# CPO Containerization

1. Expand the “po35.zip” to create the docker image build directory (c:\build\po35)
2. Create a database instance
   1. This can be done by installing CPO on a VM and pointing it to an external SQL Server. This SQL Server can also be running in a container, but there is no reason to do this at this time.
   2. Use SQL Server authentication (not Windows authentication). Windows auth can be made to work using a gMSA, but I have not taken the time to do so yet.
   3. <https://hub.docker.com/r/microsoft/mssql-server-windows/>
   4. <https://hub.docker.com/r/microsoft/mssql-server-linux/>
3. Export the CPO keys from the host the DB was created from (VM):
   1. cd C:\Windows\Microsoft.NET\Framework64\v4.0.30319
   2. aspnet\_regiis.exe -px "Tidal Intelligent Automation Server" keys.xml –pri
   3. Copy “keys.xml” into the Docker image build directory c:\build\po35
4. Modify c:\build\po35\Silent.rsp to point to the DB created in step 2.
5. Build the container image from build directory (c:\build\po35 <- directory zipped in box folder)
   1. cd c:\build\po35
   2. docker build -t po35 . --no-cache
6. Follow steps to create a group managed service account (gMSA) – see link saved in box folder and save as ‘containercred.json’. This allows the container to interact with the domain. This can be confirmed from within running container by executing “nltest.exe /parentdomain” which should return the domain name. If it returns an error, the gMSA is not setup correctly.
   1. <https://github.com/Microsoft/Virtualization-Documentation/tree/live/windows-server-container-tools/ServiceAccounts>
7. Launch container from c:\build\po35 (zip file in box folder) using gMSA credential file
   1. docker run -it --security-opt "credentialspec=file://containercred.json" po35 cmd
8. From within container (since launched interactively with ‘-i'), complete the installation of CPO via silent installer. (I tried having installer run as part of container build, but silent installer complains about ‘does not support output redirect’ and fails).
   1. cd c:\CPO3.5.0.104\Setup
   2. SilentInstall\_Server.bat
9. This should complete installation, however, it is impossible to connect to the container with the console client (times out).