

e office A DIGITAL WORK PLACE SOLUTION

Digital Signature Certificate(DSC) Signer Service



User Guidelines





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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

← → C & https://docs.eoffice.gov/n			* 0
	eOff	ce Documents Repository	
GUIDEL	INES/SOPs	DSC	
eFile File Management System	KMS Knowledge Management System	BSC Signer Service (Ver. 4.0) Installer For Windows For Windows For Windows Ser (Buests G) OSC Signer Service (Ver. 4.0) User Guide	Barry
e Tour Tour Management System	SPARROW Smart Performance Appraisal Report	Collaboration and Messaging Services	Alter fuldatives
English and devices of Netional Information Lenser (INC E + C A https://wolfsca.gov.in	♦ 3008.		¢ 8 0 i
			Contact Us -A A +A
	ном	O B B	
3			Vesentation mplementation landbook Documentation Aozilla Firefox ESR i2 srochures i5C i5C





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]



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



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** \rightarrow **Click on Uninstall or change a program** \rightarrow 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.

Contraction in the American			Other	- @	
Computer	•				
Organize Properties	System properties	Uninstall or change a program	Map network drive	Open Control Panel	
 Favorites Desktop Downloads Recent Places Libraries Apps Documents Music Pictures Videos 	 Hard Disk Drives Local Disk 919 MB free Devices with Rem DVD RW D 	(C) e of 49.9 GB novable Storage (1)	hange a program on er. Local Disk (D:) 80.4 GB free of 99.9 GB		Local Disk (l
Computer Coal Disk (C:) Coal Disk (D:) Coal Disk (E:) Network					





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

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

DSC Signer Service: Installation Folder		-		×
Setup will install DSC Signer Service Installer in the follow folder, click Browse and select another folder. Click Next		istall in a	differen	t
Destination Folder				
Destination Folder ram Files (x86) Wational Informatics Centre (DSC Sign	ner Service	Brow	vse]
ram Files (x86) Wational Informatics Centre DSC Sign Space required: 22.1 MB	her Service	Brow	vse	
ram Files (x86)Wational Informatics Centre DSC Sign	ner Service	Brow	vse]
ram Files (x86) Wational Informatics Centre DSC Sign Space required: 22.1 MB	ner Service		vse]

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

			-
Instructions:			^
1. DSC Signer Service	uses port 55100 for HTTP & 55101 fo	or HTTPs.	
2. This service will be a	consumed by any eOffice web application		
3. User can't use DSC	without installing this service.		
	nation kindly go through the Dsc Inst		ocument.
URL to download Dsc I	nation kindly go through the Dsc Inst Installation Guidelines: <u>https://docs.e</u> her Service (V4.0) User Guidelines		ocument.
URL to download Dsc I	Installation Guidelines: https://docs.e		ocument.
URL to download Dsc I Go to DSC -> DSC Sigr	Installation Guidelines: <u>https://docs.e</u> ner Service (V4.0) User Guidelines		ocument.
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URL to download Dsc I Go to DSC -> DSC Sigr	Installation Guidelines: <u>https://docs.e</u> ner Service (V4.0) User Guidelines		ocument.
URL to download Dsc I Go to DSC -> DSC Sigr Readme	Installation Guidelines: <u>https://docs.e</u> ner Service (V4.0) User Guidelines		voument.





- **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.

DSC Signer Service: Installi	ng		100	
Create shortcut: C:\Users\DE	ELL \De installer 3.J	pg igner Service.li	nk	
Sh 🔯 DSC Signer Servi	ce			×
A shortcu Servie	t has been cre	ated on the Desi	top for DSC Sig	ner
			0	K
ffice Project Division, Nationa	l Informatics Ce	entre		
			-	
		< Back	Close	Cancel

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.

