



सत्यमेव जयते

eoffice

A DIGITAL WORK PLACE SOLUTION

DSC

Digital Signature Certificate(DSC) Signer Service

User Guidelines



Prepared by

National Informatics Centre

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Introduction

Till recently the web based applications were using applet based technology to achieve digital signing that used Java plug-ins (NPAPI plug-in) provided by browsers (Chrome, Firefox, and Internet Explorer etc.) to run applet inside the browser.

Latest versions of all browsers started discontinuing the applet support (around the Year 2016-2017) essentially to firm up the security. The signing mechanisms that eOffice (or for that matter any other web application) was using earlier, therefore, also had to change. A **new browser independent** signer has been developed and released that would work with latest browsers and does not require applet to run. It is essentially a service that would require to be installed, one time, in the individual windows client's machines of the user.

This document provides very simple steps that will guide the user to install the signer service smoothly on his/her local client machine and also provide help to the users of eOffice in their respective departments/states.

DSC Signer Service

Pre Requisite for Digital Signer Service (DSS)

1. OS: Windows 7 or above.
2. Latest Installation of Java Runtime Environment
3. Digital Signer Service application on client machine

Before running and installing DSS, please make sure you have 1 and 2

Downloading the Digital Signer Service

The new DSC signer service can download from (as per client's machine OS):

<https://docs.eoffice.gov.in> (NICNET user(s))

OR

<https://eoffice.gov.in>, as shown below



Checking the System Requirements

1. Unzip the downloaded folder,
2. Locate and run **Check_System_Details.bat** file from downloaded bundle to check if user machine has java installed or not.
3. This will check whether Java installed or not. [Arrow 1]

```
Select C:\Windows\System32\cmd.exe - "Check System Details.bat"

[A] Checking System Information:
OS Name:           Microsoft Windows 10 Pro
OS Version:        10.0.17134 N/A Build 17134
BIOS Version:      Dell Inc. 1.10.2, 8/9/2018
System Type:       x64-based PC

[B] Checking Java version running in system:
java version "1.8.0_201"
Java(TM) SE Runtime Environment (build 1.8.0_201-b09)
Java HotSpot(TM) 64-Bit Server VM (build 25.201-b09, mixed mode)

[C] Checking for port 55100.....
Port is free, continue to install DSC Signer Service.

[D] Checking for port 55101.....
Port is free, continue to install DSC Signer Service.
Press any key to continue . . .
```




3. This also checks of Port 55100 and Port 55101 are open or not. [Arrow 2 and 3]

Installing JRE

If Java is not installed, install it from following link:

<https://java.com/en/download/manual.jsp>

Windows **Which should I choose?**

 Windows Online filesize: 1.95 MB	Instructions	After installing Java, you may need to restart your browser in order to enable Java in your browser.
 Windows Offline filesize: 66.37 MB	Instructions	
 Windows Offline (64-bit) filesize: 76.03 MB	Instructions	

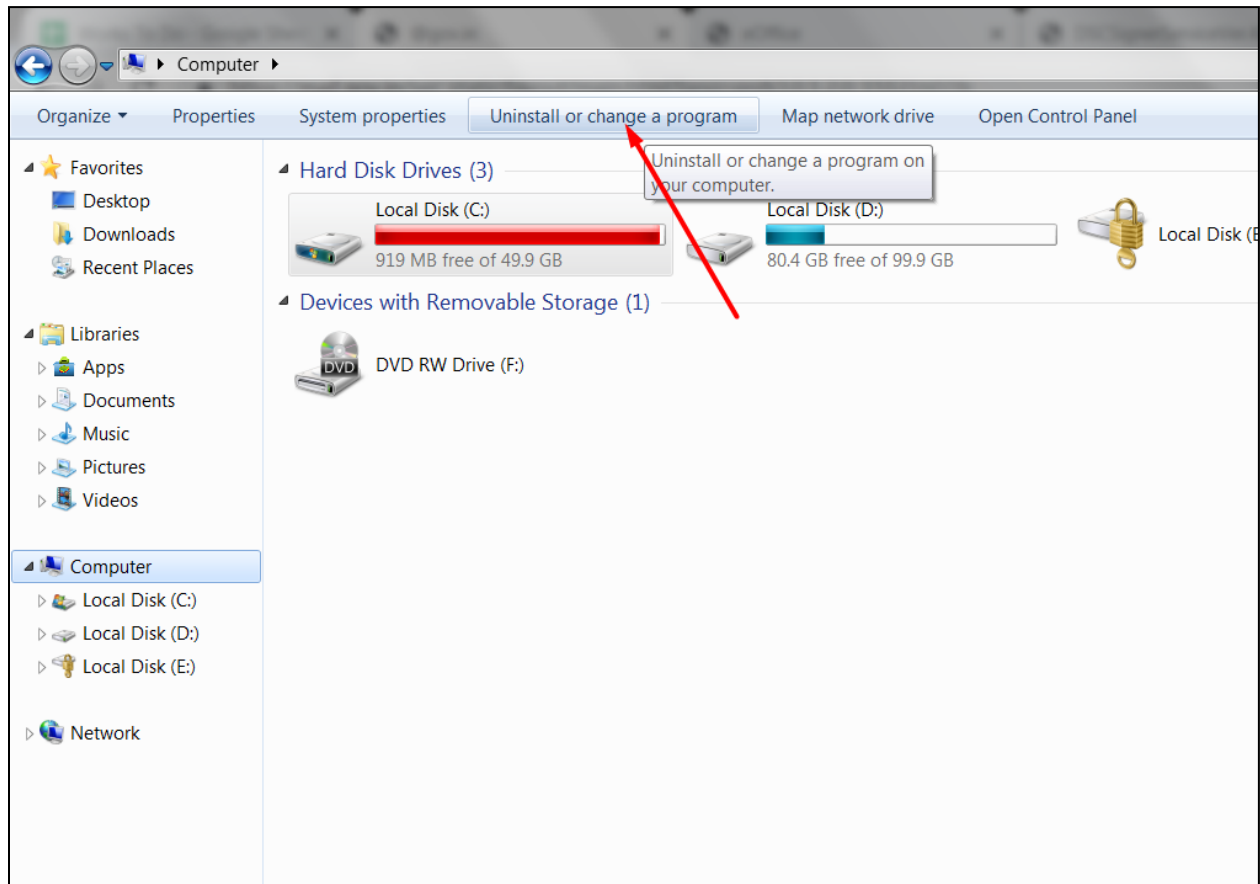
If you use 32-bit and 64-bit browsers interchangeably, you will need to install both 32-bit and 64-bit Java in order to have the Java plug-in for both browsers. » [FAQ about 64-bit Java for Windows](#)

Click on Arrow 1[if you have 32 bit windows] or arrow 2[if you have 64 bit windows].

After Downloading the required version of Java, Install it on the system by running the exe file that you have downloaded and complete the process.

