

# DP 900

Portal, CLI, Powershell, Templates (containing BICEP, Teraform, ARM Json) is used to interact with the cloud.

All these methodologies connect to the Azure Resource Manager(ARM), which in turn interacts with cloud resources.

ARM can be seen as something which facilitates our interaction using two level/planes.

- Control Plane
- Data Plane

**Control Plane** : Allows us to interact with the Azure Resources like management (creating, deleting resources). This plan has Role Based Access Control (RBAC) which allows us to perform actions on the resources

**Data Plane** : This is the data itself. Like the storage service, database etc. Having the RBAC at control plan doesn't necessarily mean you've access to the data itself. Access to the resource doesn't mean you've access to the data stored!

- Data could've its own RBAC.
- Can have its own key or Shared Access signature(SAS).
- Can have its own Access Control List(ACLS); ways to define who can do what!

## IAAS VS PAAS

There are different layers in Azure with different responsibilities.

For IAAS services, you're responsible for everything right from choosing the OS to setting up the Database application.

We'll be responsible for backup , patching, tuning , updates of not only the system but also for the Database app and the data itself! We've to work with everything!

For PAAS Services, we just have to select the database and work with the data, rest of the work is taken care by Azure. Can be considered as Database as a service(DBAAS).

Examples : Azure SQL Database, Azure SQL managed instance, Postgres, cosmos.

