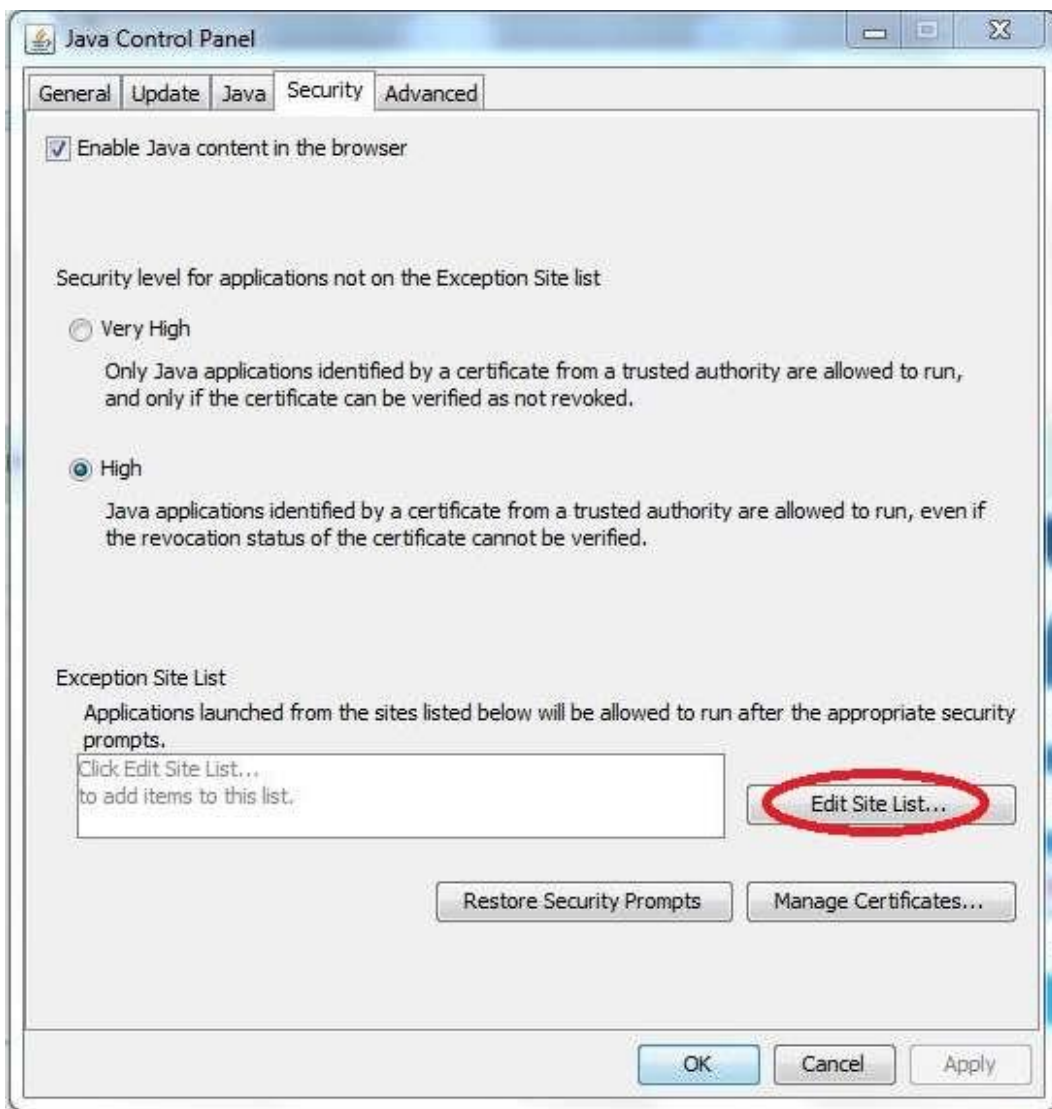
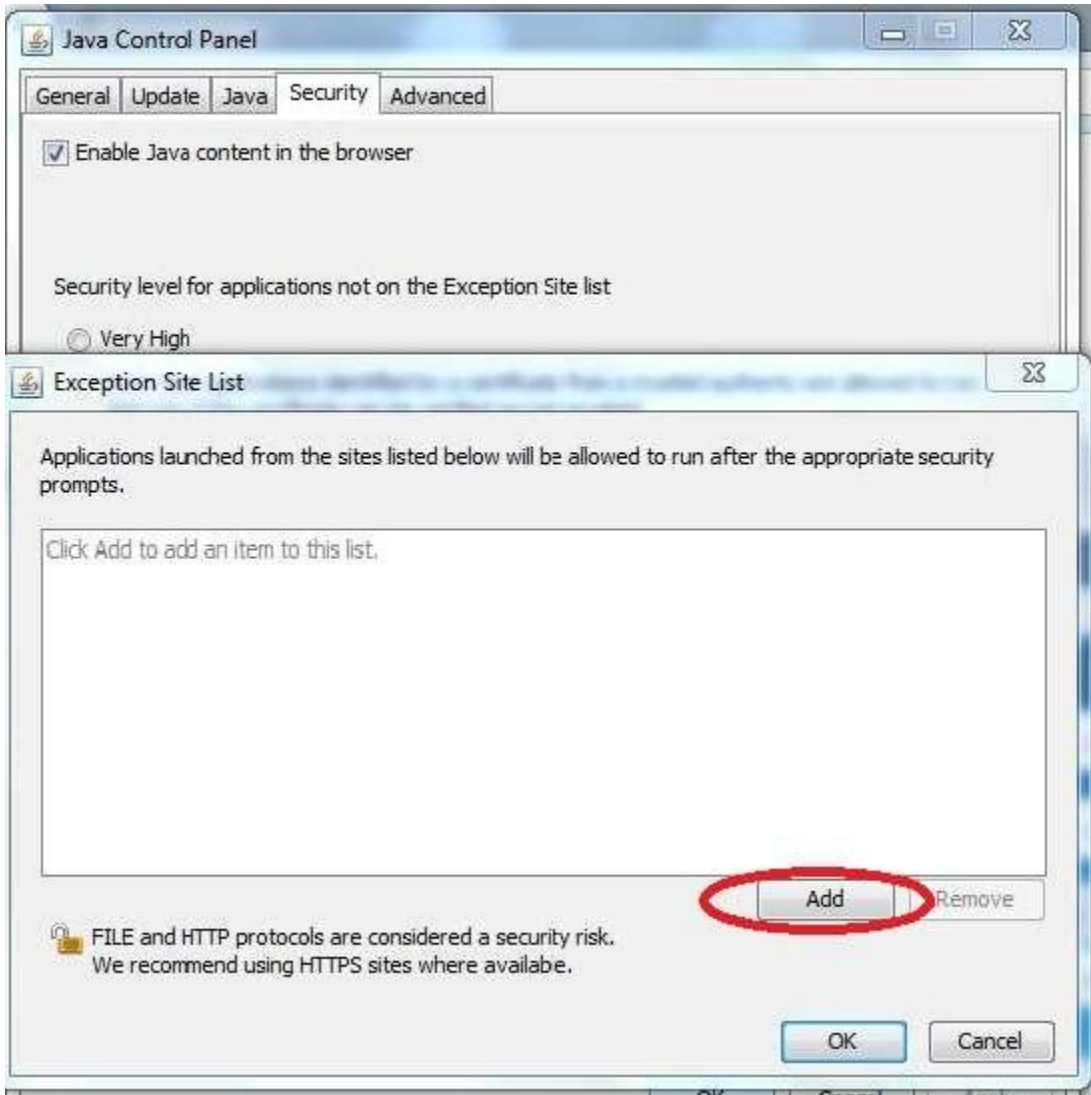


