SITECORE

Docker deployment guide for Sitecore Horizon 10.1

A guide to deploying Horizon in a Docker environment.

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1. Deploy Horizon to Docker

Guide to deploying Horizon modules to a Sitecore instance on Docker.

To deploy the Horizon module to Docker on top of a Sitecore instance, you must prepare your system and build custom Content Management (CM) and MSSQL images containing Horizon integration data. When you have deployed Horizon, you must configure your SolrCloud search indexes.

1.1. Prepare for deployment

To prepare your system for the deployment:

1. On the Sitecore download page, locate and download the Container Deployment Package for Sitecore Horizon 10.1. Unzip it and locate the `compose/[windows-version]` folder, where `[windows-version]` is the Windows operating system you are deploying to. It can be *2004*, *2009*, or *ltsc2019*. Copy this folder to your local Docker *deploy* folder.

2. Download the Sitecore containers configuration for the relevant topology, for example, *sitecore-xp1*, to the *deploy* folder. Make sure that the `docker-compose.yml` file is in the *deploy* folder, for example, `deploy/docker-compose.yml`.

3. The Horizon module adds the *hrz* service to the platform. You must configure TLS/HTTPS certificates for this service. For information on how to do this, see the *Configure TLS/HTTPS certificates* section of Run your first Sitecore instance for CM and ID services.

1.2. Build custom images

To build custom CM and MSSQL images:

1. On your Docker installation, create an empty *build* folder.

2. In the *build* folder, create a new folder and name it *cm*. In the *cm* subfolder, create a new file and name it `Dockerfile`. Copy and paste the following into the new file:

```
# escape=`
ARG BASE_IMAGE
ARG HORIZON_INTEGRATION_ASSET_IMAGE
FROM ${HORIZON_INTEGRATION_ASSET_IMAGE} as horizon_integration
FROM ${BASE_IMAGE} AS base
COPY --from=horizon_integration C:\module\cm\content C:\inetpub\wwwroot
```

3. In the *build* folder, create a new folder and name it *mssql*. In the *mssql* subfolder, create a new file, and name it `Dockerfile`. Copy and paste the following into the new file:

```
# escape=`
ARG BASE_IMAGE
```

```
ARG HORIZON_INTEGRATION_ASSET_IMAGE
FROM ${HORIZON_INTEGRATION_ASSET_IMAGE} as horizon_integration
FROM ${BASE_IMAGE} AS cm
COPY --from=horizon_integration C:\module\db C:\horizon_integration_data
RUN C:\DeployDatabases.ps1 -ResourcesDirectory C:\horizon_integration_data; `
Remove-Item -Path C:\horizon_integration_data -Recurse -Force;
```

4. In the *build* folder, create an empty file and name it `docker-compose.yml`. Copy and paste the following into the new file:

```
version: "3.7"
services:
  cm:
    image: sitecore-horizon-integration-${TOPOLOGY}-cm:${VERSION}
    build:
      context: ./cm
      args:
        BASE_IMAGE: ${CM_BASE_IMAGE}
        HORIZON_INTEGRATION_ASSET_IMAGE : ${HORIZON_INTEGRATION_ASSET_IMAGE}
  mssql:
    image: sitecore-horizon-integration-${TOPOLOGY}-mssql:${VERSION}
    build:
      context: ./mssql
      args:
        BASE_IMAGE: ${MSSQL_IMAGE}
        HORIZON_INTEGRATION_ASSET_IMAGE : ${HORIZON_INTEGRATION_ASSET_IMAGE}
```

5. In the *build* folder, create a file and name it `.env`. Populate the file with the following parameters:

Variable	Description
HORIZON_INTEGRATION_ASSET_IMAGE	The Horizon integration asset image. The name of the image is `scr.sitecore.com/sxp/modules/horizon-integration-[topology]-assets:2.26-[windows-version]`. Replace `[topology]` with the name of the Sitecore topology you are using, either *xp0*, *xp1*, or *xm1*. Replace `[windows-version]` with the version of the Windows operating system you are deploying to, either *2004*, *2009*, or *1809*. **NOTE** If you use Windows version *1809* for the Horizon asset image, you must use Windows version *ltsc2019* for the Horizon runnable image.
CM_BASE_IMAGE	Sitecore CM image for each Sitecore CMS build. You can find this value in the Sitecore platform `docker-compose.yml` and `.env` files.
TOPOLOGY	The topology you want to deploy Horizon to. It can be *xp0*, *xp1*, or *xm1*.
MSSQL_IMAGE	Sitecore MSSQL image for each Sitecore CMS build. Look for this data in the Sitecore platform `docker-compose.yml` and `.env` file

Variable	Description
VERSION	The version tag for the newly generated CM and MSSQL images patched with Horizon integration data, for example, *10.1.0*.

6. In the *build* folder, run the `docker-compose build` command. This builds CM and MSSQL images patched with Horizon files.

1.3. Run Horizon module on top of Sitecore

To run the Horizon module on top of Sitecore:

1. In the *deploy* folder, open the `.env` file. Add these variables to the file:

Variable	Description
HRZ_HOST	The host for the Horizon website, for example, `xp1hrz.localhost`. The value is the same that you set for the Traefik certificate in Step 3. You can check it in the `\deploy \traefik\config\dynamic` configuration file.
VERSION	The version tag for the CM and MSSQL patched images. It is the same value you added to the `.env` file in the *build* folder.
TOPOLOGY	Topology to deploy.

2. Save the file. In the *deploy* folder, run the following command:

```
docker-compose -f .\docker-compose.yml -f .\docker-compose.override.yml up -d
```

> **NOTE**
> If you want to enable the SXA module configuration for Horizon, add `-f .\sxa.override.yml` to the command.
>
> If you want to enable the DAM plugin configuration for Horizon, add `-f .\dam.override.yml` to the command.

1.4. Configure the SolrCloud search indexes

To configure the SolrCloud search indexes:

1. Open a browser and navigate to https://<topology>cm.localhost/sitecore, for example, https://xp1cm.localhost/sitecore.

2. Login to Sitecore with the admin user and password that you configured as a secret.

3. In the Sitecore Control Panel click **Populate Managed Schema**. In the **Schema Populate** dialog box, select all the indexes and click **Populate**.

4. In the Sitecore Control Panel, in the **Indexing** section, click **Indexing Manager**.

5. In the **Indexing Manager** dialog box, select **sitecore_horizon_index** and then click **Rebuild**.

6. When the search indexes have been rebuilt, click **Close**.