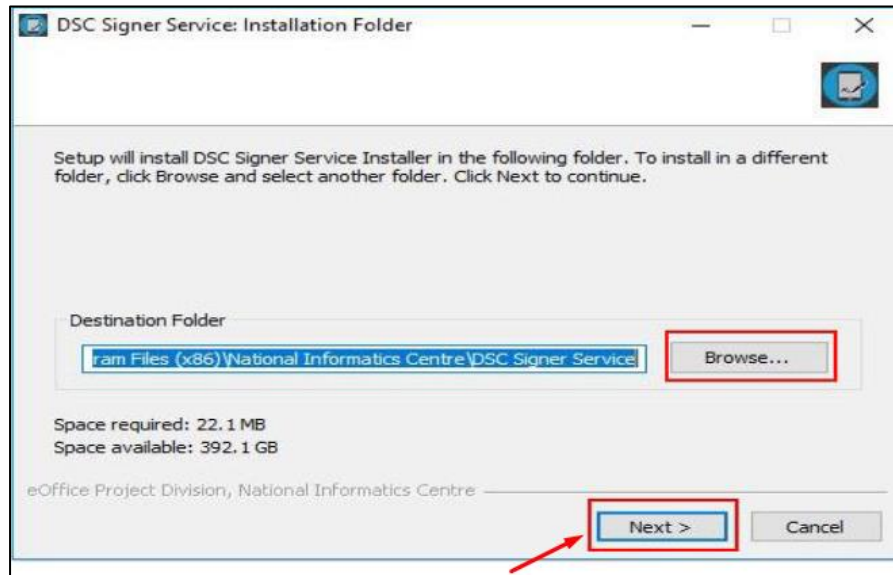
Installing DSC Signer Service in client machine

Note: Before installing, please make sure you don't have any previous installation of DSC Signer Service installed on client machine. If there is one, go to **My Computer** → **Click on Uninstall or change a program** → here from the list of programs, uninstall DSC Signer Service from the system, and then proceed to installation of latest version of DSC Signer service.

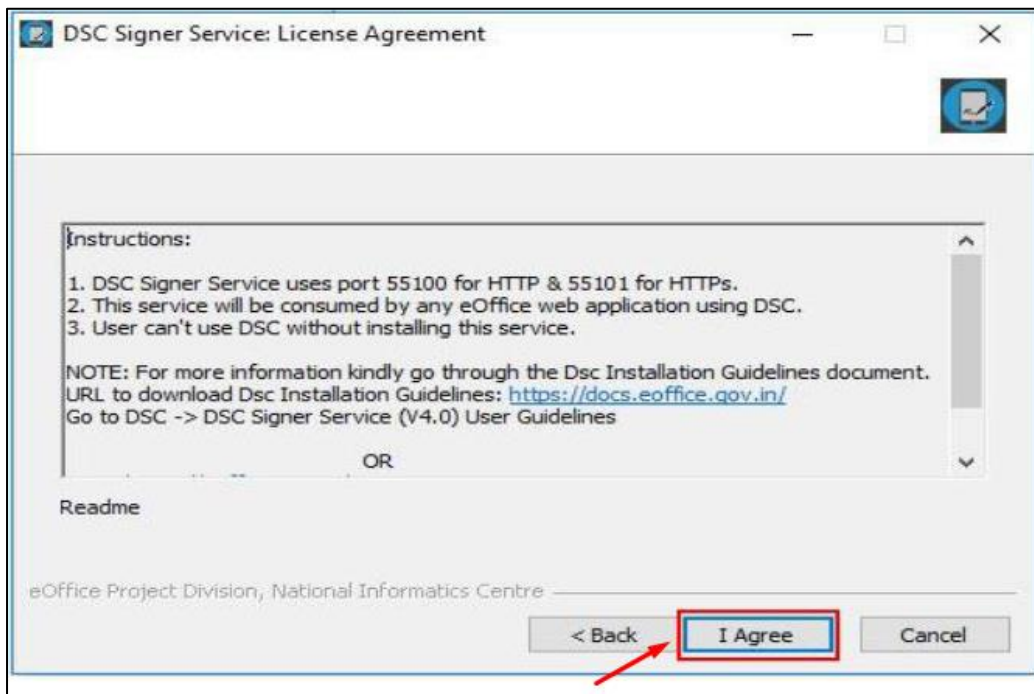


Following are the steps to install DSC Signer service to a client machine.

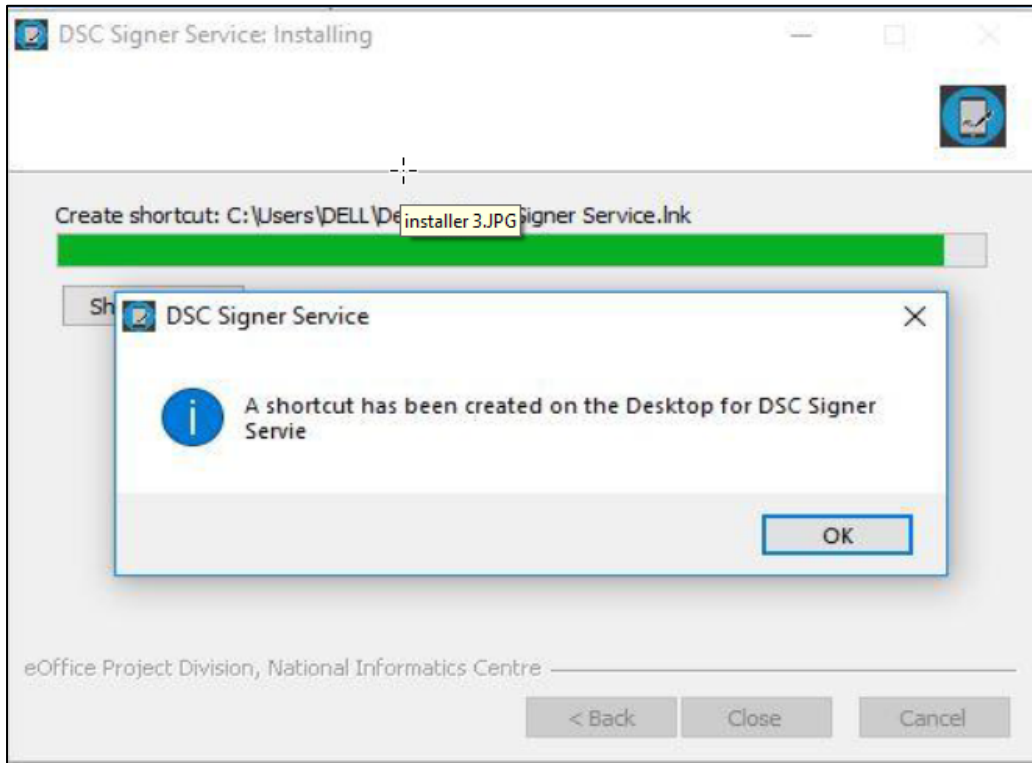
1. Locate the **DSC_Signer_Service.exe** file from downloaded bundle.
2. Double click required **exe** file to start the installation.
3. For default installation, click **Next** button



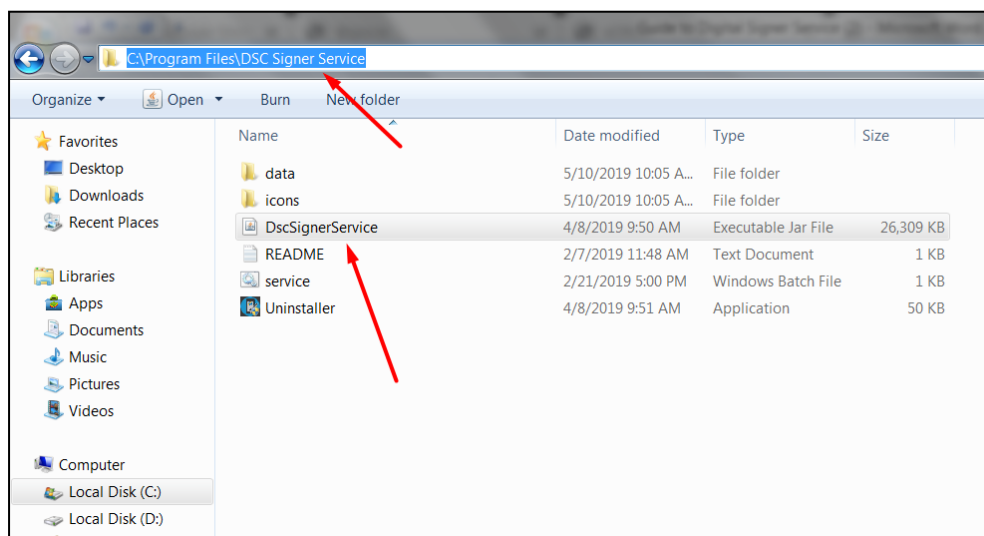
4. Click on **I Agree** button.



