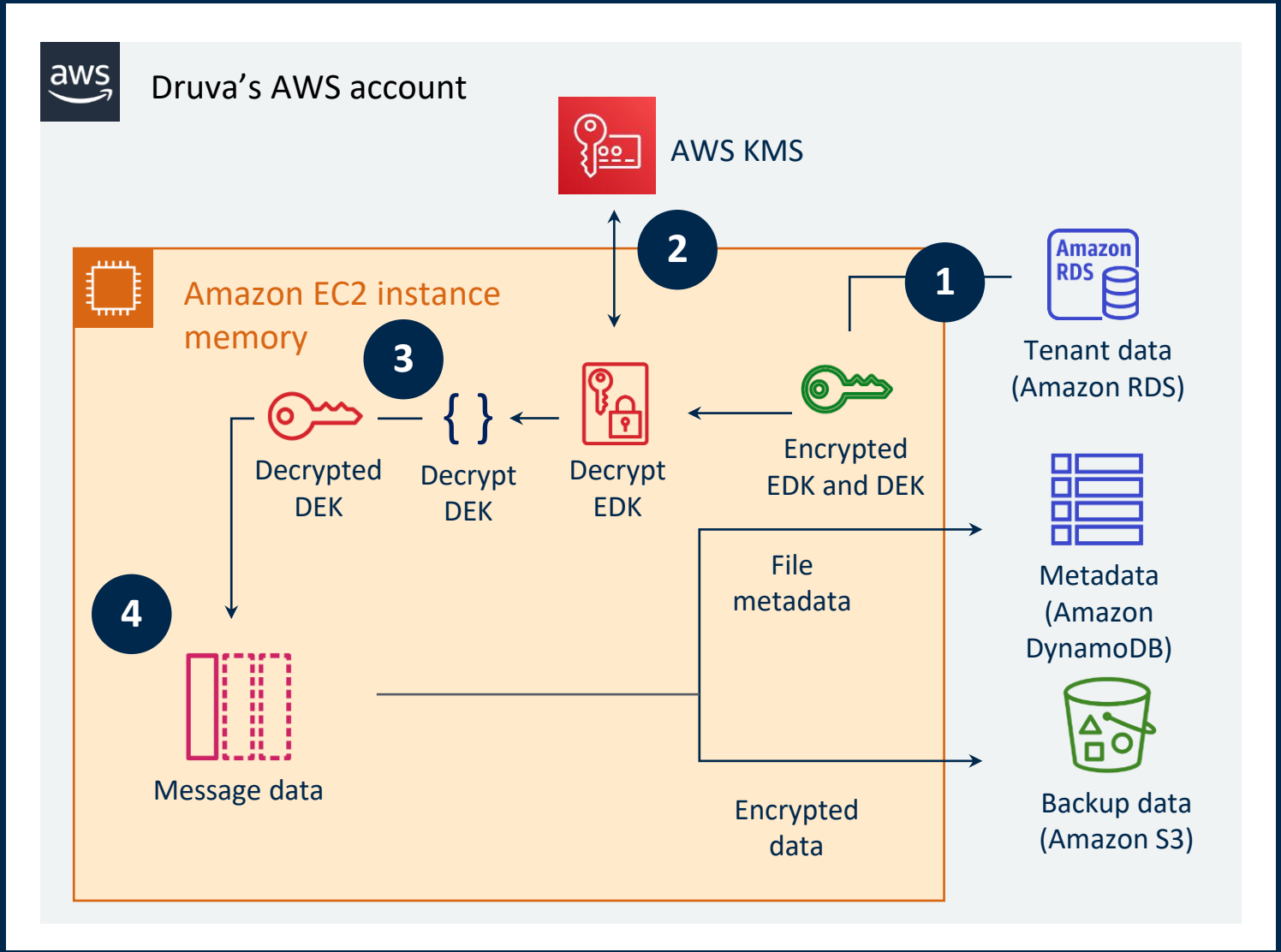
FIREEYE

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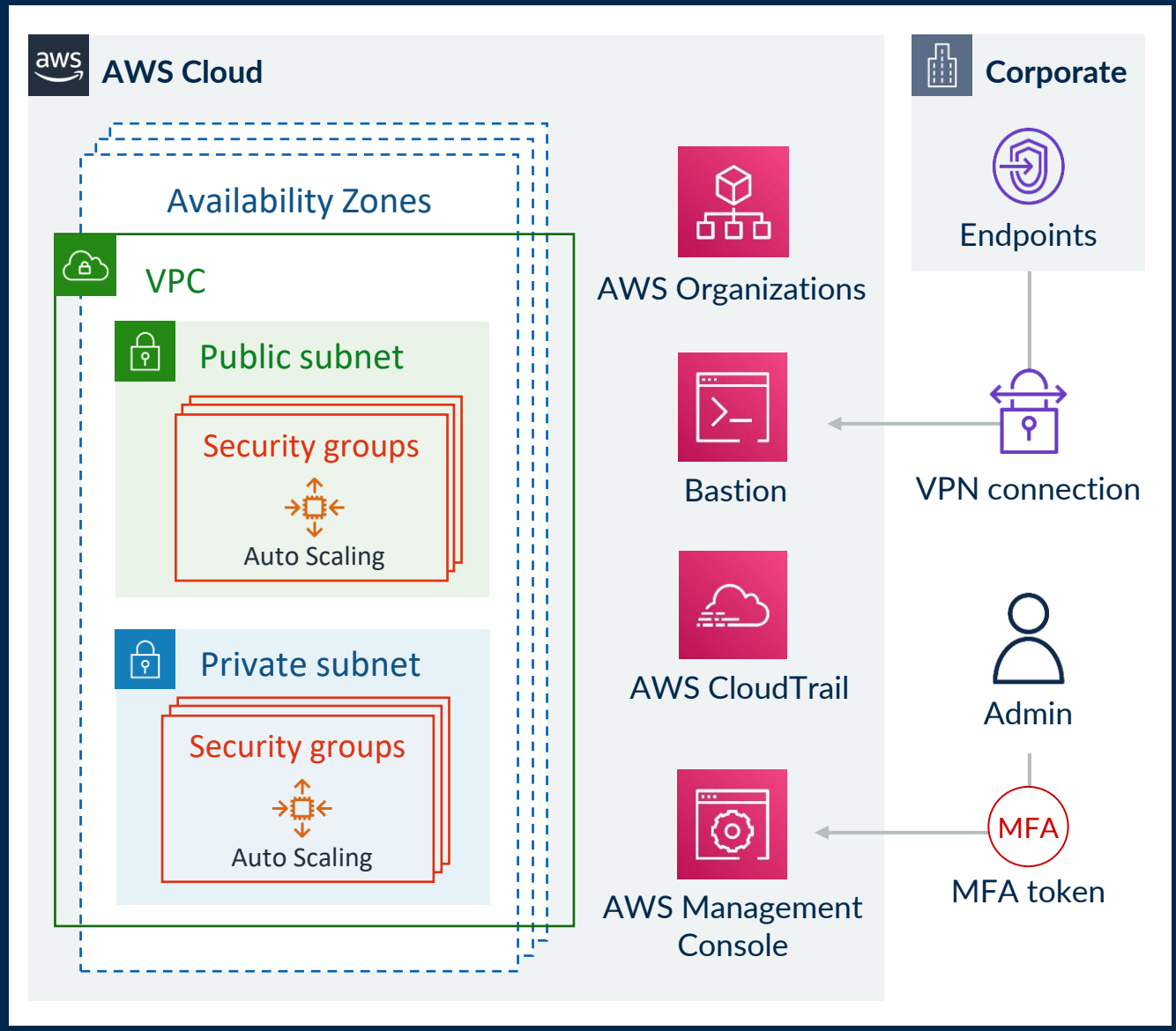
Encryption at Rest (Druva KMS)

1. Retrieve KMS-generated encrypted data key (EDK) and Druva data encryption key (DEK) from Amazon RDS
2. Druva passes the EDK to KMS to obtain a cleartext EDK
3. The encrypted tenant DEK is then decrypted with the EDK to obtain a decrypted DEK
4. Use DEK to encrypt backup for Amazon S3



