neueda

futureproof your workforce

INSTALLATION TYPES

NEUEDA.COM

OpenShift Installations

- OpenShift is about bringing the resource power of a cluster of machines to your applications.
  - It promises high scalability and high availability.
  - It gives fine-grained control over workloads.
- We will look at some of the main installation types to give a flavour of what is available.

Commercial Installations: Local Hardware

- RedHat is previewing an install assistant for this
- To get started you need to supply a cluster name and a base domain
- Single Node OpenShift (SNO) is a special case which we will look at later.
- There are guided instructions for bare-metal and cloud datacentre options as well.

Commercial Installations: Cloud

- Managed Services:
  - RedHat has its own fully managed service on AWS and GCP
  - AWS, Azure and IBM Cloud all have OpenShift managed services available.
- There are also DIY installations available for AWS, Alibaba, Azure, GCP and IBM Cloud.
- Licenses can be purchased through RedHat or (new!) on the AWS, Azure and GCP Marketplaces.

Training & Development Installations

- To get started with OpenShift 4.* you might want to take advantage of some lighter weight training installations.
- **CodeReady Containers**
- **OpenShift Developer Sandbox**
- There is also an OpenShift playground where you can control an OpenShift cluster for 1 hour.
  - This can take a long time to deploy!

CodeReady Containers (CRC)

- Designed to run on a single computer (Linux, MacOS, Windows)
- Allows you to build and run applications locally - an ideal tool for development.
- Does require a physical machine (cannot be installed on a VM)
  - It runs as a single node (control and worker) in its own VM
- It is ephemeral and not intended for production use
- Requirements:
  - 4 physical CPU cores; 9GB of free memory, 35GB of storage.

CRC Comments

- A very good idea for developers creating workloads
- Straightforward to install and run
- Doesn’t have the Route Table requirements of a regular cluster
- Can be set up on a server in your LAN and access remotely.

OpenShift Developer Sandbox

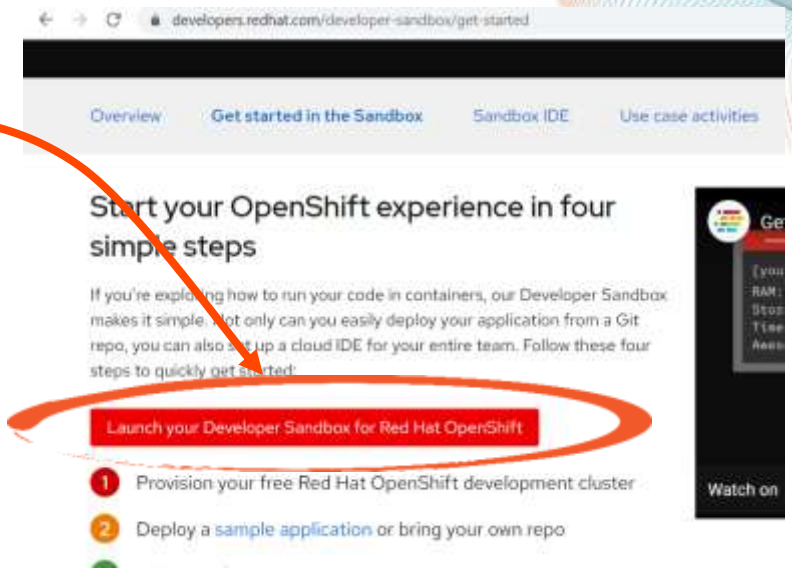
- The developer sandbox is a free, private OpenShift environment from RedHat.
- It comes with a set of developer tools.
- It has its own browser-based IDE (based on VSCode)
- It also provides some learning paths and use case-based activities.
- You are required to create a RedHat user account, and supply a telephone number for account verification (only).

Sandbox Comments

- You only have your sandbox for 30 days, then everything is deleted (but you can apply for another one)
- All pods are deleted after 12 hours
- Your sandbox has two default projects, you *cannot* create any more.

Sign up to Sandbox

- Go to [Get Started in the Sandbox]
- Click on the “Launch ..” button
- If you don’t have a Red Hat account, create one
- Put your cell number in to confirm the account via text
- Then you’re good to go!



neueda
future proof your workforce

Demo: The OpenShift Web Console

- We are using a fully deployed OpenShift 4.11 cluster for most of our labs and demos.
- Let’s look at the Web Console together and then you will all have a chance to get it working on your local platforms.

Lab 0: Signing in and First Deployment

- Hands on with OpenShift!
- Go to labs/0-setup-first-deploy.md on the website and follow the instructions.

Questions and Comments?