# ****API OVERVIEW****

using the Kubernetes API to read and write Kubernetes resource objects via a Kubernetes API endpoint.

## Resource Categories

This is a high-level overview of the basic types of resources provide by the Kubernetes API and their primary functions.

**Workloads** are objects you use to manage and run your containers on the cluster.

**Discovery & LB** resources are objects you use to "stitch" your workloads together into an externally accessible, load-balanced Service.

**Config & Storage** resources are objects you use to inject initialization data into your applications, and to persist data that is external to your container.

**Cluster** resources objects define how the cluster itself is configured; these are typically used only by cluster operators.

**Metadata** resources are objects you use to configure the behavior of other resources within the cluster, such as HorizontalPodAutoscaler for scaling workloads.

**Pod v1 core**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | **Field** | **Description** | | --- | --- | | apiVersion *string* | APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. | | kind *string* | Kind is a string value representing the REST resource this object represents.. | | metadata [*ObjectMeta*](https://kubernetes.io/docs/reference/generated/kubernetes-api/v1.11/#objectmeta-v1-meta) | Standard object's metadata. | | spec [*PodSpec*](https://kubernetes.io/docs/reference/generated/kubernetes-api/v1.11/#podspec-v1-core) | Specification of the desired behavior of the pod | | status [*PodStatus*](https://kubernetes.io/docs/reference/generated/kubernetes-api/v1.11/#podstatus-v1-core) | Most recently observed status of the pod. This data may not be up to date. Populated by the system. | |

https://kubernetes.io/docs/reference/generated/kubernetes-api/v1.11/#pod-v1-core