Microsoft

AZ-104

Administer Data Protection

AZ-104 Course Outline

01: Administer Identity
02: Administer Governance and Compliance
03: Administer Azure Resources
04: Administer Virtual Networking
05: Administer Intersite Connectivity
06: Administer Network Traffic Management
07: Administer Azure Storage
08: Administer Azure Virtual Machines
09: Administer PaaS Compute Options
10: Administer Data Protection
11: Administer Monitoring

Learning Objectives - Administer Network Protection

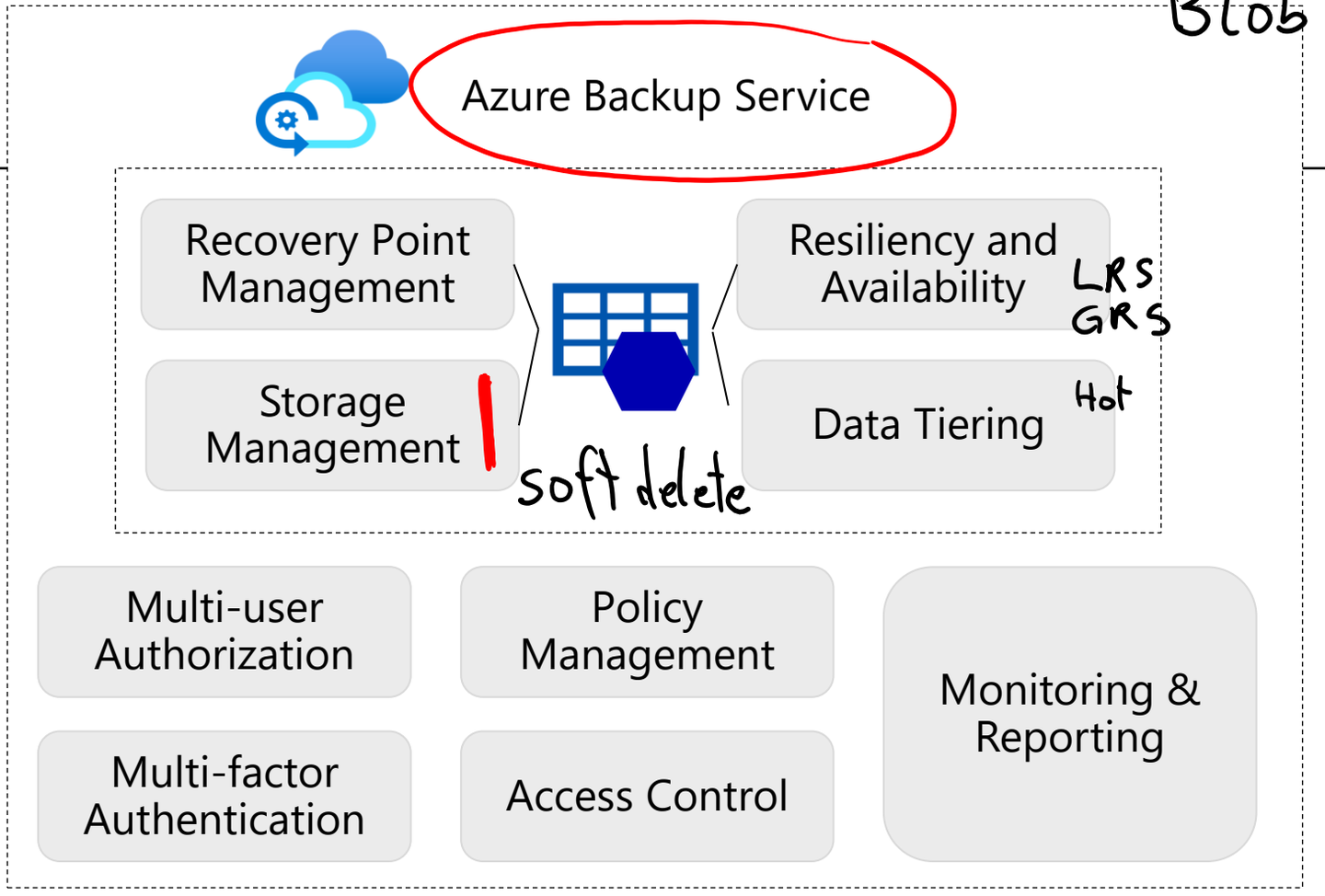
- Introduction to Azure Backup
- Configure Virtual Machine Backups
- Lab 10 – Implement Data Protection

ASR

Introduction to Azure Backup

What is Azure Backup?

