QA Ind Replica Configuration

Schindler CRD Applications

Exported on 2025-08-19 06:15:50

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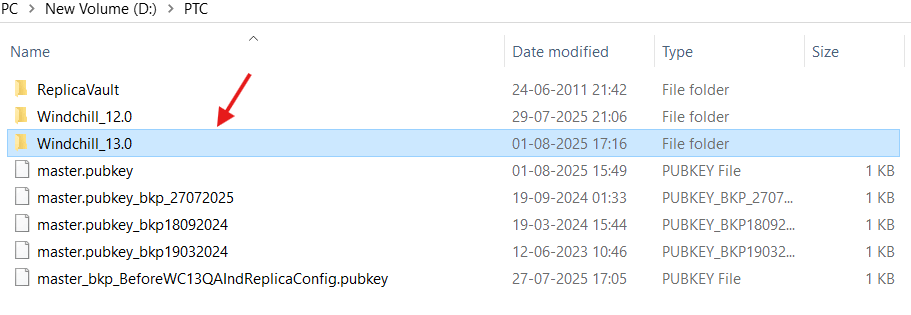
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# Prerequisite

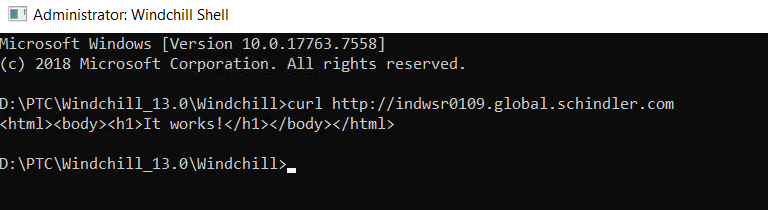
1. Remote File Server should be installed on the respective server.
2. Need admin access on the replica server.

# Procedure:

1. Take backup of the below folder.

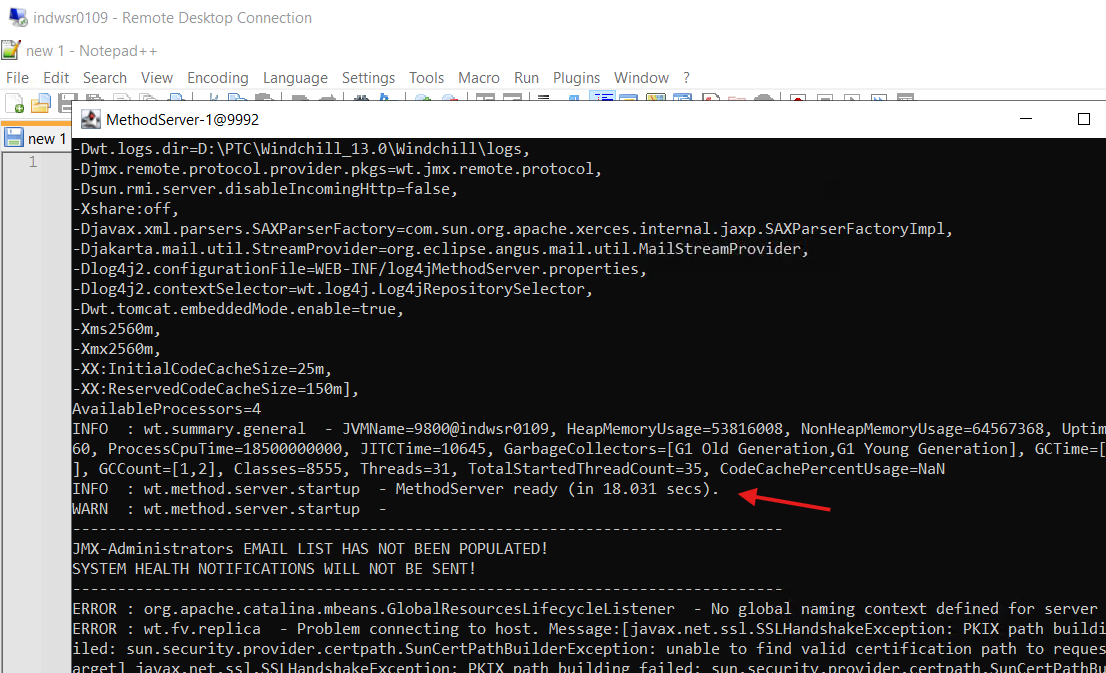


2. Launch Windchill Shell as an admin and execute curl command to make sure Apache installed successfully.



3. Start Apache and Windchill on Replica.

4. MS started successfully without any issues.

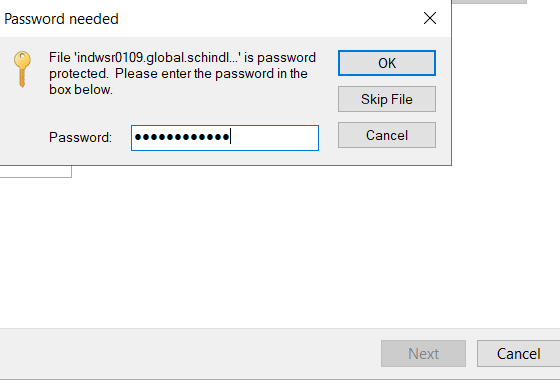


5. Stop Windchill and Apache.

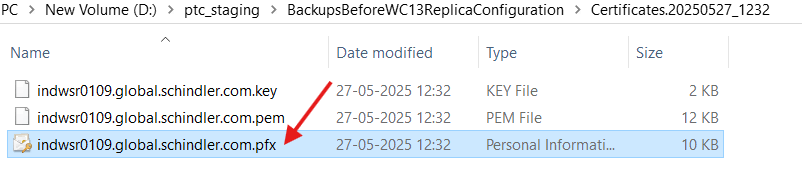
## SSL Configuration

### Generating Mydomain.txt file:

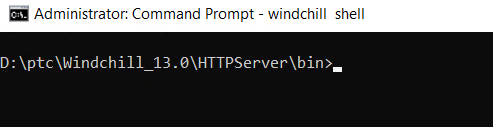
1. Stop Windchill & Apache.
2. Copy the Zip file provided by Schindler team to replica machine.
3. Extract the zip file using the password provided by Schindler team.



4. Put the .pfx file in target server at any directory.



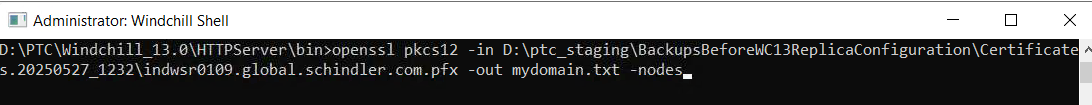
5. Open Windchill Shell in admin mode and navigate to D:\ptc\Windchill13.0\HTTPServer\bin as shown below.



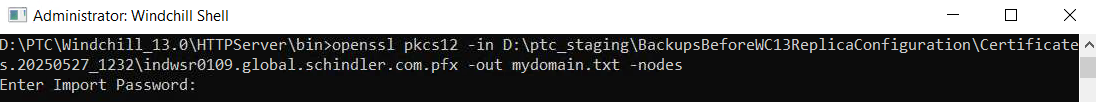
6. Execute the below command and enter the path of the pfx file in place of <>:

**Syntax: openssl pkcs12 -in <> -out mydomain.txt -nodes**

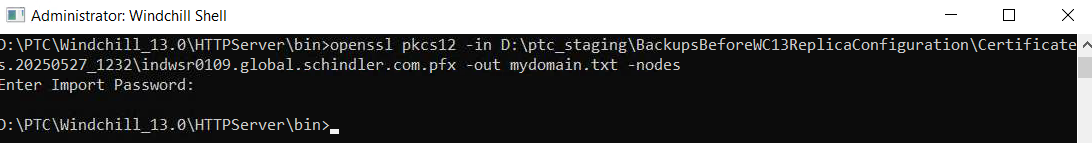
**Command: openssl pkcs12 -in D:\ptc\_staging\BackupsBeforeWC13ReplicaConfiguration\Certificates.20250527\_1232\**[**indwsr0109.global.schindler.com**](http://indwsr0109.global.schindler.com)**.pfx -out mydomain.txt -nodes**

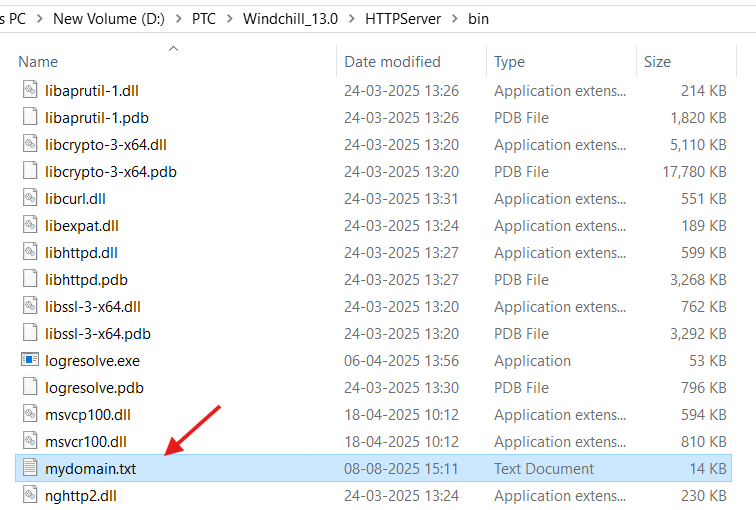


7. Enter the password provided by Schindler team and hit Enter.



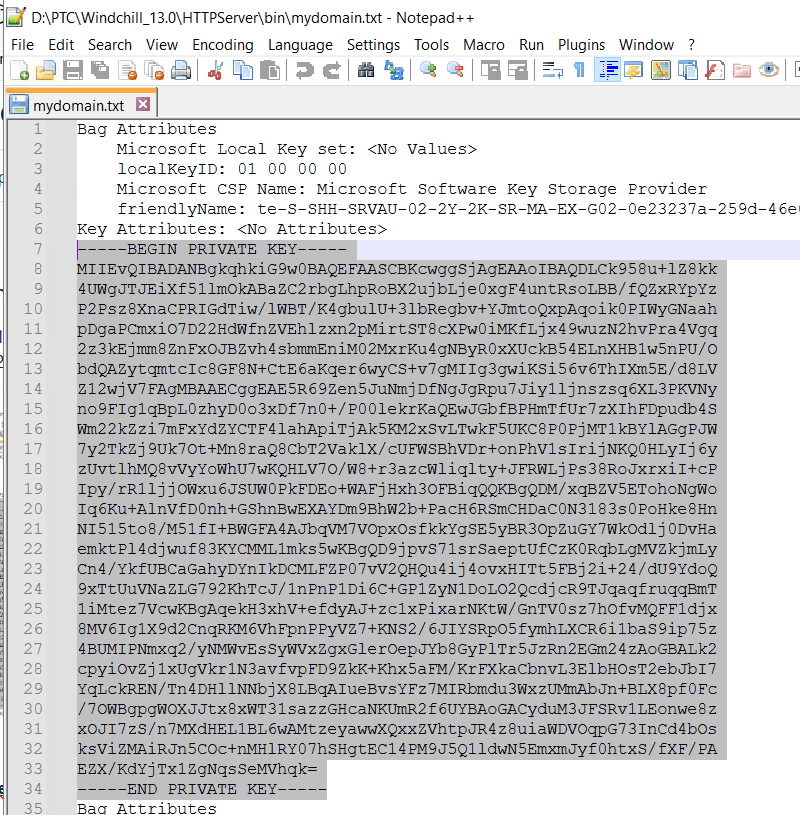
8. After successful execution of the command, it will generate the mydomain.txt file at location D:\ptc\Windchill13.0\HTTPServer\bin.



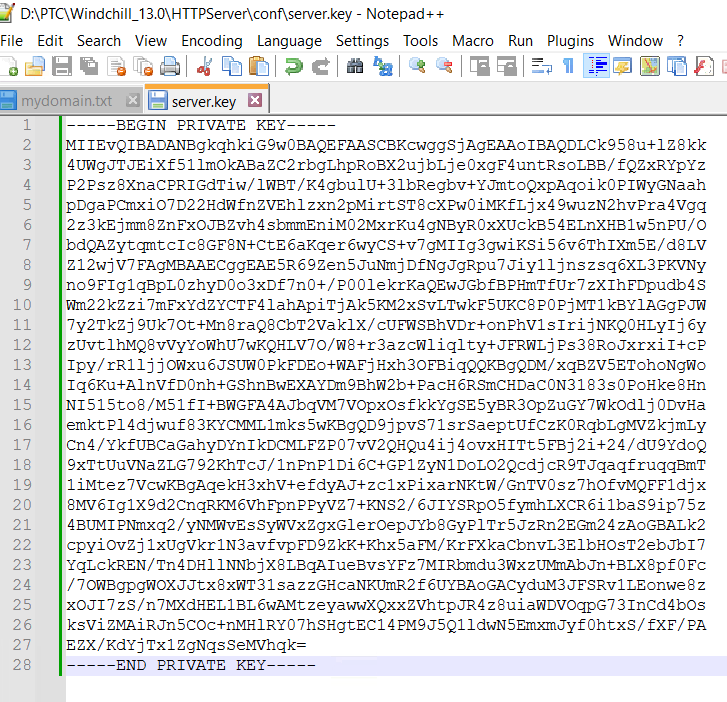


### Generating the server.key file

1. Open mydomain.txt file.
2. Copy the text from -----BEGIN PRIVATE KEY----- to -----END PRIVATE KEY----- from mydomain.txt file and paste it in another file and save it as server.key in D:\ptc\Windchill13.0\HTTPServer\conf folder. (Select file type as All while saving the file).



