CAEPE Test Drive Manual

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TABLE OF CONTENTS

1.Test Drive Scenarios

This Test Drive experience is designed to empower you to navigate through workflows showcasing how CAEPE streamlines processes, reduces effort and time.

Two scenarios are covered:
- **Progressive Delivery (A/B Deployment)**
  Progressive delivery strategies improve user experiences and minimize downtime. With CAEPE, guided UI workflows are provided for seamless deployment, precise routing control, and efficient version tagging.
- **Smoke Testing**
  Engineering teams routinely test deployments for scalability, reliability, or to assess applications on updated Kubernetes versions. CAEPE simplifies smoke testing, enabling deployment, testing, and management of rollbacks or further deployments based on results.

1.1   CAEPE Test Drive

1. After you complete the Test Drive form and click **Submit**, you will receive an email once your test drive is ready.

    Keep this email handy. It contains essential information for a smooth experience. You'll need all the provided URLs later in this guide.

    Notes: The unique infix numbers generated between "testdrive-xxxxx-chc" are specific to this specific test drive instance and will remain accessible for approximately 4 hours. Your session is entirely unique, and all data is automatically deleted at the end of your test drive session.
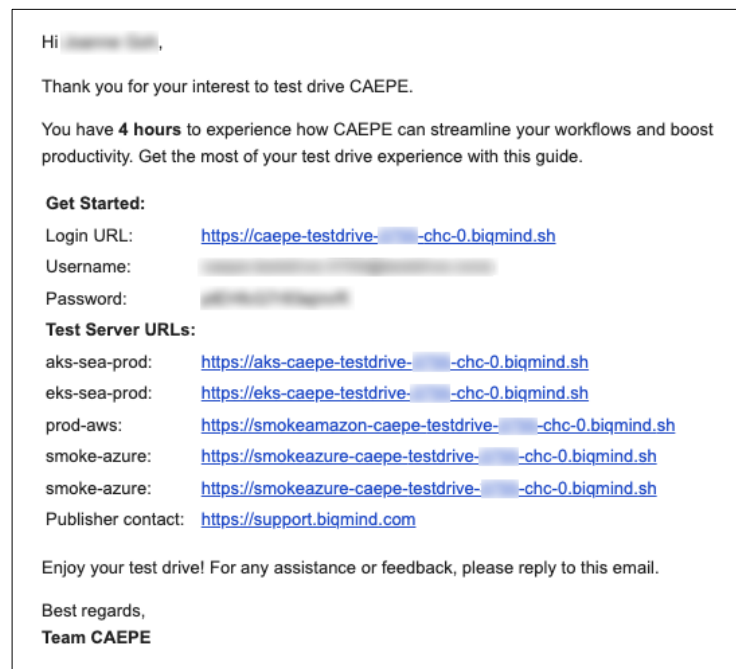
Proceed to login with the Login URL and credentials provided.

1.2   A/B Deployment Walkthrough

An A/B strategy involves simultaneously deploying two versions of an application to different groups of users.

In this walkthrough, an ecommerce website will be deployed to the following clusters with different images:
- aks-sea-prod-caepe-testdrive-xxxx-caz-0 => a blue cat
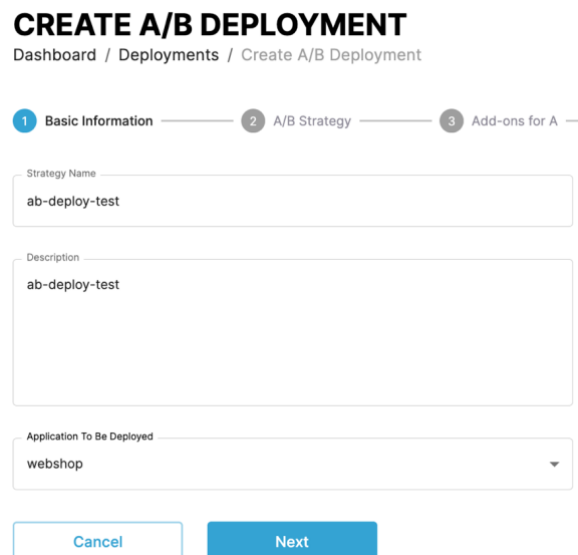- eks-useast1-prod-caepe-testdrive-xxxx-caz-0 => a red cat

Before you begin, click the EKS, and AKS URLs respectively in the email to check the deployments.

Test Server URLs:	
aks-sea-prod:	https://aks-caepe-testdrive-____-chc-0.biqmind.sh
eks-sea-prod:	https://eks-caepe-testdrive-____-chc-0.biqmind.sh

Both URLs should display blank pages.