Recovery Service Vault
Backup
ASR Site Recovery
Blob



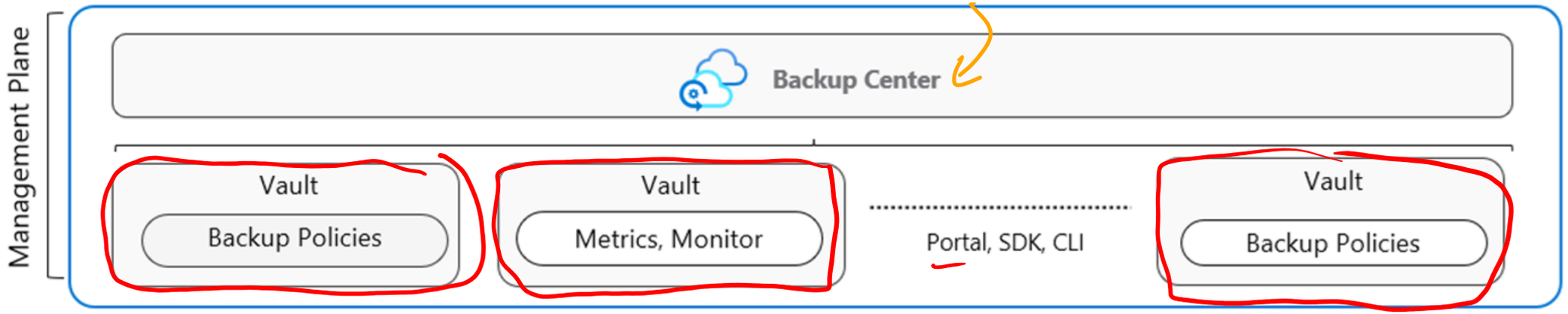
Backup agents

On-premises files, folders, and system state

Built-in backup

- Azure Virtual Machines
- Azure Managed Disks
- Azure Files Shares
- SQL Server in Azure VMs
- SAP HANA databases in Azure VMs
- Azure Database for PostgreSQL servers
- Azure Blobs

How Azure Backup works (vaults and policies)