**server.key file:**

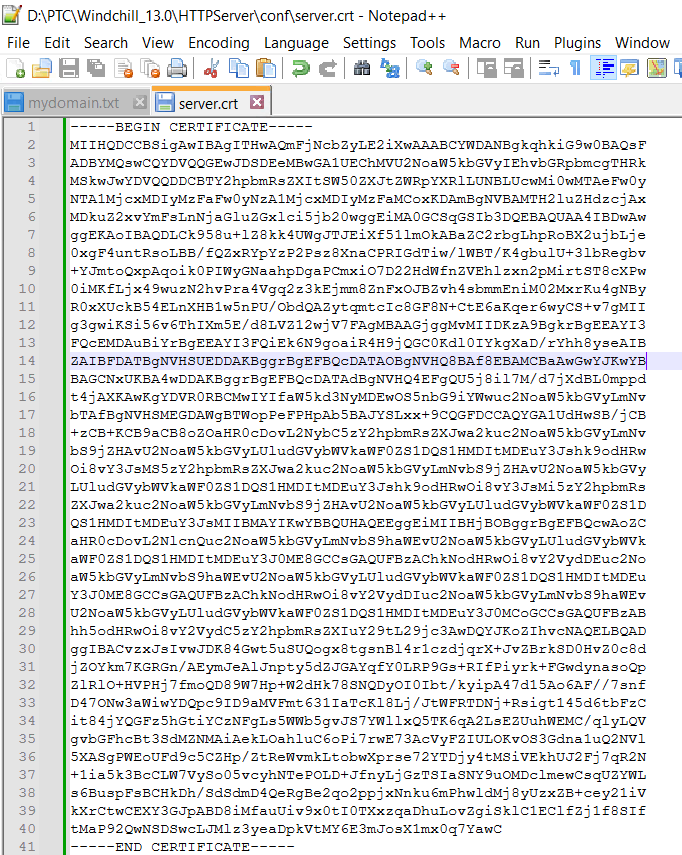


### Generating server.crt file

1. Open mydomain.txt file.
2. Copy the 1st certificate key from -----BEGIN CERTIFICATE----- to -----END CERTIFICATE----- from the mydomain file and paste it in new file and save it as server.crt in D:\ptc\Windchill13.0\HTTPServer\conf folder. (Select file type as All while saving the file).

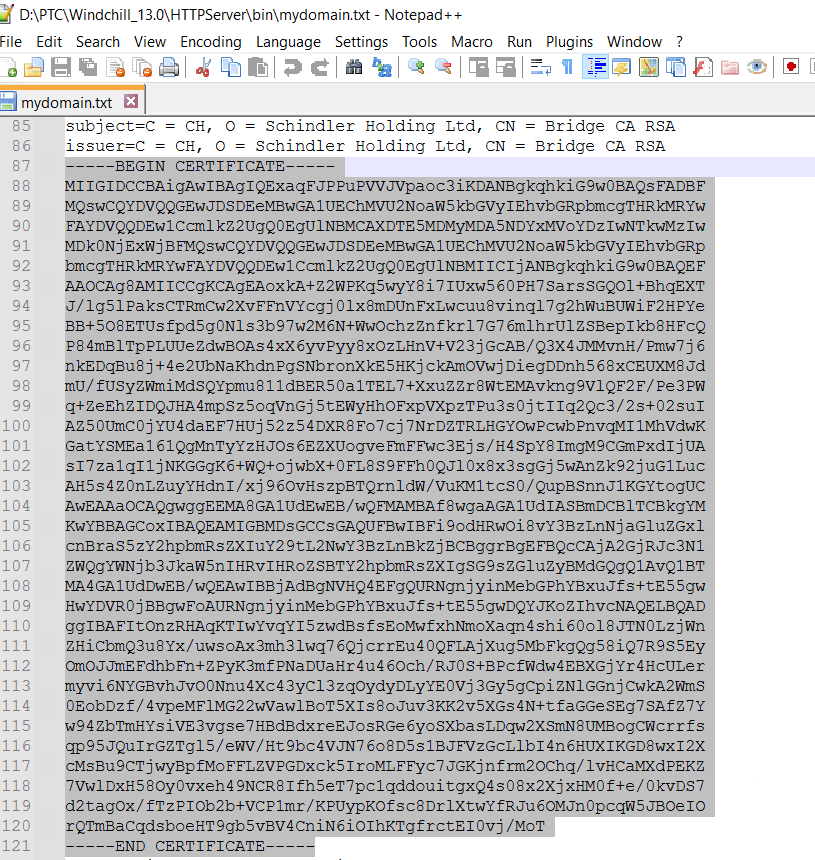


**server.crt file:**

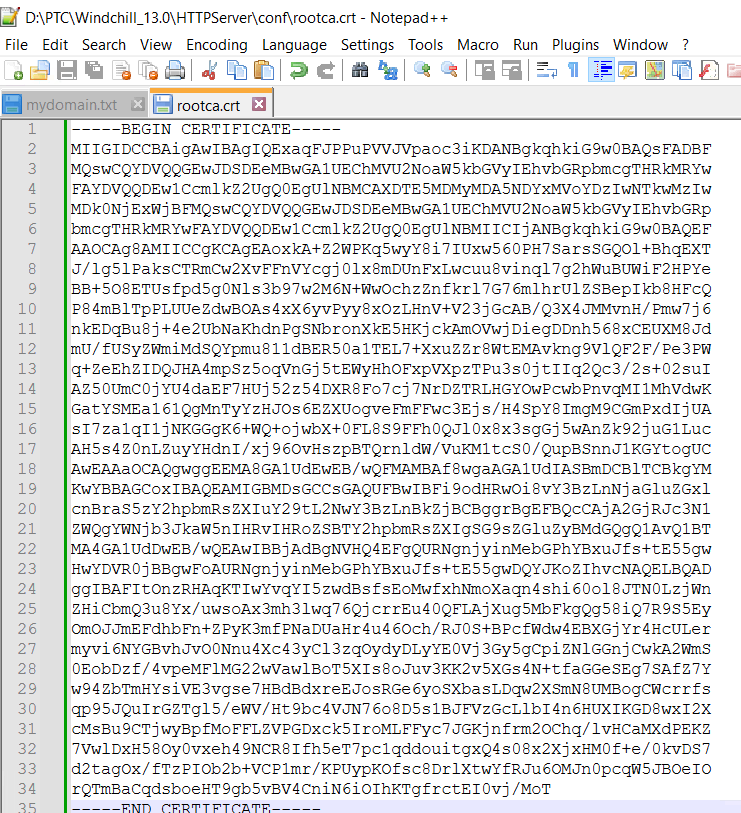


### Generating rootca.crt file

1. Open mydomain.txt file.
2. Copy the 2nd certificate key from line -----BEGIN CERTIFICATE----- to -----END CERTIFICATE----- from the mydomain file and paste it in new file and save it as rootca.crt in D:\ptc\Windchill13.0\HTTPServer\conf folder. (Select file type as All while saving the file).



**rootca.crt file:**

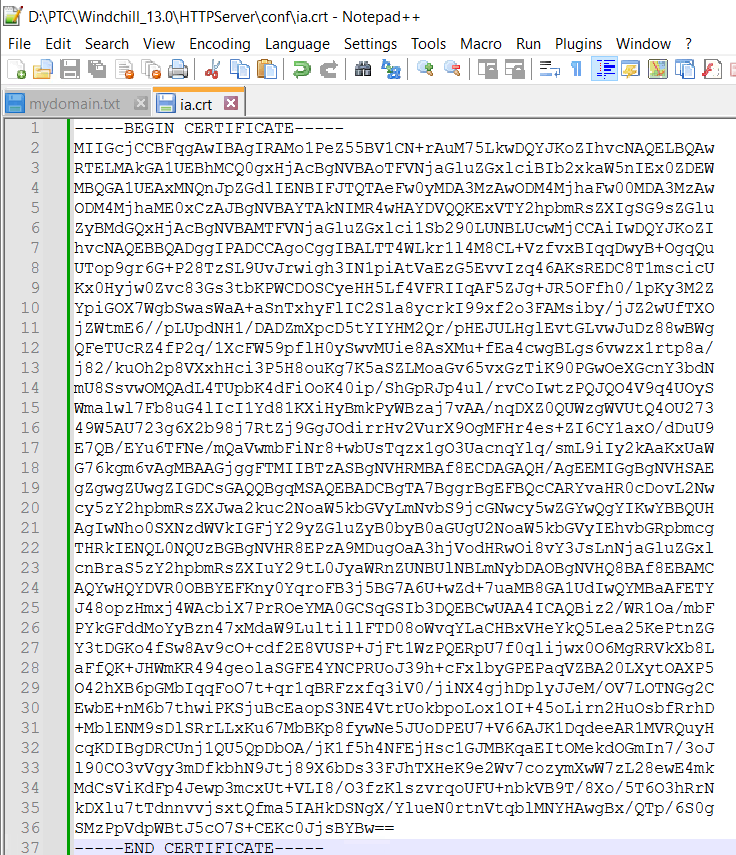


### Generating ia.crt file

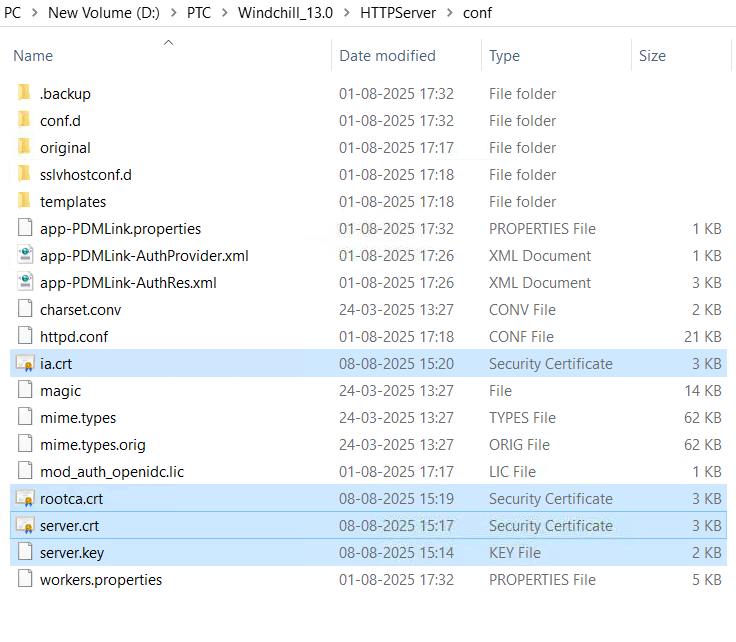
1. Open mydomain.txt file.
2. Copy the 3rd certificate key from -----BEGIN CERTIFICATE----- to -----END CERTIFICATE----- from the mydomain file and paste it in new file and save it as ia.crt in D:\ptc\Windchill13.0\HTTPServer\conf folder. (Select file type as All while saving the file).



**ia.crt file:**



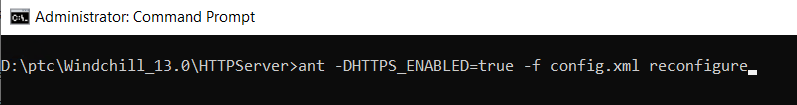
Note: Below are the list of files extracted from mydomain.txt file.



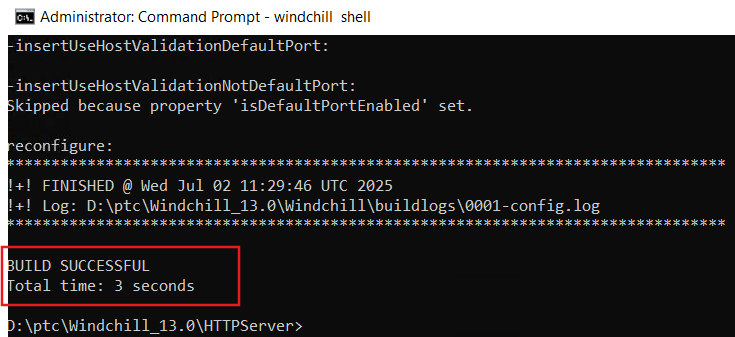
### Enable HTTPS and disable HTTP

1. Open the Windchill Shell as an Administrator and navigate to HTTPServer directory and run below command.

**ant -DHTTPS\_ENABLED=true -f config.xml reconfigure**

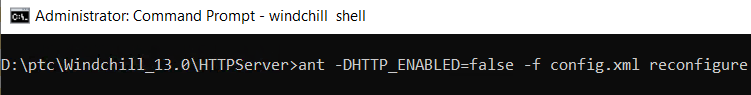
****

2. Make sure the build is successful after the command execution.

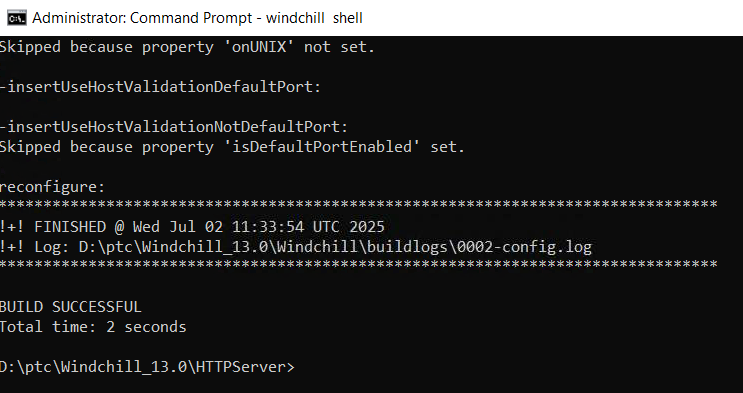


3. Execute the below command to disable http.

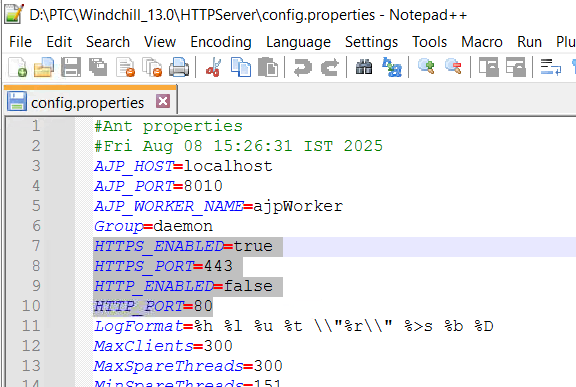
**ant -DHTTP\_ENABLED=false -f config.xml reconfigure**



4. Make sure the build is successful after the command execution.



5. Make sure the values are propagated to the config.properties under D:\ptc\Windchill13.0\HTTPServer folder.



### Reconfigure Windchill to use SSL

1. Launch Windchill shell as an Administrator.
2. Execute the following command to reconfigure the web server protocol and port.

