AIRNOV DR SOLUTION CHANGE: WHY NOW AND HOW TO GET BUY IN

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AGENDA
AIRNOV DR SOLUTION CHANGE

- ❑ Why a DR change now?
- ❑ Understanding choices
- ❑ Best practices for pitching leadership
- ❑ Modern DR opportunities

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ABOUT

Parent company Airsec was founded in 1952. In 2019, the company was rebranded as Airnov Healthcare Packaging.

Airnov Healthcare Packaging is specialized in moisture, oxygen and odor control technologies, as well as in primary plastic packaging.

Global footprint: 5 manufacturing facilities, 3 dedicated research and development centers, and 5 sales offices

PROTECTING TODAY, PRESERVING TOMORROW.

PROTERA: WHAT WE DO

CELEBRATING 25 YEARS

We modernize, optimize, and transform enterprise workloads through a proactive services and support model.

Driving agreed measurable and reportable business outcomes.

DISASTER RECOVERY CHANGE

WHY NOW?

Ensure business can function following a disaster

Recovery against ransomware

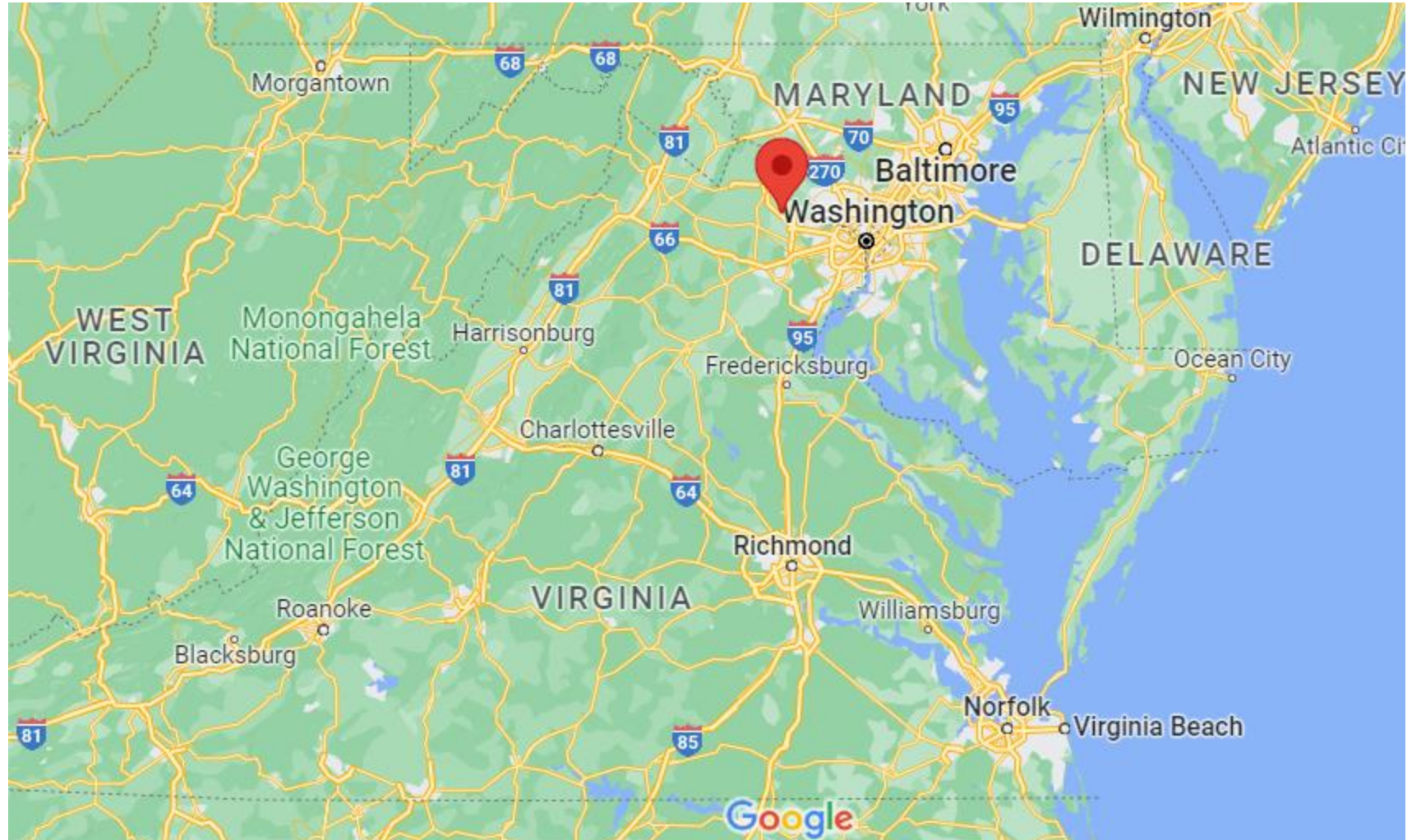**Maximize benefits of running on AWS**

DISASTER RECOVERY

BUILDING THE BUSINESS CASE

