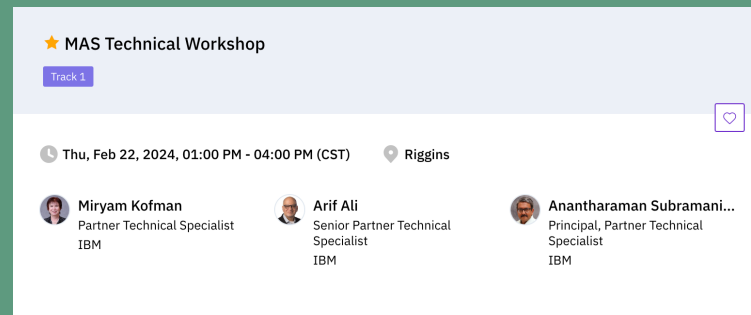


MAS Technical Workshop

Southwest Maximo Users Group 2024

February 21 – 22, 2024




Coppell, TX



★ MAS Technical Workshop

Track 1

Thu, Feb 22, 2024, 01:00 PM - 04:00 PM (CST) Riggins

 Miryam Kofman Partner Technical Specialist IBM	 Arif Ali Senior Partner Technical Specialist IBM	 Anantharaman Subramani... Principal, Partner Technical Specialist IBM
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Maximo as an enterprise-grade, integrated, containerized suite of software

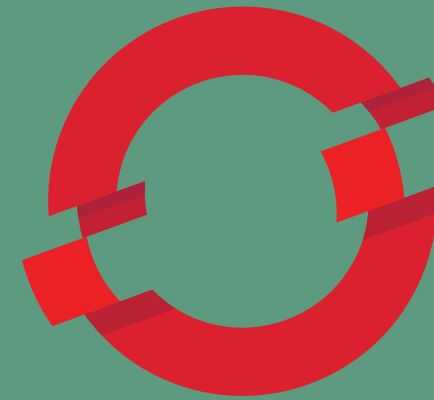
Why OpenShift?

Why choose an enterprise platform?

- Kubernetes
 - do-it-yourself
 - vanilla Kubernetes
- An enterprise Kubernetes platform
 - Advanced security
 - Auditing and logging capabilities
 - Simplified deployment
 - Configuration and management capabilities
 - Enterprise Kubernetes include Red Hat OpenShift, Google Anthos, Amazon EKS, Microsoft Azure Kubernetes Service, VMware Tanzu and others.

Red Hat OpenShift Container Platform

Industry-leading application platform leveraging Kubernetes for containerized applications across public or hybrid cloud, on-premise or edge architecture.



OPENSHIFT

<https://www.redhat.com/en/technologies/cloud-computing/openshift/container-platform>

OpenShift's Out-of-the-Box Features

- Platform for deploying custom applications.
- Web-based user interface, command line tools, and an API.
- Access to a wide range of services such as databases, messaging, and storage.
 - These services are provided by Red Hat Ecosystem Catalog, which allows third parties to ensure their software is certified for the platform and provides users an easy way to consume the software within the platform.
- Monitoring and logging capabilities. Security and resource isolation.



Datasheet

<https://developers.redhat.com/products/openshift/overview>



Full breakdown

<https://www.redhat.com/en/resources/openshift-container-platform-datasheet>

OpenShift Platform Support

- ▶ Installing on Alibaba
 - ▶ Installing on AWS
 - ▶ Installing on Azure
 - ▶ Installing on Azure Stack Hub
 - ▶ Installing on GCP
 - ▶ Installing on IBM Cloud
 - ▶ Installing on Nutanix
 - ▶ Installing on bare metal
 - ▶ Installing on-premise with Assisted Installer
 - ▶ Installing an on-premise cluster with the Agent-based Installer
- ▶ Installing on a single node
 - ▶ Deploying installer-provisioned clusters on bare metal
 - ▶ Installing IBM Cloud Bare Metal (Classic)
 - ▶ Installing on IBM Z and IBM LinuxONE
 - ▶ Installing on IBM Power
 - ▶ Installing on IBM Power Virtual Server
 - ▶ Installing on OpenStack
 - ▶ Installing on vSphere
 - ▶ Installing on any platform

At present, OpenShift is officially documented and supported across various cloud-vendor platforms and on-premise infrastructure.



<https://docs.openshift.com/container-platform/4.12/welcome/index.html>

OpenShift Installation Methods

Assisted Installer	Agent-based Installer	IPI Installer	UPI Installer
Involves creating a cluster interactively by using the redhat.com's web-based user interface.	Agent-based installation is like Assisted Installer, except you locally run web-based user interface. Useful for disconnected environment.	Installer-provisioned infrastructure (IPI) acts as an installation wizard, prompting you for values for the automated installation. Easy to install.	User-provisioned infrastructure (UPI) is like IPI except all the infrastructure is created manually and OpenShift is installed on top. Complex; takes some time to set up.