🚔 Apps 🔣 Uninstaller	Date modified Type Size 5/10/2019 10:05 A File folder 5/10/2019 10:05 A File folder 5/10/2019 10:05 A File folder 26,309 KF 2/7/2019 11:48 AM Text Document 1 KF 2/21/2019 5:00 PM Windows Batch File 1 KF
Downloads Libraries Apps Downloads Libraries Li	5/10/2019 10:05 A File folder 4/8/2019 9:50 AM Executable Jar File 26,309 KB 2/7/2019 11:48 AM Text Document 1 KB 2/21/2019 5:00 PM Windows Batch File 1 KB
Recent Places DscSignerService README Service Libraries Service Apps Winistaller	4/8/2019 9:50 AM Executable Jar File 26,309 KI 2/7/2019 11:48 AM Text Document 1 KI 2/21/2019 5:00 PM Windows Batch File 1 KI
Libraries Service Apps Winstaller	2/7/2019 11:48 AM Text Document 1 KH 2/21/2019 5:00 PM Windows Batch File 1 KH
Libraries Service Apps Munstaller	2/21/2019 5:00 PM Windows Batch File 1 KB
Apps Apps Milling	_,,
of instance	
	4/8/2019 9:51 AM Application 50 KB
Documents	
🕹 Music	
la Pictures	
Juleos	
Computer	
😻 Local Disk (C:)	
⊲≫ Local Disk (D:)	

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

👢 icons		5/10/2019 10):05 A	File folder
DscSignerServi README service		Open 7-Zip	AN	M Text Document 1 KB
Uninstaller		Edit with Notepad++ Scan with OfficeScan Open with Extract files Extract Here Extract to DscSignerService\ Delete file using FileASSASSIN Unlock file using FileASSASSIN	AM	
		Restore previous versions Send to	•	Compressed (zipped) folder
	9 9	Cut Copy Create shortcut Delete Rename Properties		Mail recipient Local Disk (C:)
			<i>.</i>	DVD RW Drive (F:)





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].

a	DscSignerService.jar
Type of file:	Shortcut (.lnk)
Opens with:	🛃 Java(TM) Platform SE b Change
Location:	C:\Users\OAI\ICSI\Desktop
Size:	1.09 KB (1,117 vtes)
Size on disk:	4.00 KB (4,096 bytes)
Created:	09 May, 2019, 11:49:21 AM
Modified:	09 May, 2019, 11:49:21 AM
Accessed:	09 May, 2019, 11:49:21 AM
Attributes:	Read-only Hidden Advanced
	OK Cancel Apply

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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 <u>https://127.0.0.1:55101/check/isLive</u> User willsee following error: Your Connection is not secure. Ignore this error by clicking on Advance button.

A Insecure Connection	× +		- ø ×
(←) → ♂ @	@ https://127.0.0.155101/breds/sLive	··· 🖂 🕁	W\ © ≡
	🌠 Your connection is not secure		
	The owner of 127.0.0.1 has configured their website improperty. To protect your information from being stolen, Firefox has not connected to this website.		
	Learn more		
	Report errors like this to help Mozilla identify and block malicious sites		
	Go Back Advanced		
	/		
	· · · · · · · · · · · · · · · · · · ·		

Next, click on Add Exception button as shown below

	The owner of 127.0.0.1 has configured their website improperly. To protect your information from being stolen, Firefo has not connected to this website.
1	Learn more
	Report errors like this to help Mozilla identify and block malicious sites
	Go Back Advanced
	127.0.0.1:55101 uses an invalid security certificate. The certificate is not trusted because it is self-signed. Error code: MOZILLA_PKIX_ERROR_SELF_SIGNED_CERT
	Add Exception



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

Add Security Exception	×
You are about to override how Firefox identifies this site. Legitimate banks, stores, and other public sites will not ask you to do this.	
Location: https://127.0.0.1:55101/check/isLive	<u>G</u> et Certificate
This site attempts to identify itself with invalid information.	<u>⊻</u> iew
Unknown Identity	
The certificate is not trusted because it hasn't been verified as issued by a trusted authority using	a secure signature.
Permanently store this exception	n Cancel

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

🥩 127.0.0.1:55101/check/isLive 🗙 🗙	(+)
(←) → C* û	① A https://127.0.0.1:55101/check/isLive
success	





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.

