**Elevate v2.1 Bankfast Installation Guide**

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# Introduction

The operations manual is intended to give the knowledge to install Bankfast hosted in Liferay DXP portal in kubernetes clusters. Maintain them and to prepare for regular maintenance activities and to troubleshoot the installation should the need arise.

## Audience

The operations manual is targeted at anyone who will be installing, monitoring, maintaining or troubleshooting Bankfast application. IT managers may also find the manual useful for planning for outages, updates, performance measurement and forward planning.

## Scope

This document will cover the following functional areas of installing, configuring and maintaining Elevate Bankfast installation.

# Environment Setup

This section describes the environment set up needed for the installation

## Optimal System - CLUSTER Configuration

For an optimal system, the cluster should have at least one node with the following configuration

|  |  |
| --- | --- |
| **Configuration** | **Value** |
| vCPU | 8 vcPU |
| Memory | 32 GiB |

## High Available System - CLUSTER Configuration

For an optimal system, the cluster should have at least two nodes with the following configuration

|  |  |
| --- | --- |
| **Configuration** | **Value** |
| vCPU | 8 vcPU |
| Memory | 32 GiB |

# Set up Installation Environment(MAC)

This section describes the set up needed in the machine from which the helm chart will be installed to a kubernetes environment. This will need the following to be installed

* Docker
* Kubernetes
* Helm

## Installing Docker Desktop

Download and install docker from <https://download.docker.com/mac/stable/Docker.dmg>

For detailed instructions and trouble shooting, follow the link - <https://docs.docker.com/docker-for-mac/install/>

## Installing Hombrew

Homebrew is a package management system for mac that helps install various tools. Check that you’ve got Homebrew installed by running ***brew --version***. If you get a Homebrew version number back, you’re good to go.

If you don’t have Homebrew, run this in your Terminal

***$/usr/bin/ruby -e "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/master/install)"***

## Installing Kubernetes

Kubernetes is a docker container orchestration tool. Execute the following command to install Kubernetes.

***$*** ***brew install kubernetes-cli***

Test to ensure the version you installed is sufficiently up-to-date:

***$ kubectl version***

For detailed instructions and trouble shooting, follow the link - <https://kubernetes.io/docs/tasks/tools/install-kubectl/>

## Installing Helm

Execute the below command to install Helm

***$brew install kubernetes-helm***

### Initialize Helm

Execute ***helm init*** and you’ll see something like the following.

***$ helm init***

***Creating /Users/matthewpalmer/.helm***

***Creating /Users/matthewpalmer/.helm/repository***

***Creating /Users/matthewpalmer/.helm/repository/cache***

***Creating /Users/matthewpalmer/.helm/repository/local***

***Creating /Users/matthewpalmer/.helm/plugins***

***Creating /Users/matthewpalmer/.helm/starters***

***Creating /Users/matthewpalmer/.helm/cache/archive***

***Creating /Users/matthewpalmer/.helm/repository/repositories.yaml***

***Adding stable repo with URL: https://kubernetes-charts.storage.googleapis.com***

***Adding local repo with URL: http://127.0.0.1:8879/charts***

***$HELM\_HOME has been configured at /Users/matthewpalmer/.helm.***

***Tiller (the Helm server-side component) has been installed into your Kubernetes Cluster.***

***Please note: by default, Tiller is deployed with an insecure 'allow unauthenticated users' policy.***

***To prevent this, run `helm init` with the --tiller-tls-verify flag.***

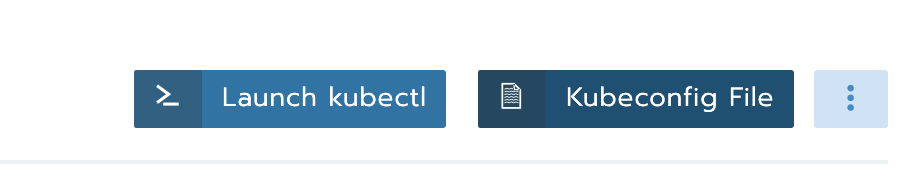
***For more information on securing your installation see: https://docs.helm.sh/using\_helm/#securing-your-helm-installation***

