Applying Data Virtualization service patch v1.3.0.0-302

Contents

Introduction

This document describes how to install the Data Virtualization service patch `v1.3.0.0-302`.

The `v1.3.0.0-302` service patch includes fixes for the following issues:

- `#6245276`: Unable to virtualize file correctly if file path contains Japanese characters.
- Error occurs when you browse or preview a CSV file containing Japanese characters on a Linux® remote connector.
- Unable to display virtualized data from a CSV file that has name with double byte.
- Data is garbled in virtualization preview of CSV file that contains Japanese characters.
- Unable to preview virtualization of column names in CSV file that contains Japanese characters.

Optionally, this document provides instructions on how to patch down to service Version `v1.3.0.0-279`.

Applying patch for Data Virtualization

A Red Hat OpenShift project administrator can apply patches for Data Virtualization on a cluster that is connected to the internet or on an air-gapped cluster.

Before you begin

Required role: To install a patch, you must be an administrator of the project (namespace) where the software is deployed.

Ensure that the Data Virtualization service instance is running correctly:

```
oc get pods | grep dv-0
```

`dv-0` service pod must be running and with `3/3 ready` status.

Ensure that the Mac OS or Linux machine where you will run the commands meets the appropriate requirements for your environment:

Requirements for the machine	Cluster is connected to the internet	Cluster is air-gapped
Can connect to the cluster.	✓	✓
Is connected to the internet.	✓	
Has the `oc` command-line interface. You can download the appropriate client tools for your operating system from OKD. Ensure that the version is compatible with the version of Red Hat OpenShift on your cluster.	✓	✓
Has the Cloud Pak for Data command-line interface. See Obtaining the installation files. Use the same version of the command-line interface each time you run the commands.	✓	✓
Has the updated `repo.yaml` file in the same directory as the Cloud Pak for Data command-line interface. See Obtaining the installation files.	✓	
Has the `cpd-`*`Operating_System`*`-workspace` directory, which contains the required files. See Preparing for air-gapped installations.		✓

Ensure that you have the following information from your Red Hat OpenShift cluster administrator:

Required information	Description
OpenShift_URL:port	The URL and port number to use when logging in to your Red Hat OpenShift cluster. Ensure that you have the appropriate credentials to log into the cluster using `oc login`. **Value:**

Required information	Description
	Your cluster administrator should tell you whether your cluster is connected to the internet or is air-gapped.
Project	The project where the software is currently installed. **Value:**
Assembly_version	The version of the software that is currently installed. **Value:** v1.3.0.0
Registry_location	The location to store the updated images on the registry server. If you are patching the software when you are connected to the internet, ensure that you have the appropriate credentials to *push* images to the registry server. **Value:** **Guidance for Red Hat OpenShift registry users:** • This is the external route to the location in the registry. The default external route is: `docker-registry-default.9.87.654.321.nip.io/project` Where `default.9.87.654.321.nip.io` is your public IP address. • When you specify a value for the *Registry_location* variable, ensure that you include the *project* name.
Registry_from_cluster	The location from which pods on the cluster can *pull* images. **Value:** **Guidance for Red Hat OpenShift registry users:** • This is the internal name of the registry service. The default service name is: `docker-registry.default.svc:5000/project` • When you specify a value for the *Registry_from_cluster* variable, ensure that you include the *project* name.

Important: Some patches have prerequisite patches because they have dependencies on another service or on a set of shared, common services. If the patch details list one or more prerequisite patches, you must install the prerequisite patches before you install the service patch. You can run the following command to determine whether any of the prerequisite patches are already installed on the cluster:

```
oc describe cpdinstall cr-cpdinstall | grep "Patch Name:" | sort | uniq | cut -d: -f2
```

If the prerequisite patch is already installed, it is listed in the output of the preceding command.

About this task

To apply service patches for Data Virtualization Version 1.3.0.0 in Cloud Pak for Data Version 2.5, you must use the air-gapped mode, regardless of whether your cluster can connect to the internet.

Procedure

To apply a Data Virtualization patch:

1. Run the appropriate command for **cpd patch** your environment.

   Tip: For a list of all available options, enter the command: `./cpd-*Operating_System* --help`.