**xconfmanager -s wt.webserver.port=443 -s wt.webserver.protocol=https -t codebase/wt.properties –p**

****

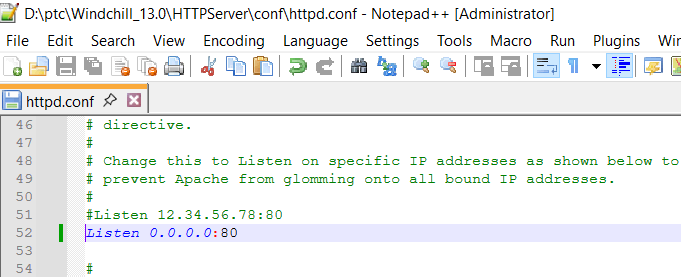
3. Make sure the changes are propagated successfully.



### Check Apache listening on port 80 (non-SSL based) for https redirection

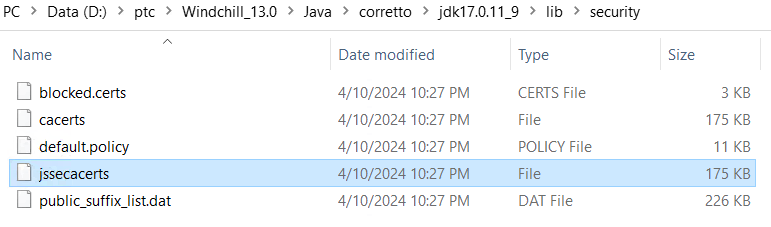
1. Make sure the below entry is available in **HTTPServer/conf/httpd.conf**file.
   * **Listen 0.0.0.0:80**

2. If the entry is commented with # then please uncomment by removing # and save changes.



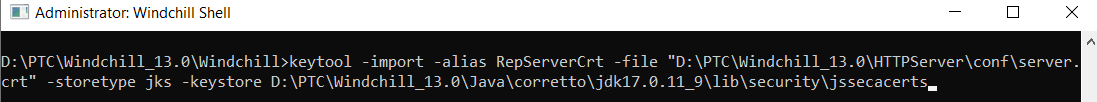
### Import the Certificate in java keystore

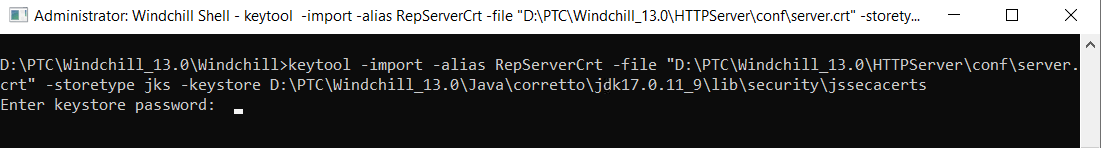
1. Go to D:\ptc\Windchill\_13.0\Java\corretto\jdk17.0.11\_9\lib\security.
2. copy the file **cacerts** and paste it in the same directory and rename it as **jssecacerts**as shown below.

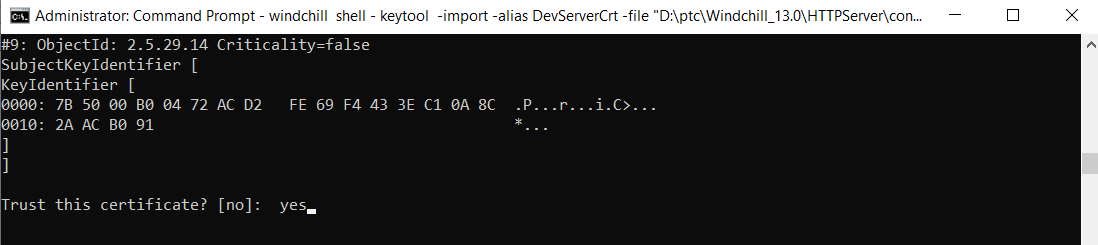


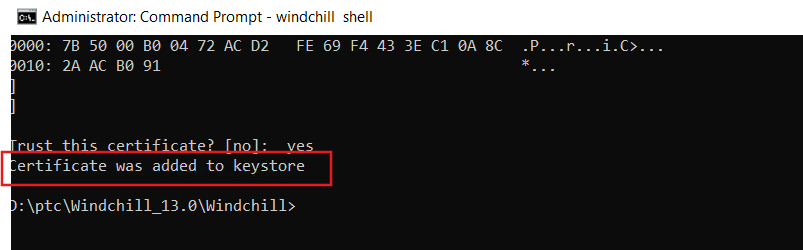
3. From Windchill shell as an admin execute the below commands and when password is required, please enter default password as **changeit**and enter yes to trust this certificate.

* keytool -import -alias RepServerCrt -file "D:\PTC\Windchill\_13.0\HTTPServer\conf\server.crt" -storetype jks -keystore D:\PTC\Windchill\_13.0\Java\corretto\jdk17.0.11\_9\lib\security\jssecacerts







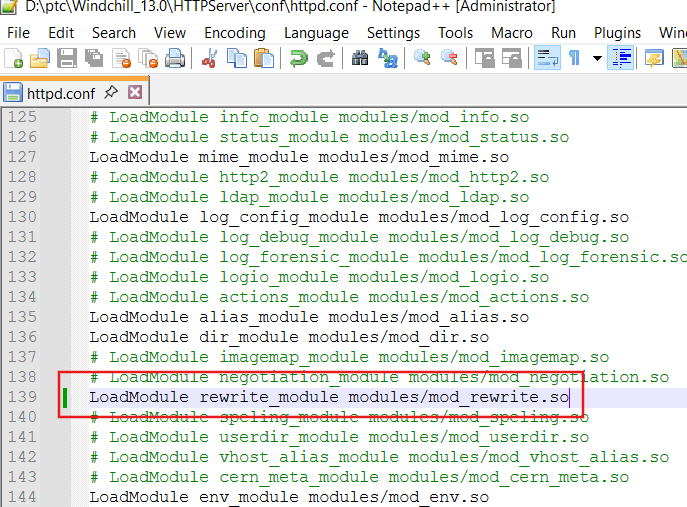


4. Follow the same process for below two certificates.

* keytool -import -alias RepRootCrt -file "D:\PTC\Windchill\_13.0\HTTPServer\conf\rootca.crt" -storetype jks -keystore D:\PTC\Windchill\_13.0\Java\corretto\jdk17.0.11\_9\lib\security\jssecacerts
* keytool -import -alias RepIaCrt -file "D:\PTC\Windchill\_13.0\HTTPServer\conf\ia.crt" -storetype jks -keystore D:\PTC\Windchill\_13.0\Java\corretto\jdk17.0.11\_9\lib\security\jssecacerts

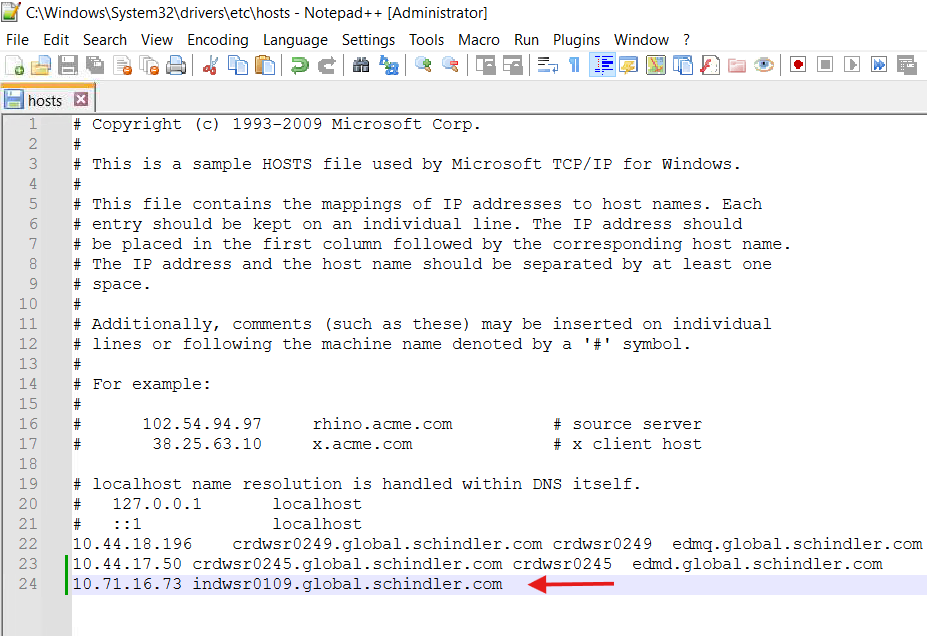
### http to https redirection

1. Uncomment the [mod\_rewrite.so](http://mod_rewrite.so/) property from D:\ptc\Windchill13.0\HTTPServer\conf\httpd.conf



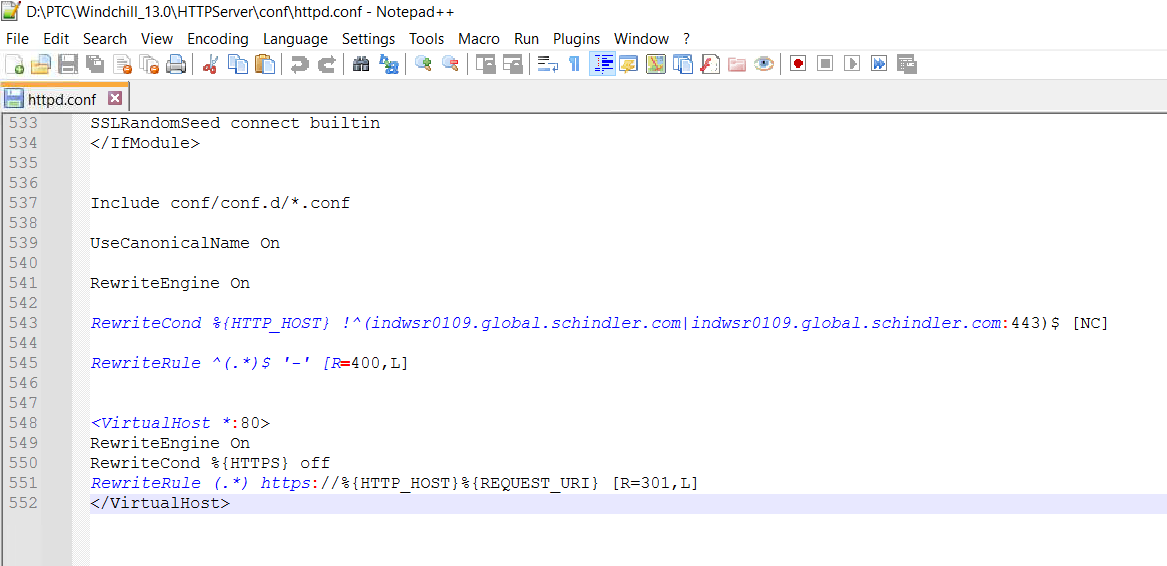
2. Make sure that the value of Listen 0.0.0.0.80 is correct in **<Apache>/conf/httpd.conf**

3. Add the host entry as shown below and restart the server.



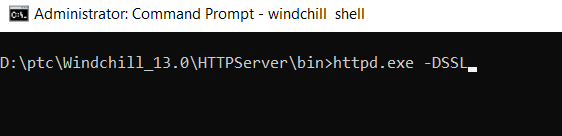
4. Add below entry in target httpd.conf file at bottom.

