VMware Cloud Assembly™ gives IT and Cloud Ops teams the ability to automate the delivery of cloud services across multiple clouds while also giving developers access to infrastructure as code.

Typical Challenges

1. Governing resource access and use across private, hybrid or multiple public cloud environments.
2. Implementing resource governance and provisioning automation in a way that meet enterprise IT requirements while still supporting a developer experience equivalent to native public clouds.
3. Being able to easily reuse resource environment definitions across multiple clouds including private, hybrid and public clouds.

Solution: Cloud Assembly

1. Creating cloud agnostic blueprints (predefined environment definitions) simplifies and reduces the cost of managing multiple clouds.
2. Developers have the ability to easily access resources using a declarative, iterative approach that treats infrastructure as code while Cloud and IT Operations teams have the ability to govern resource delivery across teams and clouds.
3. Open API design which makes it easy to integrate governed resource delivery into CI/CD processes.
Key Capabilities

**Cloud Agnostic Blueprints**: Ability to build blueprints on a set of building blocks (compute, network, storage, ELBs) that can be deployed on any supported cloud.

**Infrastructure as Code**: YAML files can be used to define blueprints and deployments facilitating configuration management, definition repeatability, version control and cross developer collaboration.

**Policy Based Resource Delivery**: IT and Cloud Ops teams can easily set up a governance framework that includes who can use which resources and which clouds can support specific activities or teams.

**Agile Governance**: Tag based governance at the project level enables modular control using multiple types of policies (lease, approval, naming, access rights, notification, resource type, budget limits) and ensures optimal use of resources with continuous visibility.

**Choice of Development Model**: Intuitive user interface allows end users to write code, draw or both in the creation of environment definitions.

**Declarative Approach**: Desired end state definition across the environment lifecycle (day one and day two operations) with the ability to modify and iterate on deployed workloads.

Supported Platforms

VMware Cloud Assembly supports a VMware based private clouds, hybrid clouds such as VMware Cloud™ on AWS and the native public clouds of AWS and Azure. Google Cloud Platform is planned.

Resources

**Websites**
https://cloud.vmware.com/cloud-assembly

**Blog**
https://cloud.vmware.com/community