***Happy Helming!***

## Setup connectivity with Kubernetes Deployment Environment

Following steps needs to be executed to establish connectivity with kubernates deployment environment

1. Login to rancher environment and download the kubeconf file from the cluster you like to deploy



1. Place it under ~/.kube/config in the local machine to point to the specified cluster from the local machine

# Set up Installation Environment(Windows)

This section describes the set up needed in the machine from which the helm chart will be installed to a kubernetes environment. This will need the following to be installed

* Docker
* Kubernetes
* Helm

## Installing Docker Desktop

Download and install docker from <https://download.docker.com/win/stable/Docker%20for%20Windows%20Installer.exe>

For detailed instructions and trouble shooting, follow the link - <https://docs.docker.com/docker-for-windows/install/>

## Installing Kubernetes

Kubernetes is a docker container orchestration tool. E xecute the following command to install Kubernetes.

* Right click on docker for windows, select "Settings"
* Choose Kubernetes tab and enable it. This will take a while to start Kubernetes



## Installing Helm

Helm can be installed easily using chocolatey. Execute the below command to install

* Install Chocolatey following <https://chocolatey.org/install#installing-chocolatey>. Chocolatey is a package manager for Windows (like apt-get or yum but for Windows), it allows you to install packages in windows.

Note: all of the commands in these instructions are run in Windows CMD, not in linux subsystem.

* Install Helm package by running "***choco install kubernetes-helm***" in cmd

### Initialize Helm

Execute ***helm init*** and you’ll see something like the following.

***$ helm init***

***Creating /Users/matthewpalmer/.helm***

***Creating /Users/matthewpalmer/.helm/repository***

***Creating /Users/matthewpalmer/.helm/repository/cache***

***Creating /Users/matthewpalmer/.helm/repository/local***

***Creating /Users/matthewpalmer/.helm/plugins***

***Creating /Users/matthewpalmer/.helm/starters***

***Creating /Users/matthewpalmer/.helm/cache/archive***

***Creating /Users/matthewpalmer/.helm/repository/repositories.yaml***

***Adding stable repo with URL: https://kubernetes-charts.storage.googleapis.com***

***Adding local repo with URL: http://127.0.0.1:8879/charts***

***$HELM\_HOME has been configured at /Users/matthewpalmer/.helm.***

***Tiller (the Helm server-side component) has been installed into your Kubernetes Cluster.***

***Please note: by default, Tiller is deployed with an insecure 'allow unauthenticated users' policy.***

***To prevent this, run `helm init` with the --tiller-tls-verify flag.***

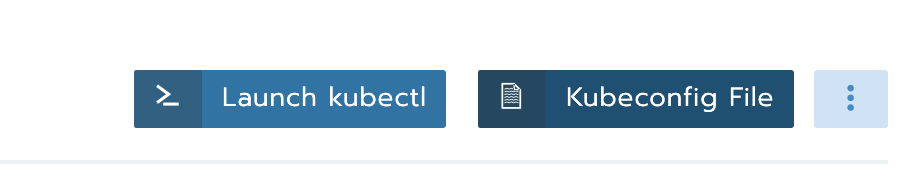
***For more information on securing your installation see: https://docs.helm.sh/using\_helm/#securing-your-helm-installation***

***Happy Helming!***

## Setup connectivity with Kubernetes Deployment Environment

Following steps needs to be executed to establish connectivity with kubernates deployment environment

1. Login to rancher environment and download the kubeconf file from the cluster you like to deploy



1. Place it under ~/.kube/config in the local machine to point to the specified cluster from the local machine

# Elevate Applications

## Available Applications

Following are the available applications in Elevate for installation/Upgrade.

|  |  |  |
| --- | --- | --- |
| **Application** | **Version** | **Description** |
| Bankfast | 2.1.0 | Online banking system on Liferay DXP |
| Support | 2.1.0 | Needed if pointing to fakehost for bankfast |

## Installing Bankfast

Download the heml chart for bankfast in your local.