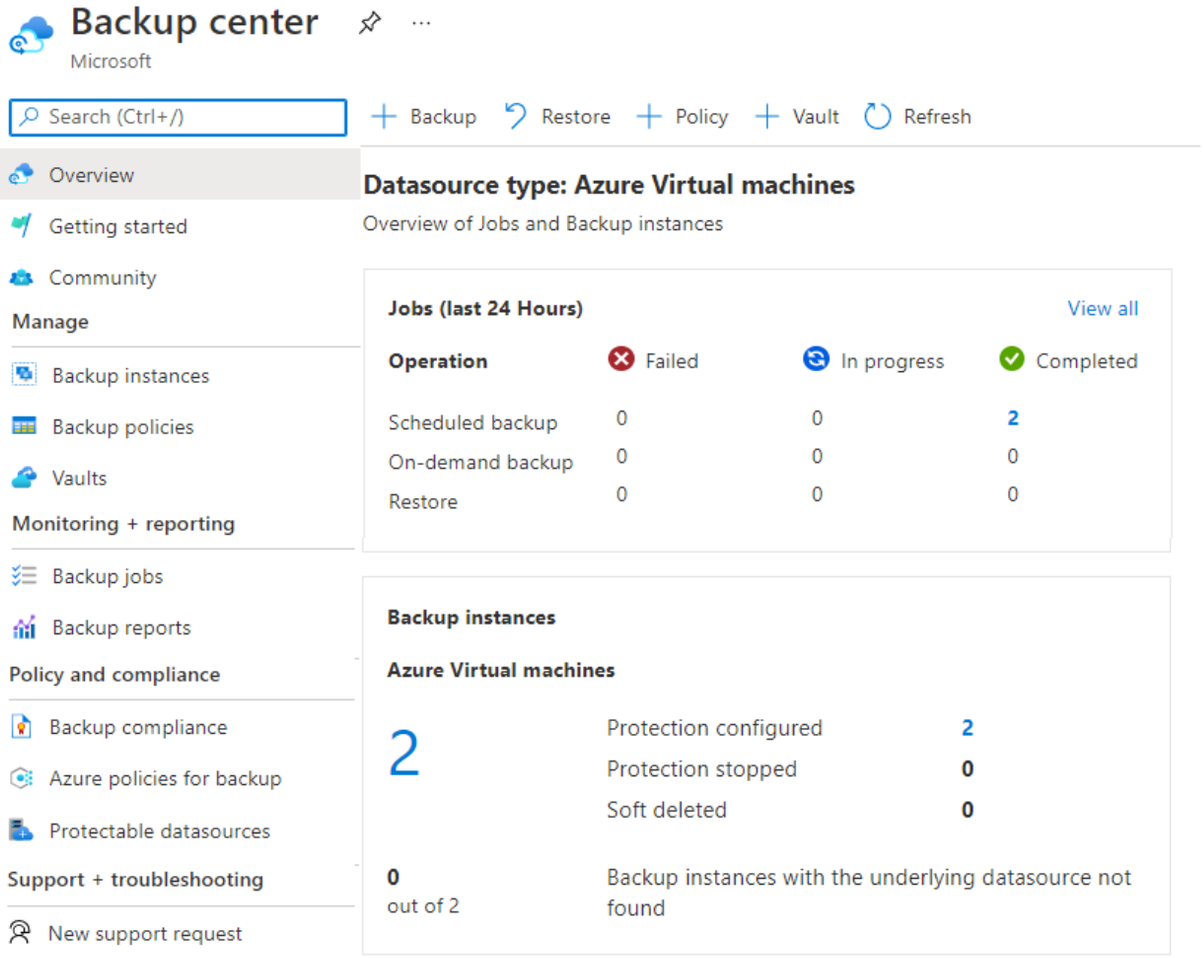
- Vaults store backup copies, recovery points, and backup policies
- Two types of vaults: Backup vault and Recovery Service vault
- Backup Policies define the data source, storage vault, and backup schedule
- The Backup Center provides a single unified management experience (next slide)

Implement Azure Backup Center

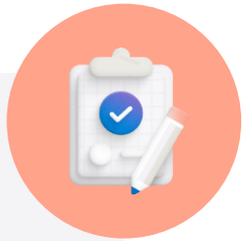
Single pane of glass to manage backups across a large and distributed Azure environment