Requirements for OpenShift: Pull secret

The screenshot shows the Red Hat Hybrid Cloud Console interface. The browser address bar displays `console.redhat.com/openshift/downloads`. The page title is "OpenShift > Downloads". The left sidebar contains a navigation menu with items: OpenShift, Overview, Dashboard, Clusters, Learning Resources, Releases, Developer Sandbox, Downloads (highlighted), Red Hat Insights, and Advisor. The main content area is divided into two sections: "Tools" and "Tokens".

Tools Section:

Tool	OS	Architecture	Action
> Butane config transpiler CLI	Windows	x86_64	Download
> CoreOS Installer CLI	Linux	x86_64	Download
> Cloud Credential Operator CLI utility (ccoctl)	Linux	x86_64	Download

Tokens Section:

Token Type	Action
> Pull secret	Copy, Download
> OpenShift Cluster Manager API Token	View API token →

A red box highlights the "Pull secret" option in the Tokens section. A hand cursor is pointing at the "Copy" button next to it. A red arrow in the browser address bar points to the URL.

OpenShift topology

OpenShift is generally supported in 2 topologies

Highly available
OpenShift Container
Platform cluster (HA):

Three control-
plane (master)
nodes with any
number of worker
nodes.



A single-node OpenShift
Container Platform (SNO
– No HA):

A node that is both a
control-plane
(master) and worker.



A three-node OpenShift
Container Platform (No
HA):

A compact cluster
that has three
master nodes that
are also worker
nodes.



Platforms/vendors

Software As A Service (SaaS / Managed-Hosted	Self-managed (on cloud or on-prem or hybrid)
Maximo/MAS	Maximo/MAS
OpenShift	OpenShift

Installing OpenShift using Red Hat's installer-provisioned infrastructure method



Setting up Red Hat OpenShift Container Platform (RHOCP/OCP) involves various methods, and one of them is the installer-provisioned infrastructure (IPI) method. This method uses a tool called `openshift-install` to help install OCP on different systems like bare metal hardware or virtual servers.



Requirements for MAS: AppPoints License & Entitlement key

IBM Maximo Application Suite license file

Access the [IBM License Key Center](#) to get the license key of IBM Maximo Application Suite. From **Get Keys** > **IBM App Point Suites**, select IBM MAXIMO APPLICATION SUITE AppPOINT LIC and enter the following information on the next page:

Obtaining your IBM Entitlement key from the IBM Entitled Registry

Last Updated: 2024-01-11

The [IBM Entitled Registry](#) key is used during the installation to download the container images for the Suite and its applications from the IBM Entitled Registry. It is also required to install some prerequisites. Download this key from the [IBM Container Library](#).

Complete this task to log in to the IBM Container Library. To verify that your entitlement key is valid for Maximo® Application Suite.

Procedure

1. Log in to the IBM Container Library with a user ID that has software download rights for your company's entitlement.



<https://www.ibm.com/docs/en/mas-cd/continuous-delivery?topic=cloud-obtaining-your-entitlement-key-from-entitled-registry>



<https://www.ibm.com/docs/en/mas-cd/continuous-delivery?topic=cli-prerequisites-installing>

Upgrading from Maximo Asset Management to IBM Maximo Manage

The screenshot displays the IBM Maximo Manage user interface. At the top, a dark blue header contains a home icon, a hamburger menu, the text "Welcome, MAXADMIN", the user name "MAXADMIN", and several utility icons including a bell, a bar chart, a speech bubble, a refresh icon, a question mark, and the IBM logo.

Below the header is a navigation area with a search bar labeled "Find Navigation Item" and two tabs: "Administration" (selected) and "Inventory". A "Go To Applications" section lists various application categories such as "My Recent Applications", "Administration", "Analytics", "Assets", "Building Information Mo...", "Change", "Contracts", "Financial", "IT Infrastructure", "Integration", "Inventory", "Planning", "Preventive Maintenance", "Purchasing", "Release", and "Security".

The main content area is titled "IBM Maximo Application Suite | Manage" (circled in red) and includes a "Take a tour" button. It features a secondary navigation bar with "Administration" and "Inventory" tabs. The dashboard is divided into several panels:

- Quick Insert:** A panel with links for "New Person" and "New User".
- Security, Users and Groups:** A panel with links for "Users", "Security Groups", "People", and "Person Groups".
- Workflow Configuration:** A panel with links for "Workflow Designer", "Roles", "Actions", "Communication Templates", "Workflow Administration", and "Escalations".
- Bulletin Board:** A panel with a "Filter" button and a table with columns: "Subject", "Message", "Post Date", "Expiration Date", and "Viewed". The table shows one row with "N" in the "Viewed" column. Below the table, it states "There are currently no bulletin board messages to view."
- Inbox / Assignments:** A panel stating "No Assignments found for MAXADMIN".
- KPI Graph:** A panel showing a gauge chart for "Current User Sessions". The gauge has a scale from 100 to 900. The current value is 1, which is significantly below the target of 500. The status is indicated by a green bar.
- Related KPI Table:** A table with columns: "Related KPI", "Status", "KPI", "Actual", "Target", and "Variance". It contains one row: "Current User Sessions" with a status of "Green", an actual value of 1, a target of 500, and a variance of -499.