<VirtualHost \*:80>  
RewriteEngine On  
RewriteCond %{HTTPS} off  
RewriteRule (.\*) https://%{HTTP\_HOST}%{REQUEST\_URI} [R=301,L]  
</VirtualHost>

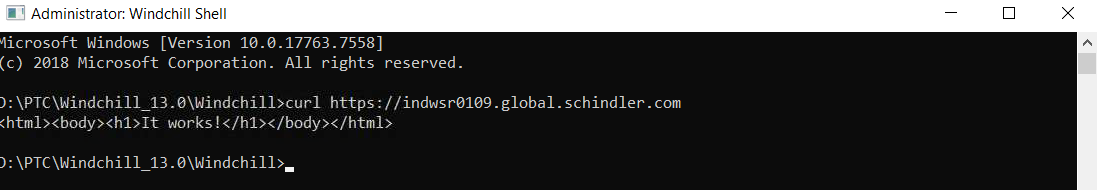


### Testing SSL configuration:

1. Clean Windchill cache.
2. Start Apache using SSL as shown below.

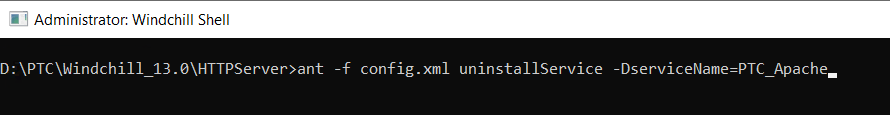


3. Launch Windchill Shell as an admin and execute curl command as shown below.

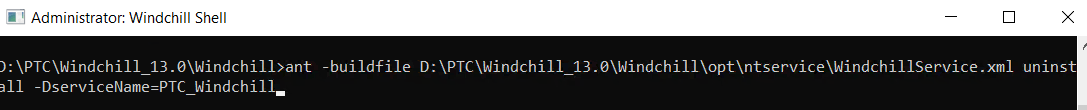


## Apache & Windchill as Windows Service

1. Stop Apache and Windchill.
2. Uninstall existing Apache and Windchill services by executing the below commands.
   * **ant -f config.xml uninstallService -DserviceName=PTC\_Apache**

****

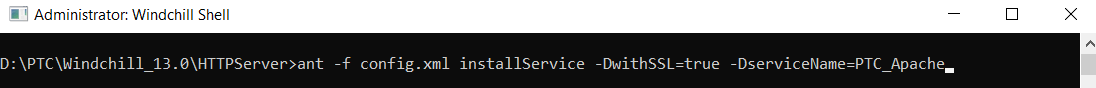
* + **ant -buildfile D:\PTC\Windchill\_13.0\Windchill\opt\ntservice\WindchillService.xml uninstall -DserviceName=PTC\_Windchill**

****

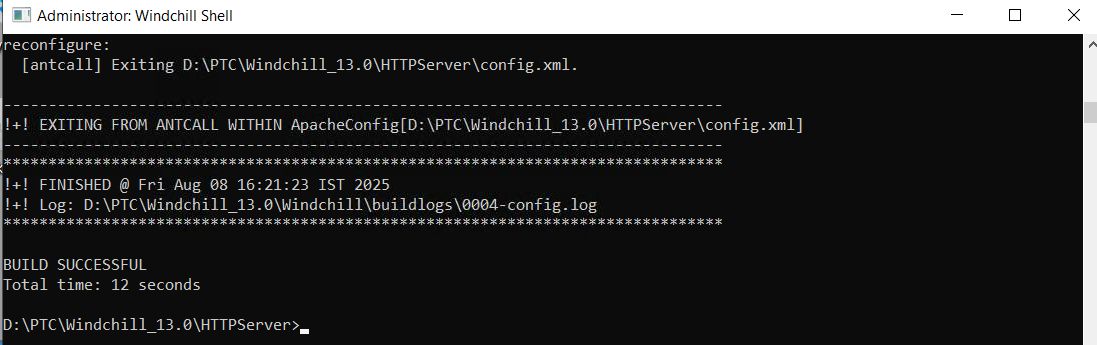
3. Make sure all the SSL configs are in place. If not, pls update them accordingly before executing the below command.

4. Launch Windchill as an admin and navigate to HTTPServer and execute the below command.

ant -f config.xml installService -DwithSSL=true -DserviceName=PTC\_Apache

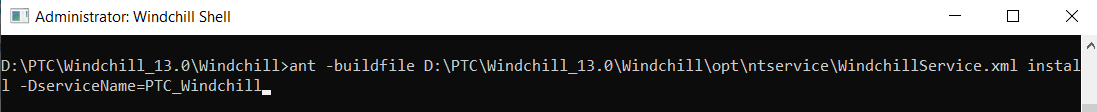


5. Ensure build is successful.

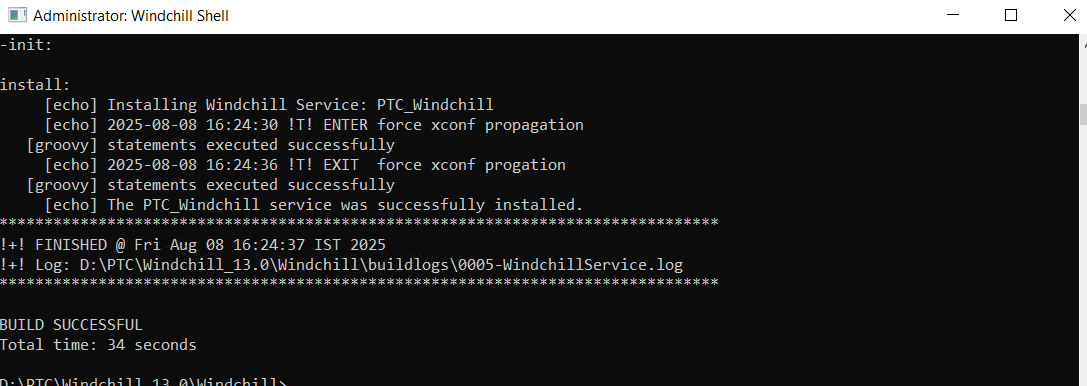


6. Launch Windchill as an admin and execute the below command.

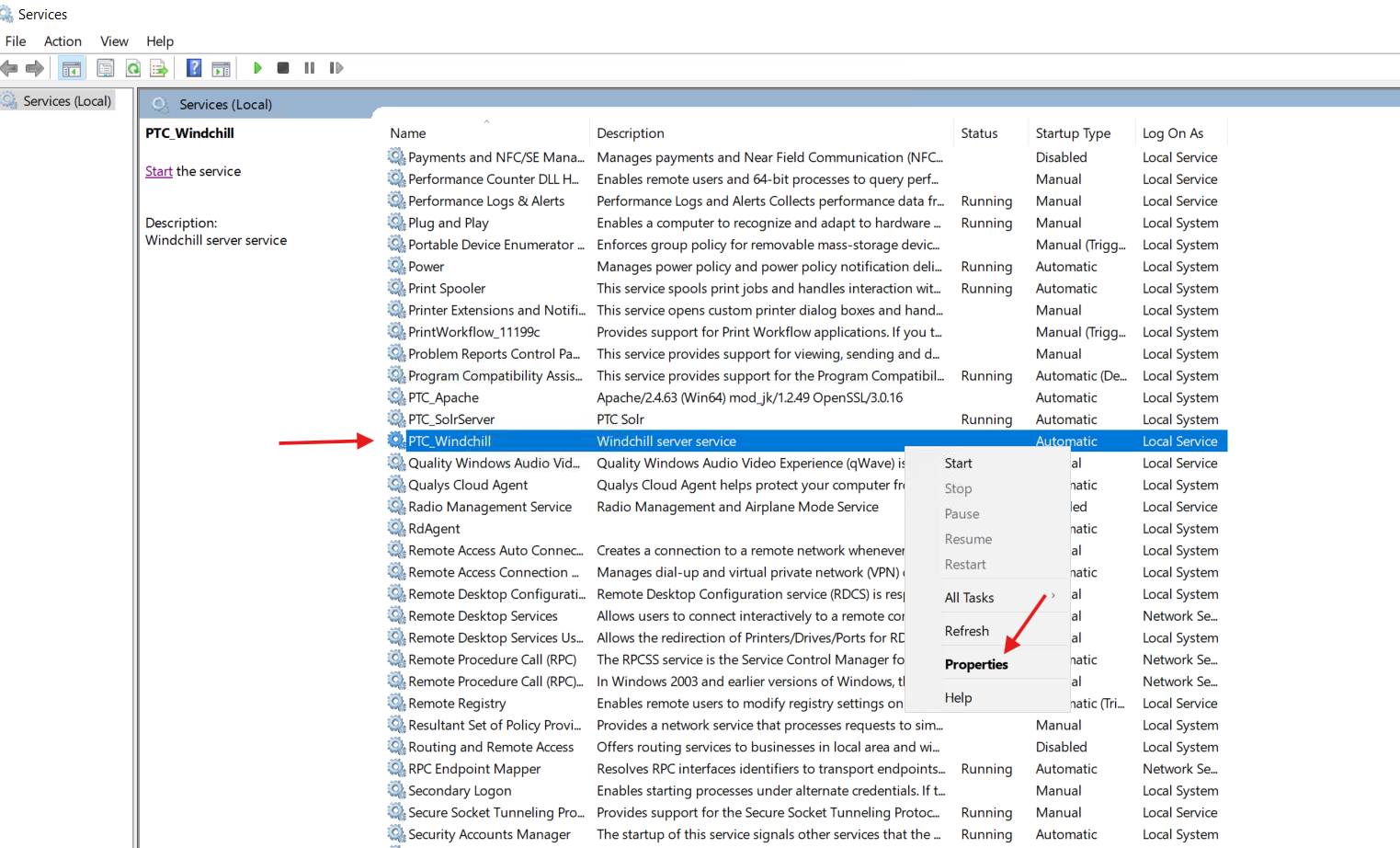
ant -buildfile D:\PTC\Windchill\_13.0\Windchill\opt\ntservice\WindchillService.xml install -DserviceName=PTC\_Windchill



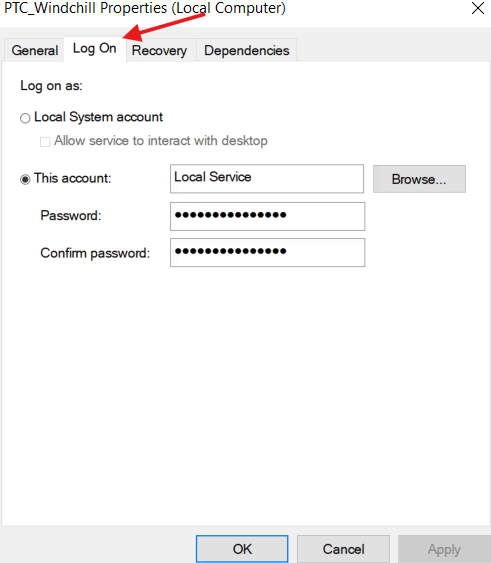
7. Make sure the build is successful.



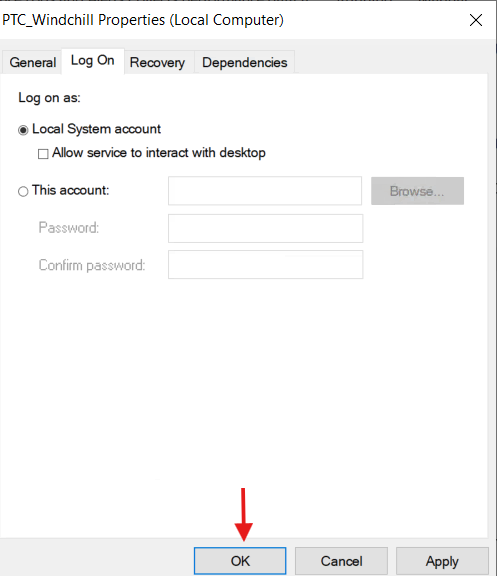
8. Open services → Right click on Windchill service → Click on Properties.



9. Click on Log On.

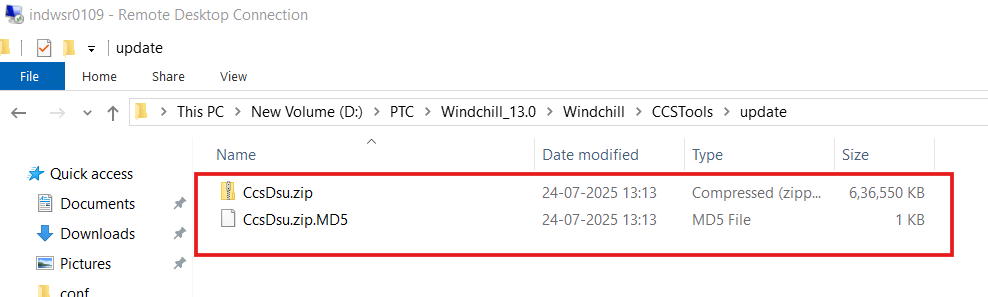


10. Change Log on as: to Local System account as shown below and click on Ok.



## COPY CCSDSU.ZIP FROM MASTER

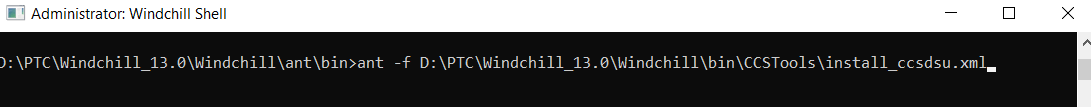
1. Copy CcsDsu.zip file from master server directory <WT\_HOME>/CCSTools/update to file server directory <WT\_HOME>/CCSTools/update.



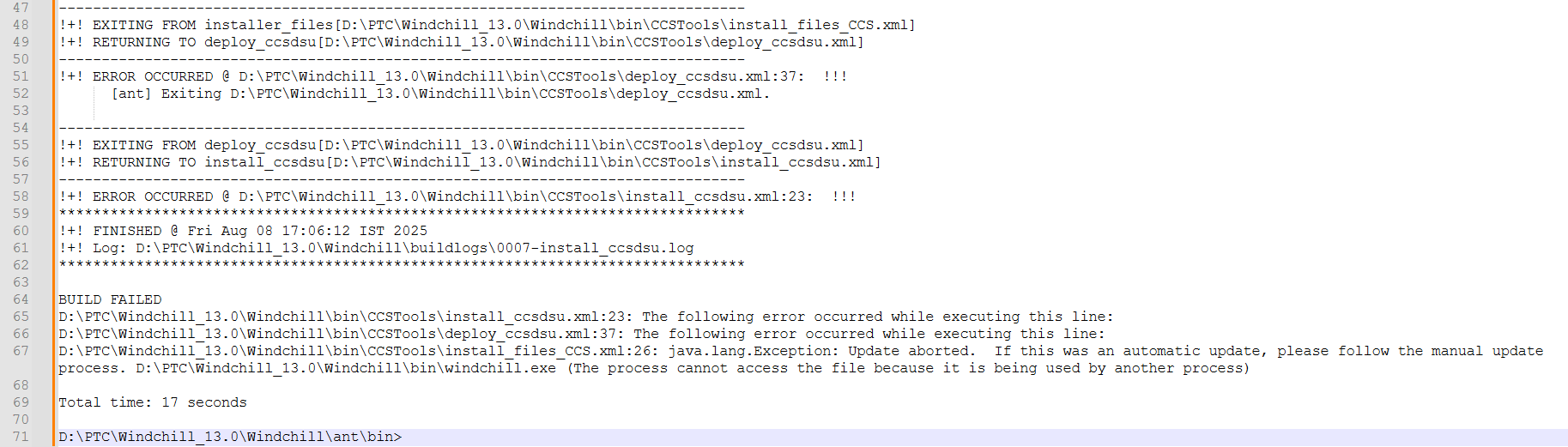
## EXECUTE COMMAND TO UPDATE CRITICAL PATCH

1. Stop Windchill.
2. Make sure Apache is running.
3. Launch Windchill Shell as an admin and navigate to the required directory to execute the below command.

