What is control plane and runtime plane?

Control plane

Anypoint Platform control plane provides a set of cloud services that we use to design, deploy, reuse and management of integrations and APIs. It is the web interface. The control plane contains product features and components that are part of the Anypoint Design Centre, Anypoint Management Centre, and Anypoint Exchange.

These cloud services are available in a multi-tenant environment of Anypoint Platform in EU and US region and also single tenant environment via Private cloud Edition.

US Cloud:

US hosted multi-tenant version of Anypoint Platform provides services to design, reuse, management and security of integrations and APIs.

EU Cloud:

GDPR (General Data Protection Regulation)compliant.

It ensures all personal data of EU citizens are stored and processed within EU boundaries.

Government Cloud:

Multi-tenant configuration designed specifically for US government and authorized government agencies. It provides continuous security monitoring with process improvements in threat detection and response, patch and vulnerability management, personal and training

Private Cloud Edition:

A single-tenant version of Anypoint Platform offers full control of the integration lifecycle within own data centres. Private Cloud Edition leverages Docker and Kubernetes technologies to provide built-in high availability and scalability

Runtime plane

Anypoint Platform runtime plane is where applications are deployed, and also where the Mule runtime engine and other application related services run. Runtime engine include policies and tokenization, MQ, Object Store and Connectors.

3 options to deploy applications

Cloudhub:

Cloudhub allows Anypoint Platform customers to host and manage Mule runtimes in the Mulesoft cloud. Include 99.99% uptime, one click scalability and automatic updates.

Runtime Fabric:

Using Runtime Fabric we can deploy Mule runtimes within our own data centres in a private Iaas (Microsoft Azure or AWS) or on premise infrastructure. Runtime Fabric provides horizontal scalability and zero downtime redeployment.

On-premises:

Use standalone Mule instances when we want to host and manage our own infrastructure.

How do API's in runtime plane communicate with control plane?

There is always communication happening between control plane and runtime plane when application needs to be deployed, scaling up, scaling down and for managing the application. And there is a secure channel between control plane and runtime plane. These communication are through Anypoint Platform’s Runtime Manager to agent in case of Mule standalone runtime and controller in case to Runtime fabric.

Key capabilities of Runtime manger, exchange, API manager?