Your Maximo Database: Before

The screenshot displays the IBM Data Studio interface. On the left, the 'maxdb80 - localhost:5000' database is expanded to show the 'MAXIMO' schema, which includes various database objects like Tables, Views, and Indexes. The main editor window shows a SQL query: `select varvalue from maxvars where varname = 'MAXUPG';`. A red arrow points to the word 'varvalue' in the query. Below the editor, the 'MAXVARS 1' table is displayed in a grid view. The first row shows the value 'V7613-344' for the 'VARVALUE' column. A second red arrow points to this value in the grid. To the right of the grid, a 'Value' panel shows the selected value 'V7613-344'.


ABC VARVALUE
1 V7613-344

Your Maximo Database: After

The screenshot displays the IBM Data Studio interface. The top window, titled '<maxdb80> Script', contains the SQL query: `select varvalue from maxvars where varname = 'MAXUPG';`. The left-hand 'Object Explorer' shows the database structure for 'maxdb80 - localhost:5000', with the 'MAXIMO' schema expanded to show various database objects like Tables, Views, and Indexes. Below the script editor, the 'MAXVARS 1' table is open, showing a single row with the value 'V8700-96' in the 'VARVALUE' column. A 'Value' popup window is also visible, displaying 'V8700-96' with a red arrow pointing to it.

ABC VARVALUE
1 V8700-96

WebSphere. software



WebSphere Integrated Solutions Console

User ID:

Password:

IBM
Licensed Materials - Property of IBM
IBM, the IBM logo, ibm.com and WebSphere
International Business Machines Corporation
product and service names might be
IBM trademarks is available on the Web

Log in to your account

Username *

Password *



Red Hat OpenShift

Welcome to Red Hat OpenShift

Maximo 7.x → Manage 8.x

What's new in Maximo Manage

Last Updated: 2024-01-02

Learn more about what's new and changed in Maximo Manage.

- [What's new in Maximo Manage 8.7](#)
Learn more about what's new and changed in Maximo Manage.
- [What's new in Maximo Manage 8.6](#)
Learn more about what's new and changed in Maximo Manage.
- [What's new in Maximo Manage 8.5](#)
Learn more about what's new and changed in Maximo Manage.
- [What's new in Maximo Manage 8.4](#)
Learn more about what's new and changed in Maximo Manage.
- [What's new in Maximo Manage 8.3](#)
Learn more about what's new and changed in Maximo Manage.
- [What's new in Maximo Manage 8.2](#)
Learn more about what's new and changed in Maximo Manage.
- [What's new in Maximo Manage 8.1](#)
Learn more about what's new and changed in Maximo Manage.
- [What's new in Maximo Manage 8.0](#)
Learn more about what's new and changed in Maximo Manage.



Maximo Mobile

Learn more about what's new and changed in Maximo Mobile.

- **What's new in Maximo Mobile 8.11**

Learn more about what's new and changed in Maximo Mobile 8.11.

- **What's new in Maximo Mobile 8.10**

Learn more about what's new and changed in Maximo Mobile 8.10.

- **What's new in Maximo Mobile 8.9**

Learn more about what's new and changed in Maximo Mobile 8.9.

- **What's new in Maximo Mobile 8.8**

Learn more about what's new and changed in Maximo Mobile 8.8.



Technical Workshop (Interactive)

Intro: Platforms in use

Red Hat OpenShift Container Platform

Industry-leading application platform leveraging Kubernetes for containerized applications across public or hybrid cloud, on-premise or edge architecture.



<https://www.redhat.com/en/technologies/cloud-computing/openshift/container-platform>

VMware vSphere

Leading server virtualization platform designed for data center consolidation and improved application availability.



<https://www.vmware.com/products/vsphere.html>

IBM Technology Zone (TechZone)

TechZone provides technical “show me” content and environments together in one place. Users of TechZone can find and reserve a wide range of live environments across infrastructures and platforms.



<https://techzone.ibm.com/dashboard>

Outline

1. Review Maximo 7.x
2. Install OpenShift
3. Prepare customization archive
4. Prepare Maximo database for migration
5. Upgrade Maximo 7.x to IBM Maximo Manage 8.x

Two questions, quick anonymous survey




<https://wkf.ms/49fECyn>

Thank you!

★ MAS Technical Workshop

Track 1



 Thu, Feb 22, 2024, 01:00 PM - 04:00 PM (CST)

 Riggins



Miryam Kofman
Partner Technical Specialist
IBM



Arif Ali
Senior Partner Technical
Specialist
IBM



Anantharaman Subramani...
Principal, Partner Technical
Specialist
IBM