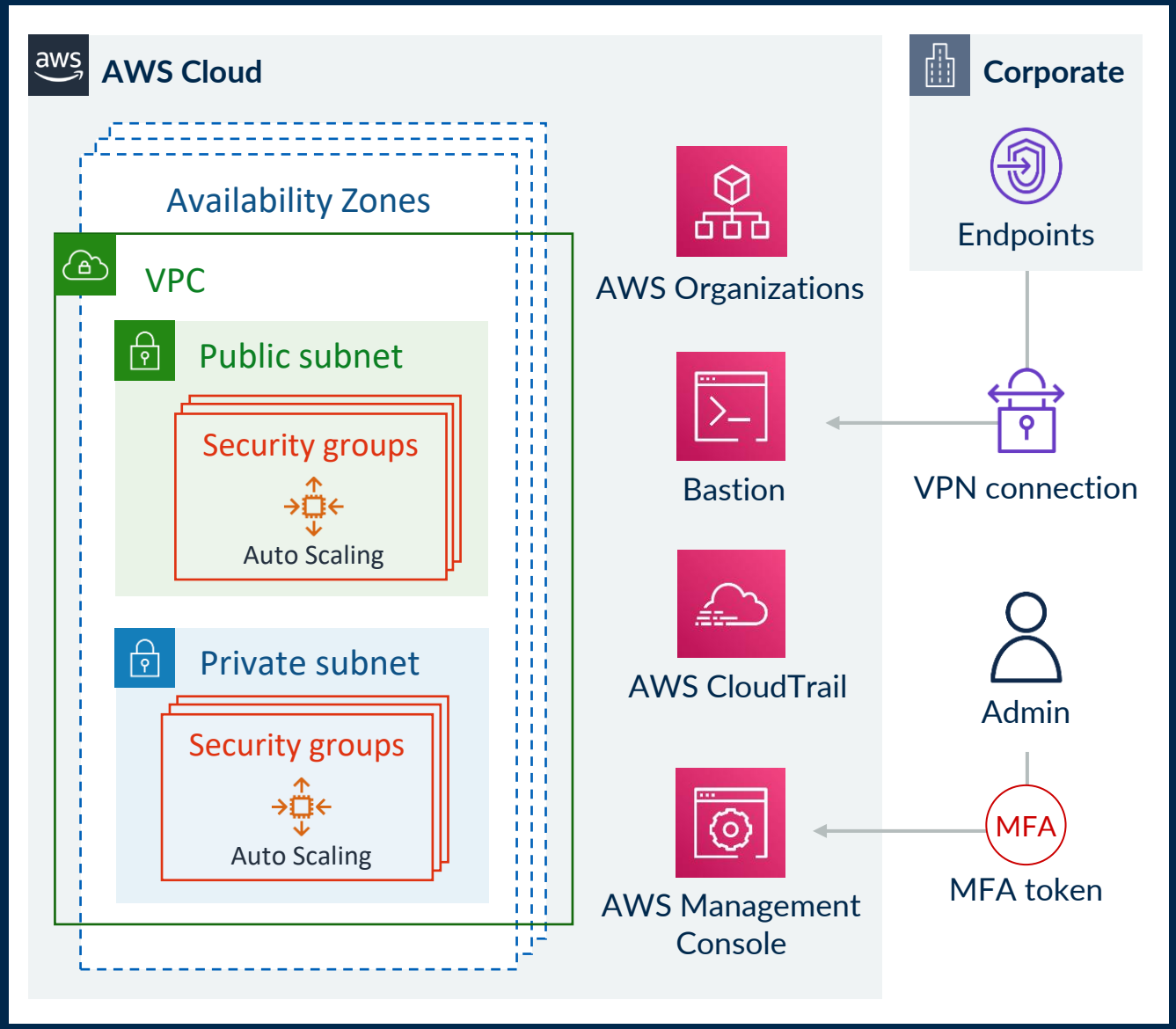
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Platform Security



