Transcript, zCX Foundation for Red Hat OpenShift Overview

0:00 With IBM zCX foundation for Red Hat OpenShift, you can deploy containerized Linux on Z applications in a Red Hat OpenShift cluster inside a z/OS system to directly support Linux workloads, without separately provisioning a Linux server.

0:27 You maintain operational control within z/OS. The containerized Linux-on-Z workloads and OpenShift cluster nodes transparently inherit z/OS quality of service.

0:39 Red Hat OpenShift provides open, enterprise-level cloud-native tools and orchestration capabilities for your hybrid cloud deployments on z/OS.

0:49 Your company undoubtedly uses OpenShift today. Now you can run it on z/OS, too, bringing your applications closer to your z/OS transactions and data. By doing this, you're integrating z/OS into your company's cloud modernization strategy.

1:04 You install an OpenShift cluster on z/OS using zCX, a feature of z/OS that provides the ability to run containerized Linux on Z software directly in z/OS in an address space.

1:20 An OpenShift cluster is made up of control plane nodes, that manage compute nodes, that run workloads. The Red Hat recommended configuration is to deploy three control plane nodes.

1:30 In z/OS, these control nodes are deployed using zCX in separate address spaces spread out across z/OS sysplex for high availability.

1:40 It is recommended that you deploy a minimum of two compute nodes for each control node. These are also deployed using zCX in separate address spaces spread across the z/OS sysplex for high availability.

1:57 zCX for OpenShift requires an IBM z14 or higher and z/OS release 2.4 or higher, with zCX Foundation for Red Hat OpenShift product licensing, which entitles you to run Red Hat OpenShift on z/OS using zCX. Note that zCX for OpenShift is zIIP-eligible. The Red Hat OpenShift stack includes Red Hat

2:23 Enterprise Linux CoreOS, a container-optimized operating system; cri-o, the container runtime component; Kubernetes, the container orchestration component; and enterprise-grade Red Hat OpenShift management services. The OpenShift binaries, obtained from Red Hat, are the same across the IBM Z architecture No modifications are required to run OpenShift on z/OS using zCX.

2:54 After the z/OS system programmer gathers the required resources for Red Hat OpenShift deployment, they use the provided zCX z/OSMF workflows to provision and start the Red Hat OpenShift cluster nodes. zCX for OpenShift provides additional z/OSMF workflows to reconfigure, add local disks, and

3:15 deprovision cluster nodes. Once the Red Hat OpenShift cluster is deployed successfully on z/OS using zCX, the OpenShift administrator then performs the day-two post-install steps to make the OpenShift cluster ready for users, and to prepare the OpenShift cluster for workloads.

3:36 The OpenShift cluster is ready for an application developer to deploy a workload. Red Hat provides a marketplace where developers can find applications for the OpenShift administrator and application developer.

3:52 OpenShift on zCX provides the same experience as OpenShift on any other platform.

4:00 You can work with your IBM representative to set up a zCX for OpenShift trial that enables full zCX for OpenShift capability for 60 days on your z14 or higher system with

4:12 z/OS 2.4 or higher. To explore zCX for OpenShift further, go to the content solution page, which is a one-stop-shop for technical resources about zCX for OpenShift.

4:23
Get started with zCX for OpenShift today!