- **Current DR**: "Managed Resiliency" (Cold DR)
    - Backups: 2X weekly, daily incremental
    - Not "true" DR; zones are not outside of region
    - Managed Resiliency is two zones within the same region. Our region is AWS East (Virginia)

- **True DR**: Multi-region

- **Our Mission Critical Apps are on AWS**
    - US East 1 region is comprised of 6 Availability Zones. AZ's vary per region (typically 2-3)
    - Potential problem: An earthquake that spans more than 100 miles, a war or an asteroid, telecommunication outages
    - 70—80% of AWS customers put Tier 1 ERP in a different region
    - Multi-region recommended

- **How much risk are we willing to accept?** Today, if availability zones are knocked out, globally Airnov would have no system.
    - RPO/RTO (Recovery Point Objective/Recovery Time Objective) is 6 hours/12 hours
    - A disaster to 1 of the 6 zones, every company in that region would be trying to get space in the remaining zones

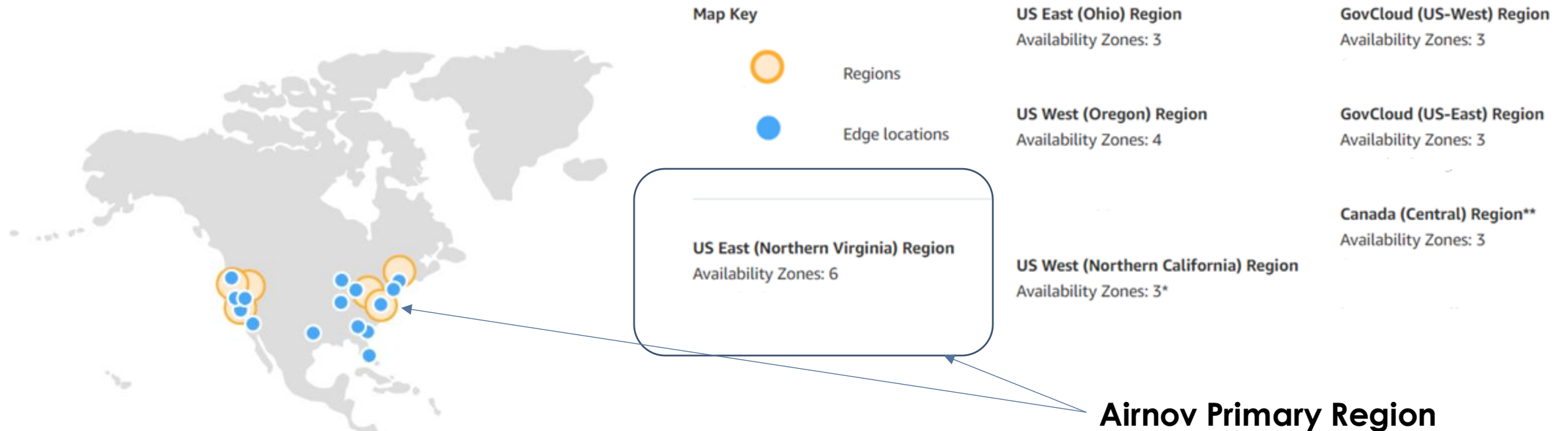- **Layers of Protection**: Multi-region offers greater protection

DISASTER RECOVERY

BUILDING THE BUSINESS CASE

Today: Our availability zone is less than 45 minutes from Washington, D.C.