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Platform Security



Incident detection and response

Amazon Route 53 review

Amazon EC2

+

IMDSv2

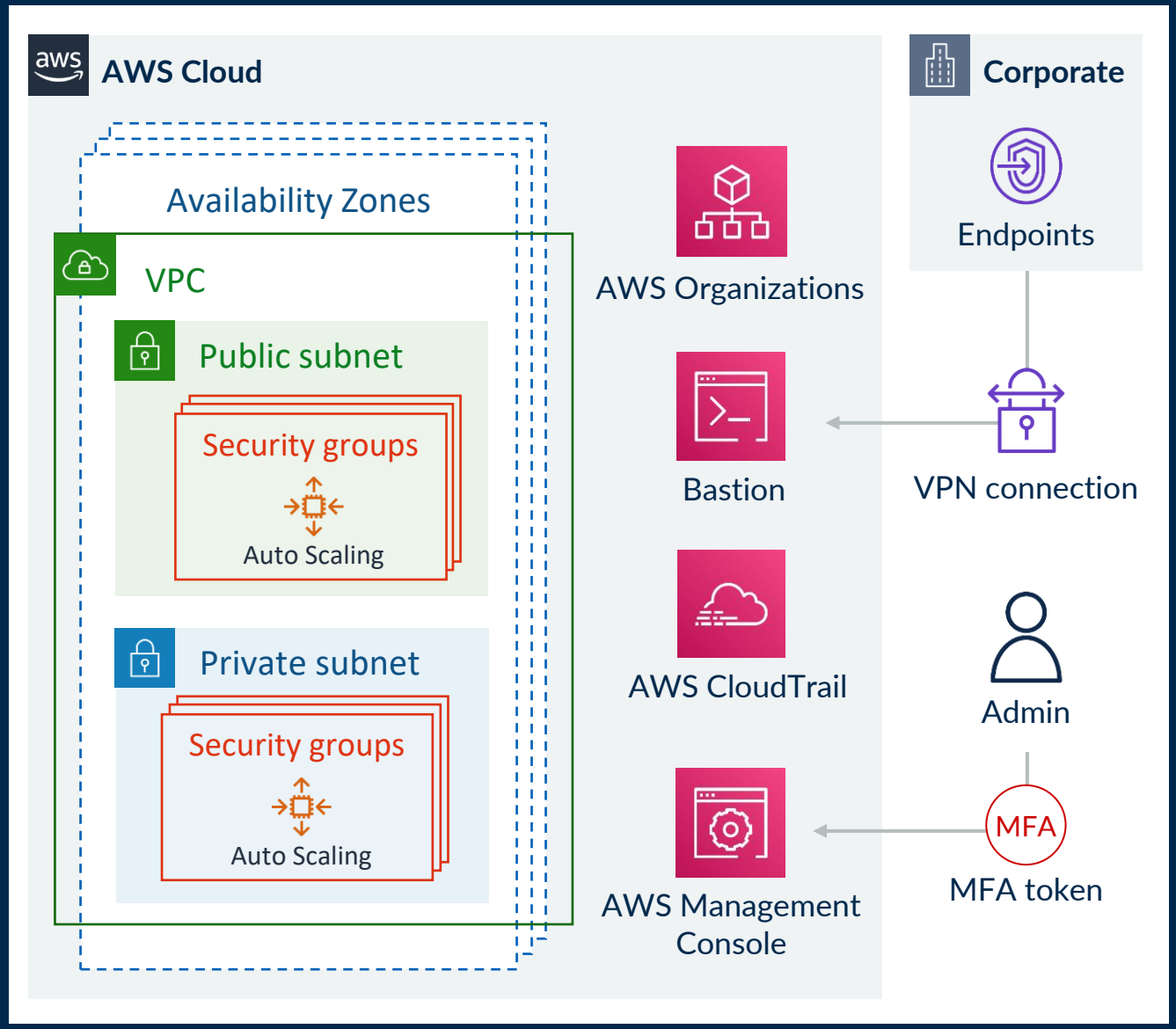
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Platform Security

