



# **Architecture and components**

## **Astra Control Center**

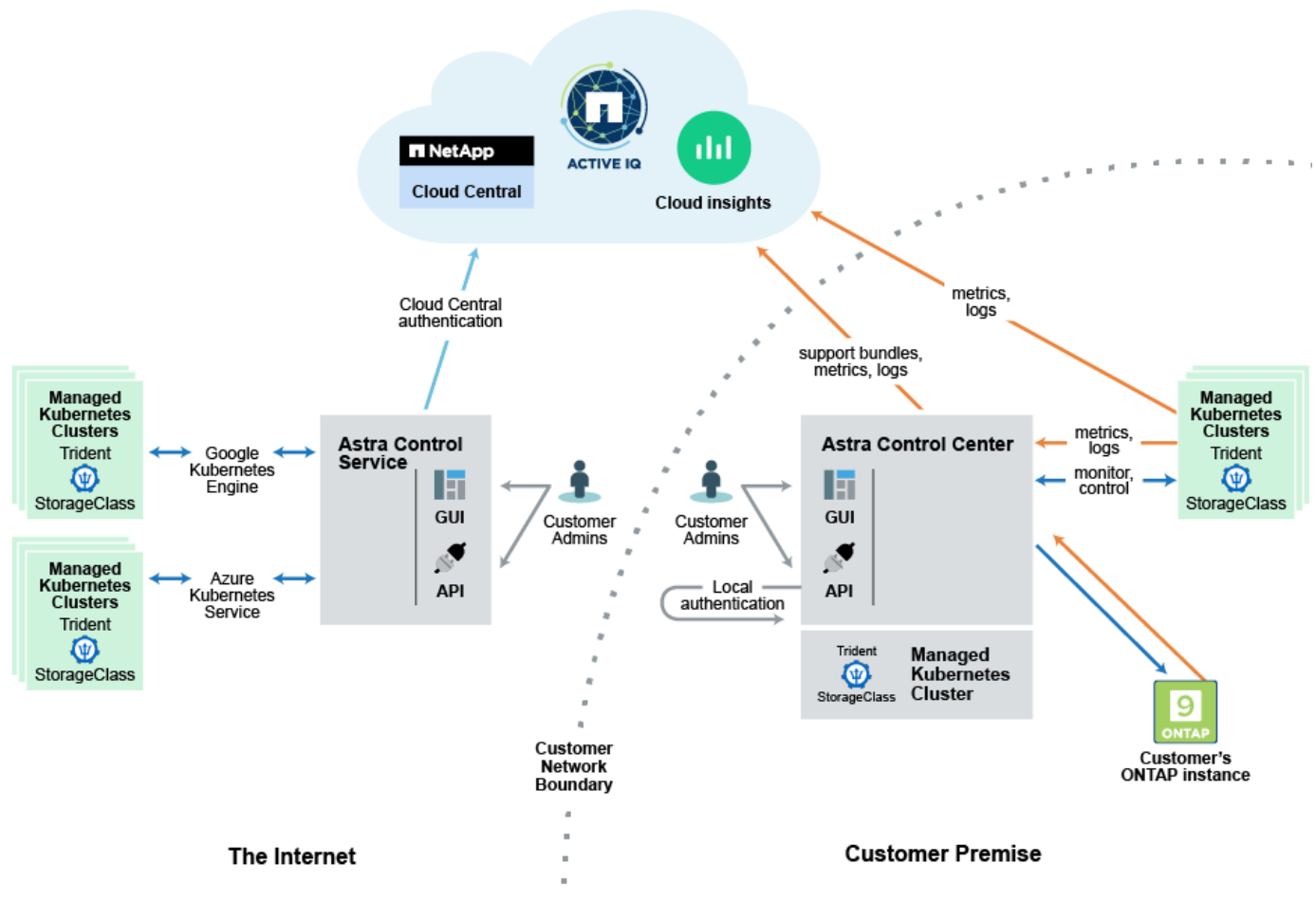
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# Architecture and components

Here is an overview of the various components of the Astra Control environment.



## Astra Control components

- **Kubernetes clusters:** Kubernetes is a portable, extensible, open-source platform for managing containerized workloads and services, that facilitates both declarative configuration and automation. Astra provides management services for applications hosted in a Kubernetes cluster.
- **Trident:** As a fully supported open source storage provisioner and orchestrator maintained by NetApp, Trident enables you to create storage volumes for containerized applications managed by Docker and Kubernetes. When deployed with Astra Control Center, Trident includes a configured ONTAP storage backend.
- **Storage backend:** Astra Control Service uses [NetApp Cloud Volumes Service for Google Cloud](#) as the backend storage for GKE clusters and [Azure NetApp Files](#) as the backend storage for AKS clusters.

Astra Control Center uses an ONTAP AFF and FAS storage backend. As a storage software and hardware platform, ONTAP provides core storage services, support for multiple storage access protocols, and storage management functionality, such as snapshots and mirroring.

- **Cloud Insights:** A NetApp cloud infrastructure monitoring tool, Cloud Insights enables you to monitor performance and utilization for your Kubernetes clusters managed by Astra Control Center. Cloud Insights correlates storage usage to workloads. When you enable the Cloud Insights connection in Astra Control

Center, telemetry information shows in Astra Control Center UI pages.

## Astra Control interfaces

You can complete tasks using different interfaces:

- **Web user interface (UI):** Both Astra Control Service and Astra Control Center use the same web-based UI where you can manage, migrate and protect apps. Use the UI also to manage user accounts and configuration settings.
- **API:** Both Astra Control Service and Astra Control Center use the same Astra API. Using the API, you can perform the same tasks that you would using the UI.

Astra Control Center also enables you to manage, migrate, and protect Kubernetes clusters running within VM environments.

## For more information

- [Astra Control Service documentation](#)
- [Use the Astra API](#)
- [Trident documentation](#)
- [Cloud Insights documentation](#)
- [ONTAP documentation](#)

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