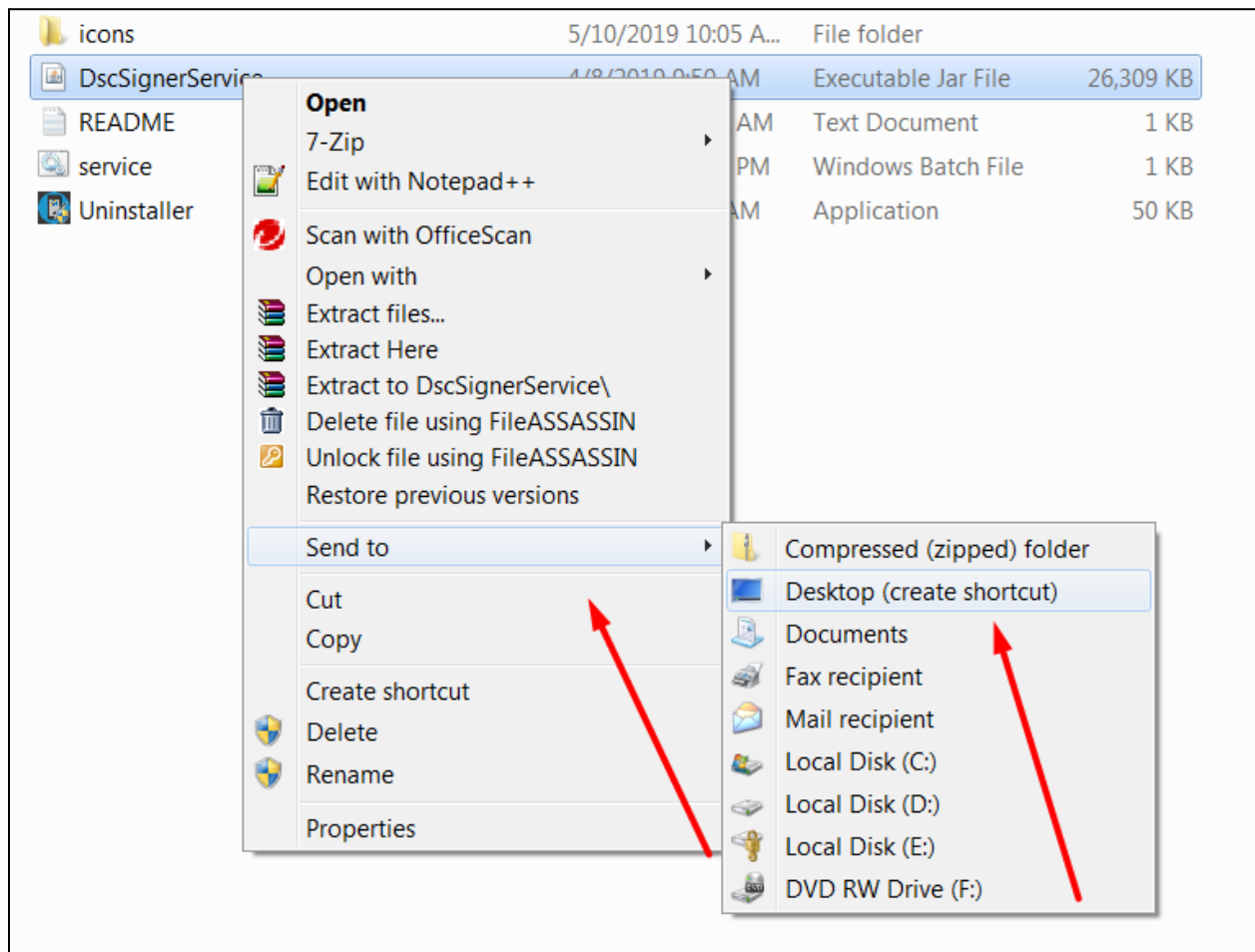
5. After installation is complete message will show up as shown above. Click on **OK** button and then click on **Close** button to finish the installation.
6. A shortcut is created on the desktop, named **DSC Signer Service.jar**.
7. After completion of installation it is required to either run the **DSC Signer Service** manually or reboot the system for the first time.



Note: Sometimes a shortcut is not created on Desktop. In that case, go to **My Computer** → **C Drive** → **Program Files** → **DSC Signer Service** and locate **DscSignerService** in it.

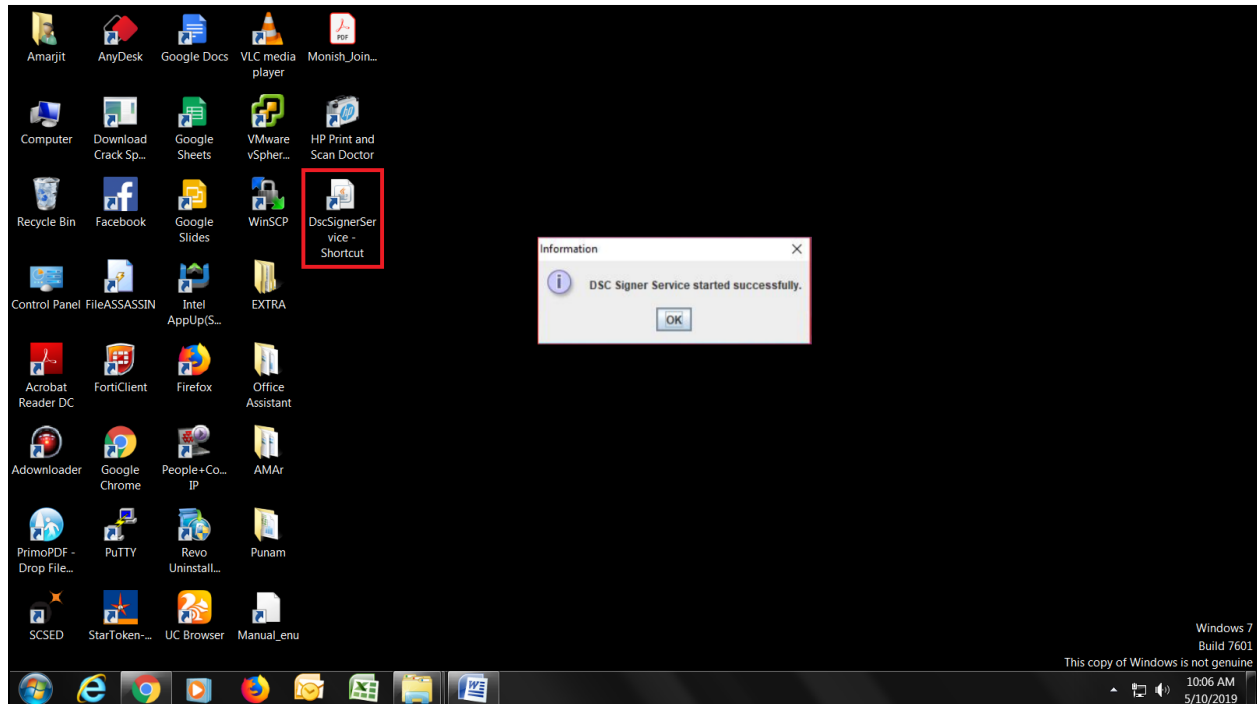


Right click on **DscSignerService** → **Send to** → **Desktop (create shortcut)**



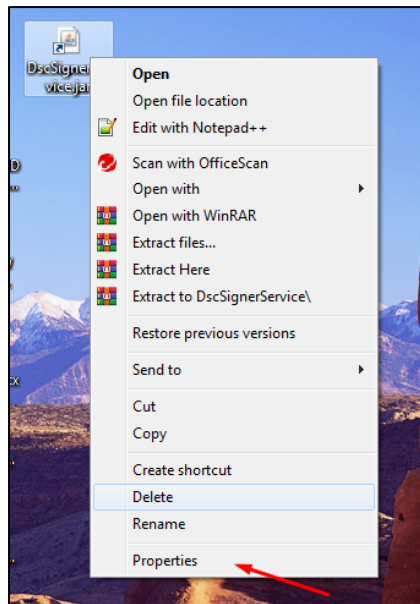
Steps to manually START the DSC Signer Service

1. Double click the desktop icon **DscSignerService**.
2. The service will take few seconds to start.
3. A message prompts DCS Signer Service started successfully.