### Database

|  |  |
| --- | --- |
| Database Name | Installation Instructions |
| bankfast | Created as part of deployment |
| rcas | Created as part of deployment |
| portal | Created as part of deployment |
| mfa | Created as part of deployment |

### Configurations

Following are the property that could be set up at the time of deployment by updating values.yaml

|  |  |  |
| --- | --- | --- |
| Property Name | Description | Pattern/Sample |
| deploy.env | Environment name. should be aplhanumric | sst |
| deploy.client | Client name. should be aplhanumric | internal |
| host.scheme | http/https |  |
| host.domainName | The base domain name of the application | k8s.sandstone.online |
| database.host | Host ip/url of the database server | 10.30.1.80 |
| database.user | DB user name | elevate |
| database.password | DB password | elevate |
| database.adminUser | DB admin user name | elevate |
| database.password | DB admin user name | elevate |
| database.rcas | Alphanumeric. Can contain ‘\_’ |  |
| database.bankfast | Alphanumeric. Can contain ‘\_’ |  |
| database.portal | Alphanumeric. Can contain ‘\_’ |  |
| database.mfa | Alphanumeric. Can contain ‘\_’ |  |
| database.port | DB server port | 1433 |
| external.appointmentManagerUrl | Url with http:// or https:// | https://appointment-manager.elevate-stealth.unisys.com |
| external.appointmentManagerContextRoot | Alphanumeric | AMOnlineTest |
| external.chatbotUrl | Url with http:// or https:// |  |
| external.chatbotContextRoot | Alphanumeric |  |
| external.pfmBaseurl | Url with http:// or https:// | http://pfm-qa.elevate-sst.sandstone.com.au |
| external.applyBaseUrl | Url with http:// or https:// | http://apply-qa.elevate-sst.sandstone.com.au |
| bankfast.host.uri | Fakehost or aggregator url | http://smarthost:8080/smarthost/services/bankFastHost |

### Steps to create catalog

1. Execute the following command to install

***helm install -n <stack-name> --namespace <namespace> <template-location>***

***Example - helm install -n bankfast-dxp --namespace elevate ./bankfast-dxp***

### Steps to upgrade catalog

1. Execute the following command to upgrade

***helm upgrade <stack-name> --namespace <namespace> <template-location>***

***Example - helm upgrade bankfast-dxp --namespace elevate ./bankfast-dxp***

### Accessing the Application

1. The internet banking site can be accessed using

https://ib-<namespace>-<deploy.env>-<deploy.client>-<host.domainName>

<http://ib-elevate-ci-portal-sst-internal.k8s.sandstone.online/>

## Installing Support (Fakehost for Bankfast)

### Database Required

|  |  |
| --- | --- |
| Database Name | Installation Instructions |
| smarthost | Create empty database with relevant access permissions. |

### Catalog Configurations

|  |  |  |
| --- | --- | --- |
| Property Name | Description | Pattern/Sample |
| deploy.env | Environment name. should be aplhanumric | sst |
| deploy.client | Client name. should be aplhanumric | internal |
| database.host | Host ip/url of the database server | 10.30.1.80 |
| database.user | DB user name | elevate |
| database.password | DB password | elevate |

### Steps to create catalog

1. Execute the following command to install

***helm install -n <stack-name> --namespace <namespace> <template-location>***

***Example - helm install -n support-dxp --namespace elevate ./support-dxp***

### Steps to upgrade catalog

1. Execute the following command to upgrade

***helm upgrade <stack-name> --namespace <namespace> <template-location>***

***Example - helm upgrade support-dxp --namespace elevate ./support-dxp***