2. On a machine that can connect to the internet, change to the directory where you extracted the Cloud Pak for Data installation command-line interface.
3. If you have an existing `/cpd-*Operating_System*-workspace` directory, for example, `cpd-linux-workspace` directory, rename this directory.

   The service patch must create a new `/cpd-*Operating_System*-workspace` directory to store the required files.
4. Run the following command to download the patch to your local machine:

   ```
   ./cpd-Operating_System patch --repo ./repo.yaml \
   --assembly dv \
   --version Assembly_version \
   --patch-name Patch_name \
   --action download
   ```

   Replace the following values:

Variable	Replace with
Operating_System	For Linux, specify `linux`. For Mac OS, specify `darwin`.
Assembly_version	The version of the software that is currently installed. **Value:** v1.3.0.0
Patch_name	Specify the name of the patch that you want to install. This information is included in the patch description. • To apply the new Data Virtualization service patch, specify the following patch name: `v1.3.0.0-302` • To roll back to a previous service patch, specify the following patch name: `v1.3.0.0-279`

5. Transfer the following items to a machine that can connect to the cluster and to the registry server:
   a) The `cpd-*Operating_System*-workspace` directory. Ensure that the directory structure remains unchanged.
   b) A copy of the Cloud Pak for Data installation command-line interface. Ensure that the command-line interface is compatible with the machine that you are transferring the files to. Additionally, the command-line interface must be the same version as the command-line interface that you ran in the preceding steps.
6. Locate the file `cpd-*Operating_System*-workspace/modules/dv/x86_64/v1.3.0.0/patch/*Patch_name*/patchCommands.txt`.

   Replace *Patch_name* with the name of the patch that you want to install.

   • To apply the new Data Virtualization service patch, specify the following patch name: `v1.3.0.0-302`

- To roll back to a previous service patch, specify the following patch name: `v1.3.0.0-279`

Edit the `patchCommands.txt` as follows:

a) Get the deployment name of `dv-api` service pod:

```
oc get deployments | grep -i dv-api
```

b) Replace the value of **dv-api** parameter with the name of the `dv-api` deployment. For example: `dv-3-1572975697166-ibm-dv-api`

c) Get the deployment name of the Data Virtualization unified console:

```
oc get deployments | grep -i dv | grep -i console
```

d) Replace the value of **dv-uc** parameter with the name of the unified console deployment. For example: `dv-1-1572975697166-ibm-unified-console`

7. From the machine that can connect to the cluster, run the following command to push the images to the registry server:

```
./cpd-Operating_System patch \
--namespace Project \
--load-from Image_directory_location
--assembly dv \
--patch-name Patch_name \
--transfer-image-to Registry_location \
--ask-push-registry-credentials \
--action push
```

Replace the following values:

Variable	Replace with
Operating_System	For Linux, specify `linux`. For Mac OS, specify `darwin`.
Project	Specify the project (namespace) where the software that you want to patch is deployed.
Image_directory_location	The location of the `cpd-Operating_System-workspace` directory.
Patch_name	Specify the name of the patch that you want to install. This information is included in the patch description. • To apply the new Data Virtualization service patch, specify the following patch name: `v1.3.0.0-302` • To roll back to a previous service patch, specify the following patch name: `v1.3.0.0-279`
Registry_location	Use the value specified by your cluster administrator or the value that you used when you installed the software.

What to do next

After you patch the service, you must update JAR files and remote connectors. To do so, select one of the following methods:

Option 1: Create and run the `post-patching-jars-update.sh` script

1. Log in to the `dv-server` service pod:

```
oc exec -it -n Project dv-0 -c dv-server -- bash
```

Replace *Project* with the project (namespace) where you applied the service patch.

2. Create a script file named `post-patching-jars-update.sh` by using content in post-patching-jars-update.sh script file.