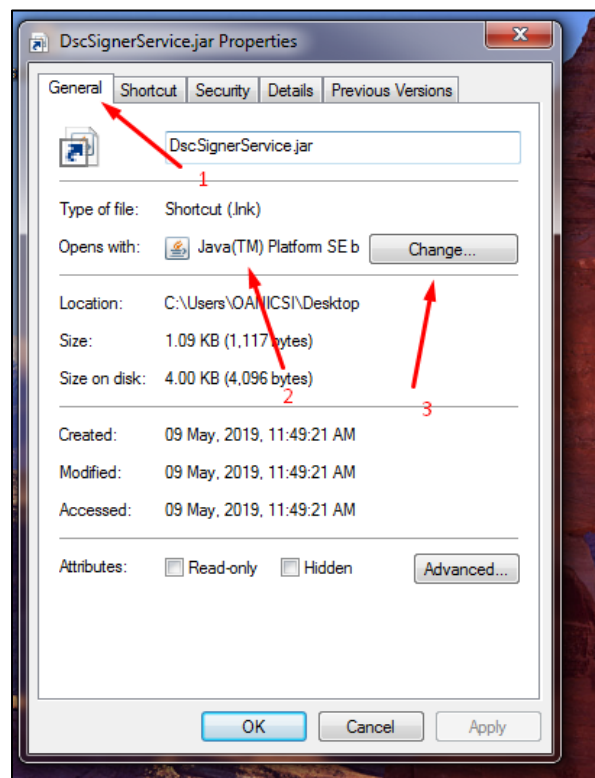


In Case the Signer Service doesn't open, do as follows:

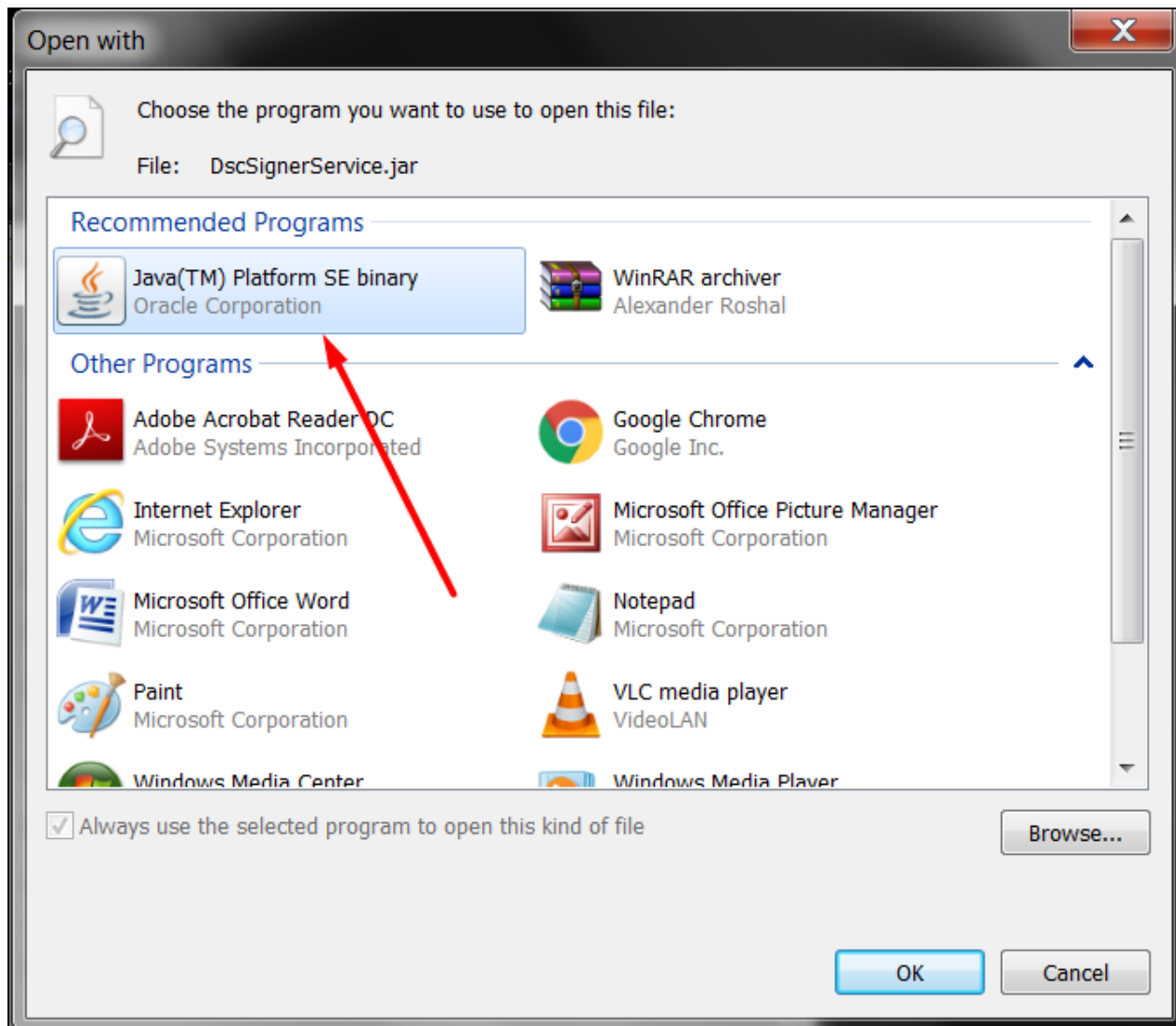
1. Right click on DscSignerService.jar on Desktop and click on Properties



2. Click on **General** Tab [Arrow 1] and See if it shows Opens with **Java™ Platform** [Arrow 2]. If it doesn't show, then click on **Change** Button [Arrow 3].



