

```
apiVersion: v1
kind: Namespace
metadata:
  name: tkg-system
---
apiVersion: v1
kind: Namespace
metadata:
  name: tanzu-package-repo-global
---
apiVersion: apiregistration.k8s.io/v1
kind: APIService
metadata:
  name: v1alpha1.data.packaging.carvel.dev
spec:
  group: data.packaging.carvel.dev
  groupPriorityMinimum: 100
  service:
    name: packaging-api
    namespace: tkg-system
  version: v1alpha1
  versionPriority: 100
---
apiVersion: v1
kind: Service
metadata:
  name: packaging-api
  namespace: tkg-system
spec:
  ports:
    - port: 443
      protocol: TCP
      targetPort: api
  selector:
    app: kapp-controller
---
apiVersion: apiextensions.k8s.io/v1
kind: CustomResourceDefinition
metadata:
  name: internalpackagemetadatas.internal.packaging.carvel.dev
spec:
  group: internal.packaging.carvel.dev
  names:
    kind: InternalPackageMetadata
    listKind: InternalPackageMetadataList
    plural: internalpackagemetadatas
    singular: internalpackagemetadata
```

```
scope: Namespaced
versions:
- name: v1alpha1
  schema:
    openAPIV3Schema:
      properties:
        apiVersion:
          description: '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. More info:
https://git.k8s.io/community/contributors/devel/sig-
architecture/api-conventions.md#resources'
          type: string
        kind:
          description: 'Kind is a string value representing
the REST resource this object represents. Servers may infer this
from the endpoint the client submits requests to. Cannot be
updated. In CamelCase. More info:
https://git.k8s.io/community/contributors/devel/sig-
architecture/api-conventions.md#types-kinds'
          type: string
        metadata:
          type: object
        spec:
          properties:
            categories:
              items:
                type: string
              type: array
            displayName:
              type: string
            iconSVGBase64:
              type: string
            longDescription:
              type: string
            maintainers:
              items:
                properties:
                  name:
                    type: string
                type: object
              type: array
            providerName:
              type: string
            shortDescription:
              type: string
```

```

        supportDescription:
          type: string
        type: object
      required:
      - spec
        type: object
      served: true
      storage: true
      subresources:
        status: {}
---
apiVersion: apiextensions.k8s.io/v1
kind: CustomResourceDefinition
metadata:
  name: internalpackages.internal.packaging.carvel.dev
spec:
  group: internal.packaging.carvel.dev
  names:
    kind: InternalPackage
    listKind: InternalPackageList
    plural: internalpackages
    singular: internalpackage
  scope: Namespaced
  versions:
  - name: v1alpha1
    schema:
      openAPIV3Schema:
        properties:
          apiVersion:
            description: '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. More info:
https://git.k8s.io/community/contributors/devel/sig-
architecture/api-conventions.md#resources'
            type: string
          kind:
            description: 'Kind is a string value representing
the REST resource this object represents. Servers may infer this
from the endpoint the client submits requests to. Cannot be
updated. In CamelCase. More info:
https://git.k8s.io/community/contributors/devel/sig-
architecture/api-conventions.md#types-kinds'
            type: string
        metadata:
          type: object
      spec:

```

```

properties:
  capacityRequirementsDescription:
    type: string
  licenses:
    items:
      type: string
    type: array
  refName:
    type: string
  releaseNotes:
    type: string
  releasedAt:
    format: date-time
    nullable: true
    type: string
  template:
    properties:
      spec:
        properties:
          canceled:
            description: Canceled when set to true
            will stop all active changes
            type: boolean
          cluster:
            properties:
              kubeconfigSecretRef:
                properties:
                  key:
                    type: string
                  name:
                    type: string
                type: object
              namespace:
                type: string
            type: object
          deploy:
            items:
              properties:
                kapp:
                  properties:
                    delete:
                      properties:
                        rawOptions:
                          items:
                            type: string
                          type: array
                        type: object