3. Run the following commands to execute the `post-patching-jars-update.sh` script:

```
sed -i "s/+x\ \/mnt\/PV\/versioned\/backup/777\ \/mnt\/PV\/versioned\/backup/g" /opt/dv/
current/post-patching-jars-update.sh
sh /opt/dv/current/post-patching-jars-update.sh
```

4. To patch remote connectors:

   a. Locate script to patch remote connectors:

      - In Linux and Mac, find the **dv_remoteupgrade_linux.sh** in the `/opt/ibm/qpserver/install/DATAVIRTUALIZATION_INSTALL` directory of the `dv-0` service pod.
      - In Microsoft Windows, find the `dv_remoteupgrade_windows.bat` batch file in the `/opt/ibm/qpserver/install/DATAVIRTUALIZATION_INSTALL` directory of the `dv-0` service pod.

   b. Copy the corresponding script to the `dvendpoint` directory on the remote connector. Ensure that the `datavirtualization.env` file is located in that directory.

   c. Specify the value of the *_ADMIN_PORT* variable. The value of the *_ADMIN_PORT* variable is displayed in the script you generated to install the remote connectors. For more information, see Installing remote connectors.

   d. In Windows, close the command prompt of the remote connector that you want to patch.

   e. Execute and run the script:

      - In Linux and Mac, run the following command:

        ```
        chmod +x dv_remoteupgrade_linux.sh
        ```

      - In Windows, ensure you have permission to run batch file. Close the command prompt on which remote connector is running.

      Note: In Linux or Mac operating systems, if you have more than one remote connector endpoints on the same machine, the patching script stops the other endpoints. Once the patching is complete, you must start these endpoints manually:

      ```
      sh DVENDPOINT_DIRECTORY/sysroot/launchGaianServer.sh
      ```

Option 2: Perform manual update of JAR files

- **If you applied service patch `v1.3.0.0-302`:**

  1. Log in to the `dv-server` service pod:

     ```
     oc exec -it -n Project dv-0 -c dv-server -- bash
     ```

     Replace *Project* with the project (namespace) where you applied the service patch.

  2. Verify that the file `/opt/ibm/qpserver/sysroot/lib/DATAVIRTUALIZATION.jar` has timestamp `July 2020` and:

     a. Move the `/mnt/PV/versioned/ibm/home-bigsql/datavirtualization/DATAVIRTUALIZATION.jar` file to a different folder in the `/mnt/PV/versioned` directory.

     b. Replace the file `/mnt/PV/versioned/ibm/home-bigsql/datavirtualization/DATAVIRTUALIZATION.jar` with the file `/opt/ibm/qpserver/sysroot/lib/DATAVIRTUALIZATION.jar`

     c. Ensure that the ownership and permissions in file `/opt/ibm/qpserver/sysroot/lib/DATAVIRTUALIZATION.jar` are the same as in the file you replaced.

  3. Verify that the file `/opt/ibm/qpserver/sysroot/lib/GAIANDB.jar` has timestamp `July 2020` and:

a. Replace the following files with file /opt/ibm/qpserver/sysroot/lib/GAIANDB.jar:
   - /mnt/PV/versioned/uc_dsserver_shared/config/lib/GAIANDB.jar
   - /mnt/PV/versioned/ibm/home-bigsql/datavirtualization/GAIANDB.jar
   - /mnt/PV/versioned/opt/ibm/qpendpoint/sysroot/lib/GAIANDB.jar

b. Ensure that the ownership and permissions in file /opt/ibm/qpserver/sysroot/lib/DATAVIRTUALIZATION.jar are the same as the files you replaced.

c. Run the following Db2® commands to update files GAIANDB.jar and QP_ADMIN.jar:

```
db2 connect to bigsql
db2 "CALL sqlj.replace_jar(\"file:/opt/ibm/qpserver/install/DATAVIRTUALIZATION_INSTALL/
GAIANDB.jar\", \"QPLEXSYS.GAIANDB\")" 2>&1
db2 "CALL sqlj.replace_jar(\"file:/opt/ibm/qpserver/install/DATAVIRTUALIZATION_INSTALL/
DATAVIRTUALIZATION_dashproc.jar\", \"QPLEXSYS.QUERYPLEX_ADMIN\")" 2>&1
db2 connect reset
```

4. Verify that the file /opt/ibm/qpendpoint/sysroot/jars/DATAVIRTUALIZATION_config.jar has timestamp July 2020 and use this file to replace /mnt/uc_dsserver_shared/config/jars/DATAVIRTUALIZATION_config.jar