Datasource-centric management focused on what you are backing up

Connected experiences with native integrations that enables management at scale



Learning Recap – Introduction to Azure Backup



- Introduction to Azure Backup

Check your knowledge questions and additional study

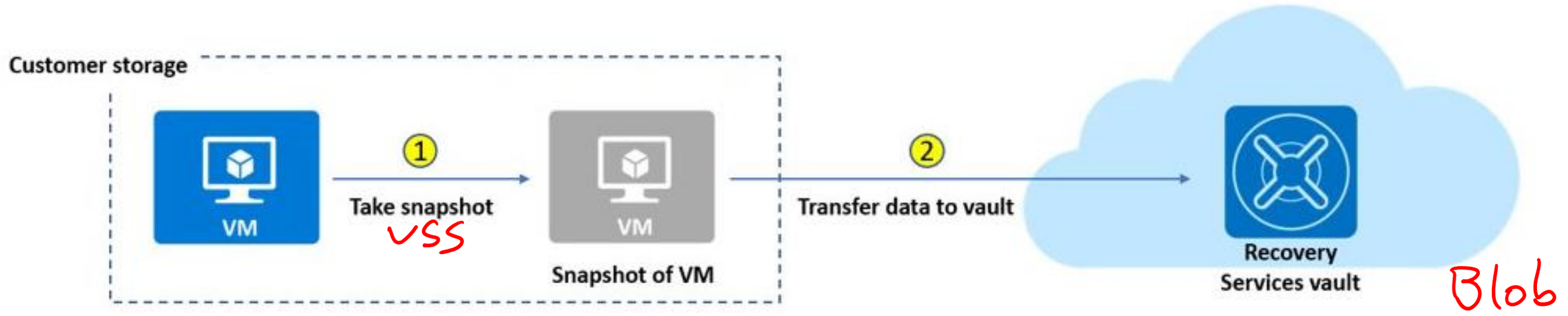
Configure Virtual Machine Backups

Explore options to protect virtual machine data

VSS

Snapshots	Azure Backup ✓	Azure Site Recovery ✓
Managed snapshots provide a quick and simple option for backing up VMs that use Managed Disks	Azure Backup supports application-consistent backups for both Windows and Linux VMs	Azure Site Recovery protects your VMs from a major disaster scenario when a whole region experiences an outage

Create virtual machine snapshots in Azure Backup



Use snapshots taken as part of a backup job

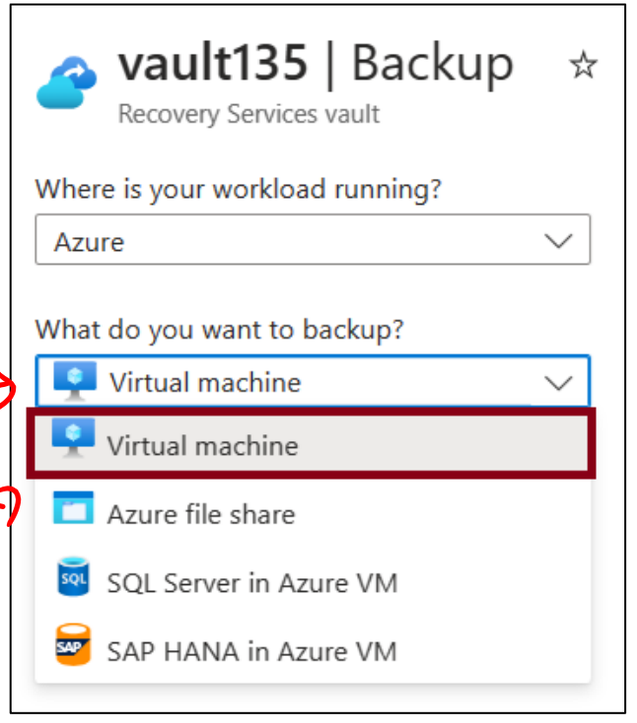
Reduces recovery wait times – don't wait for data transfer to the vault to finish

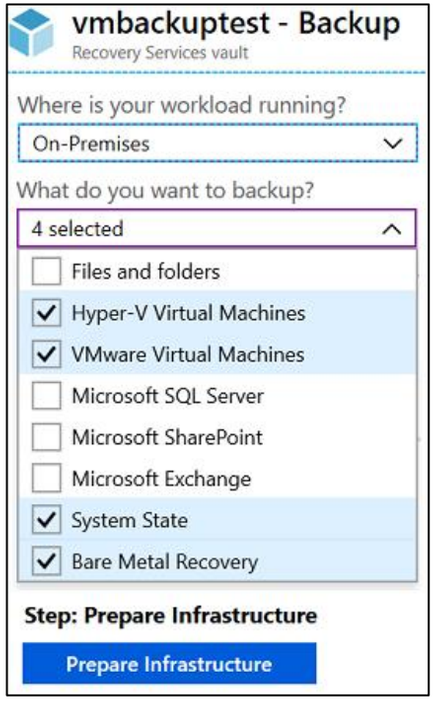
Configure Instant Restore retention (standard or enhanced)

