

ArgoCD

Projects, Authentication, Authorization

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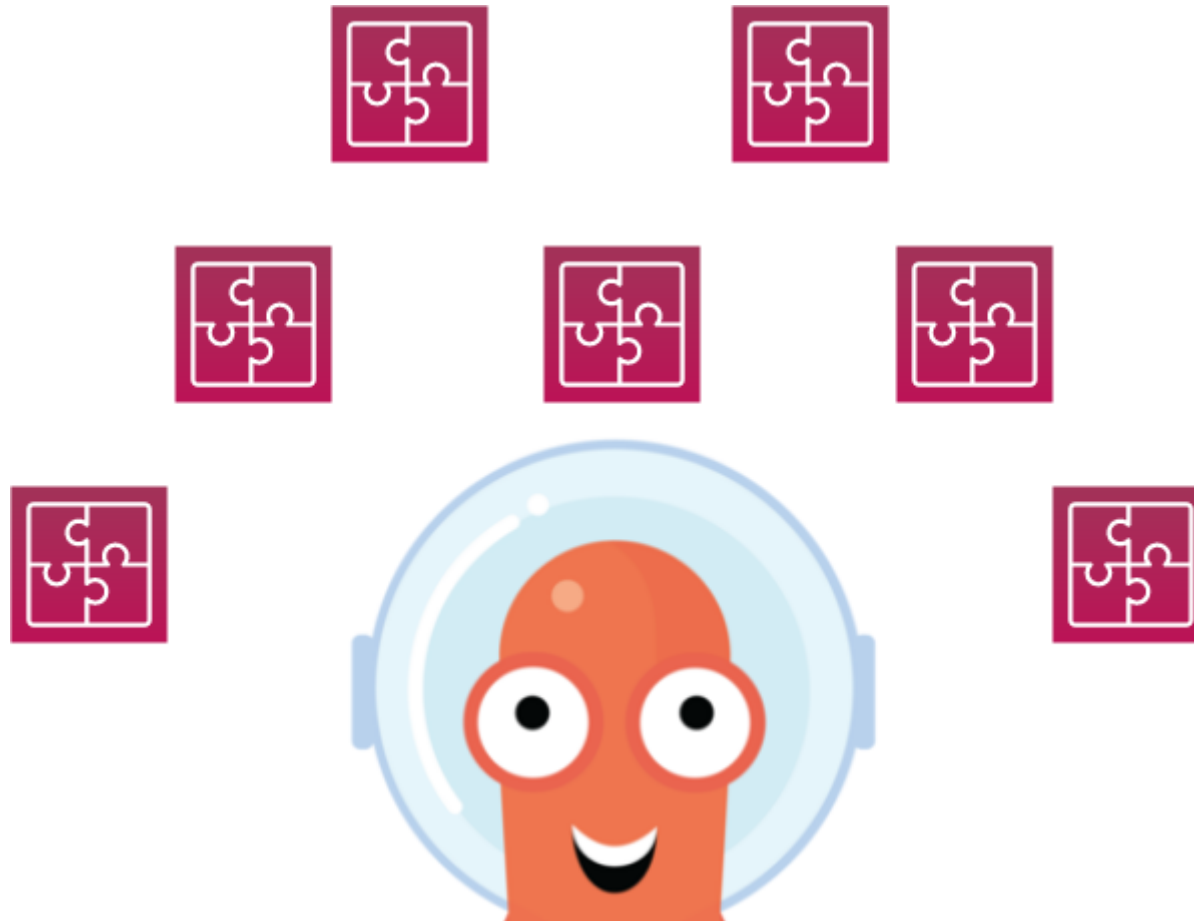
- Applications are collections of Resources
- ArgoCD instance manages applications
- Multiple Teams working on instance
- Manage access in Argo