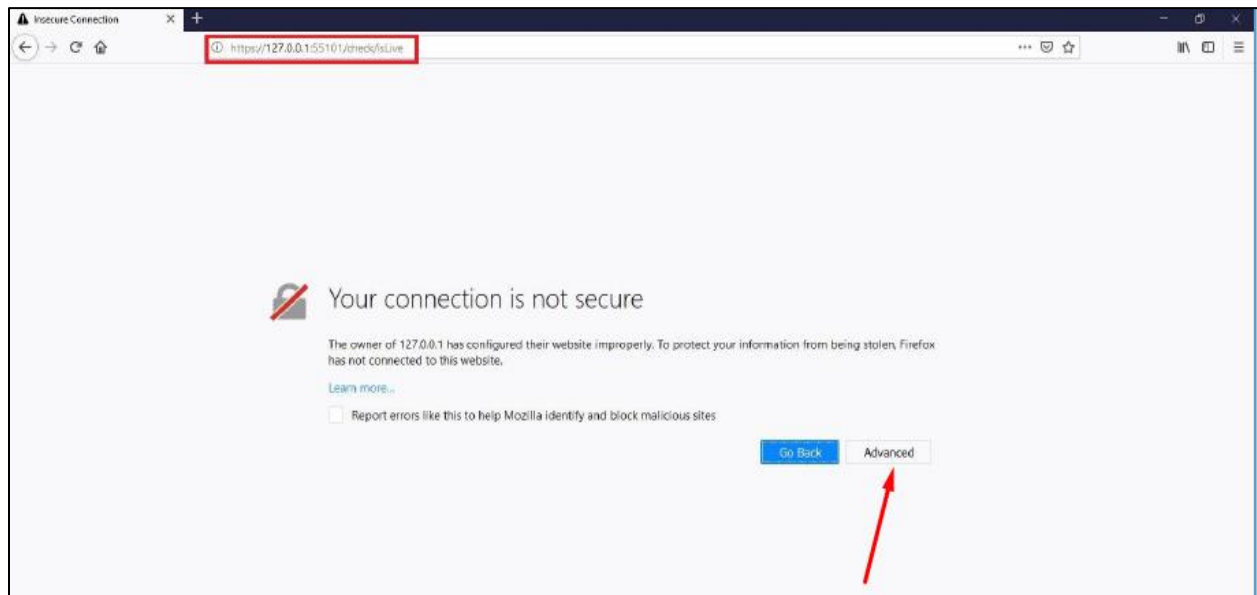
3. Select on **Java™ Platform SE Binary** [or equivalent on your system] and click **OK**.



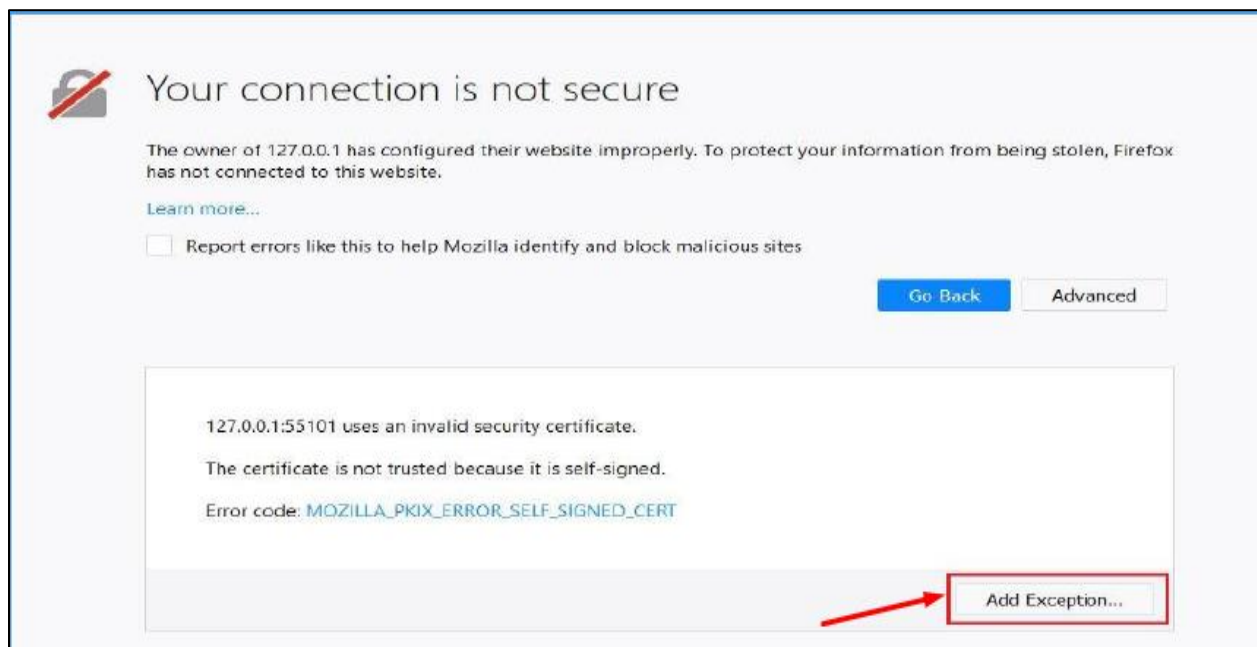
Add/Import SSL Certificate to the Browsers

For Firefox

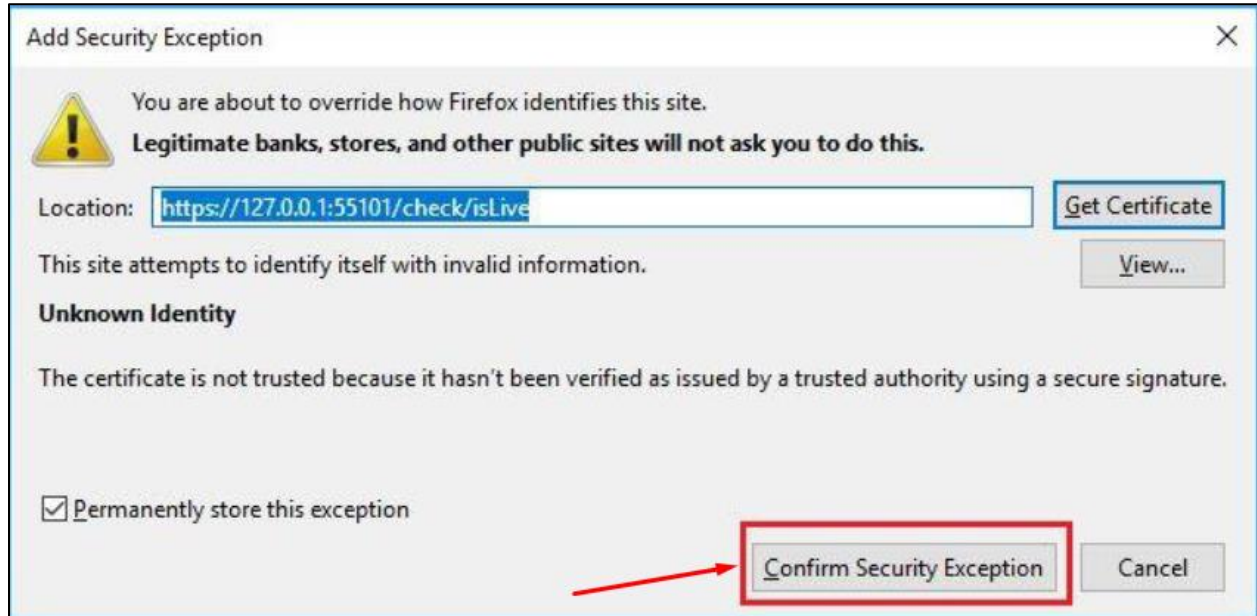
Open the Mozilla browser and enter the URL <https://127.0.0.1:55101/check/isLive>
User will see following error: Your Connection is not secure. Ignore this error by clicking on Advance button.



Next, click on Add Exception button as shown below



The browser will open a window to get the certificate. Click **Confirm Security Exception** button to add the exception as shown below.