orca security

snyk

Securing the code and CI/CD pipeline



Incident detection and response

Amazon Route 53 review

Amazon EC2

+

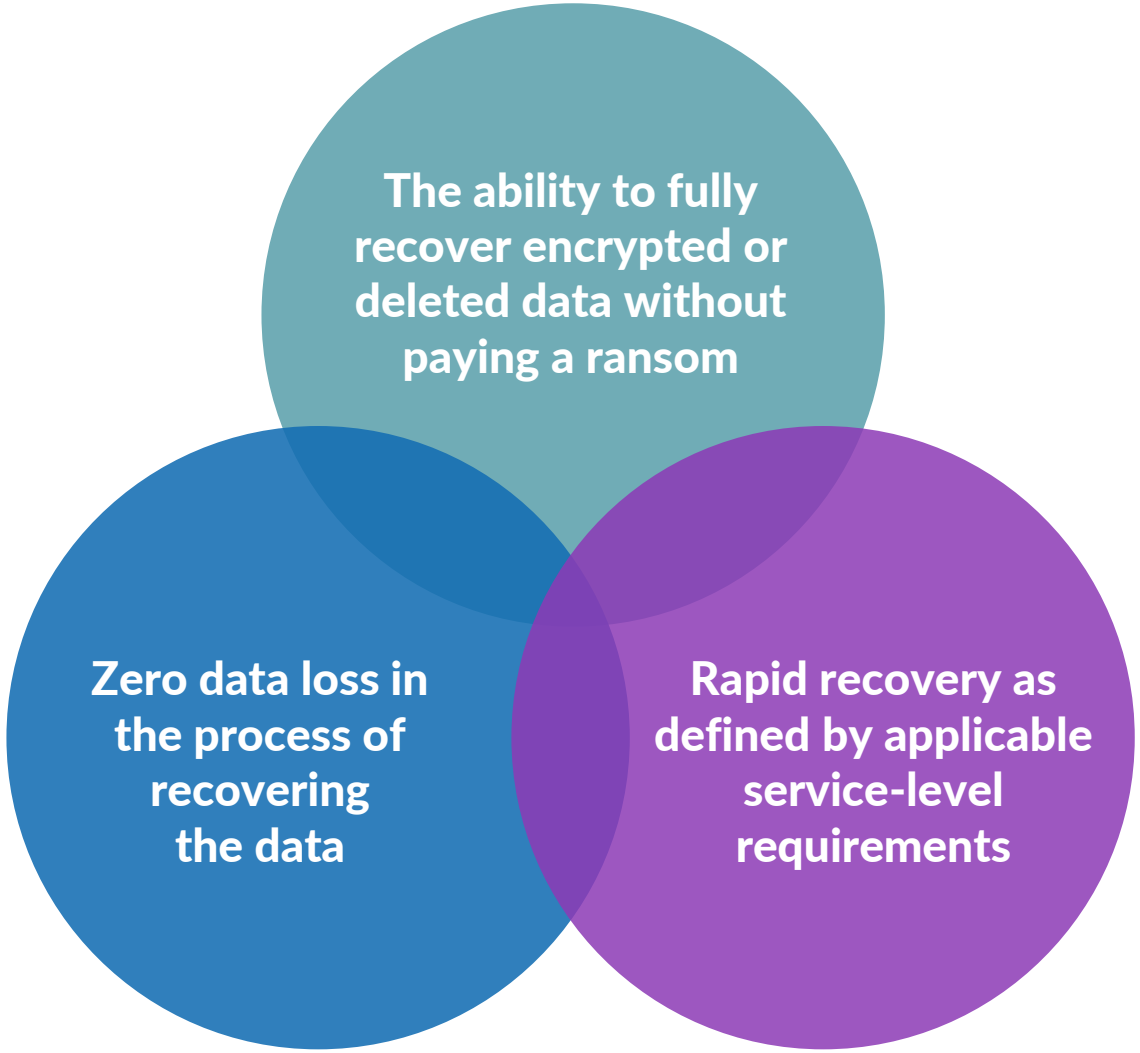
IMDSv2

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Cyberattack recovery success can be measured by three KPIs

When a recovery fails to meet these criteria, then the organization may suffer financial loss, loss of reputation, permanently lost customers, and reduced employee productivity.