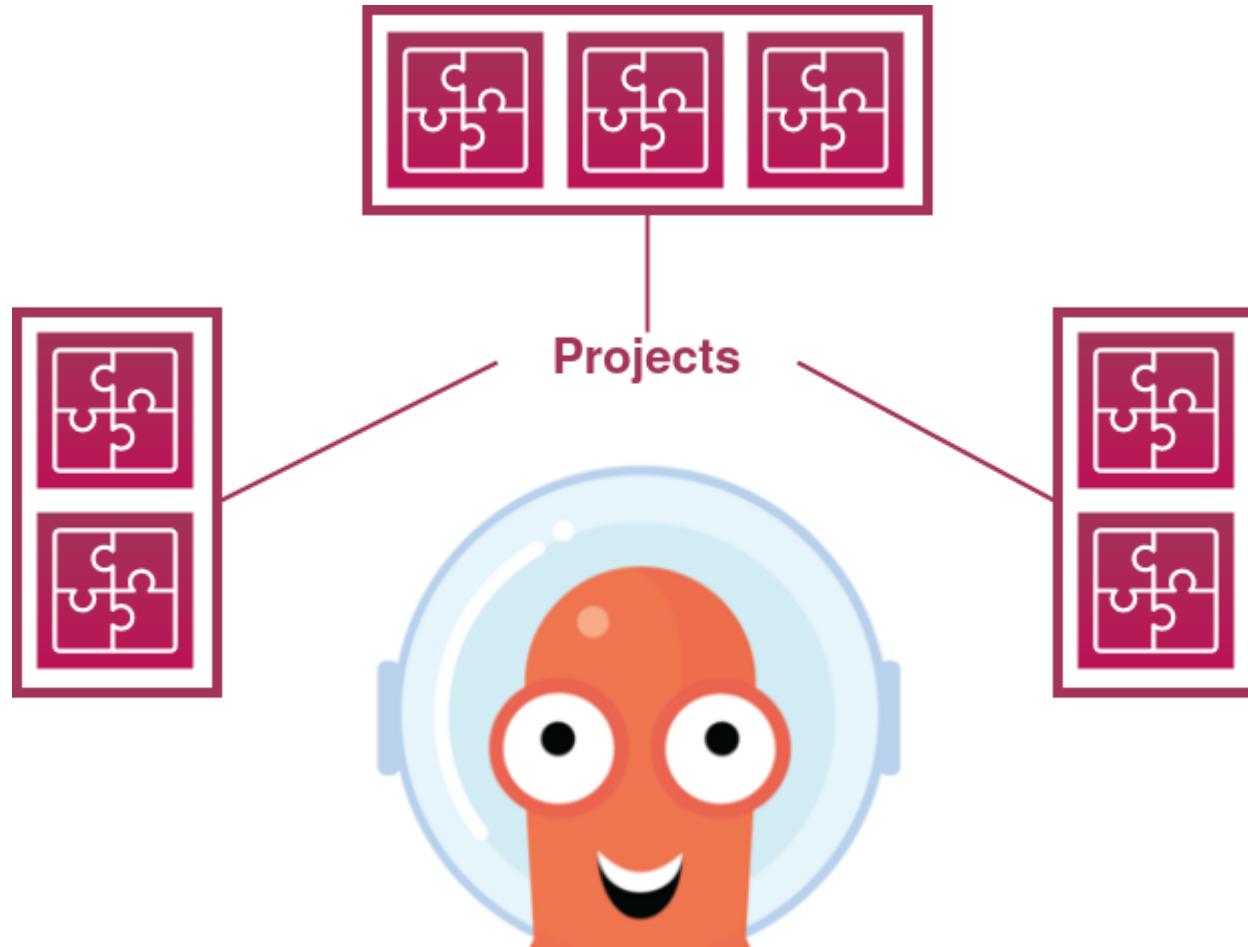
ArgoCD

Projects

ArgoCD Projects



ArgoCD Projects



ArgoCD Projects

- Which repos may be deployed?
- Where may it be deployed?
- What kinds of objects?
- Defining roles (RBAC) for projects.



ArgoCD Projects

```
apiVersion: argoproj.io/v1alpha1
kind: AppProject
metadata:
  name: my-project
  namespace: argocd
spec:
  description: Example Project
  # Allow manifests to deploy from any Git repos
  sourceRepos:
  - '*'
  # Only permit applications to deploy to the guestbook namespace in the same cluster
  destinations:
  - namespace: guestbook
    server: https://kubernetes.default.svc
  # Deny all cluster-scoped resources from being created, except for Namespace
  clusterResourceWhitelist:
  - group: ''
    kind: Namespace
  # Allow all namespace-scoped resources to be created, except for ResourceQuota,
  namespaceResourceBlacklist:
  - group: ''
    kind: ResourceQuota
  - group: ''
    kind: LimitRange
  - group: ''
    kind: NetworkPolicy
  roles:
  # A role which provides read-only access to all applications in the project
  - name: read-only
    description: Read-only privileges to my-project
  policies:
```

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Authentication

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Authentication

→ Authentication exclusive JWT

- Local Admin user
- OAuth2
- Automation Tokens



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Authorization

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Authorization

- User claims groups in JWT
- Compared against RBAC policies
- Roles / Policies defined in Argo



Authorization

- Roles and Policies defined in
`argocd-rbac-cm` ConfigMap
- Create Roles and add Policies to
them

```
apiVersion: v1
kind: ConfigMap
metadata:
  name: argocd-rbac-cm
  namespace: argocd
data:
  policy.default: role:readonly
  policy.csv: |
    p, role:org-admin, applications, *, /*, allow
    p, role:org-admin, clusters, get, *, allow
    p, role:org-admin, repositories, get, *, allow
    p, role:org-admin, repositories, create, *, allow
    p, role:org-admin, repositories, update, *, allow
    p, role:org-admin, repositories, delete, *, allow

    g, your-github-org:your-team, role:org-admin
```