**ant -f D:\PTC\Windchill\_13.0\Windchill\bin\CCSTools\install\_ccsdsu.xml**



4. It failed with the error.

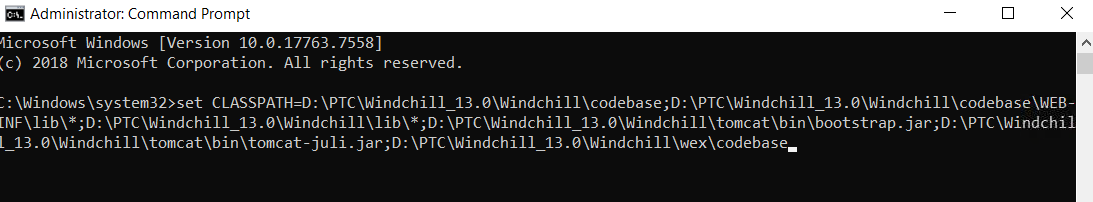


5. As per the [Article - CS390982 - Unable to install CssDsu update on replica server manually. Build is failing with Error-> windchill.exe (The process cannot access the file because it is being used by another process)](https://www.ptc.com/en/support/article/CS390982?source=search) followed the steps.

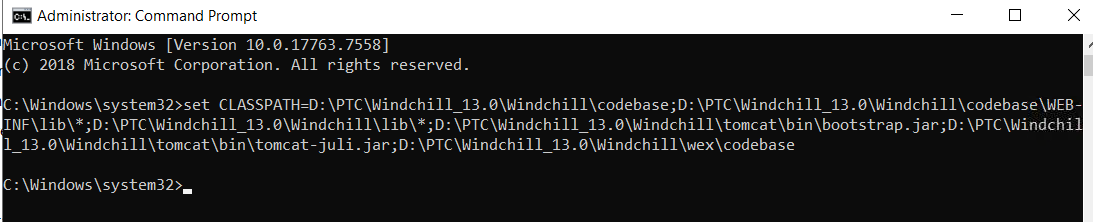
6. Launch Command Prompt as admin.

7. Set Environment Variable CLASSPATH by executing the below command.

set CLASSPATH=D:\PTC\Windchill\_13.0\Windchill\codebase;D:\PTC\Windchill\_13.0\Windchill\codebase\WEB-INF\lib\\*;D:\PTC\Windchill\_13.0\Windchill\lib\\*;D:\PTC\Windchill\_13.0\Windchill\tomcat\bin\bootstrap.jar;D:\PTC\Windchill\_13.0\Windchill\tomcat\bin\tomcat-juli.jar;D:\PTC\Windchill\_13.0\Windchill\wex\codebase

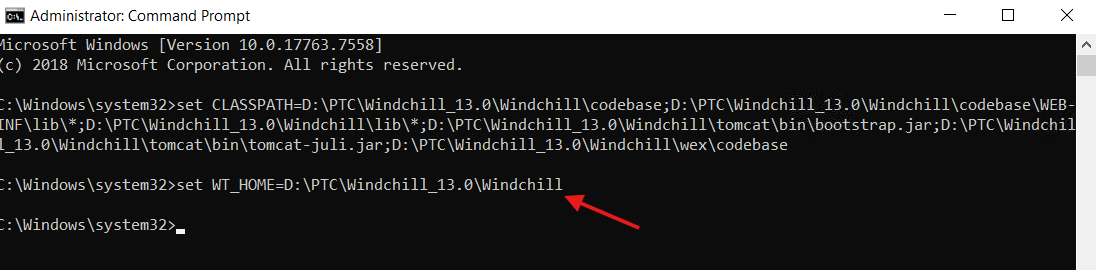


8. Make sure it executed.

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9. Set Environment Variable WT\_HOME by executing the below command from same cmd.

set WT\_HOME=D:\PTC\Windchill\_13.0\Windchill



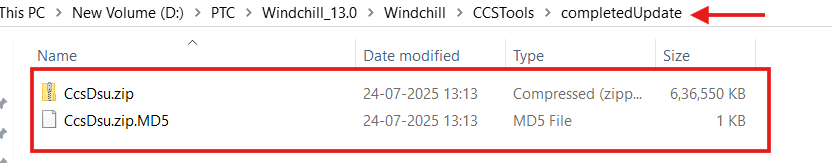
10. Navigate to the following location and execute the below command.

ant -f <Windchill>\bin\CCSTools\install\_ccsdsu.xmlant -f D:\PTC\Windchill\_13.0\Windchill\bin\CCSTools\install\_ccsdsu.xml

11. Make sure build completed successfully.

## VERIFY COMPLETED UPDATE DIRECTORY AND DETAILS

1. Create <WT\_HOME>/CCSTools/completedUpdate directory if it does not already exist. If exists, then check that CcsDsu.zip folder is available in completedUpdate directory.
2. Verified and observed that the folder is available and also the zip file is available under the folder.



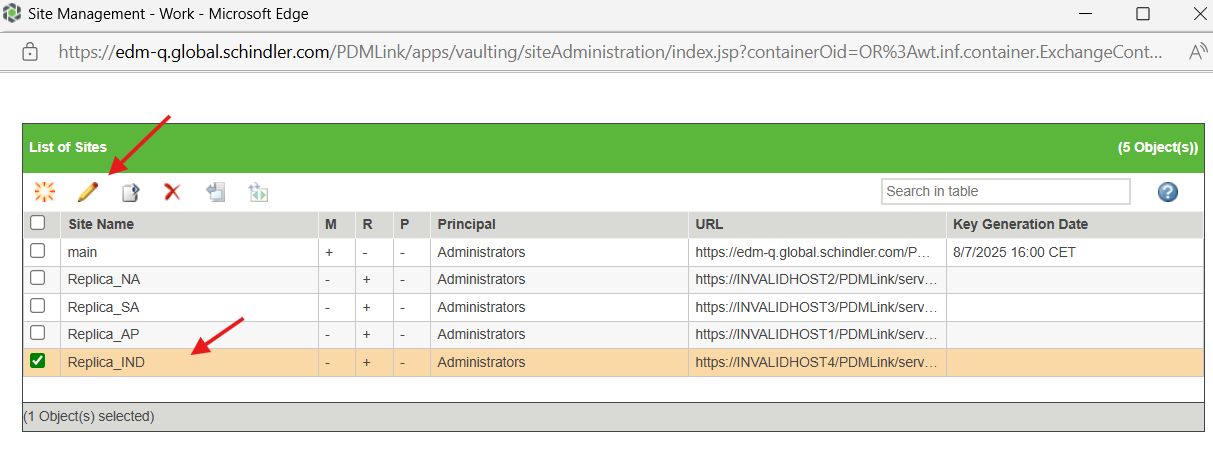
3. If completedUpdate directory was manually created then move the contents of directory <WT\_HOME>/CCSTools/update to <WT\_HOME>/CCSTools/completedUpdate directory overwriting the files to the destination folder.

4. Check update folder is already empty. Contents are already in completedUpdate.

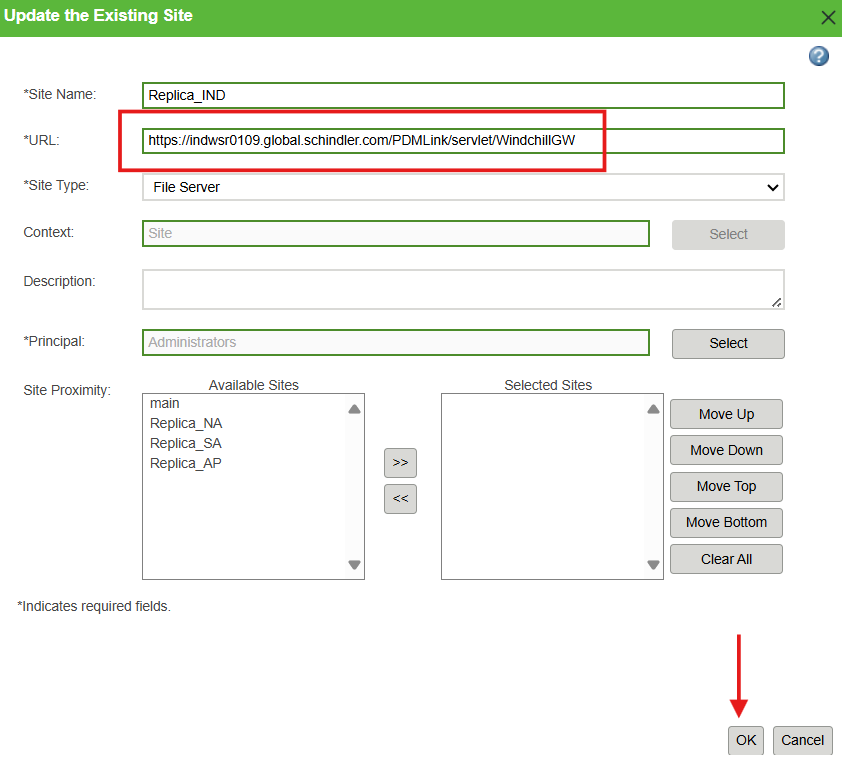
5. Verified and observed that update folder is empty.

## Configure Sites

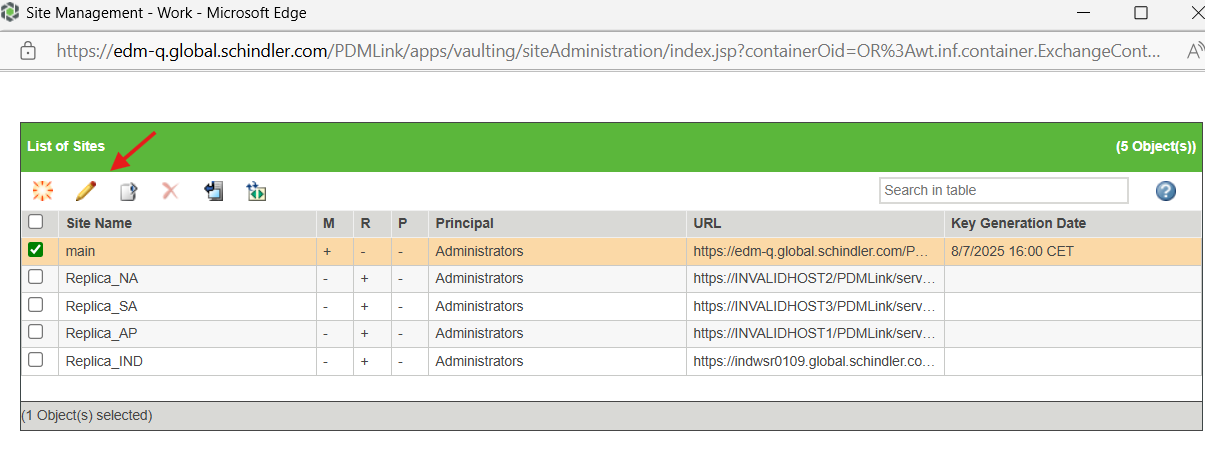
1. Login to master Windchill as admin.
2. Navigate to site → utilities → File Server Administration → Site Administration.
3. Select Site and click on update.



4. Update the values as per the requirement and click on Ok.

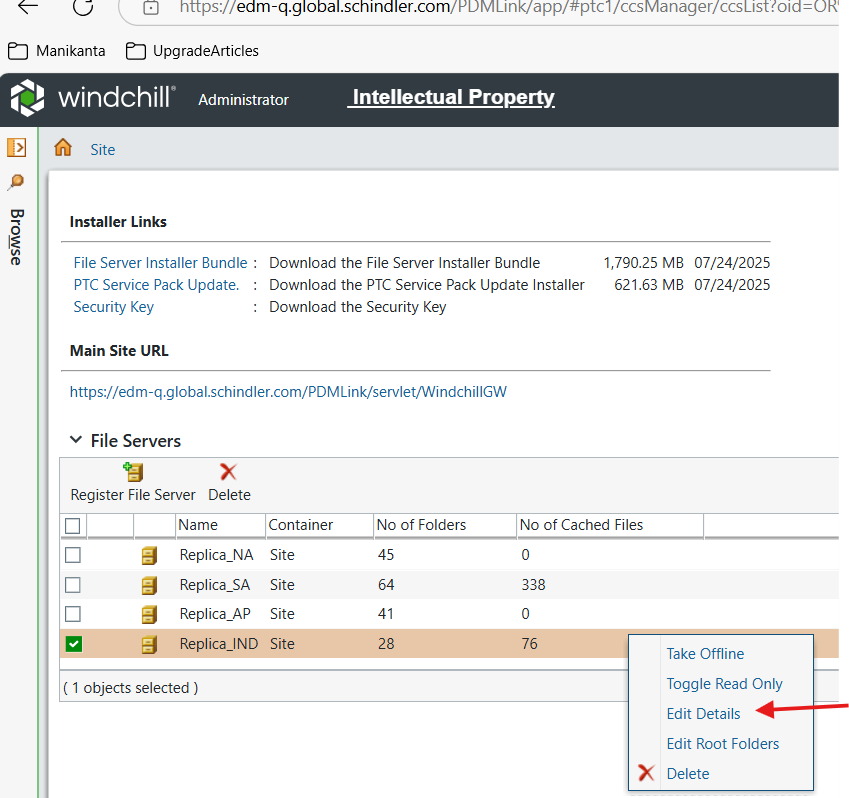


5. Select main site and click on update as shown below.

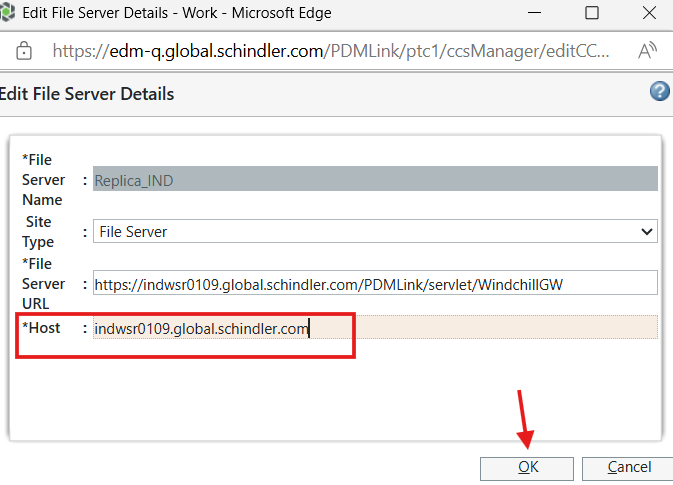


## Configure File Server

1. Navigate to site → utilities → File Server Administration → File Server Management.
2. Right click on Replica\_IND → Click on Edit details.