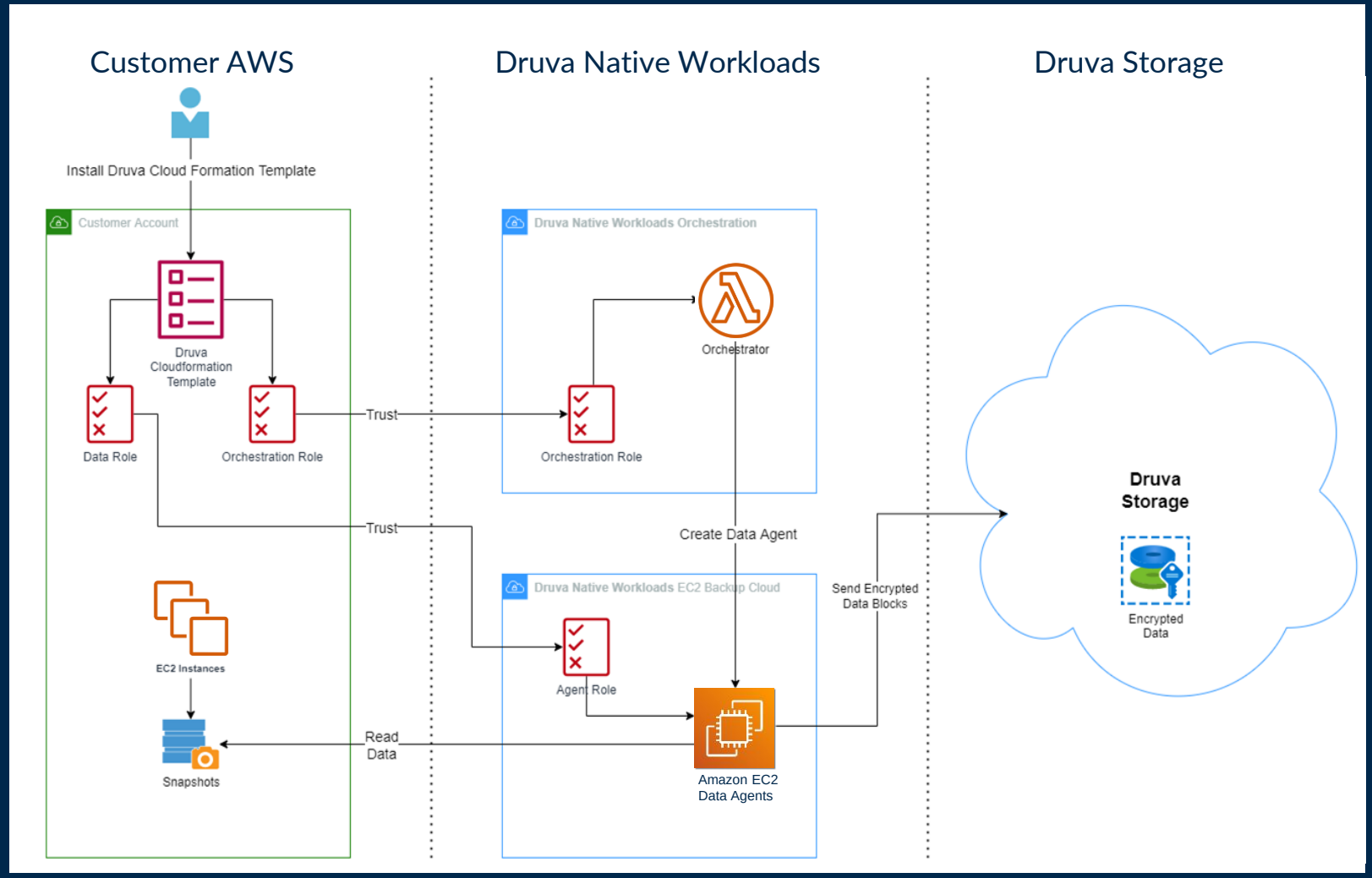
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Best Practices to Secure Your Data

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Security Threat #1: Account Access/Permissions



Benefits include

- Amazon EC2 backups stored in Druva Cloud
- Encrypts data in flight and at rest
- Manual deletion prevention and data lock

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Security Threat #2: Ransomware

Druva Learnings from Customers



Incident Timeline, Data Compromise

- Detection lags infection
- Credential theft makes backups vulnerable (deletion, config changes)



Security Operations and Incident Response

- Poor data posture & limited “data” observability
- Lack of preserved backup logs that can be used for forensics



