

BookStack on Kubernetes (in-cluster MySQL + external HAProxy)

Image used: `lscr.io/linuxserver/bookstack:latest` (community-maintained, actively updated, includes `/status` health endpoint that BookStack's own HA docs recommend probing).

1. Create the database in your existing MySQL

BookStack manages its own schema, so it just needs an empty database + a user with full rights on it. Run on your existing MySQL:

```
CREATE DATABASE bookstack CHARACTER SET utf8mb4 COLLATE utf8mb4_unicode_ci;
CREATE USER 'bookstack'@'%' IDENTIFIED BY 'CHANGE_ME_strong_password';
GRANT ALL PRIVILEGES ON bookstack.* TO 'bookstack'@'%';
FLUSH PRIVILEGES;
```

Use the same password in `01-secret.yaml` (`DB_PASSWORD`).

2. Edit before applying

File	What to change
<code>01-secret.yaml</code>	<code>DB_PASSWORD</code> to match what you set in MySQL
<code>02-configmap.yaml</code>	<code>APP_URL</code> (must match the host users/HAProxy hit), <code>DB_HOST</code> (your MySQL Service DNS name)
<code>03-pvc.yaml</code>	<code>storageClassName</code> — run <code>kubectl get storageclass</code> to see what's available
<code>06-ingress.yaml</code>	<code>host</code> , and <code>ingressClassName</code> if you're not on ingress-nginx

`DB_HOST` resolution inside the cluster:

- Same namespace as MySQL's Service → just the Service name, e.g. `mysql`
- Different namespace → `mysql.<that-namespace>.svc.cluster.local`

3. Apply

```
kubectl apply -f 01-namespace.yaml
kubectl apply -f 04-secret.yaml
kubectl apply -f 03-configmaps.yaml
kubectl apply -f 04-storage-class.yaml
kubectl apply -f 05-deployment.yaml
kubectl apply -f 06-service.yaml
```

Check it's healthy:

```
kubectl -n bookstack get pods
kubectl -n bookstack logs -f deploy/bookstack
kubectl -n bookstack port-forward svc/bookstack 8080:80
curl -i http://localhost:8080/status # should return 200
```

Default login is `admin@admin.com` / `password` — change it immediately after first login.

4. Point HAProxy

This setup gives you Proxy Service and **Ingress** Should point the DNS to the Proxy service.

Because Bookstack is running in different Namespace, so HAProxy cannot cross-connect to different namespace.

Create Proxy for Bookstack:

```
apiVersion: v1
kind: Service
metadata:
  name: bookstack-proxy
  namespace: default
spec:
  type: ExternalName
```

```
externalName: bookstack.bookstack.svc.cluster.local
```

```
ports:
```

```
- port: 80
```

Example HAProxy backend:

```
I Hosts:
```

```
- bookstack.yourdomain.com
```

```
Add the below in rules:
```

```
- host: bookstack.yourdomain.com
```

```
http:
```

```
paths:
```

```
- path: /
```

```
pathType: Prefix
```

```
backend:
```

```
service:
```

```
name: bookstack-proxy
```

```
port:
```

```
number: 80
```

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