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AWS US REGIONS / AVAILABILITY ZONES

Map Key

○ Regions

● Edge locations

US East (Ohio) Region
Availability Zones: 3

US West (Oregon) Region
Availability Zones: 4

US East (Northern Virginia) Region
Availability Zones: 6

US West (Northern California) Region
Availability Zones: 3*

GovCloud (US-West) Region
Availability Zones: 3

GovCloud (US-East) Region
Availability Zones: 3

Canada (Central) Region**
Availability Zones: 3

Airnov Primary Region

Availability Zones

An Availability Zone (AZ) is one or more discrete data centers with *redundant power, networking, and connectivity* in an AWS Region. AZs give customers the ability to operate production applications and databases that are more highly available, fault tolerant, and scalable than would be possible from a single data center. *All AZs in an AWS Region are interconnected with high-bandwidth, low-latency networking*, over fully redundant, dedicated metro fiber providing high-throughput, low-latency networking between AZs. All traffic between AZs is encrypted. The network performance is sufficient to accomplish synchronous replication between AZs. AZs make partitioning applications for high availability easy. If an application is partitioned across AZs, companies are better isolated and protected from issues such as power outages, lightning strikes, tornadoes, earthquakes, and more. *AZs are physically separated by a meaningful distance*, many kilometers, from any other AZ, although all are within 100 km (60 miles) of each other.

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AIRNOV CURRENT IMPLEMENTATION

MANAGED RESILIENCY

1. Backups and Snapshot to S3

2. S3 Replicated to several availability zones in the same Region

3. Available on-demand compute
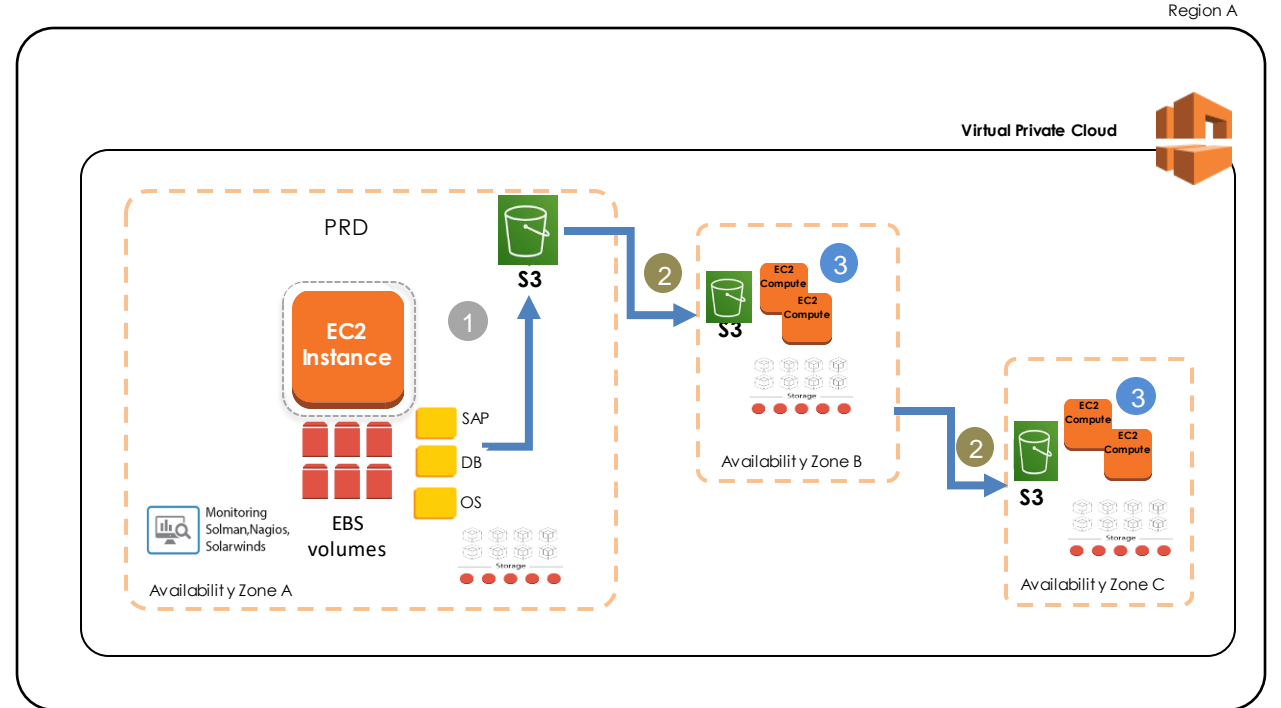
Data Durability & Reliability
Amazon S3 provides durable infrastructure to store important data and is designed for durability of 99.999999999% of objects. Your data is redundantly stored across multiple facilities and multiple devices in each facility.