Implementation Steps
1. Create an A/B deployment by clicking the **Create A/B Deployment** button from **the Deployments > Deployment Strategies** menu.
2. Fill in the fields as follows:
     a. Strategy Name: ab-deploy-test
     b. Description: ab-deploy-test
3. From the **Application To Be Deployed** dropdown list, select **webshop**

4. Click **Next**
5. On the **A/B strategy** page, select the **Deploy On To Different Clusters** option,
     a. In the Cluster/Group for A field, select **eks-useast1-prod-caepe-testdrive-xxxx-chc-0 and** enter **absplit** for Application Branch for A (Optional) field
     b. In the Cluster/Group for B field, select **aks-sea-prod-caepe-testdrive-xxxx-chc-0**

6. Click **Next**.
7. Click **Next Add-ons for A** page and **Add-ons for B** pages. **Note:** For more information about Add-ons, see our Deployments documentation
8. In the final step, on the deployment priority page, click **Create Deployment**.
9. A pop-up message will be displayed. Click on **Back to Deployments**.

10. On the Deployments page, you will see two A/B deployments:

11. Refresh the EKS, and AKS URLs to check the deployments.
    Note: For more information on the various deployment strategies, see our Deployments documentation

    The webshop application is now deployed to two separate clusters, each identified by a different color cat.
    Version 1 'Red Cat' (EKS)

CAEPE. WebShop.
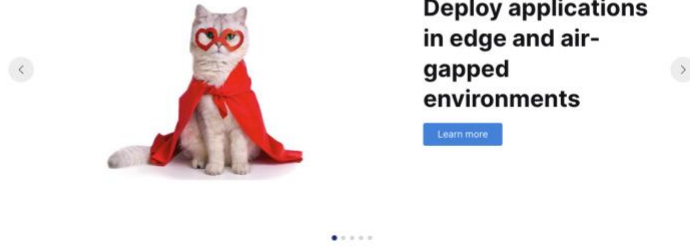
Version 2 'Blue Cat' (AKS)
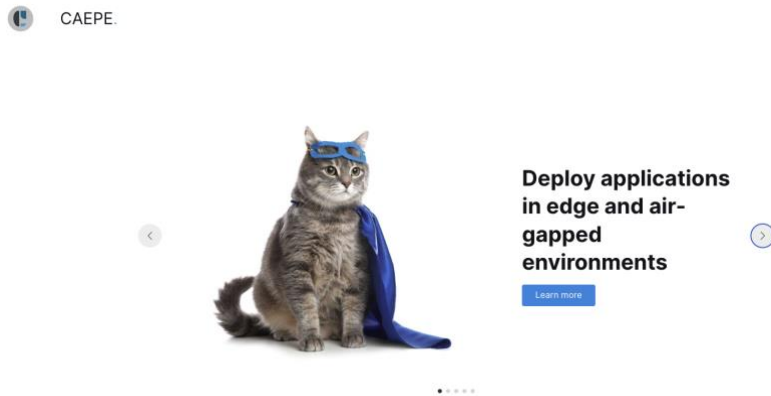
1.3   Manage Deployments

In the center of the page, you will find the deployments linked to your account. You have the option to toggle between a "list" and "grid" view of these deployments. By clicking on the **Filters** button, you can further filter by deployment name, status, and strategy type.

Each entry in the list or grid displays the deployment strategy name, status, deployment date & time, deployed application, cluster where the application is deployed, and an **Actions** button

1.4 Smoke Test Deployment

With CAEPE, you can quickly deploy a snapshot of a production application or the latest version to an upgraded or new cluster type. This ensures compatibility through smoke, performance, penetration, or chaos tests.

Implementation Steps:

1. Create a Standard Deployment by clicking the **Create Deployment** button from the **Deployments > Deployment Strategies** menu.
2. Complete the fields as shown below:
   a. Deployment Name: webshop-prod
   b. Description: webshop-prod
3. From the **Application To Be Deployed** dropdown list, select **webshop-prod,** and click **Next Step.**

4. On the **Select Cluster/Group** page, select the **prod-aws-caepe-testdrive-xxxxx-chc-0.**
5. Click **Next Step.**
6. On the **Add-ons** page, click **Create Deployment.** Note: For details on Add-ons, see [Deployments](#) documentation
7. In the final step, on the deployment priority page, click **Create Deployment**. This deployment will be used for smoke testing.

