

Creating a Helm Package and Pushing to Azure Container Registry

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Create Helm Package

```
cd <ROOT_CHART_FOLDER>
helm package .

# Add version
helm package --version <VERSION> .
```

Successfully packaged chart and saved it to: /Users/john/projects/netguard_cyberdome/deployment/kubernetes/components/ingress-controller/ingress-nginx-4.3.0.tgz

OCI Registry

Pushing Chart

```
helm push ./redis-24.3.tgz oci://ncydacrinprogress.azurecr.io/charts/
```

Pulling Chart

```
helm pull oci://ncydacrinprogress.azurecr.io/charts/redis --version 24-john --username ncydacrinprogress --password xxx
```

Helm V1 Registry

Add Azure Repo

```
helm repo add ncydacr https://ncydacr.azurecr.io/helm/v1/repo --username ncydacr --password XXXXX
```

"ncydacr" has been added to your repositories

Push to Azure

```
export HELM_EXPERIMENTAL_OCI=1
helm push <PACKAGE_FILE_NAME>.tgz oci://ncydacr.azurecr.io/charts
```

```
helm push ingress-nginx-4.3.0.tgz oci://ncydacr.azurecr.io/charts
Pushed: ncydacr.azurecr.io/charts/ingress-nginx:4.3.0
Digest: sha256:0fffd79e4d12a33a232c5d871d298b0672a08dc467af56337b90e6ff893e898cd
```

Push using az (required for our helm2 charts used by Flux)

```
az acr helm push -n ncydacr ./<PACKAGE_FILE_NAME>.tgz
```

```
This command is implicitly deprecated because command group 'acr helm' is deprecated and will be removed in a
future release. Use 'helm v3' instead.
Unable to get AAD authorization tokens with message: 2022-11-17 15:46:53.417375 An error occurred:
CONNECTIVITY_REFRESH_TOKEN_ERROR
Access to registry 'ncydacrinprogress.azurecr.io' was denied. Response code: 401. Please try running 'az login'
again to refresh permissions.
Unable to get admin user credentials with message: The resource with name 'ncydacrinprogress' and type
'Microsoft.ContainerRegistry/registries' could not be found in subscription 'CNS BA-Security-CyberSecurity-Dome-
DEV-out (b63b61a0-605d-47e8-b8a6-598e188a00ed)'.
Username: ncydacrinprogress
Password:
{
  "saved": true
}
```

Verify

```
helm repo update

# or with specific repo
helm repo update <repo>
```

```
Hang tight while we grab the latest from your chart repositories...
...Successfully got an update from the "ncydacr" chart repository
Update Complete. Happy Helming!
```

```
helm search repo <REPO/CHART>
```

```
helm search repo ncydacr/ingress-nginx
NAME                                CHART VERSION    APP VERSION
DESCRIPTION
ncydacr/ingress-nginx              4.3.0            1.4.0            Ingress controller for Kubernetes using
NGINX a...
```

Verify Chart Downloaded on Destination Cluster

```
kubect1 get helm charts -A
```