Resiliency Built in
Snapshots stored in 3+ Availability Zones
Backups stored in 3+ Availability Zones
On-Demand Compute for scale up
On-Demand Storage for scale up

AIRNOV FUTURE IMPLEMENTATION: RECOVERY AS A SERVICE (RAAS)

Disaster Recovery – Geographic Separation

1 Backups and Snapshot to S3

2 S3 Replicated to several availability zones

3 Available on-demand compute

4 Block level replication –
using AWS Elastic Disaster Recovery
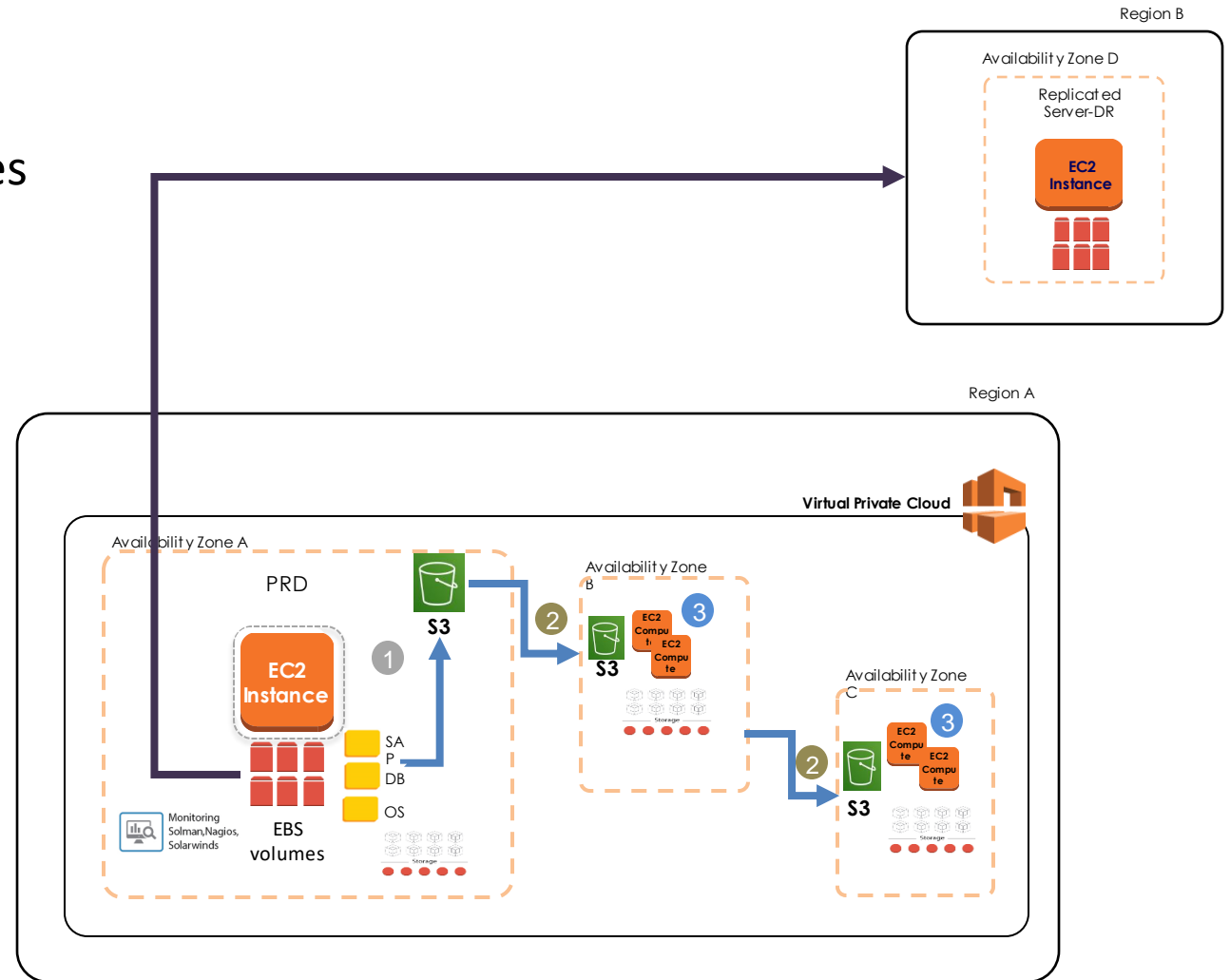
Higher RPO/RTO; Lower Cost
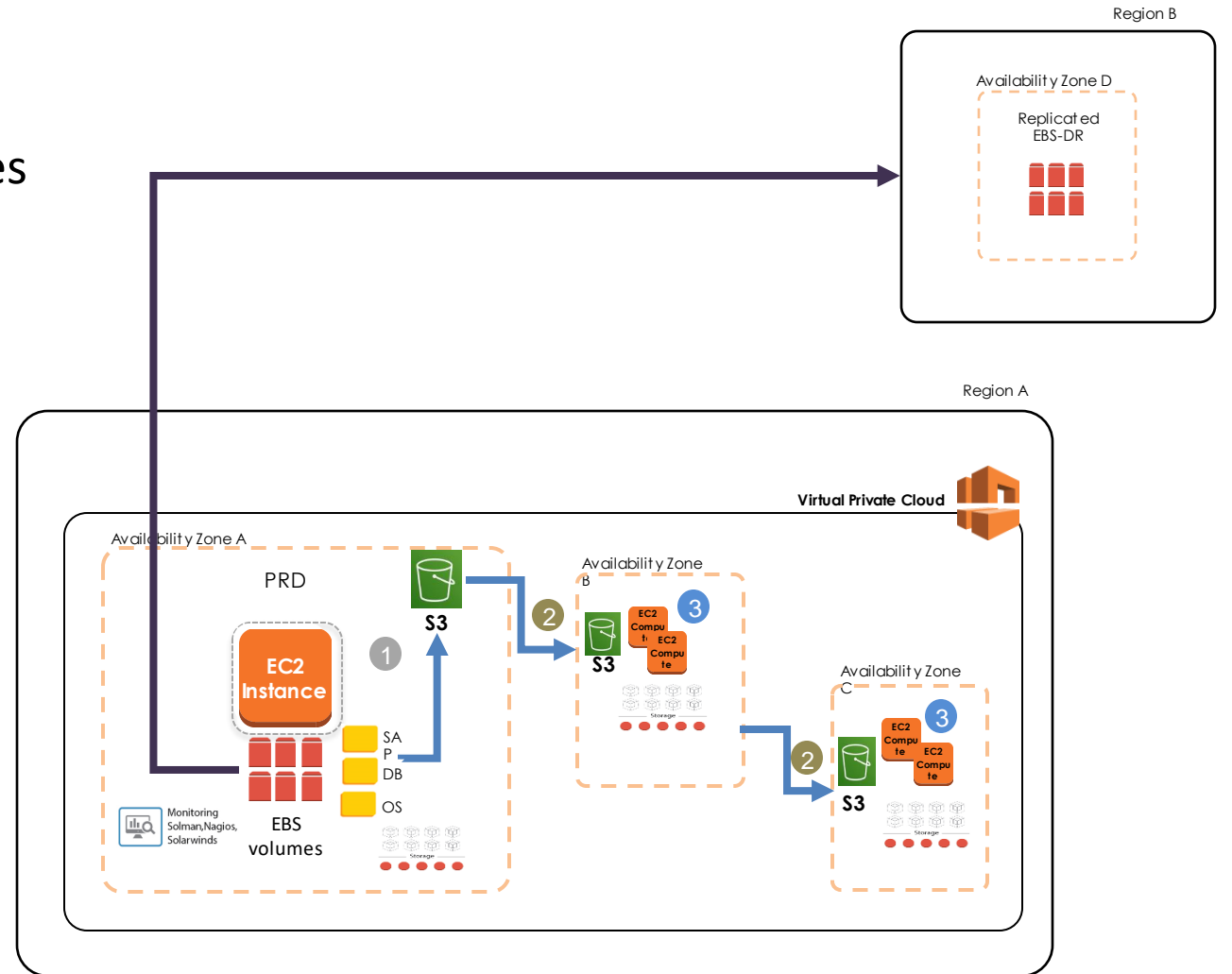
ADDITIONAL DR OPTIONS AVAILABLE