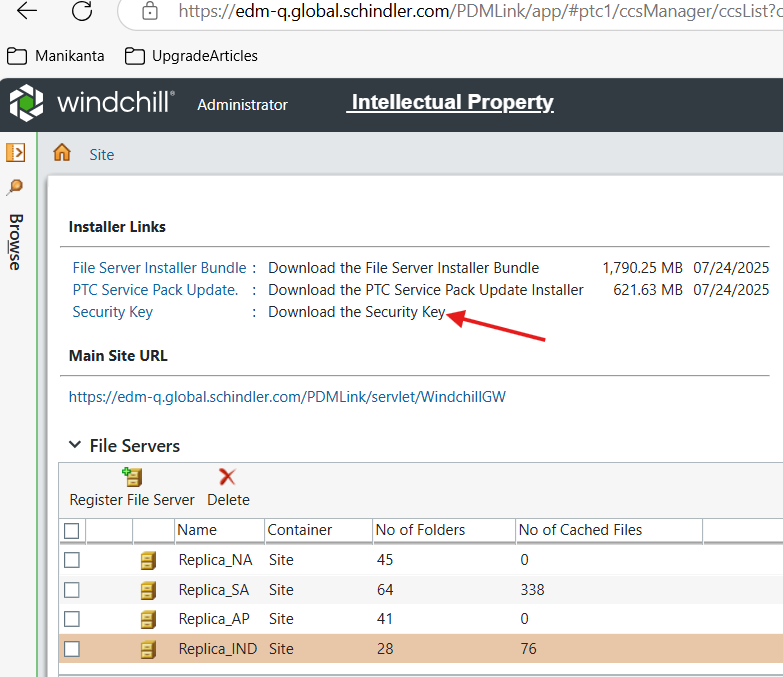


3. Update the hostname as shown below and click on Ok.

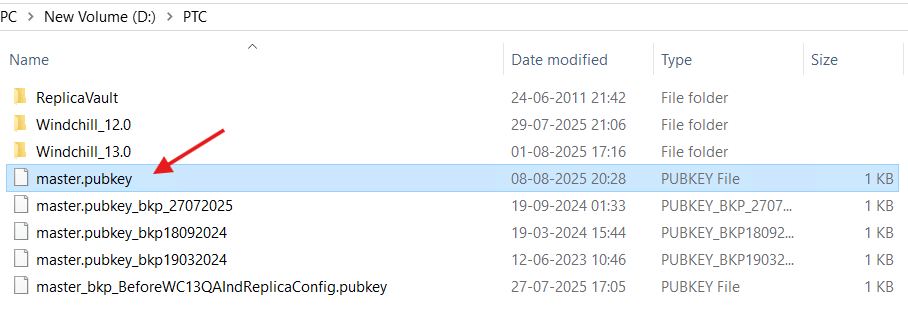


## DOWNLOAD MASTER KEY FROM MASTER SITE

1. Navigate to site → utilities → File Server Administration → File Server Management.
2. Download master key (Security Key) from master site.

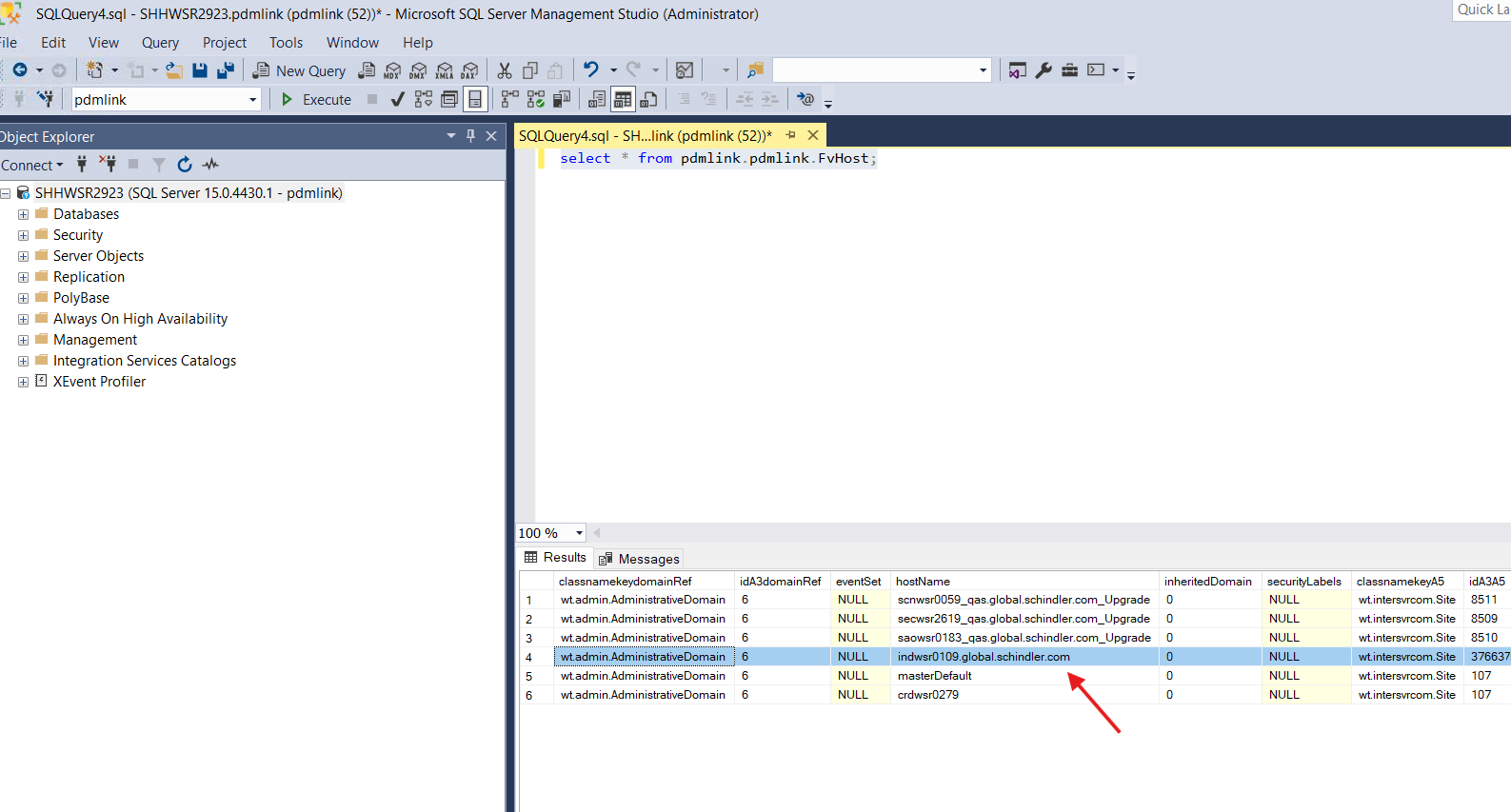


3. Rename the downloaded main.pubkey as master.pubkey and replace it with old file.

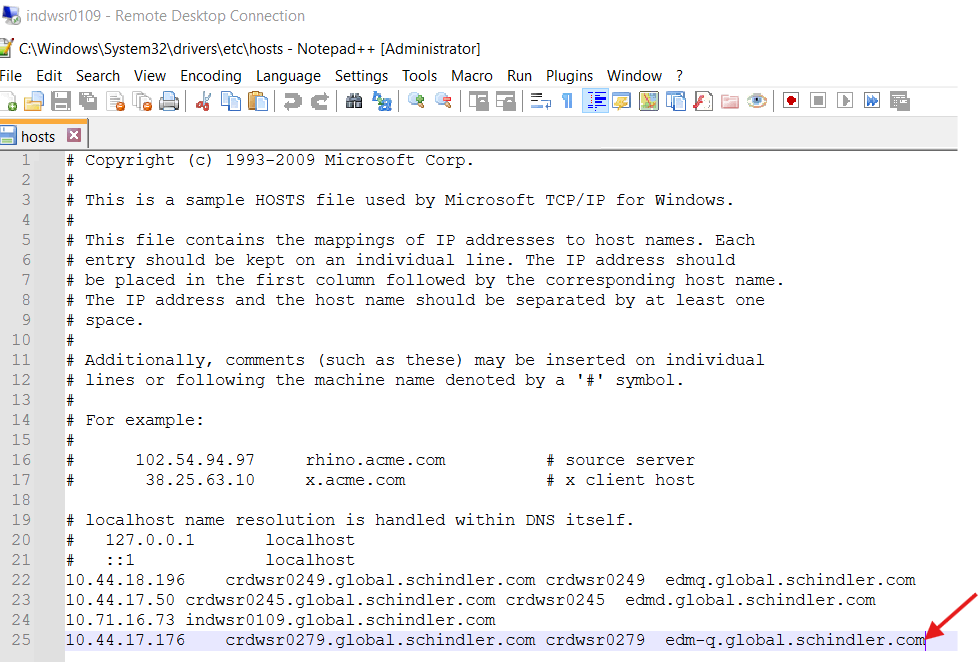


4. Execute the below query as pdmlink to make sure the db entry is pointing to correct hostname.

select \* from pdmlink.pdmlink.FvHost;



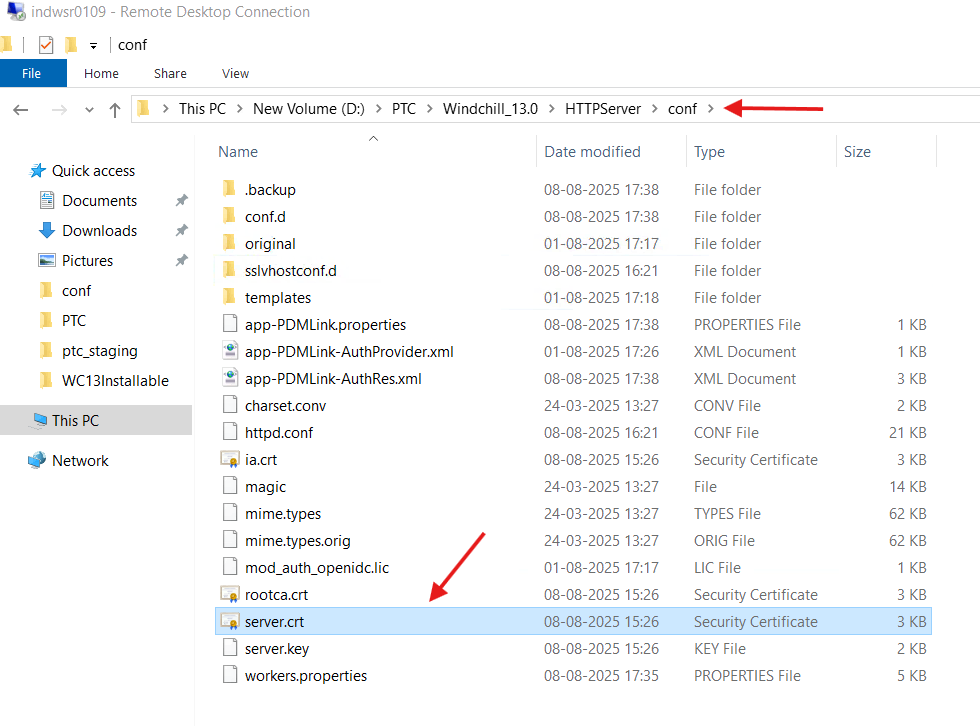
5. Add the below master host entry in replica server and restart the server.



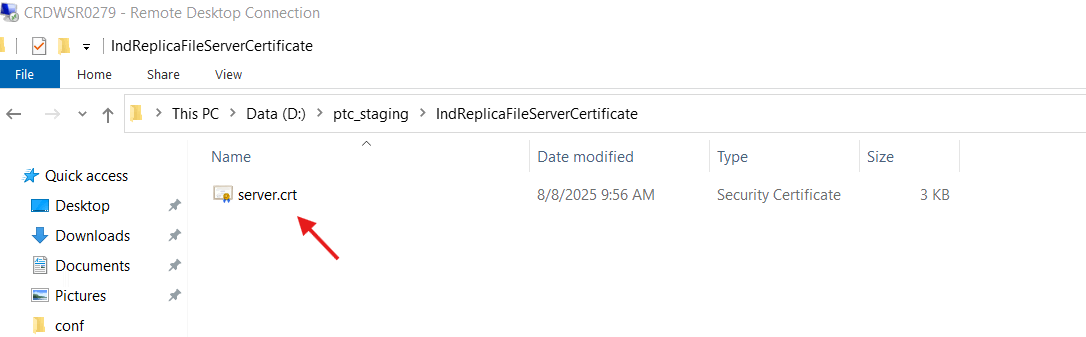
6. Restart method server on replica site and master site.