5. Verify that file /opt/ibm/qp_artifacts/archives/DATAVIRTUALIZATION_ENDPOINT_V1.3.0.0_202007*.tar.gz exists by running the following command:

```
sudo ls -l /opt/ibm/qp_artifacts/archives/
DATAVIRTUALIZATION_ENDPOINT_V1.3.0.0_202007*.tar.gz
```

   a. Extract file /opt/ibm/qp_artifacts/archives/DATAVIRTUALIZATION_ENDPOINT_V1.3.0.0_202007*.tar.gz to a temporary folder. For example:

```
mkdir /tmp/dv_qp_tmp; sudo tar -zxf /opt/ibm/qp_artifacts/archives/
DATAVIRTUALIZATION_ENDPOINT_V1.3.0.0_202007*.tar.gz -C /tmp/dv_qp_tmp
```

   b. Copy /tmp/dv_qp_tmp/icu4j-66_1.jar to directories /mnt/PV/versioned/ibm/home-bigsql/datavirtualization and /mnt/PV/versioned/opt/ibm/qpendpoint/sysroot/lib

   c. Ensure that permissions and ownership for file icu4j-66_1.jar are:

```
-rw-r--r-- bigsql hadoop
```

   d. Back up the following files by moving them to a different folder under the /mnt/PV/versioned directory:
      - /mnt/PV/versioned/uc_dsserver_shared/config/DATAVIRTUALIZATION_ENDPOINT_V1.3.0.0_201911*.tar.gz
      - /mnt/PV/versioned/uc_dsserver_shared/config/DATAVIRTUALIZATION_ENDPOINT_V1.3.0.0_201911*.zip
      - /mnt/PV/versioned/dv_data/DATAVIRTUALIZATION_ENDPOINT_V1.3.0.0_201911*.zip
      - /mnt/PV/versioned/dv_data/DATAVIRTUALIZATION_ENDPOINT_V1.3.0.0_201911*.tar.gz
      - /mnt/PV/versioned/QUERYPLEX_INSTALL/DATAVIRTUALIZATION_ENDPOINT_V1.3.0.0_201911*.zip
      - /mnt/PV/versioned/QUERYPLEX_INSTALL/DATAVIRTUALIZATION_ENDPOINT_V1.3.0.0_201911*.tar.gz

   e. Replace files that you moved in the previous steps with the following files:
      - opt/ibm/qp_artifacts/archives/DATAVIRTUALIZATION_ENDPOINT_V1.3.0.0_202007*.tar.gz

- opt/ibm/qp_artifacts/archives/
  DATAVIRTUALIZATION_ENDPOINT_V1.3.0.0_202007*.zip

  Ensure that permissions and ownership for these files are:

  ```
  -rw-r--r-- bigsql hadoop
  ```

6. Restart dv-0 service pod:

   ```
   oc delete pod dv-0
   ```

7. To patch remote connectors:

   a. Locate script to patch remote connectors:

   - In Linux and Mac, find the **dv_remoteupgrade_linux.sh** in the /opt/ibm/qpserver/install/DATAVIRTUALIZATION_INSTALL directory of the dv-0 service pod.
   - In Microsoft Windows, find the dv_remoteupgrade_windows.bat batch file in the /opt/ibm/qpserver/install/DATAVIRTUALIZATION_INSTALL directory of the dv-0 service pod.

   b. Copy the corresponding script to the dvendpoint directory on the remote connector. Ensure that the datavirtualization.env file is located in that directory.

   c. Specify the value of the *_ADMIN_PORT* variable. The value of the *_ADMIN_PORT* variable is displayed in the script you generated to install the remote connectors. For more information, see Installing remote connectors.

   d. In Windows, close the command prompt of the remote connector that you want to patch.

   e. Execute and run the script:

   - In Linux and Mac, run the following command:

     ```
     chmod +x dv_remoteupgrade_linux.sh
     ```

   - In Windows, ensure you have permission to run batch file. Close the command prompt on which remote connector is running.

   Note: In Linux or Mac operating systems, if you have more than one remote connector endpoints on the same machine, the patching script stops the other endpoints. Once the patching is complete, you must start these endpoints manually:

   ```
   sh DVENDPOINT_DIRECTORY/sysroot/launchGaianServer.sh
   ```

- **If you applied service patch v1.3.0.0-279:**

1. Log in to the dv-server service pod:

   ```
   oc exec -it -n Project dv-0 -c dv-server -- bash
   ```

   Replace *Project* with the project (namespace) where you applied the service patch.

