3.6 Use cases driving hybrid and multicloud adoption

Here are some use cases to review by clients considering hybrid or multicloud adoption.

3.6.1 Multicloud strategy

Customers want to use the strength and unique offerings from different cloud vendors, but also want to have a consistent operation and runtime environment so that they can achieve portability without cloud platform lock-in.

3.6.2 Cloud bursting and scalability

If you have private cloud environments running on-premises and want to expand the cluster or private cloud to an external infrastructure only in certain special conditions (such as load testing) or for a bursting workload, hybrid and multicloud topologies can meet these needs.

3.6.3 Disaster recovery

Because the same workload can be easily and quickly provisioned, external cloud providers can be a great place to act as a disaster recovery (DR) data center.

3.6.4 Application affinity

Generally, API back ends are distributed across multiple on-premises and off-premises clouds. Therefore, you should prefer to deploy APIs near systems of records to reduce latency.

3.6.5 Regional flexibility

Exposing APIs from different geographical areas can expand your business into new regions because customers expect fast response (low latency) and secure access to APIs from anywhere in the world. Geographical distribution of API requests from a physically closer cloud unit reduces latency and ensures adherence to local policies that require certain data to be physically present within the area or country.

3.6.6 Geographical high availability

There is a limited value in deploying APIs to another region if the back-end application is not present in that region or consumers accessing APIs from different regions. In that respect, geographical HA targets both application affinity and regional flexibility concerns and increases global availability profile and performance of APIs.