## Import Replica Certificate to Master Java keystore

1. Copy the below file from Replica File Server.



2. Paste the file on master Windchill server at any location.



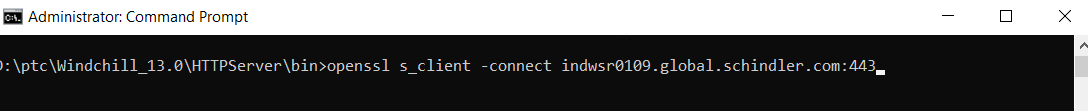
3. Launch Windchill Shell as an admin and execute the below command on Windchill server.



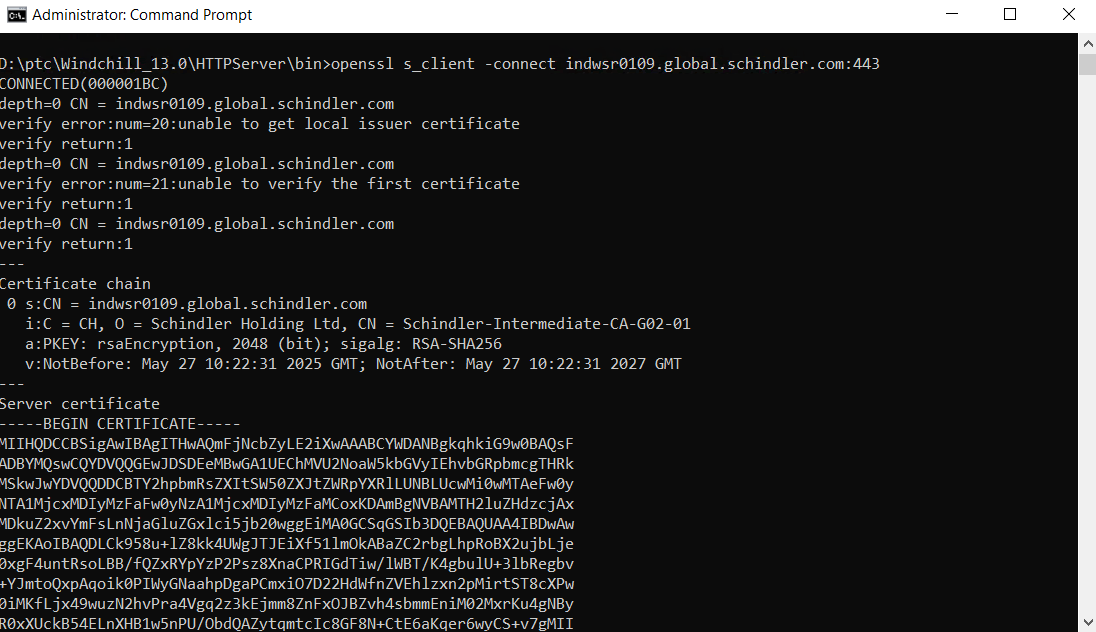
4. Restart the Windchill server.

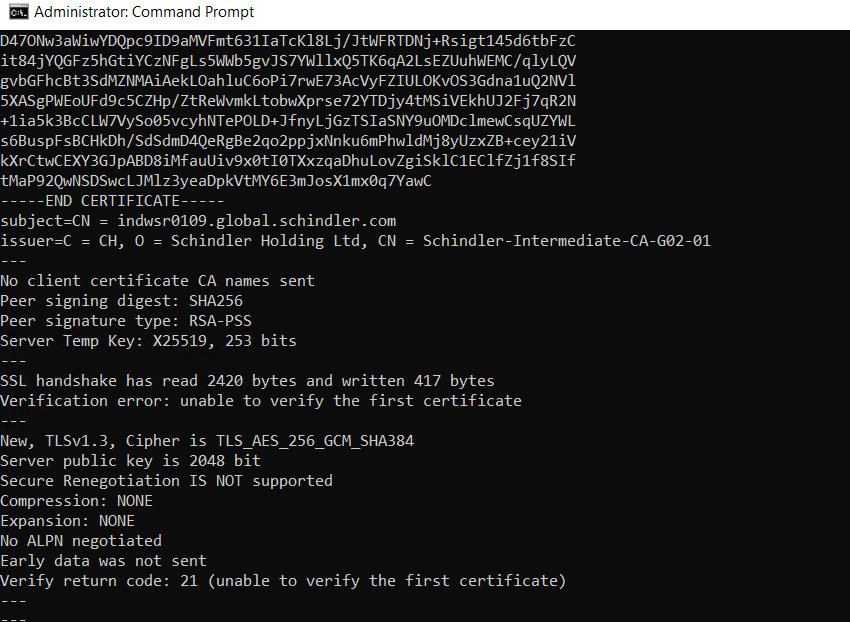
5. Once the Windchill server is up launch cmd as admin and navigate to the below directory and execute the below command.

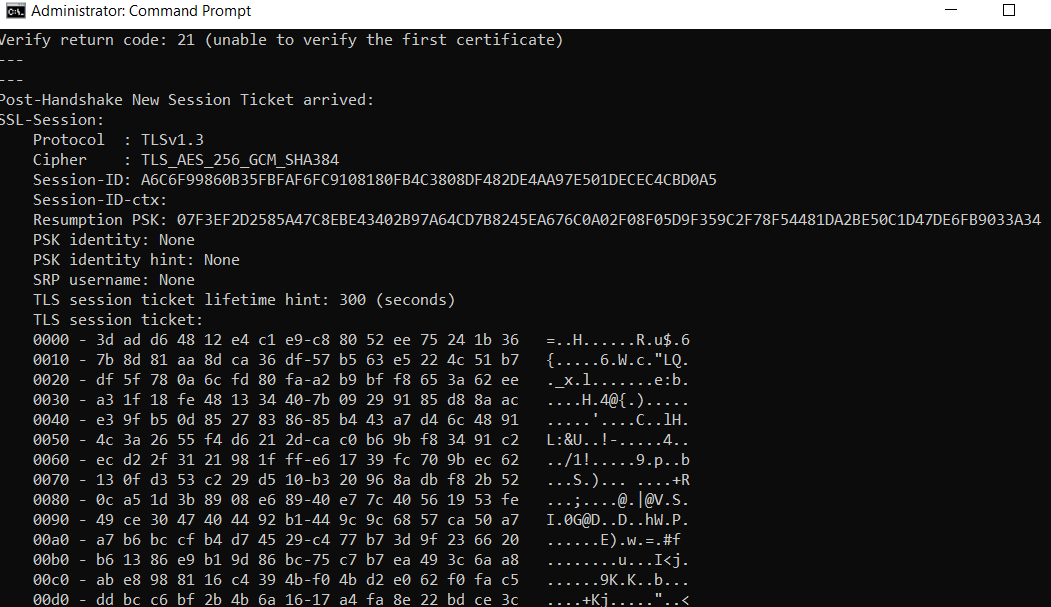
openssl s\_client -connect [indwsr0109.global.schindler.com](http://indwsr0109.inf.schindler.com):443

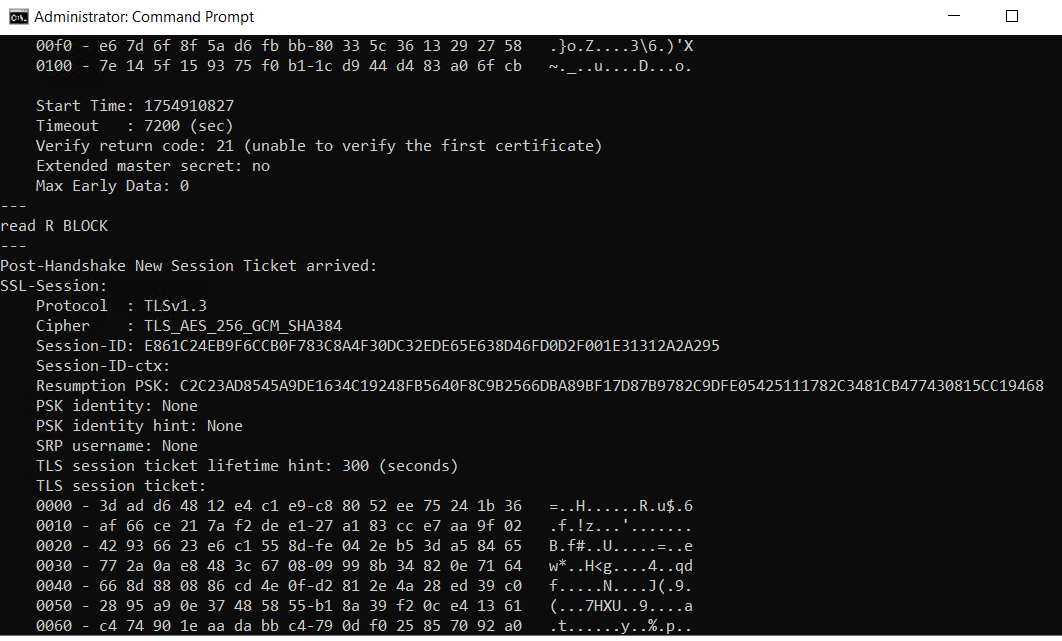


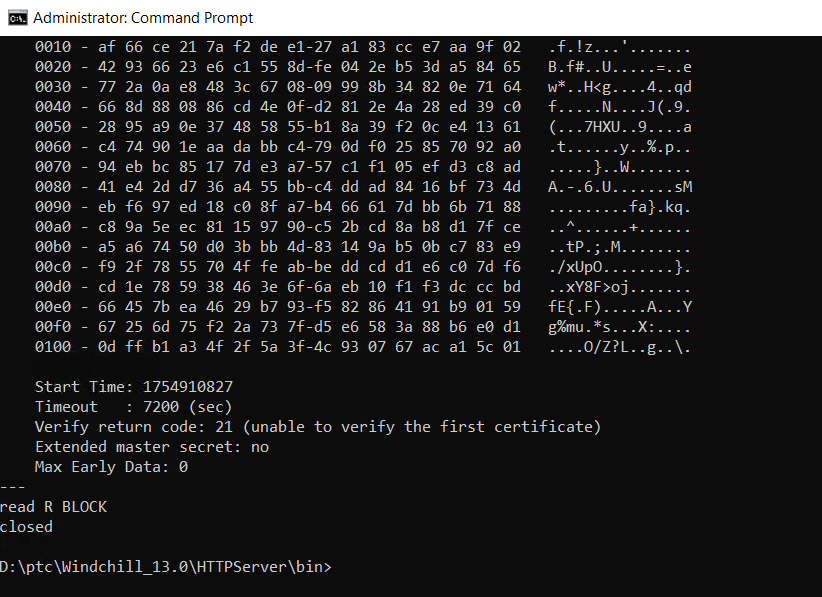
6. Make sure the command executed successfully.







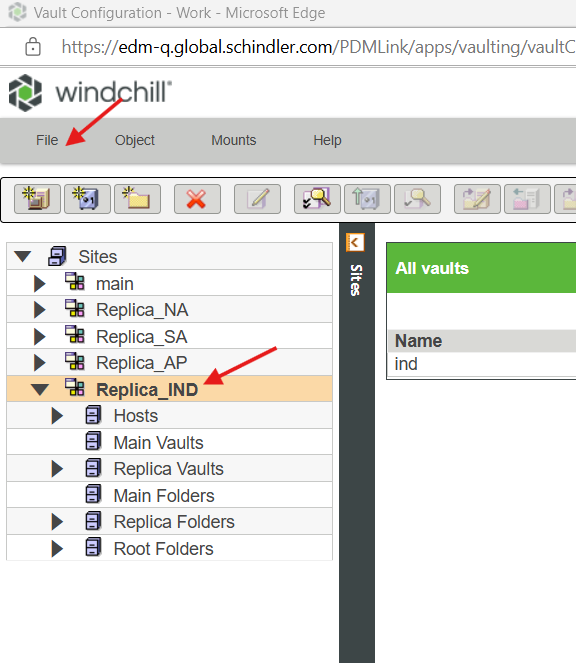




7. Restart method server on replica site and master site

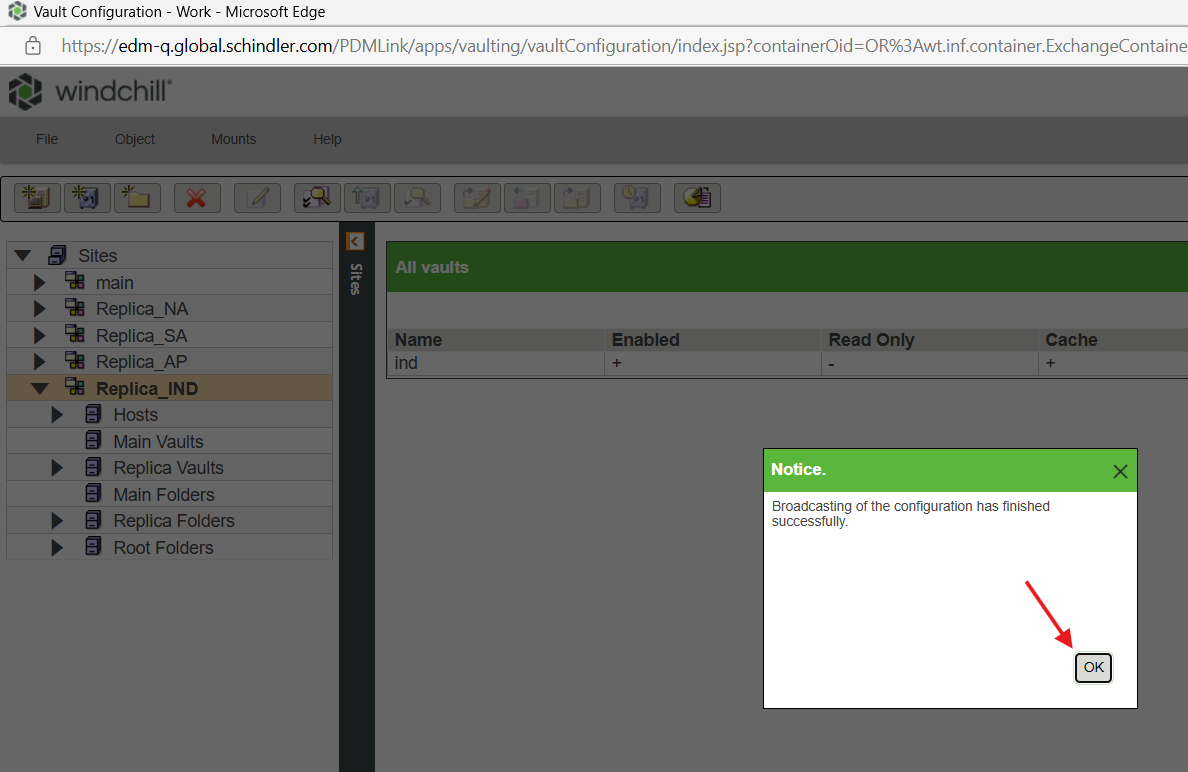
## Vault Configuration

1. Navigate to site → Utilities → File Server Administration → Vault Configuration.
2. Select Replica\_IND → click on File.