```

```

inspect:
  properties:
    rawOptions:
      items:
        type: string
      type: array
    type: object
intoNs:
  type: string
mapNs:
  items:
    type: string
  type: array
rawOptions:
  items:
    type: string
  type: array
type: object
type: object
type: array
fetch:
  items:
    properties:
      git:
        description: TODO implement git
        properties:
          lfsSkipSmudge:
            type: boolean
          ref:
            type: string
          secretRef:
            description: 'Secret may
include one or more keys: ssh-privatekey, ssh-knownhosts'
            properties:
              name:
                description: Object is
expected to be within same namespace
              type: string
            type: object
          subPath:
            type: string
          url:
            type: string
        type: object
      helmChart:
        properties:
          name:

```

```

stable/redis'
description: 'Example:
type: string
repository:
properties:
secretRef:
properties:
name:
description: Object is
expected to be within same namespace
type: string
type: object
url:
type: string
type: object
version:
type: string
type: object
http:
properties:
secretRef:
description: 'Secret may
include one or more keys: username, password'
properties:
name:
description: Object is
expected to be within same namespace
type: string
type: object
sha256:
type: string
subPath:
type: string
url:
description: 'URL can point to
one of following formats: text, tgz, zip'
type: string
type: object
image:
properties:
secretRef:
description: 'Secret may
include one or more keys: username, password, token. By default
anonymous access is used for authentication. TODO support docker
config formatted secret'
properties:
name:

```

```

description: Object is
expected to be within same namespace
type: string
type: object
subPath:
type: string
url:
description: 'Example:
username/app1-config:v0.1.0'
type: string
type: object
imgpkgBundle:
properties:
image:
type: string
secretRef:
description: 'Secret may
include one or more keys: username, password, token. By default
anonymous access is used for authentication. TODO support docker
config formatted secret'
properties:
name:
description: Object is
expected to be within same namespace
type: string
type: object
type: object
inline:
properties:
paths:
additionalProperties:
type: string
type: object
pathsFrom:
items:
properties:
configMapRef:
properties:
directoryPath:
type: string
name:
type: string
type: object
secretRef:
properties:
directoryPath:
type: string

```

```

name:
  type: string
type: object
type: object
type: array
type: object
type: object
type: array
noopDelete:
  description: When NoopDeletion set to
true, App deletion should delete App CR but preserve App's
associated resources
  type: boolean
paused:
  description: Paused when set to true
will ignore all pending changes, once it set back to false,
pending changes will be applied
  type: boolean
serviceAccountName:
  type: string
syncPeriod:
  description: Controls frequency of app
reconciliation
  type: string
template:
  items:
    properties:
      helmTemplate:
        properties:
          name:
            type: string
          namespace:
            type: string
          path:
            type: string
          valuesFrom:
            items:
              properties:
                configMapRef:
                  properties:
                    name:
                      type: string
                type: object
              path:
                type: string
            secretRef:
              properties:

```



```

name:
  type: string
type: object
type: object
type: array
type: object
jsonnet:
  description: TODO implement
  type: object
kbld:
  properties:
    paths:
      items:
        type: string
      type: array
    type: object
kustomize:
  description: TODO implement
  type: object
sops:
  properties:
    paths:
      items:
        type: string
      type: array
pgp:
  properties:
    privateKeysSecretRef:
      properties:
        name:
          type: string
      type: object
    type: object
type: object
ytt:
  properties:
    fileMarks:
      items:
        type: string
      type: array
    ignoreUnknownComments:
      type: boolean
    inline:
      properties:
        paths:

```

```
    additionalProperties:
      type: string
    type: object
  pathsFrom:
    items:
      properties:
        configMapRef:
          properties:
            directoryPath:
              type: string
            name:
              type: string
          type: object
        secretRef:
          properties:
            directoryPath:
              type: string
            name:
              type: string
          type: object
      type: object
    type: array
  type: object
paths:
  items:
    type: string
  type: array
strict:
  type: boolean
valuesFrom:
  items:
    properties:
      configMapRef:
        properties:
          name:
            type: string
        type: object
      path:
        type: string
      secretRef:
        properties:
          name:
            type: string
        type: object
    type: object
  type: array
type: object
```

```
        type: object
        type: array
        type: object
    required:
    - spec
    type: object
    valuesSchema:
    description: valuesSchema can be used to show
template values that can be configured by users when a Package
is installed in an OpenAPI schema format.
    properties:
        openAPIv3:
            nullable: true
            type: object
            x-kubernetes-preserve-unknown-fields: true
        type: object
    version:
        type: string
    type: object
    required:
    - spec
    type: object
    served: true
    storage: true
    subresources:
        status: {}
---
```

```
apiVersion: apiextensions.k8s.io/v1
kind: CustomResourceDefinition
metadata:
  name: apps.kappctrl.k14s.io
spec:
  group: kappctrl.k14s.io
  names:
    kind: App
    listKind: AppList
    plural: apps
    singular: app
  scope: Namespaced
  versions:
  - additionalPrinterColumns:
    - description: Friendly description
      jsonPath: .status.friendlyDescription
      name: Description
      type: string
    - description: Last time app started being deployed. Does
not mean anything was changed.
```

```

    jsonPath: .status.deploy.startedAt
    name: Since-Deploy
    type: date
- description: Time since creation
  jsonPath: .metadata.creationTimestamp
  name: Age
  type: date
name: v1alpha1
schema:
  openAPIV3Schema:
    properties:
      apiVersion:
        description: '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. More info:
https://git.k8s.io/community/contributors/devel/sig-
architecture/api-conventions.md#resources'
        type: string
      kind:
        description: 'Kind is a string value representing
the REST resource this object represents. Servers may infer this
from the endpoint the client submits requests to. Cannot be
updated. In CamelCase. More info:
https://git.k8s.io/community/contributors/devel/sig-
architecture/api-conventions.md#types-kinds'
        type: string
      metadata:
        type: object
      spec:
        properties:
          canceled:
            description: Canceled when set to true will stop
all active changes
            type: boolean
          cluster:
            properties:
              kubeconfigSecretRef:
                properties:
                  key:
                    type: string
                  name:
                    type: string
                type: object
              namespace:
                type: string
            type: object

```

```

deploy:
  items:
    properties:
      kapp:
        properties:
          delete:
            properties:
              rawOptions:
                items:
                  type: string
                type: array
            type: object
          inspect:
            properties:
              rawOptions:
                items:
                  type: string
                type: array
            type: object
          intoNs:
            type: string
          mapNs:
            items:
              type: string
            type: array
          rawOptions:
            items:
              type: string
            type: array
        type: object
    type: object
  type: array
fetch:
  items:
    properties:
      git:
        description: TODO implement git
        properties:
          lfsSkipSmudge:
            type: boolean
          ref:
            type: string
          secretRef:
            description: 'Secret may include one
or more keys: ssh-privatekey, ssh-knownhosts'
            properties:
              name:

```

```

description: Object is expected to
be within same namespace
    type: string
    type: object
    subPath:
    type: string
    url:
    type: string
    type: object
helmChart:
properties:
    name:
    description: 'Example: stable/redis'
    type: string
    repository:
    properties:
    secretRef:
    properties:
    name:
    description: Object is
expected to be within same namespace
    type: string
    type: object
    url:
    type: string
    type: object
    version:
    type: string
    type: object
http:
properties:
    secretRef:
    description: 'Secret may include one
or more keys: username, password'
    properties:
    name:
    description: Object is expected to
be within same namespace
    type: string
    type: object
sha256:
    type: string
    subPath:
    type: string
    url:
    description: 'URL can point to one of
following formats: text, tgz, zip'

```

```

        type: string
    type: object
image:
  properties:
    secretRef:
      description: 'Secret may include one
or more keys: username, password, token. By default anonymous
access is used for authentication. TODO support docker config
formatted secret'
    properties:
      name:
        description: Object is expected to
be within same namespace
      type: string
    type: object
  subPath:
    type: string
  url:
    description: 'Example: username/app1-
config:v0.1.0'
    type: string
  type: object
imgpkgBundle:
  properties:
    image:
      type: string
    secretRef:
      description: 'Secret may include one
or more keys: username, password, token. By default anonymous
access is used for authentication. TODO support docker config
formatted secret'
    properties:
      name:
        description: Object is expected to
be within same namespace
      type: string
    type: object
  type: object
inline:
  properties:
    paths:
      additionalProperties:
        type: string
      type: object
    pathsFrom:
      items:
        properties:

```

```

        configMapRef:
          properties:
            directoryPath:
              type: string
            name:
              type: string
          type: object
        secretRef:
          properties:
            directoryPath:
              type: string
            name:
              type: string
          type: object
      type: object
    type: array
  type: object
  type: object
  type: array
  noopDelete:
    description: When NoopDeletion set to true, App
deletion should delete App CR but preserve App's associated
resources
    type: boolean
  paused:
    description: Paused when set to true will ignore
all pending changes, once it set back to false, pending changes
will be applied
    type: boolean
  serviceAccountName:
    type: string
  syncPeriod:
    description: Controls frequency of app
reconciliation
    type: string
  template:
    items:
      properties:
        helmTemplate:
          properties:
            name:
              type: string
            namespace:
              type: string
            path:
              type: string
            valuesFrom:

```



```
    items:
      properties:
        configMapRef:
          properties:
            name:
              type: string
            type: object
          path:
            type: string
          secretRef:
            properties:
              name:
                type: string
            type: object
          type: object
      type: array
    type: object
jsonnet:
  description: TODO implement jsonnet
  type: object
kblid:
  properties:
    paths:
      items:
        type: string
      type: array
    type: object
kustomize:
  description: TODO implement kustomize
  type: object
sops:
  properties:
    paths:
      items:
        type: string
      type: array
    pgp:
      properties:
        privateKeysSecretRef:
          properties:
            name:
              type: string
            type: object
          type: object
    type: object
ytt:
  properties:
```

```
fileMarks:
  items:
    type: string
  type: array
ignoreUnknownComments:
  type: boolean
inline:
  properties:
    paths:
      additionalProperties:
        type: string
      type: object
    pathsFrom:
      items:
        properties:
          configMapRef:
            properties:
              directoryPath:
                type: string
              name:
                type: string
            type: object
          secretRef:
            properties:
              directoryPath:
                type: string
              name:
                type: string
            type: object
          type: object
        type: array
      type: object
    paths:
      items:
        type: string
      type: array
strict:
  type: boolean
valuesFrom:
  items:
    properties:
      configMapRef:
        properties:
          name:
            type: string
        type: object
      path:
```

```

        type: string
secretRef:
  properties:
    name:
      type: string
      type: object
    type: object
  type: array
type: object
type: object
type: array
status:
  properties:
    conditions:
      items:
        description: TODO rename to Condition
        properties:
          message:
            description: Human-readable message
indicating details about last transition.
            type: string
          reason:
            description: Unique, this should be a
short, machine understandable string that gives the reason for
condition's last transition. If it reports "ResizeStarted" that
means the underlying persistent volume is being resized.
            type: string
          status:
            type: string
          type:
            type: string
        required:
        - status
        - type
        type: object
      type: array
consecutiveReconcileFailures:
  type: integer
consecutiveReconcileSuccesses:
  type: integer
deploy:
  properties:
    error:
      type: string
    exitCode:
      type: integer

```

```
    finished:
      type: boolean
    startedAt:
      format: date-time
      type: string
    stderr:
      type: string
    stdout:
      type: string
    updatedAt:
      format: date-time
      type: string
  type: object
fetch:
  properties:
    error:
      type: string
    exitCode:
      type: integer
    startedAt:
      format: date-time
      type: string
    stderr:
      type: string
    stdout:
      type: string
    updatedAt:
      format: date-time
      type: string
  type: object
friendlyDescription:
  type: string
inspect:
  properties:
    error:
      type: string
    exitCode:
      type: integer
    stderr:
      type: string
    stdout:
      type: string
    updatedAt:
      format: date-time
      type: string
  type: object
managedAppName:
```

```

        type: string
    observedGeneration:
        format: int64
        type: integer
    template:
        properties:
            error:
                type: string
            exitCode:
                type: integer
            stderr:
                type: string
            updatedAt:
                format: date-time
                type: string
        type: object
    usefulErrorMessage:
        type: string
    type: object
required:
- spec
type: object
served: true
storage: true
subresources:
    status: {}
---
apiVersion: apiextensions.k8s.io/v1
kind: CustomResourceDefinition
metadata:
    name: packageinstalls.packaging.carvel.dev
spec:
    group: packaging.carvel.dev
    names:
        kind: PackageInstall
        listKind: PackageInstallList
        plural: packageinstalls
        shortNames:
        - pkgi
        singular: packageinstall
    scope: Namespaced
    versions:
    - additionalPrinterColumns:
        - description: PackageMetadata name
          jsonPath: .spec.packageRef.refName
          name: Package name
          type: string