Disaster Recovery (Pilot Light) – Geographic Separation

1. Backups and Snapshot to S3

2. S3 Replicated to several availability zones

3. Available on-demand compute

4. Server Replication – smaller size DR Server, ramp-up at DR)

Mid RPO/RTO; Mid Cost

ADDITIONAL DR OPTIONS AVAILABLE

Disaster Recovery (Full Size) – Geographic Separation

1. Backups and Snapshot to S3

2. S3 Replicated to several availability zones

3. Available on-demand compute

4. Server Replication to same size– (DR EC2 = PRD EC2 – no resize during DR required)

Lower RPO/RTO; Higher Cost
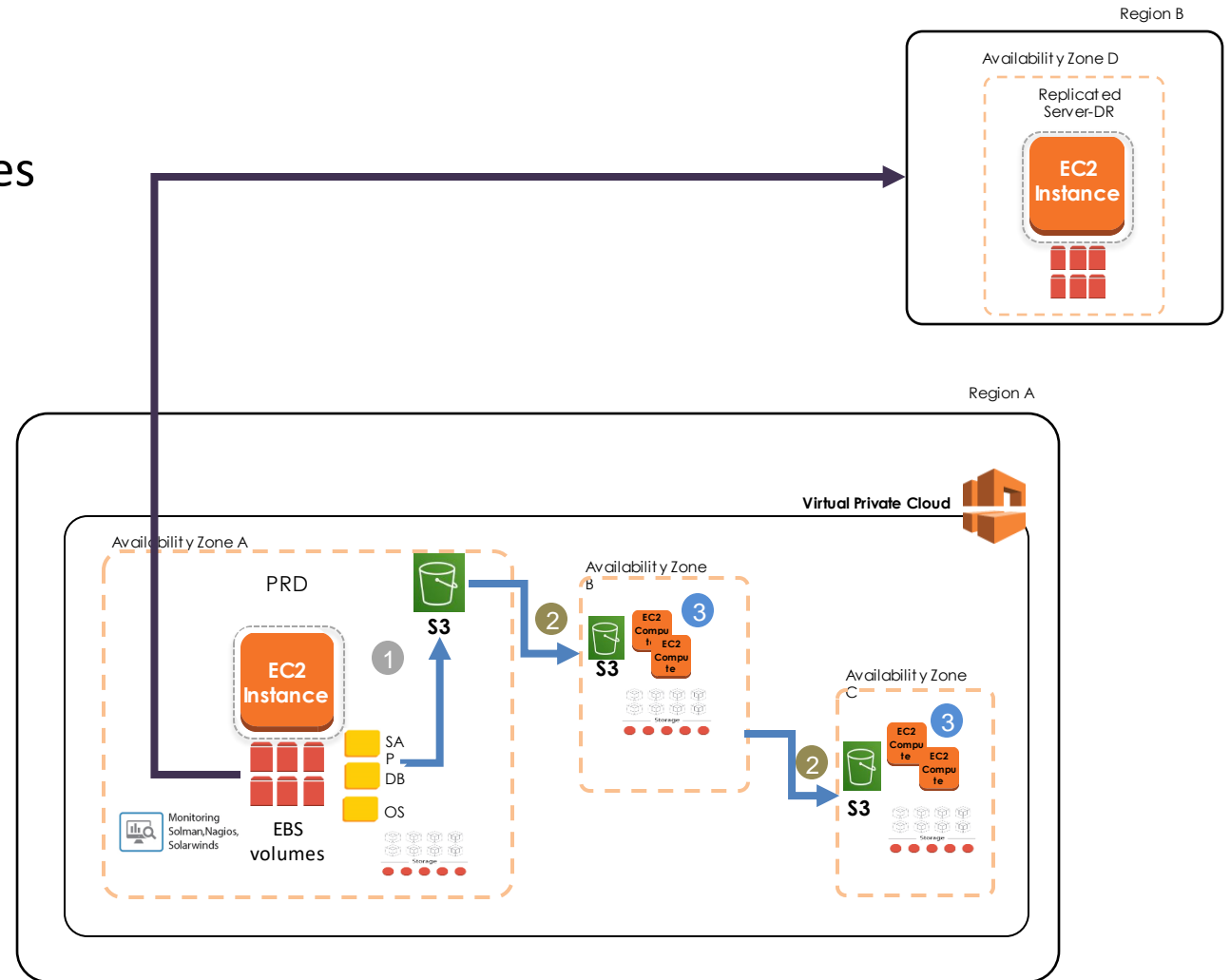
CRITICAL DR STRATEGY CONSIDERATIONS

PLAN AHEAD FOR BUSINESS NEEDS

Business Continuity Plan

Annual DR Testing

DR consideration External Interface Systems or other Business Systems

Automation DR

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WHERE CAN YOUR BUSINESS IMPROVE?

DETERMINE YOUR PATH FORWARD

Identify cost savings, security gaps, process improvement opportunities, and more.

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