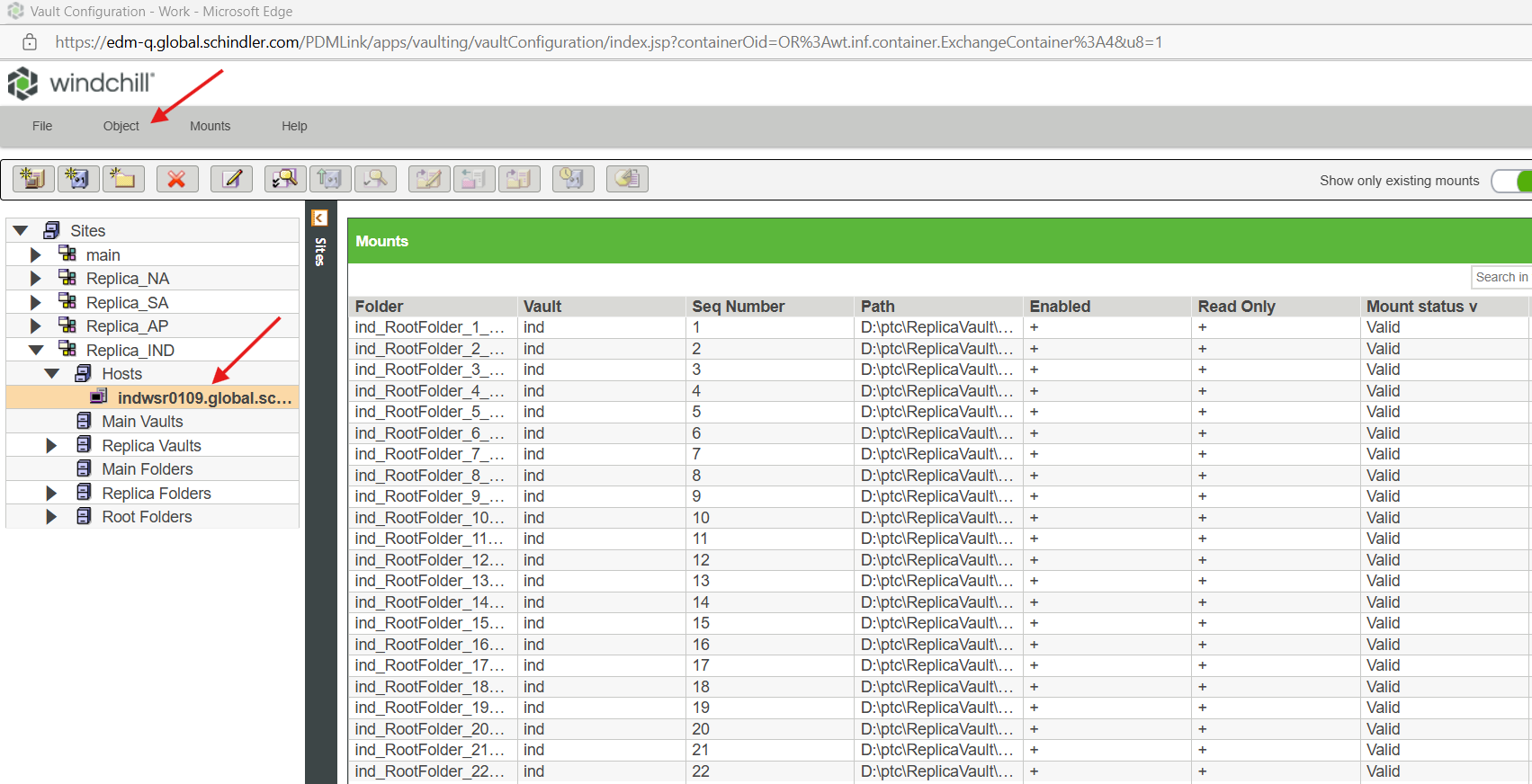


3. Select Broadcast Configuration.

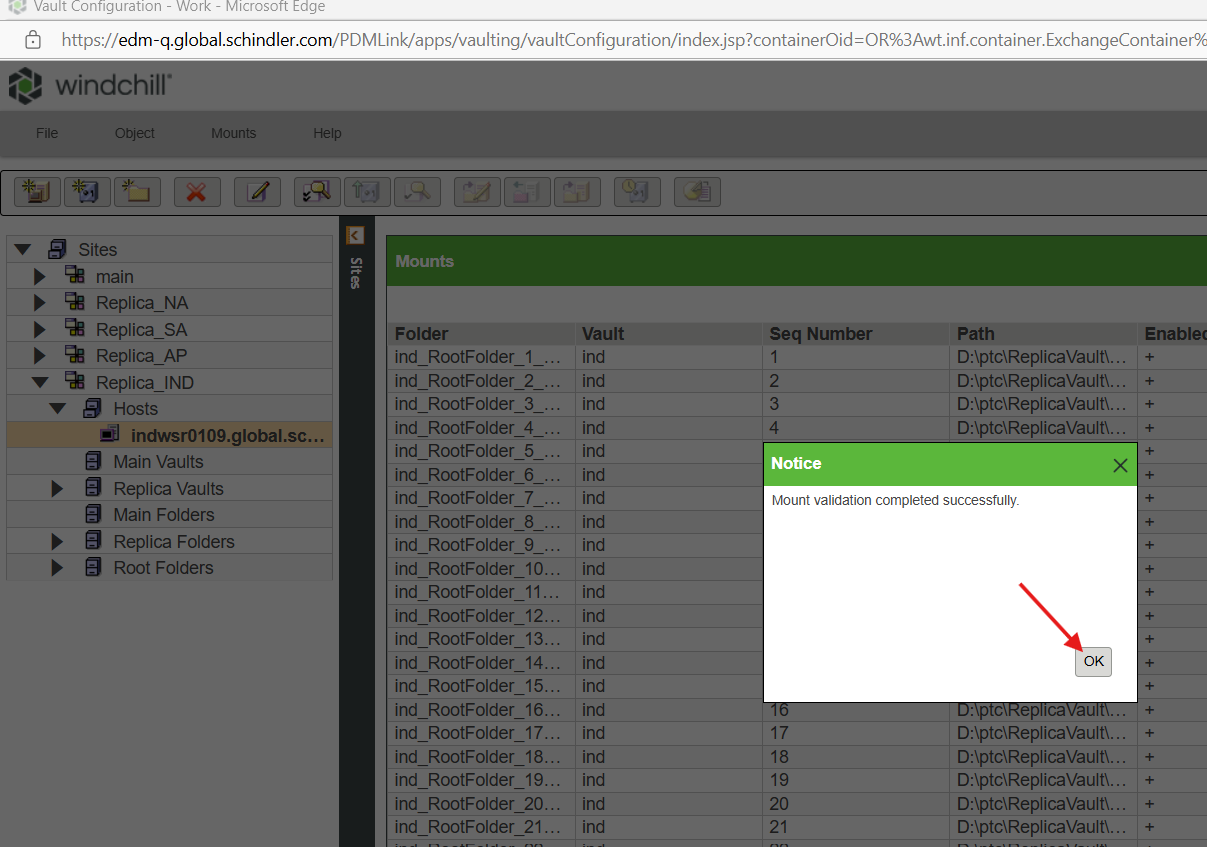
4. Make sure it completed successfully and click on Ok.



5. Select the Replica Host → Click on Object → Click on Validate.

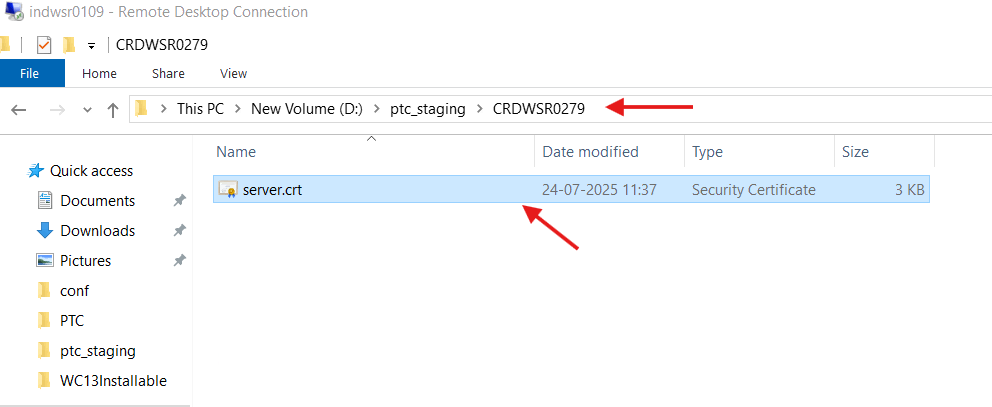


6. make sure the validation completed successfully and then click on Ok.



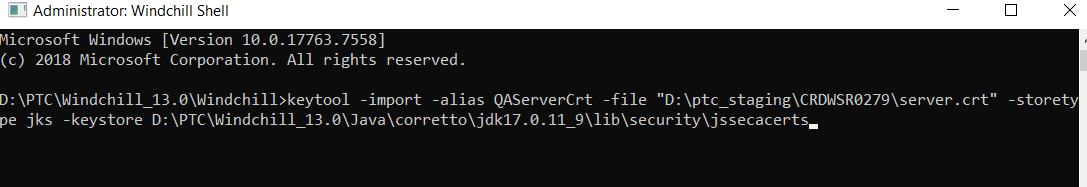
## Import Master Certificate on Replica File Server

1. Copy/paste the server.crt of Master Windchill server on to Replica server to any location.

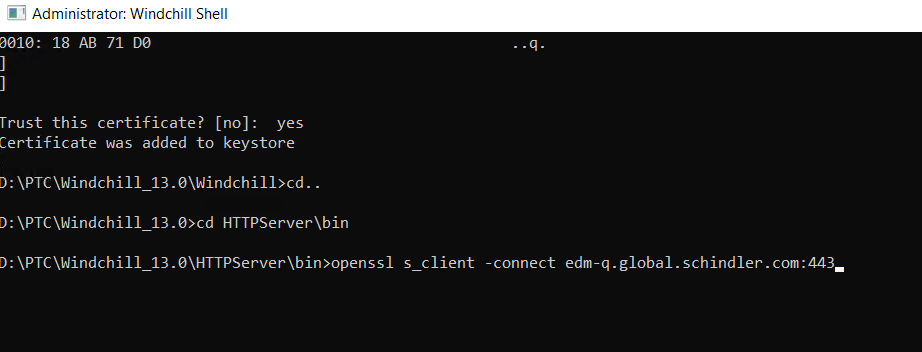


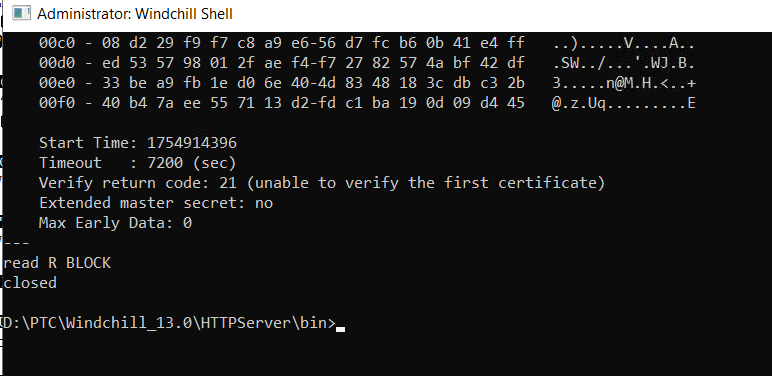
2. Launch Windchill Shell as an admin and execute the below command.

keytool -import -alias QAServerCrt -file "D:\ptc\_staging\CRDWSR0279\server.crt" -storetype jks -keystore D:\PTC\Windchill\_13.0\Java\corretto\jdk17.0.11\_9\lib\security\jssecacerts



3. Execute the below command and make sure it completed successfully.





Restart Apache and MS on File Server.