Medical Practice Management Solution

Modernization to Red Hat OpenShift Service on IBM Cloud

OpenEMR is an open-source electronic health records and medical practice management solution with hybrid inpatient/outpatient support, advanced billing, modern Cloud offerings, ability to perform quality reporting, and more. Corent identified that hybrid modernization of OpenEMR to Red Hat OpenShift service on IBM Cloud would benefit a lot of organizations.

Challenges:

- Require detailed information about the application and its workload components that can be migrated to Red Hat OpenShift Container on IBM Cloud.
- Need to know whether the application is suitable for migrating to Red Hat OpenShift Container on IBM Cloud.
- Need to find the modernization topology that is suitable for the application transformation.
- Need to define application and workload level configurations accurately for proper functioning of the application.

Under Corent's OpenSaaS Initiative™, several open-source applications were converted into SaaS. Few applications were selected for modernization migration to Red Hat OpenShift service on IBM Cloud and OpenEMR was the first to be selected for this hybrid migration to Red Hat OpenShift Container.

Solutions:

- MaaS Scanner identified the application's workload components and its associated resources within a short time using MaaS' Deep Scanning mode.
- MaaS scanned and generated Cloud assessment reports with migration feasibility details and Container advisories.
- MaaS identified the best modernization topology, based on the type of application workloads, to containerize and modernize the application on IBM Cloud.
- MaaS allows you to select the required application and workload level configurations that are automatically generated with MaaS' built-in intelligence.

Benefits:

- ✓ Hybrid modernization migration of workloads.
- ✓ Automated target container configuration.
- ✓ IBM Cloud service integration.
- ✓ Secure exposure of the application to the public.

MaaS assessed the OpenEMR application for a hybrid modernization of its workloads to Red Hat OpenShift service on IBM Cloud and migrated effortlessly to Red Hat OpenShift Container in a short span of time.

Architecture Diagram:

Original Architecture

OpenEMR application · Application server · Database server · Apache HTTP · MySQL

Transformed Architecture on Cloud

OpenEMR application · OpenShift Cluster · Apache Container · SQL Container · Apache HTTP · MySQL

This application was developed using PHP platform with 2-tier architecture and hosted on Apache HTTP web server with MySQL as database server.
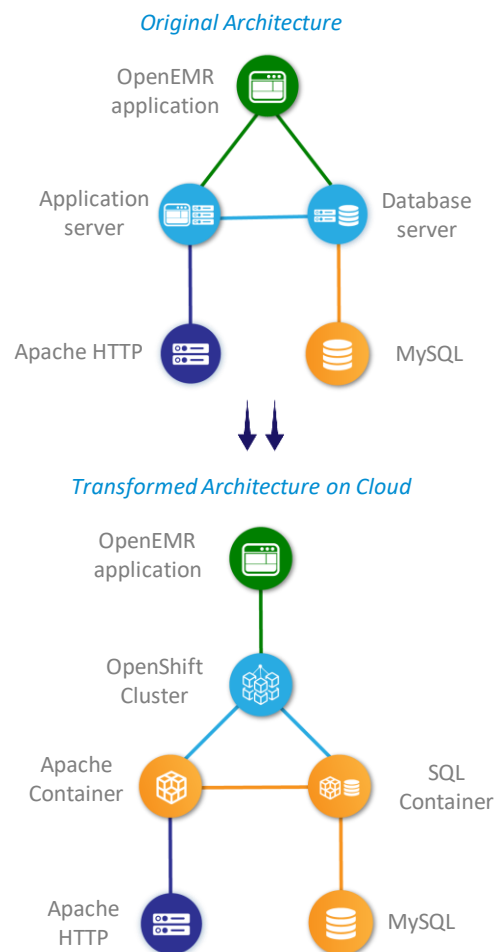
Result:

OpenEMR was analyzed by MaaS for hybrid modernization migration to Red Hat OpenShift service on IBM Cloud and suitable resources were identified. MaaS rapidly migrated the application to Red Hat OpenShift Container on IBM Cloud. This hybrid modernization of OpenEMR enabled IBM customers to access a feature-rich software solution for medical practices.