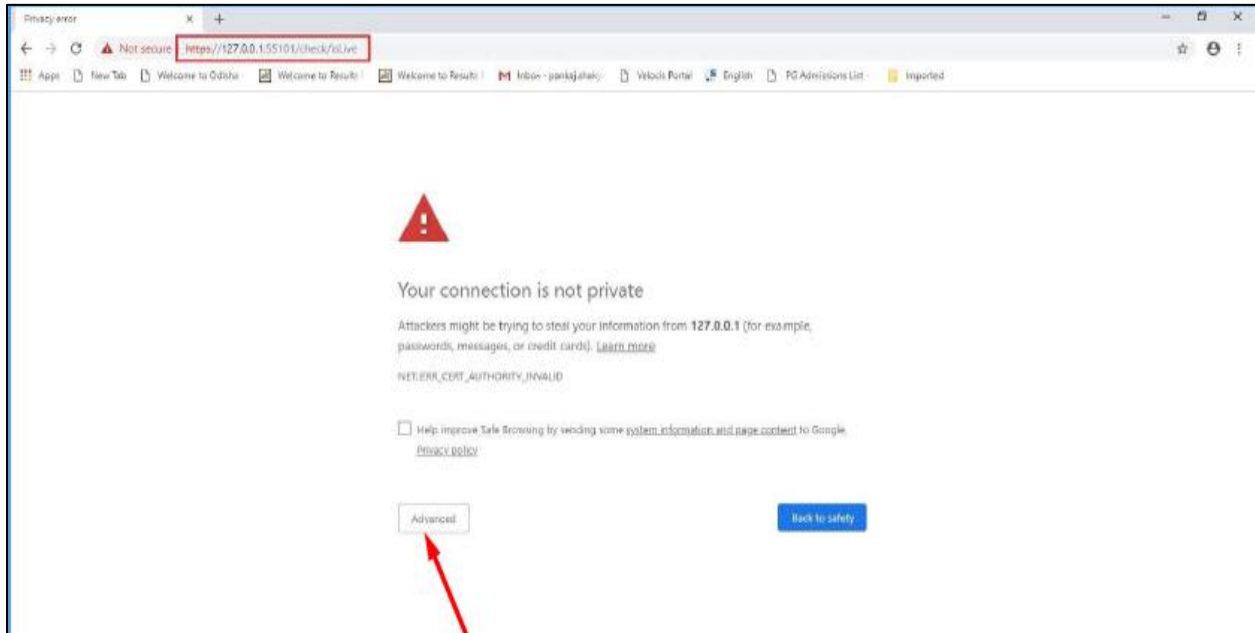
The browser will confirm and displays the message "**Success**" as shown below.



For Chrome

Open the Chrome browser and enter the URL <https://127.0.0.1:55101/check/isLive> as shown below.

User will see following error: Your connection is not private. Click on Advance button.



A message box appears, click **Proceed to 127.0.0.1 (Unsafe)** button as shown below.



The browser will confirm and displays the message "**Success**" as shown below.

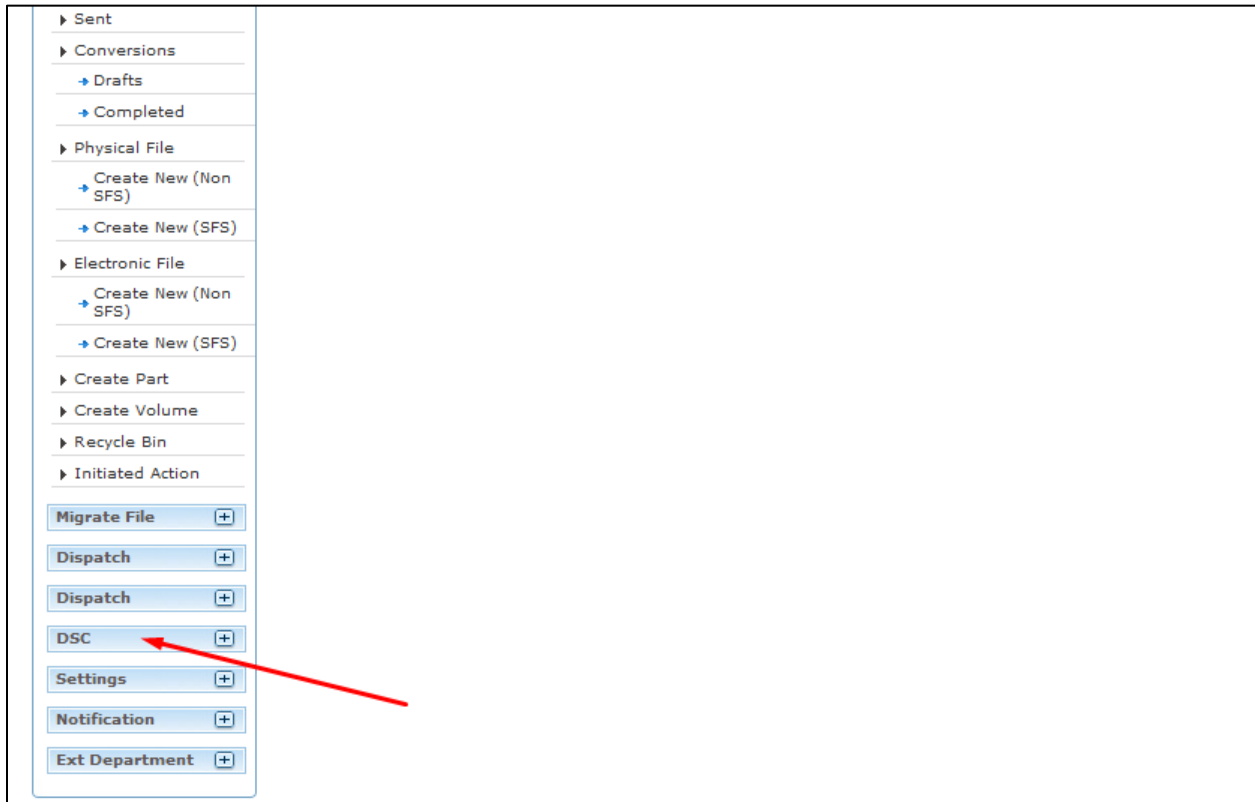


Using DSC Services in eOffice

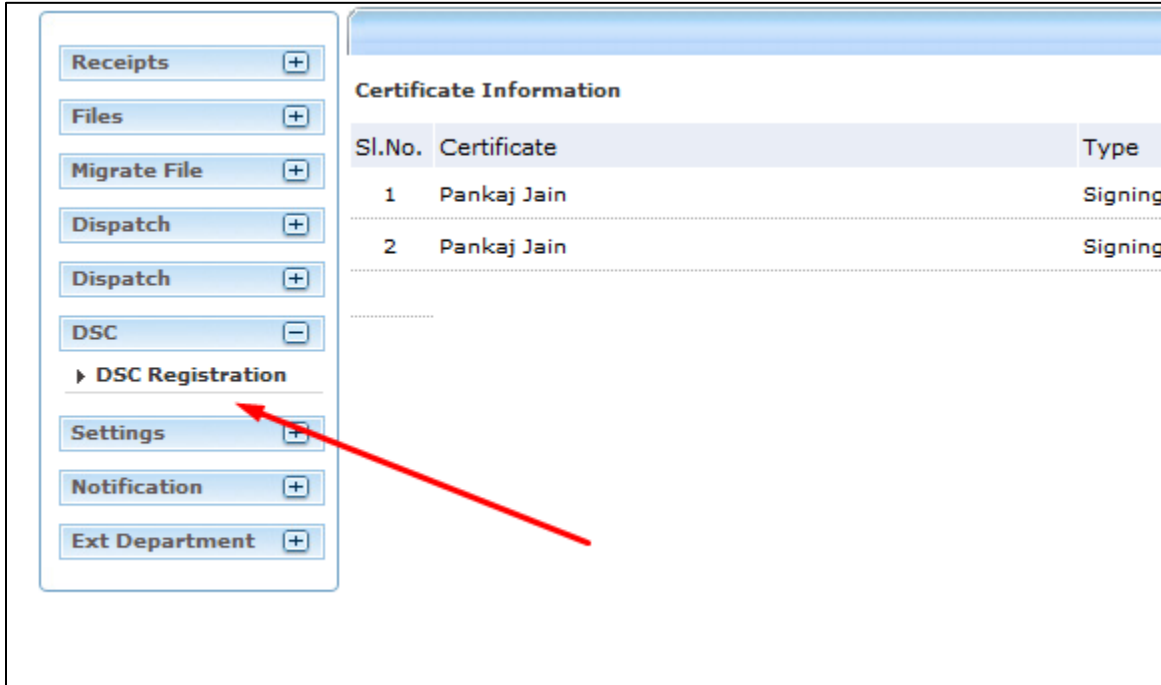
To use the DSC Services in eOffice, user will have to deregister their DSC Device and Register it again.

