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KUBERNETES ARCHITECTURE

Kubernetes Architecture

Kubelet

The kubelet systemd process is the heavy lifter for changes and configuration on worker nodes. It accepts the API calls for Pod specifications (a **PodSpec** is a JSON or YAML file that describes a pod). It will work to configure the local node until the specification has been met.

Should a Pod require access to storage, Secrets or ConfigMaps, the kubelet will ensure access or creation. It also sends back status to the kube-apiserver for eventual persistence.

- Uses **PodSpec**
- Mounts volumes to Pod
- Downloads secrets
- Passes request to local container engine
- Reports status of Pods and node to cluster.

Kubelet calls other components such as the Topology Manager, which uses *hints* from other components to configure topology-aware resource NUMA assignments such as for CPU and hardware accelerators. As an alpha feature, it is not enabled by default.