Set up Azure Recovery Services vault backup options

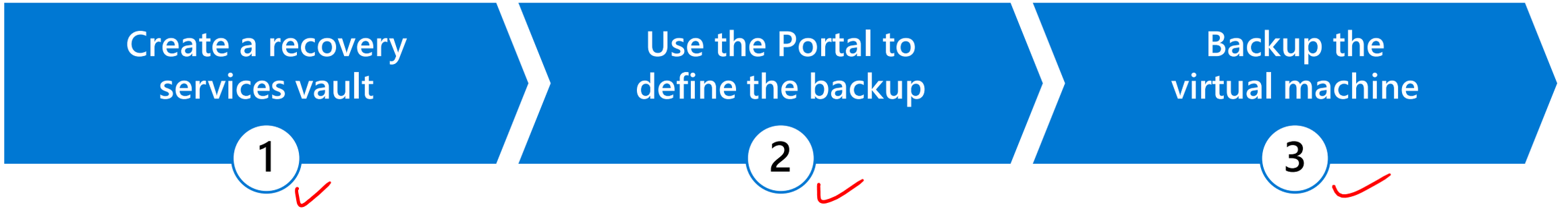
Multiple servers can be protected using the same Recovery Services vault

Azure Workloads	On-Premises Workloads





Backup Virtual Machines



Use a Recovery Services Vault in the region where you are performing your Virtual Machine backups and choose a replication strategy for Vault

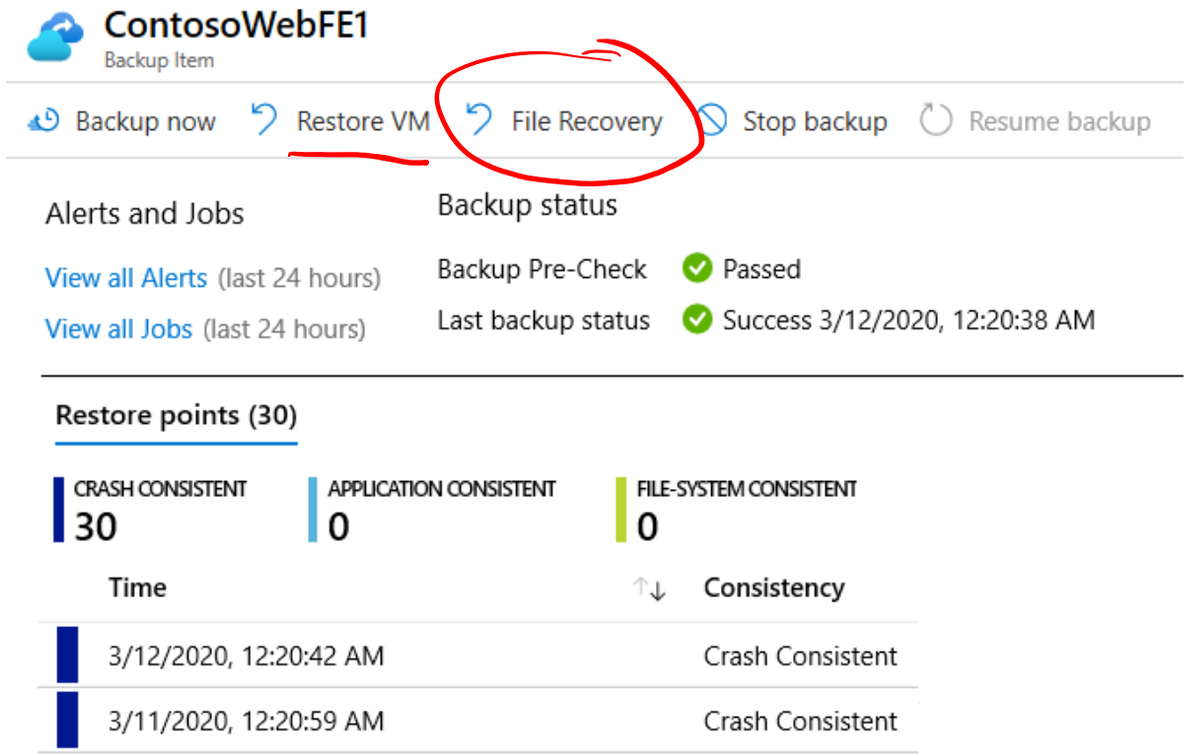
Take snapshots (recovery points) of your data at defined intervals. These snapshots are stored in recovery services vaults