To deregister, following steps are to be taken:

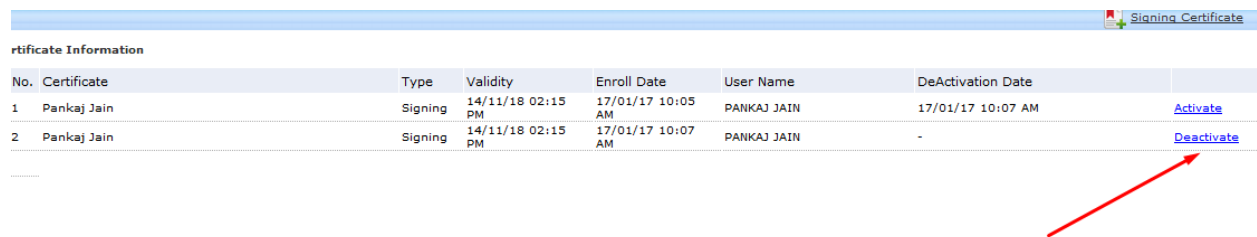
Login to eOffice, go to eFile and click on DSC as shown below.



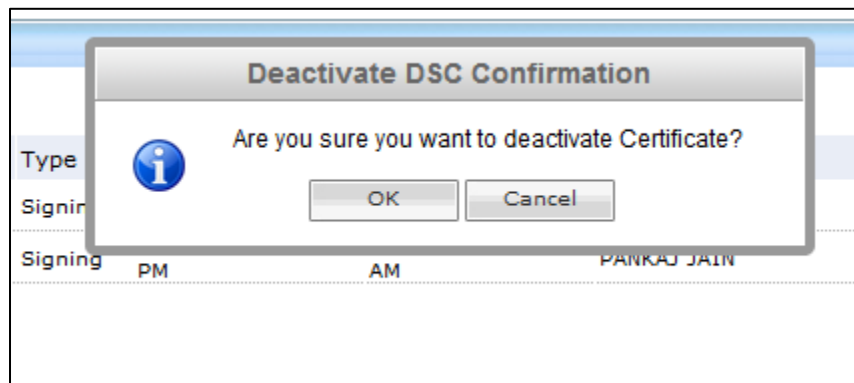
Next click on DSC Registration as shown below:



Now on Right hand side, user will see DSC Device Registered with eFile application. Click on Deactivate as shown below

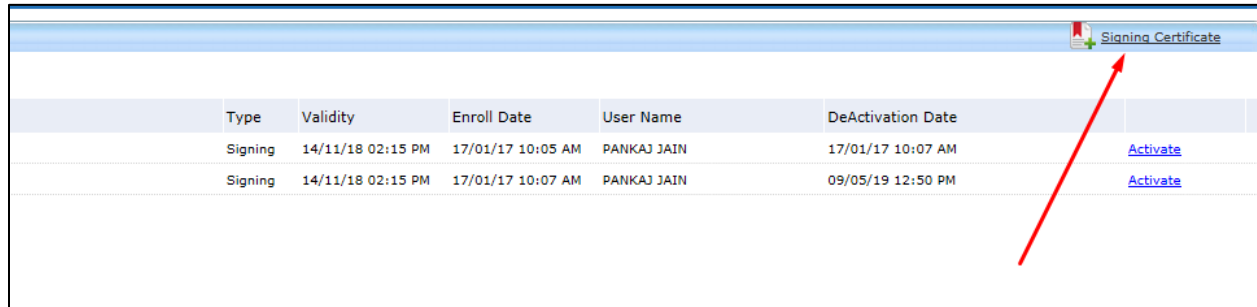


A Confirmation box will pop up. Click on OK



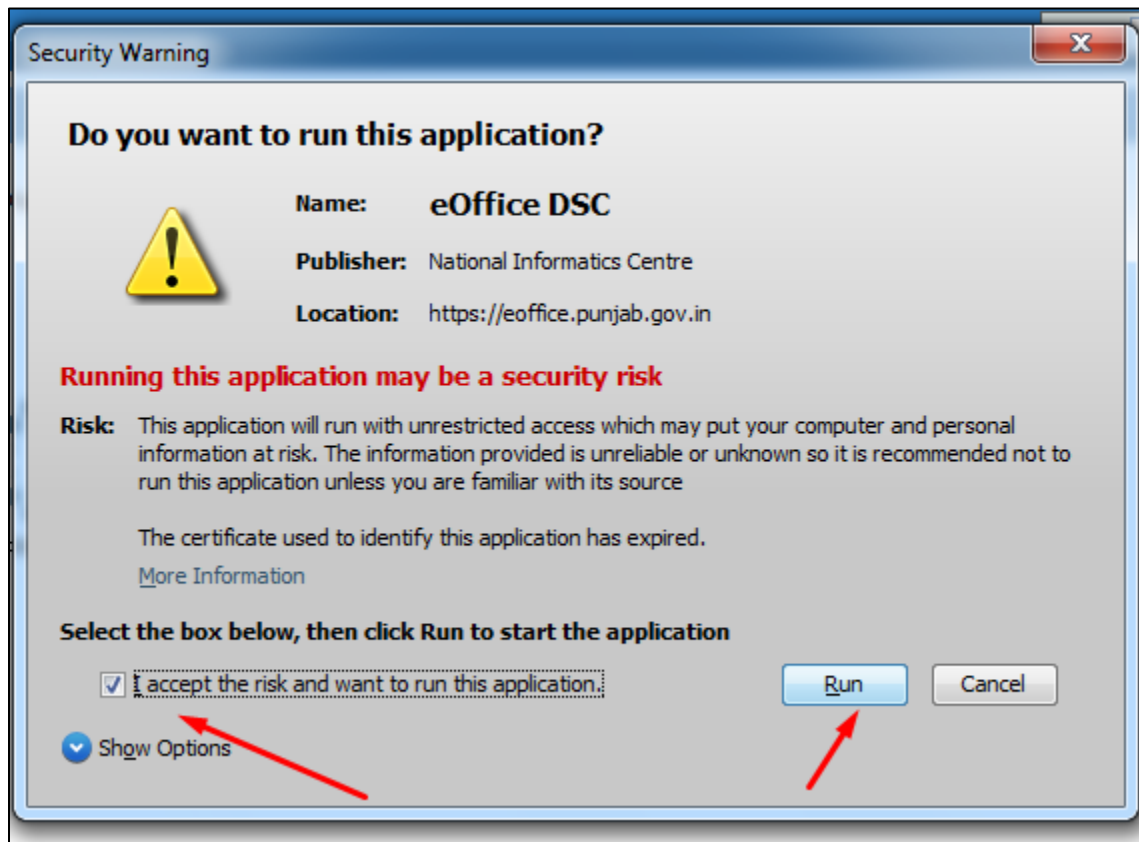
After Deactivating DSC, user must again register the DSC Device.

To Register, Attach the DSC Device to your computer USB Port and again go to DSC Registration, and click on Signing Certificate.