Recovery

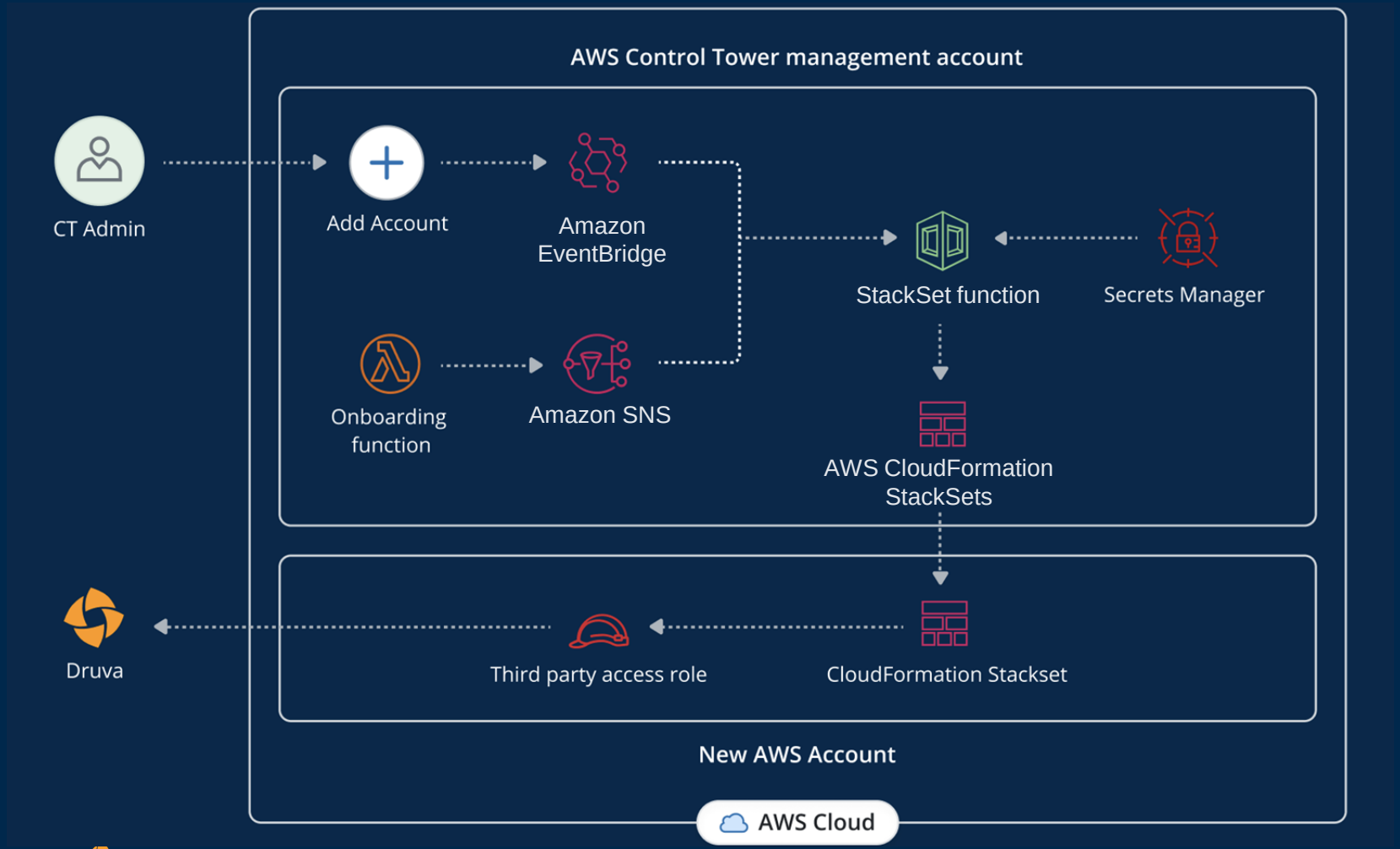
- Sandbox environment often in public cloud
- Tradeoff: RPO vs. safe and accurate recovery – long certification time for recovered backups
- Workload-specific recovery playbooks

**Learnings from actual ransomware incident response and recovery assistance engagements with customers

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Security Threat #3: Secure the Environment (AWS Control Tower)



Benefits include

- Simplified management at scale
- Enhanced multi-account security
- Implement AWS best practices

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The Importance of Data Security at Amgen

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Company Overview

A biotechnology pioneer since 1980, Amgen has grown to be one of the world's leading independent biotechnology companies and has reached millions of patients globally.

Our Mission

To serve patients

Our Business

- Innovative medicines
- Transformative research
- World class biomanufacturing

Approximately **24,000 employees** worldwide

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Staying Cybersecure in a Highly Regulated Industry



Operate in a **highly regulated** industry



Access to and/or **theft of sensitive data**



Organizational measures to **safeguard data**

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Maturing Digital Employee Experience (DEX)