For the Backup extension to work, the Azure VM Agent must be installed on the Azure virtual machine

Restore Virtual Machines

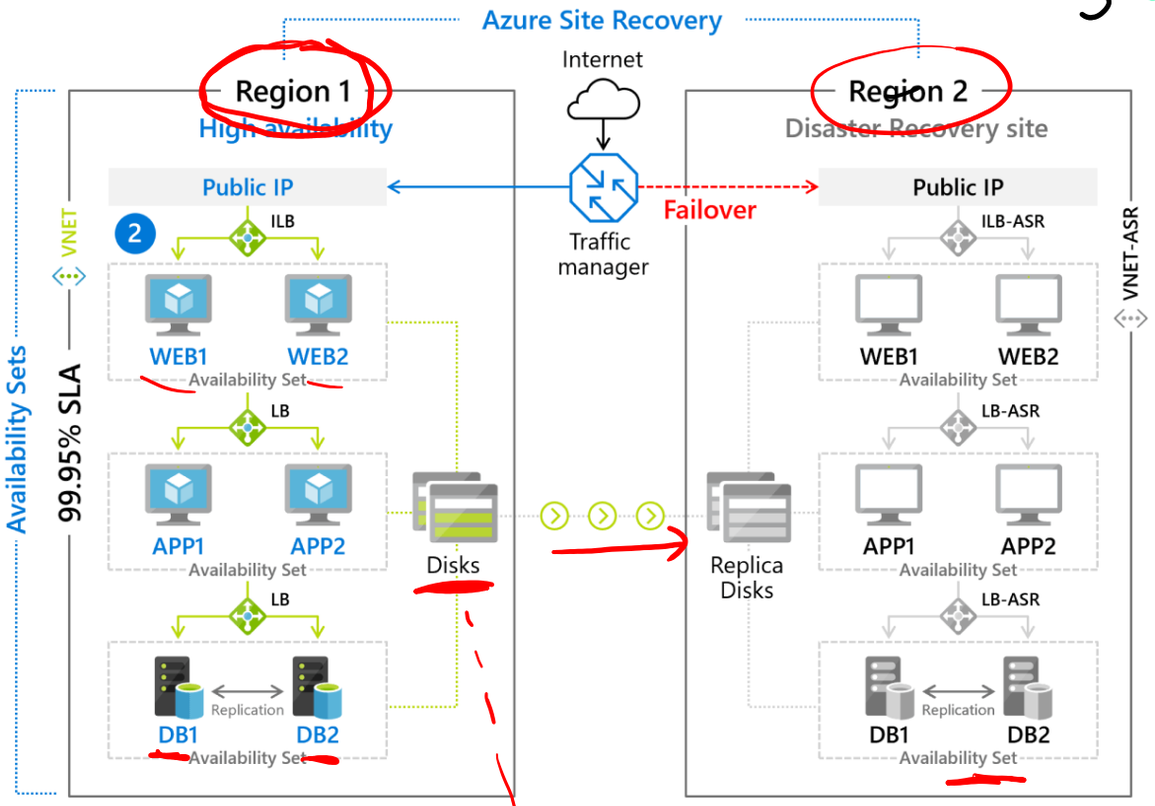
Once you trigger the restore operation, the Backup service creates a job for tracking the restore operation

The Backup service also creates and temporarily displays notifications, so you monitor how the backup is proceeding



Implement Azure Site Recovery

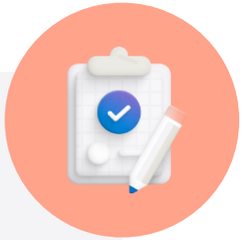
- Manages the orchestration of disaster recovery
- Replicates workloads continuously from a primary location or region to a secondary location
- Failover to shift to the secondary location; failback to return to the primary location