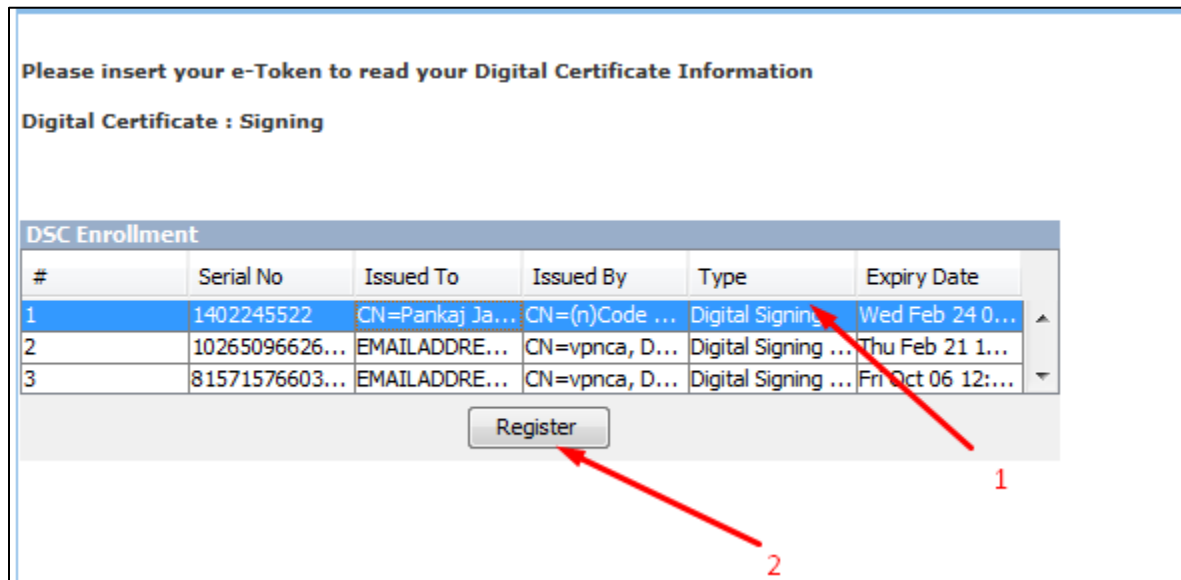


Type	Validity	Enroll Date	User Name	DeActivation Date	
Signing	14/11/18 02:15 PM	17/01/17 10:05 AM	PANKAJ JAIN	17/01/17 10:07 AM	Activate
Signing	14/11/18 02:15 PM	17/01/17 10:07 AM	PANKAJ JAIN	09/05/19 12:50 PM	Activate

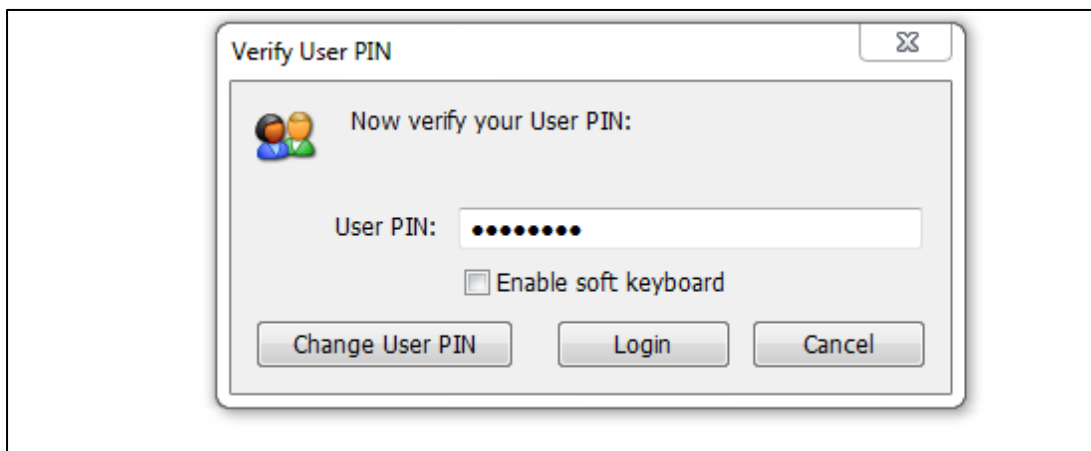
A window will pop up. Now click on checkbox and then click on Run



Now select the certificate in the list [arrow 1] and then click on Register [arrow 2] as shown below.



Enter the Pin in the Verify User PIN popup, and click Login button.



After that DSC device should be registered with the eOffice account.

Signature Validity Checkmark Visibility

In case of previous DSC, green check and Red Cross sign were being used to display verification status of signature inside pdf content.

Green check sign was used for **Valid Signature (Fig. below)** and **Red Cross sign** was used for **Invalid Signature**.

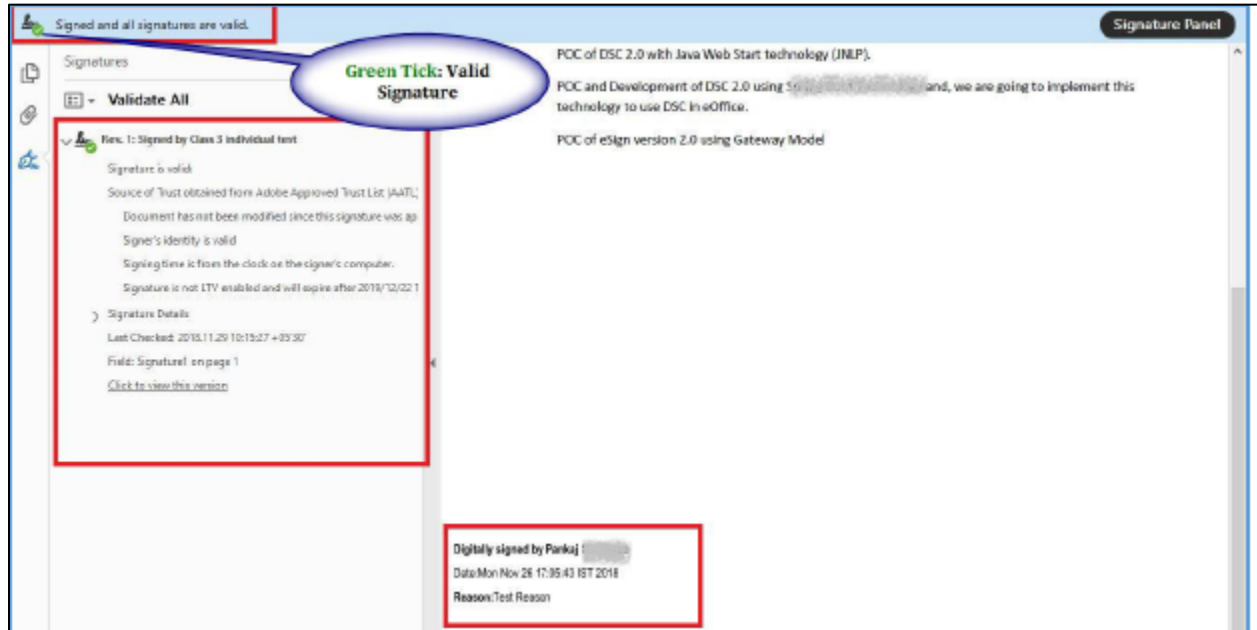


In current version, only signature details are being displayed along with the original content of the page as shown below.



How to verify signature in current scenario

Valid signature, Green Check will be shown at upper left corner of adobe reader and also inside signature panel itself as shown below.



In case of **Invalid Signature, Red Cross sign** is displayed at upper left corner of adobe reader and inside signature panel itself as shown below.