2. Verify that the file /opt/ibm/qpserver/sysroot/lib/DATAVIRTUALIZATION.jar has timestamp November 2019 and:

   a. Move the /mnt/PV/versioned/ibm/home-bigsql/datavirtualization/DATAVIRTUALIZATION.jar file to a different folder in the /mnt/PV/versioned directory.

   b. Replace the file /mnt/PV/versioned/ibm/home-bigsql/datavirtualization/DATAVIRTUALIZATION.jar with the file /opt/ibm/qpserver/sysroot/lib/DATAVIRTUALIZATION.jar

   c. Ensure that the ownership and permissions in file /opt/ibm/qpserver/sysroot/lib/DATAVIRTUALIZATION.jar are the same as in the file you replaced.

3. Verify that the file /opt/ibm/qpserver/sysroot/lib/GAIANDB.jar has timestamp November 2019 and:
   a. Replace the following files with file /opt/ibm/qpserver/sysroot/lib/GAIANDB.jar:
      – /mnt/PV/versioned/uc_dsserver_shared/config/lib/GAIANDB.jar
      – /mnt/PV/versioned/ibm/home-bigsql/datavirtualization/GAIANDB.jar
      – /mnt/PV/versioned/opt/ibm/qpendpoint/sysroot/lib/GAIANDB.jar
   b. Ensure that the ownership and permissions in file /opt/ibm/qpserver/sysroot/lib/DATAVIRTUALIZATION.jar are the same as the files you replaced.
   c. Run the following Db2 commands to update files GAIANDB.jar and QP_ADMIN.jar:

```
db2 connect to bigsql
db2 "CALL sqlj.replace_jar(\"file:/opt/ibm/qpserver/install/DATAVIRTUALIZATION_INSTALL/
GAIANDB.jar\", \"QPLEXSYS.GAIANDB\")" 2>&1
db2 "CALL sqlj.replace_jar(\"file:/opt/ibm/qpserver/install/DATAVIRTUALIZATION_INSTALL/
DATAVIRTUALIZATION_dashproc.jar\", \"QPLEXSYS.QUERYPLEX_ADMIN\")" 2>&1
db2 connect reset
```

4. Verify that the file /opt/ibm/qpendpoint/sysroot/jars/DATAVIRTUALIZATION_config.jar has timestamp November 2019 and use this file to replace /mnt/uc_dsserver_shared/config/jars/DATAVIRTUALIZATION_config.jar
5. Verify that file /opt/ibm/qp_artifacts/archives/DATAVIRTUALIZATION_ENDPOINT_V1.3.0.0_201911*.tar.gz exists by running the following command:

```
sudo ls -l /opt/ibm/qp_artifacts/archives/
DATAVIRTUALIZATION_ENDPOINT_V1.3.0.0_201911*.tar.gz
```

   a. Remove /mnt/PV/versioned/ibm/home-bigsql/datavirtualization/icu4j-66_1.jar and /mnt/PV/versioned/opt/ibm/qpendpoint/sysroot/lib/icu4j-66_1.jar
   b. Use files opt/ibm/qp_artifacts/archives/DATAVIRTUALIZATION_ENDPOINT_V1.3.0.0_201911*.tar.gz and opt/ibm/qp_artifacts/archives/DATAVIRTUALIZATION_ENDPOINT_V1.3.0.0_201911*.zip to replace the following files:
      – /mnt/PV/versioned/uc_dsserver_shared/config/DATAVIRTUALIZATION_ENDPOINT_V1.3.0.0_202007*.tar.gz
      – /mnt/PV/versioned/uc_dsserver_shared/config/DATAVIRTUALIZATION_ENDPOINT_V1.3.0.0_202007*.zip
      – /mnt/PV/versioned/dv_data/DATAVIRTUALIZATION_ENDPOINT_V1.3.0.0_202007*.zip
      – /mnt/PV/versioned/dv_data/DATAVIRTUALIZATION_ENDPOINT_V1.3.0.0_202007*.tar.gz
      – /mnt/PV/versioned/QUERYPLEX_INSTALL/DATAVIRTUALIZATION_ENDPOINT_V1.3.0.0_202007*.zip
      – /mnt/PV/versioned/QUERYPLEX_INSTALL/DATAVIRTUALIZATION_ENDPOINT_V1.3.0.0_202007*.tar.gz
   c. Ensure that permissions and ownership for these files are:

```
-rw-r--r-- bigsql hadoop
```