Physicy error X +		- # ×
← → C ▲ Not secure Mttps://127.0.0.1.55101/theck//s0/ve		ά Θ :
III Appe 🕐 New Taki 🕐 Welcome to Odsha 🛛 🛃 Welcome to Results I	💹 Wekome to Result i 🛛 Inbox - pankajalako 👌 Vekods Portai 🧏 English 👌 Pő Admissions List 🔋 Imported	
	A	
	Your connection is not private	
	Attackers might be trying to steal your information from 127.0.0.1 (for example,	
	passwords, messages, or credit cards). <u>Learn moze</u>	
	NET.ERC.CERT_AUTHORITY_INVALID	
	0	
	Melp improve Tale Browsing by vecding some system information and page content to Google. Provery policy	
	Advanced Book to safety	
	Participant Contraction (Contraction)	
	1	

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

	ction is not private e trying to steal your information fi	rom 127.0.0.1 (for example,
passwords, messa	ges, or credit cards). <u>Learn more</u>	
NET::ERR_CERT_AUTH	IORITY_INVALID	
Help improve Sa <u>Privacy policy</u>	fe Browsing by sending some <u>system in</u>	formation and page content to Google,
Hide advanced	[Back to safety
		curity certificate is not trusted by your
computer's operat		a misconfiguration or an attacker
Proceed to 127.0.0.1	(unsafe)	



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:

Receipts	+ Carti	ficate Information	
Files	+		
Migrate File	E SI.No	. Certificate	Туре
	1	Pankaj Jain	Signi
Dispatch	÷ 2	Pankaj Jain	Signi
Dispatch	÷		
DSC	Θ	****	
DSC Registrat	tion		
Settings			
Notification	÷		
Ext Department	t 🛨		

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

						Signing Certificate
tificate Information						
No. Certificate	Туре	Validity	Enroll Date	User Name	DeActivation Date	
1 Pankaj Jain	Signing	14/11/18 02:15 PM	17/01/17 10:05 AM	PANKAJ JAIN	17/01/17 10:07 AM	Activate
2 Pankaj Jain	Signing	14/11/18 02:15 PM	17/01/17 10:07 AM	PANKAJ JAIN	•	<u>Deactivate</u>
						/

A Confirmation box will pop up. Click on OK

ype	1		deactivate Certificate?	'
ignir ligning		ОК	Cancel PANKAJ JAIN	
	PM	AM	PARKO JAIN	

19



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.

					Signing Certificate
					1
Туре	Validity	Enroll Date	User Name	DeActivation Date	
Signir	ng 14/11/18 02:15 PM	17/01/17 10:05 AM	PANKAJ JAIN	17/01/17 10:07 AM	Activate
Signir	ng 14/11/18 02:15 PM	17/01/17 10:07 AM	PANKAJ JAIN	09/05/19 12:50 PM	<u>Activate</u>
					/

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

Security Warning		
Do you want to	o run this	application?
	Name:	eOffice DSC
	Publisher:	National Informatics Centre
	Location:	https://eoffice.punjab.gov.in
Running this app	lication ma	y be a security risk
information at	risk. The inforr	unrestricted access which may put your computer and personal mation provided is unreliable or unknown so it is recommended not to u are familiar with its source
The certificate More Informat		fy this application has expired.
Select the box belo	w, then click	Run to start the application
✓ Laccept the ris	k and want to	run this application. Run Cancel
Show Options		1





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

Digital C	isert your e-Token to ertificate : Signing	read your Digi	tal Certificate I	Information	
DSC Enro	ollment				
#	Serial No	Issued To	Issued By	Туре	Expiry Date
1	1402245522	CN=Pankaj Ja	CN=(n)Code	Digital Signin	Wed Feb 24 0 🔺
2	10265096626	EMAILADDRE	CN=vpnca, D	Digital Signing	Thu Feb 21 1
3	81571576603	EMAILADDRE	CN=vpnca, D	Digital Signing	Fri Oct 06 12: 🔻
		Re	egister		
					1
				2	

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

Now ver	ify γour User ΡΙΝ:	
User PIN:	•••••	
	Enable soft keyboard	
Change User	PIN Login (Cancel

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.

(Page content)

Digitally signed by ABC

Date:Mon Nov 26 17:05:43 IST 2018

Reason:Test Reason





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.

Signed and all signatures are valid. Signatures Green Tick Signatures Volidate All Green Tick Signature Signa	
Signature is not LTV esabled and will aspire offer 2018/12/02 1) Signature Datale Last Checked 2018/11/2018/15/27+89/90 Field: Signatural engage 1 <u>Click to view this version</u>	
	Digitally signed by Pankaj 1 Data Mon Nov 26 17:05:43 IST 2018 Reason:Test Reason

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.

Sig Sou > Sig Las	1: Signed by (>	l since it was signed	chonuda	Ego walion 20 wiley Geleway M	billel	
		De	itally signed by Farma, and a wind the second			