8. Click **Smoke Tests > + Define Snapshot button.**
9. Select the **prod-aws-caepe-testdrive-xxxx-chc-0** from the **Snapshot Source Cluster** dropdown list.

DEFINE SNAPSHOT
Dashboard / Smoke Tests / Define Snapshot

1 Basic Information ———————— **2** Default Configurations

Snapshot Name
prod-aws

Select Snapshot Source Cluster
prod-aws-caepe-testdrive-▮▮▮-chc-0

Namespaces (Optional)
webshop-prod ✕   Select or type to filter

Labels

\+ New Label

Resources (Optional)

Snapshot Location
aws2   Create New

Cancel   **Install CAEPE Component**

10. Fill in the fields as follows:
    a. Snapshot name: *prod-aws*
    b. namespace: *webshop-prod*.
    c. Resources: leave empty.
    d. Snapshot location: *aws2*

11. Click **Install CAEPE components. Note**: Takes a few minutes for installation to complete. The Default Configurations page will be displayed.

○ Do Nothing

◉ Execute Default Test Runs

Select test run

Please select

☐ Delete Snapshot Instance

☐ Remove Snapshot From The Smoke Test Cluster

Note: Click on **Execute Default Test Runs** for more options. You can execute test runs such as pen/security testing etc., but we will not be using for this test drive.

12. Click **Do Nothing**

Post Snapshot Deployment Activities

Define the post snapshot deployment tasks from the below options

- ◉ Do Nothing
- ○ Execute Default Test Runs

13. Click **Define Snapshot Now**

NEW SNAPSHOT DEFINED

The new snapshot **"prod-aws"** is defined successfully.

What next?
You can go ahead and take a snapshot instance from this defined snapshot.

Go to Snapshots   Define another snapshot   **Take Snapshot**

14. Click **Go to Snapshots.**
15. Click the dropdown arrow on the **Actions** button of the prod-aws Snapshot Definition and click on **Snapshot & Deploy** from the menu display.

SNAPSHOT DEFINITIONS
Dashboard / Smoke Tests / Snapshot Definitions   + **Define Snapshot**

Filters

	Name	Source Cluster	Default Cluster	Created On	Instances				
☐	prod-aws	prod-aws-caepe-testdrive-____-chc-0	-	Few mins ago	0	ACTIONS ▲	✎	🗑	View →

Take a Snapshot

📷 Execute   <> CLI Command

Take a Snapshot & Deploy

☁ Snapshot & Deploy   <> CLI Command

16. In the pop-up, select the smoke test cluster from the dropdown list

NO DEFAULT DEPLOYMENT CLUSTER IS SELECTED

The cluster to be deployed by default is not assigned with this Snapshot definition. Would you like to continue and select cluster to be deployed?

Select smoke test cluster

smoke-azure-caepe-testdrive-____-chc-0   ▼

Back to Smoke Tests   Go to Snapshot   **Create Snapshot and Deploy**

17. Click Create **Snapshot and Deploy**.

ACTION IN PROGRESS

The process of creating a new snapshot instance and deploying to the selected cluster typically takes few minutes. You will be notified once it's deployed.

Back to Smoke Tests

Ok, Got it

18. Click **Back to Smoke Tests** to return to the Smoke Test Dashboard. Takes about 2-4 minutes to deploy.

Tip: Refresh the browser (multiple times) after approximately 2-4 minutes to view the snapshot instance as it initiates, progresses, and completes, followed by the snapshot deployment running and reaching completion.

SNAPSHOT INSTANCES   VIEW ALL 1 SNAPSHOTS INSTANCES →

Snapshot Definition	Date Created	Status		
prod-aws	Today 16:57	✅ Completed	ACTIONS ▾	Definition →

SMOKE TEST (SNAPSHOT RESTORE) DEPLOYMENTS   VIEW ALL 1 DEPLOYMENTS →

Snapshot Definition	Status	Deployed Cluster	Deployed on	Latest Test	
prod-aws	🕐 Pending	smoke-azure-caepe-testdrive-8499-chc-0	18 Jul 2024 17:00	-	›

2. Technical Support and Additional Resources

- **Tech Support**
  For any technical questions during your Test Drive, click on the 'Need Help' chat widget in the bottom right corner of the app to launch a support request or contact our tech support team at support@biqmind.com.

- **Free Pilot**
  Interested in evaluating CAEPE for your team? Take advantage of our complimentary 2 to 6-week pilot program, fully supported by our team. Email us at letschat@caepe.sh for more information.

- **Other Resources**
  Explore more resources on CAEPE https://caepe.sh/start-here/