**Want to query on premise SQL DB from a Logic App?**- create on On-Premise a Data Gateway  
- on a PC on-premise, install On-Premise Data Gateway  
- add a connector to the Logic App

**Want to bring a VM from somewhere else to Azure via Azure Site Recovery?**- Install Azure Site Recovery Unified Setup  
- Enable replication for the VM  
- Deploy another server in the other provider as a configuration server

**Want to bring VM from on premise VMWare to Azure?**  
- Deploy new VM on premise  
- Azure Site Recovery Service vault, select a protection goal  
- Azure Portal 🡪 download OVF file  
- In the VM, register a configuration server

The on premise VM must have all 3 of these running on a single machine:

* **Configuration server:** coordinates communications between on-premises and Azure, manages data replication.
* **Process server:** acts as a replication gateway. It receives replication data; optimizes it with caching, compression, and encryption, and sends it to a cache storage account in Azure.  
  The process server also installs the Mobility Service agent on VMs you want to replicate, and performs automatic discovery of on-premises VMware VMs.
* **Master target server:** The master target server handles replication data during failback from Azure.

**We have Azure AD Connect with Password hash sync, SSO and staging mode.  
No sync jobs are displayed** 🡪 Azure AD Connect, ensure to disable staging mode.  
*With a server in staging mode, you can make changes to the configuration and preview the changes before you make the server active. It also allows you to run full import and full synchronization to verify that all changes are expected before you make these changes into your production environment.*

**Service Bus:** messaging (messages – publisher and receiver know of each other)  
**Event Grid:** processing event (events are generic, unlike message)  
**Event Hub:** big data ingestion, telemetry, etc

We want to setup VM backup schedule daily at 3 PM and retain each for 90 days: **Backup Policy**(its not schedule)

We can create logic apps that listen to a default Even Grid in Azure that fires events when Azure resources changes.

ROLE NAMINGS:  
- Logic App Contributor (can create too)  
- Logic App Operator (cannot create)

**Application Gateway:** a prerequisite is to have an empty subnet.