6. Restart dv-0 service pod:

```
oc delete pod dv-0
```

7. To patch remote connectors:
   a. Locate script to patch remote connectors:
      – In Linux and Mac, find the **dv_remoteupgrade_linux.sh** in the `/opt/ibm/qpserver/install/DATAVIRTUALIZATION_INSTALL` directory of the `dv-0` service pod.
      – In Microsoft Windows, find the `dv_remoteupgrade_windows.bat` batch file in the `/opt/ibm/qpserver/install/DATAVIRTUALIZATION_INSTALL` directory of the `dv-0` service pod.
   b. Copy the corresponding script to the `dvendpoint` directory on the remote connector. Ensure that the `datavirtualization.env` file is located in that directory.
   c. If you have an `upgrade` directory under the `dvendpoint` directory, rename it to `upgrade_old`.
   d. Specify the value of the *_ADMIN_PORT* variable. The value of the *_ADMIN_PORT* variable is displayed in the script you generated to install the remote connectors. For more information, see Installing remote connectors.
   e. In Windows, close the command prompt of the remote connector that you want to patch.
   f. Execute and run the script:
      – In Linux and Mac, run the following command:

        ```
        chmod +x dv_remoteupgrade_linux.sh
        ```

      – In Windows, ensure you have permission to run batch file. Close the command prompt on which remote connector is running.

      Note: In Linux or Mac operating systems, if you have more than one remote connector endpoints on the same machine, the patching script stops the other endpoints. Once the patching is complete, you must start these endpoints manually:

      ```
      sh DVENDPOINT_DIRECTORY/sysroot/launchGaianServer.sh
      ```

post-patching-jars-update.sh script file

Use the following content to create the post-patching-jars-update.sh script file. You can use this script to update Data Virtualization JAR files after you patch the service.

```
#!/bin/bash
################################################################################################
#
# Licensed Materials - Property of IBM
#
# "Restricted Materials of IBM"
#
# (C) COPYRIGHT IBM Corp. 2020 All Rights Reserved.
#
# US Government Users Restricted Rights - Use, duplication or
# disclosure restricted by GSA ADP Schedule Contract with IBM Corp.
#
################################################################################################
#  This script is used to update QP binaries post patching
################################################################################################

DV_VERSION="V1.3.0.0"
ORIGINAL_BUILD="*"

# pre check
sudo ls -al /opt/ibm/qp_artifacts/archives/DATAVIRTUALIZATION_ENDPOINT_${DV_VERSION}_*_*.tar.gz
> /dev/null
if [ $? -ne 0 ]; then
  echo "Patching failed, DATAVIRTUALIZATION_ENDPOINT_${DV_VERSION}_*_* tar.gz file not exist"
  exit 1
fi

update_jars_if_exist() {
  while true
  do
    test -z "${1}" && break
    file_dir="${1}"; shift
    base=$(basename ${file_dir})
    sudo find /mnt/PV/versioned|grep -i "${base}" | while read target_dir; do
      cp -f ${target_dir} /mnt/PV/versioned/backup
      cp -f ${file_dir} ${target_dir}
    done
  done
}

save_and_delete_jars() {
  while true
  do
    test -z "${1}" && break
    file_dir="${1}"; shift
    cp -f ${file_dir} /mnt/PV/versioned/backup
    rm -f ${file_dir}
  done
}

# patching starts here
# create backup dir
sudo mkdir -p /mnt/PV/versioned/backup
sudo chmod 777 /mnt/PV/versioned/backup
update_jars_if_exist "/opt/ibm/qpserver/sysroot/lib/DATAVIRTUALIZATION.jar" \
  "/opt/ibm/qpserver/sysroot/lib/GAIANDB.jar" \
  "/opt/ibm/qpendpoint/sysroot/jars/DATAVIRTUALIZATION_config.jar"

db2 connect to bigsql
db2 "CALL sqlj.replace_jar(\"file:/opt/ibm/qpserver/install/DATAVIRTUALIZATION_INSTALL/
GAIANDB.jar\", \"QPLEXSYS.GAIANDB\")" 2>&1
db2 "CALL sqlj.replace_jar(\"file:/opt/ibm/qpserver/install/DATAVIRTUALIZATION_INSTALL/
DATAVIRTUALIZATION_dashproc.jar\", \"QPLEXSYS.QUERYPLEX_ADMIN\")" 2>&1
db2 connect reset

mkdir /tmp/dv_qp_tmp
sudo tar -zxf /opt/ibm/qp_artifacts/archives/DATAVIRTUALIZATION_ENDPOINT_$
{DV_VERSION}_*_*.tar.gz -C /tmp/dv_qp_tmp
update_jars_if_exist "/tmp/dv_qp_tmp/sysroot/lib/icu4j-66_1.jar"
cp -f /tmp/dv_qp_tmp/sysroot/lib/icu4j-66_1.jar /mnt/PV/versioned/ibm/home-bigsql/
datavirtualization/
```

```
cp -f /tmp/dv_qp_tmp/sysroot/lib/icu4j-66_1.jar /mnt/PV/versioned/opt/ibm/qpendpoint/
sysroot/lib/

chmod +x /opt/ibm/qp_artifacts/archives
save_and_delete_jars "/mnt/PV/versioned/uc_dsserver_shared/config/DATAVIRTUALIZATION_ENDPOINT_$
{DV_VERSION}_${ORIGINAL_BUILD}.tar.gz" \
  "/mnt/PV/versioned/dv_data/DATAVIRTUALIZATION_ENDPOINT_${DV_VERSION}_$
{ORIGINAL_BUILD}.tar.gz" \
  "/mnt/PV/versioned/QUERYPLEX_INSTALL/DATAVIRTUALIZATION_ENDPOINT_${DV_VERSION}_$
{ORIGINAL_BUILD}.tar.gz"
cp -f /opt/ibm/qp_artifacts/archives/DATAVIRTUALIZATION_ENDPOINT_$
{DV_VERSION}_*_*.tar.gz /mnt/PV/versioned/uc_dsserver_shared/config/
cp -f /opt/ibm/qp_artifacts/archives/DATAVIRTUALIZATION_ENDPOINT_$
{DV_VERSION}_*_*.tar.gz /mnt/PV/versioned/dv_data/
cp -f /opt/ibm/qp_artifacts/archives/DATAVIRTUALIZATION_ENDPOINT_$
{DV_VERSION}_*_*.tar.gz /mnt/PV/versioned/QUERYPLEX_INSTALL/

save_and_delete_jars "/mnt/PV/versioned/uc_dsserver_shared/config/DATAVIRTUALIZATION_ENDPOINT_$
{DV_VERSION}_${ORIGINAL_BUILD}.zip" \
  "/mnt/PV/versioned/dv_data/DATAVIRTUALIZATION_ENDPOINT_${DV_VERSION}_${ORIGINAL_BUILD}.zip" \
  "/mnt/PV/versioned/QUERYPLEX_INSTALL/DATAVIRTUALIZATION_ENDPOINT_${DV_VERSION}_$
{ORIGINAL_BUILD}.zip"
cp -f /opt/ibm/qp_artifacts/archives/DATAVIRTUALIZATION_ENDPOINT_${DV_VERSION}_*_*.zip /mnt/PV/
versioned/uc_dsserver_shared/config/
cp -f /opt/ibm/qp_artifacts/archives/DATAVIRTUALIZATION_ENDPOINT_${DV_VERSION}_*_*.zip /mnt/PV/
versioned/dv_data/
cp -f /opt/ibm/qp_artifacts/archives/DATAVIRTUALIZATION_ENDPOINT_${DV_VERSION}_*_*.zip /mnt/PV/
versioned/QUERYPLEX_INSTALL/
chmod -x /opt/ibm/qp_artifacts/archives
```

Related information

Virtualizing data

Installing remote connectors

Troubleshooting Data Virtualization