Challenges moving to hybrid working



Amazon WorkSpaces for external workers' desktops



Reduce user friction

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Why Amgen Turned to Druva



Reduce response time to cyber threats



Improve **compliance and governance**



Automatically recover user settings and files

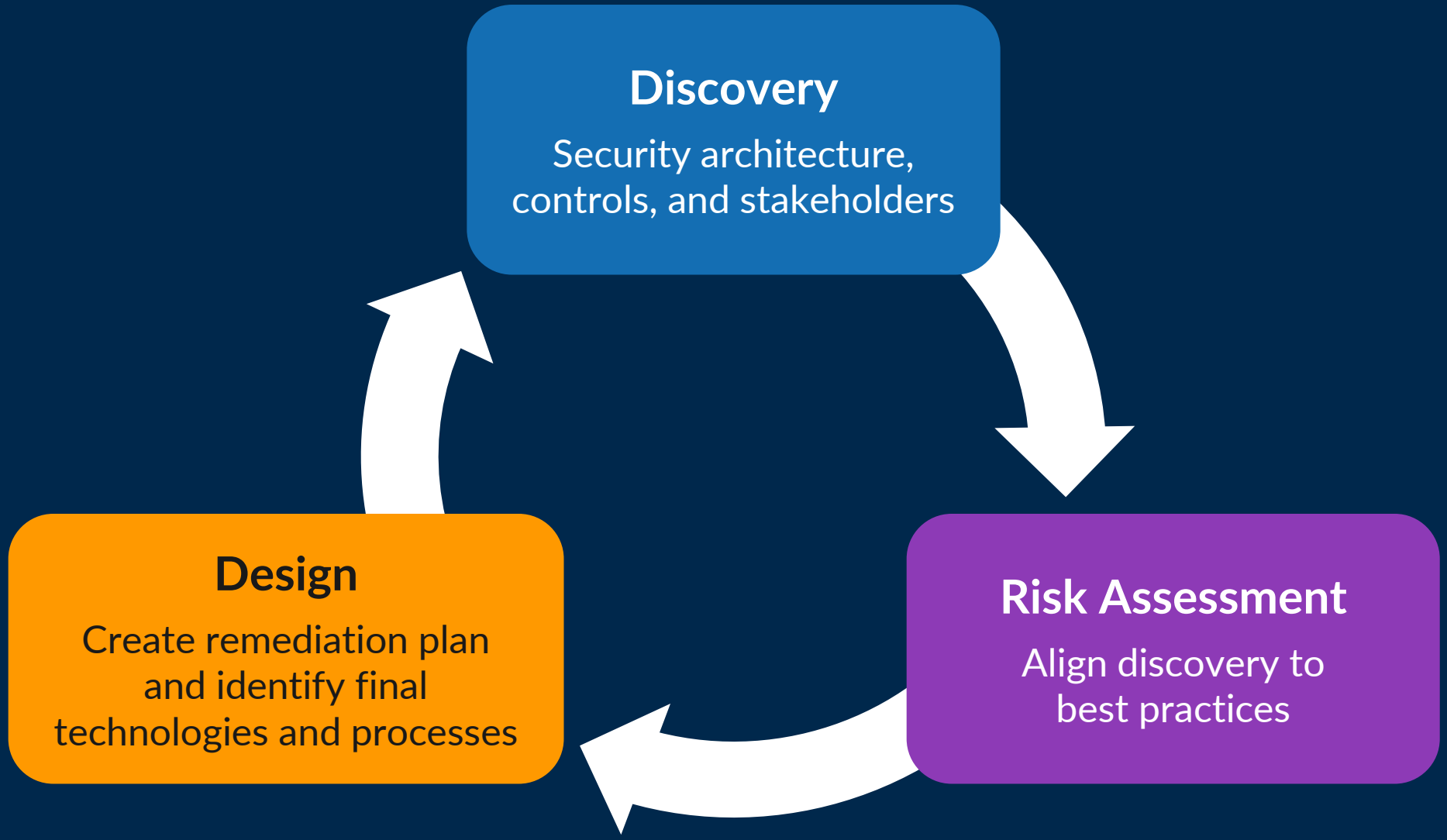
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Key Takeaways

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Data Security and Resilience is a Never-Ending Process



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The Druva Data Resiliency Guarantee



RISKS

- **Cyber risk** (ransomware and beyond)
- **Human risk**
- **Application risk**
- **Operational risk**
- **Environmental risk**

SLAs

- **100% Confidentiality.** Guarantee that customer data will not be compromised as a result of a Security Incident.
- **100% Immutability.** Guarantee that the last successful backup of customer data will be recoverable (not changed) in the event of a ransomware event.
- **99% Reliability.** Guarantee that backups will complete successfully in accordance with customer policies.
- **99.999% Durability.** Guarantee that customer data backed up is recoverable (not corrupted).
- **99.5% Availability.** Guaranteed uptime up to 99.5%

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Next Steps



Visit Druva at booth #2241 in the Expo Hall



Meet our product experts to get a live demo



Visit druva.com to learn more

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Thank you!



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