```



```
        type: string
        type: object
    namespace:
        type: string
    type: object
    noopDelete:
        description: When NoopDelete set to true,
PackageInstall deletion should delete PackageInstall/App CR but
preserve App's associated resources.
        type: boolean
    packageRef:
        properties:
            refName:
                type: string
            versionSelection:
                properties:
                    constraints:
                        type: string
                    prereleases:
                        properties:
                            identifiers:
                                items:
                                    type: string
                                type: array
                            type: object
                type: object
        type: object
    paused:
        description: Paused when set to true will ignore
all pending changes, once it set back to false, pending changes
will be applied
        type: boolean
    serviceAccountName:
        type: string
    syncPeriod:
        description: Controls frequency of App
reconciliation in time + unit format. Always >= 30s. If value
below 30s is specified, 30s will be used.
        type: string
    values:
        items:
            properties:
                secretRef:
                    properties:
                        key:
                            type: string
                        name:
```

```

        type: string
        type: object
        type: object
        type: array
        type: object
status:
  properties:
    conditions:
      items:
        description: TODO rename to Condition
        properties:
          message:
            description: Human-readable message
indicating details about last transition.
            type: string
          reason:
            description: Unique, this should be a
short, machine understandable string that gives the reason for
condition's last transition. If it reports "ResizeStarted" that
means the underlying persistent volume is being resized.
            type: string
          status:
            type: string
          type:
            type: string
        required:
        - status
        - type
        type: object
      type: array
    friendlyDescription:
      type: string
    observedGeneration:
      format: int64
      type: integer
    usefulErrorMessage:
      type: string
    version:
      description: TODO this is desired resolved
version (not actually deployed)
      type: string
  type: object
required:
- spec
type: object
served: true
storage: true

```



```
    subresources:
      status: {}
---
apiVersion: apiextensions.k8s.io/v1
kind: CustomResourceDefinition
metadata:
  annotations:
    packaging.carvel.dev/global-namespace: tanzu-package-repo-
    global
  name: packagerepositories.packaging.carvel.dev
spec:
  group: packaging.carvel.dev
  names:
    kind: PackageRepository
    listKind: PackageRepositoryList
    plural: packagerepositories
    shortNames:
    - pkgr
    singular: packagerepository
  scope: Namespaced
  versions:
  - additionalPrinterColumns:
    - description: Time since creation
      jsonPath: .metadata.creationTimestamp
      name: Age
      type: date
    - description: Friendly description
      jsonPath: .status.friendlyDescription
      name: Description
      type: string
  name: vl1alpha1
  schema:
    openAPIV3Schema:
      properties:
        apiVersion:
          description: '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. More info:
          https://git.k8s.io/community/contributors/devel/sig-
          architecture/api-conventions.md#resources'
          type: string
        kind:
          description: 'Kind is a string value representing
          the REST resource this object represents. Servers may infer this
          from the endpoint the client submits requests to. Cannot be
          updated. In CamelCase. More info:
          https://git.k8s.io/community/contributors/devel/sig-
          architecture/api-conventions.md#kinds'
```

```

https://git.k8s.io/community/contributors/devel/sig-
architecture/api-conventions.md#types-kinds'
  type: string
  metadata:
    type: object
  spec:
    properties:
      fetch:
        properties:
          git:
            description: TODO implement git
            properties:
              lfsSkipSmudge:
                type: boolean
              ref:
                type: string
              secretRef:
                description: 'Secret may include one or
more keys: ssh-privatekey, ssh-knownhosts'
                properties:
                  name:
                    description: Object is expected to
be within same namespace
                    type: string
                  type: object
                subPath:
                  type: string
                url:
                  type: string
            type: object
          http:
            properties:
              secretRef:
                description: 'Secret may include one or
more keys: username, password'
                properties:
                  name:
                    description: Object is expected to
be within same namespace
                    type: string
                  type: object
            sha256:
              type: string
            subPath:
              type: string
            url:

```

```

        description: 'URL can point to one of
following formats: text, tgz, zip'
        type: string
    type: object
    image:
        properties:
            secretRef:
                description: 'Secret may include one or
more keys: username, password, token. By default anonymous
access is used for authentication. TODO support docker config
formatted secret'
            properties:
                name:
                    description: Object is expected to
be within same namespace
                    type: string
                type: object
            subPath:
                type: string
            url:
                description: 'Example: username/app1-
config:v0.1.0'
                type: string
        type: object
    imgpkgBundle:
        properties:
            image:
                type: string
            secretRef:
                description: 'Secret may include one or
more keys: username, password, token. By default anonymous
access is used for authentication. TODO support docker config
formatted secret'
            properties:
                name:
                    description: Object is expected to
be within same namespace
                    type: string
                type: object
            type: object
        type: object
    paused:
        description: Paused when set to true will ignore
all pending changes, once it set back to false, pending changes
will be applied
        type: boolean
    syncPeriod:
```

```
        description: Controls frequency of
PackageRepository reconciliation
        type: string
    required:
    - fetch
    type: object
status:
    properties:
        conditions:
            items:
                description: TODO rename to Condition
                properties:
                    message:
                        description: Human-readable message
indicating details about last transition.
                        type: string
                    reason:
                        description: Unique, this should be a
short, machine understandable string that gives the reason for
condition's last transition. If it reports "ResizeStarted" that
means the underlying persistent volume is being resized.
                        type: string
                    status:
                        type: string
                    type:
                        type: string
                required:
                - status
                - type
                type: object
            type: array
    consecutiveReconcileFailures:
        type: integer
    consecutiveReconcileSuccesses:
        type: integer
    deploy:
        properties:
            error:
                type: string
            exitCode:
                type: integer
            finished:
                type: boolean
            startedAt:
                format: date-time
                type: string
            stderr:
```

```
        type: string
    stdout:
        type: string
    updatedAt:
        format: date-time
        type: string
    type: object
fetch:
properties:
    error:
        type: string
    exitCode:
        type: integer
    startedAt:
        format: date-time
        type: string
    stderr:
        type: string
    stdout:
        type: string
    updatedAt:
        format: date-time
        type: string
    type: object
friendlyDescription:
    type: string
observedGeneration:
    format: int64
    type: integer
template:
properties:
    error:
        type: string
    exitCode:
        type: integer
    stderr:
        type: string
    updatedAt:
        format: date-time
        type: string
    type: object
usefulErrorMessage:
    type: string
type: object
required:
- spec
type: object
```

```
    served: true
    storage: true
    subresources:
      status: {}
---
apiVersion: v1
kind: ConfigMap
metadata:
  name: kapp-controller-config
  namespace: tkg-system
  annotations:
    kapp.k14s.io/change-group: apps.kappctrl.k14s.io/kapp-
controller-config
data:
  caCerts: ""
  httpProxy: ""
  httpsProxy: ""
  noProxy: ""
  dangerousSkipTLSVerify: ""
---
apiVersion: apps/v1
kind: Deployment
metadata:
  annotations:
    kapp-controller.carvel.dev/version: v0.23.0
    kapp.k14s.io/change-rule: upsert after upserting
apps.kappctrl.k14s.io/kapp-controller-config
  name: kapp-controller
  namespace: tkg-system
spec:
  replicas: 1
  revisionHistoryLimit: 0
  selector:
    matchLabels:
      app: kapp-controller
  template:
    metadata:
      labels:
        app: kapp-controller
    spec:
      containers:
      - args:
        - -packaging-global-namespace=tanzu-package-repo-global
        - -concurrency=4
      env:
      - name: KAPPCTRL_MEM_TMP_DIR
        value: /etc/kappctrl-mem-tmp
```

```
- name: KAPPCTRL_SYSTEM_NAMESPACE
  valueFrom:
    fieldRef:
      fieldPath: metadata.namespace
- name: KAPPCTRL_API_PORT
  value: "10350"
image: projects.registry.vmware.com/tkg/kapp-
controller:v0.23.0_vmware.1
name: kapp-controller
ports:
- containerPort: 10350
  name: api
  protocol: TCP
resources:
  requests:
    cpu: 120m
    memory: 100Mi
securityContext:
  runAsGroup: 2000
  runAsUser: 1000
volumeMounts:
- mountPath: /etc/kappctrl-mem-tmp
  name: template-fs
securityContext:
  fsGroup: 3000
serviceAccount: kapp-controller-sa
volumes:
- emptyDir:
    medium: Memory
    name: template-fs
priorityClassName: system-cluster-critical
tolerations:
- key: CriticalAddonsOnly
  operator: Exists
- effect: NoSchedule
  key: node-role.kubernetes.io/master
- effect: NoSchedule
  key: node.kubernetes.io/not-ready
- effect: NoSchedule
  key: node.cloudprovider.kubernetes.io/uninitialized
  value: "true"
---
apiVersion: v1
kind: ServiceAccount
metadata:
  name: kapp-controller-sa
  namespace: tkg-system
```

```
---
apiVersion: rbac.authorization.k8s.io/v1
kind: ClusterRole
metadata:
  name: kapp-controller-cluster-role
rules:
- apiGroups:
  - ""
  resources:
  - secrets
  - configmaps
  verbs:
  - get
  - list
  - watch
- apiGroups:
  - ""
  resources:
  - serviceaccounts
  verbs:
  - get
- apiGroups:
  - kappctrl.k14s.io
  resources:
  - apps
  - apps/status
  verbs:
  - '*'
- apiGroups:
  - packaging.carvel.dev
  resources:
  - packageinstalls
  - packageinstalls/status
  verbs:
  - '*'
- apiGroups:
  - packaging.carvel.dev
  resources:
  - packagerepositories
  - packagerepositories/status
  verbs:
  - '*'
- apiGroups:
  - internal.packaging.carvel.dev
  resources:
  - internalpackagemetadatas
  verbs:
```



```
- '*'
- apiGroups:
  - data.packaging.carvel.dev
  resources:
  - packagemetadatas
  - packagemetadatas/status
  verbs:
  - '*'
- apiGroups:
  - internal.packaging.carvel.dev
  resources:
  - internalpackages
  verbs:
  - '*'
- apiGroups:
  - data.packaging.carvel.dev
  resources:
  - packages
  - packages/status
  verbs:
  - '*'
- apiGroups:
  - ""
  resources:
  - configmaps
  verbs:
  - '*'
- apiGroups:
  - apiregistration.k8s.io
  resources:
  - apiservices
  verbs:
  - update
  - get
- apiGroups:
  - ""
  resources:
  - namespaces
  verbs:
  - list
  - watch
  - get
  - update
- apiGroups:
  - admissionregistration.k8s.io
  resources:
  - mutatingwebhookconfigurations
```

```
    verbs:
      - list
      - watch
- apiGroups:
  - admissionregistration.k8s.io
  resources:
  - validatingwebhookconfigurations
  verbs:
    - list
    - watch
---
apiVersion: rbac.authorization.k8s.io/v1
kind: ClusterRoleBinding
metadata:
  name: kapp-controller-cluster-role-binding
roleRef:
  apiGroup: rbac.authorization.k8s.io
  kind: ClusterRole
  name: kapp-controller-cluster-role
subjects:
- kind: ServiceAccount
  name: kapp-controller-sa
  namespace: tkg-system
---
apiVersion: rbac.authorization.k8s.io/v1
kind: ClusterRoleBinding
metadata:
  name: pkg-apiserver:system:auth-delegator
roleRef:
  apiGroup: rbac.authorization.k8s.io
  kind: ClusterRole
  name: system:auth-delegator
subjects:
- kind: ServiceAccount
  name: kapp-controller-sa
  namespace: tkg-system
---
apiVersion: rbac.authorization.k8s.io/v1
kind: RoleBinding
metadata:
  name: pkgserver-auth-reader
  namespace: kube-system
roleRef:
  apiGroup: rbac.authorization.k8s.io
  kind: Role
  name: extension-apiserver-authentication-reader
subjects:
```

```
- kind: ServiceAccount
  name: kapp-controller-sa
  namespace: tkg-system
```