Recovery Servic Vault
Region ~~1~~
2
3

Volume Shadow Copy
VSS
→ App Consistent
Servic

Learning Recap – Configure Virtual Machine Backups

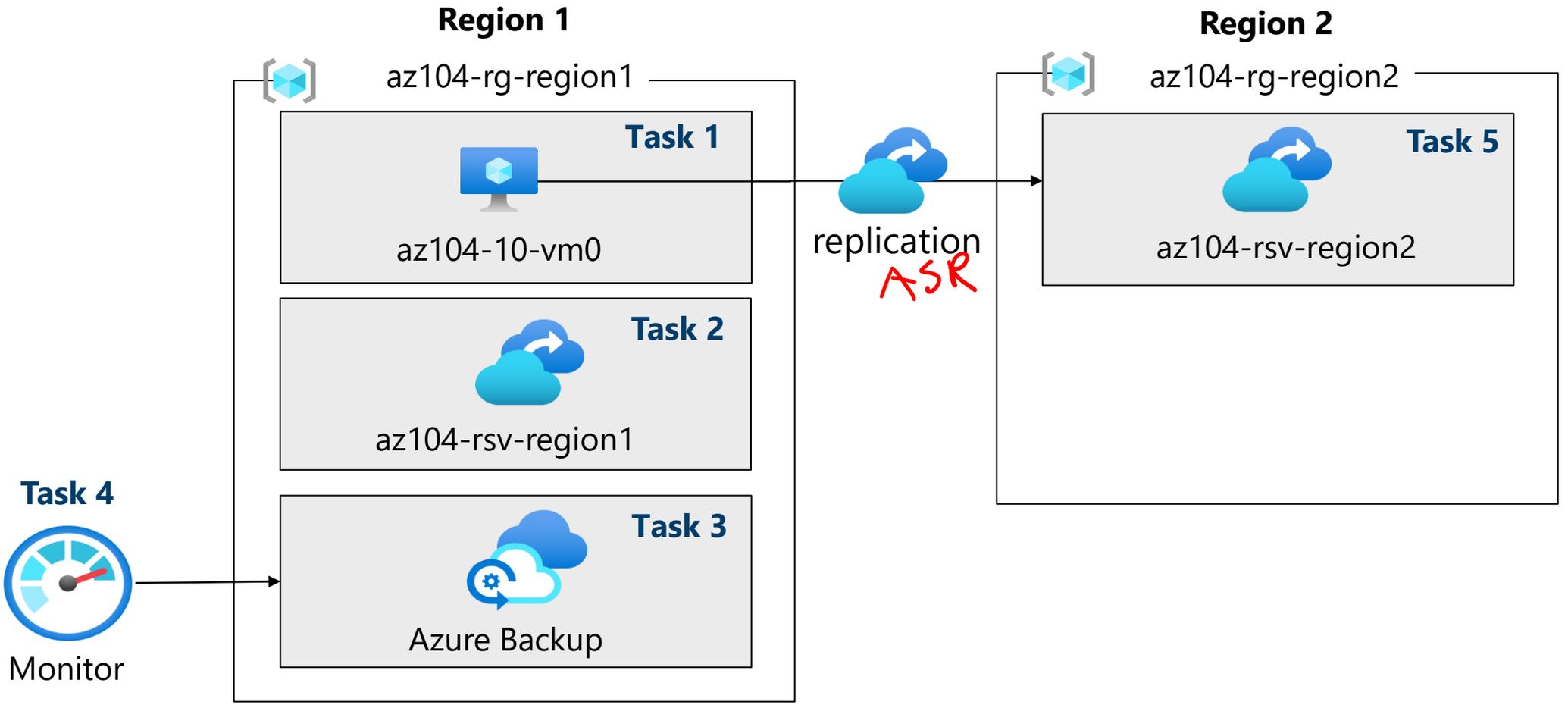


Check your knowledge questions and additional study

- Introduction to Azure Backup
- Protect your virtual machines by using Azure Backup
- Implement hybrid backup and recovery with Windows Server IaaS
- Protect your Azure infrastructure with Azure Site Recovery

Lab – Implement Data Protection

Lab 10 – Architecture diagram



End of presentation