## Steps for Applying Digital Signature

### System Requirements:

1. Mozilla Firefox (**32 bit**) browser – [click here to download firefox 48.0.2](#)
2. JRE (32 bit) 1.6 update 29 or above, 1.7 or 1.8 – [click here to download jre 1.8 update 121](#)
3. Only Java/JRE 32 bit should be used even if operating system is 64 bit
4. DSC drivers must be already installed in the PC.
5. For Windows machine, After installing JRE, Add site url (http://rr.kerala.gov.in) in Exception Site List of Security Tab in Java Control Panel (Start -> Programs -> Java -> Configure Java)







## Steps for DSC registration and Form Signing:

1. Click **Verified list** from Dash board.

DASHBOARD

Requisition - Pending for Approval 0	Requisition - Verified 3	Requisition - Returned 0	Requisition - Cancelled 0
Modify Demand - Pending 0	Modify Demand - Approved 5	Modify Demand - Cancelled 2	OTS - Pending 0
OTS - Approved 4	OTS - Cancelled 1		

2. Click **view form / Apply Dsc** button from the list.

Requisition List

Pending Requisitions 0   Verified Requisitions 5   Returned Requisitions 0   Cancelled Requisitions 0

Verified Requisitions

10 records per page   Search

Sl No.	Year	Verified Date	RR No.	Ref. File No.	Ref. File Date	A/c No.	Principal Amount	Amount Due	Name of principal Defaulter	View Form 24 Apply Dsc	Cancel Form 24
1	2017	11-04-2017	5	001	11-04-2017	123	25000	28000	Manju	Apply Dsc	Cancel
2	2017	10-04-2017	1	2017/kmv01	10-04-2017	2356	30000	31447	Asil	View form 24	
3	2017	10-04-2017	2	002356	10-04-2017	12345678	50000	62587	Dinil	View form 24	
4	2017	10-04-2017	3	002356	10-04-2017	12345678	25000	34168	Adarsh	View form 24	
5	2017	10-04-2017	4	11232	10-04-2017	123654	24000	25920	Paul	View form 24	

Showing 1 to 5 of 5 entries   -- Previous 1 Next --

3. DSC needs to be registered once before using in RROnline Portal.  
If your dsc is not registered then the following screen will appear.  
Insert smartcard/USB key and click the **Register** button

RRC : 2017/5/02 Form 24

Unsigned Form 24 Apply Digital Signature Signed Form 24 Confirm & Forward

**DSC needs to be registered once before using in RROnline Portal.**

Insert Smartcard/USB Key for DSC registration..

- Click To Register -

4. If appropriate library files (.dll or .so) are available in the system, it will be automatically detected and system will prompt for dsc pin code.

RRC : 2017/5/02 Form 24

Unsigned Form 24 Apply Digital Signature Signed Form 24 Confirm & Forward

**DSC needs to be registered once before using in RROnline Portal.**

Insert Smartcard/USB Key for DSC registration..

Processing...

Digital Signature - RROnline

Please select your PKCS#11 implementation library file(.dll / .so) :

C:\Windows\System32\Aetpksa1.dll Browse

Enter PIN Code:

Sign Cancel

5. Enter pin code to proceed. If the implementation library file path is not appearing, browse and provide the appropriate path of .dll / .so file.
- For Windows the file will be in Windows\SysWOW64" or "WINDOWS\system32" or "WINNT\system32"
  - For Linux machine the file will be in /usr/local/lib/ or /usr/lib/

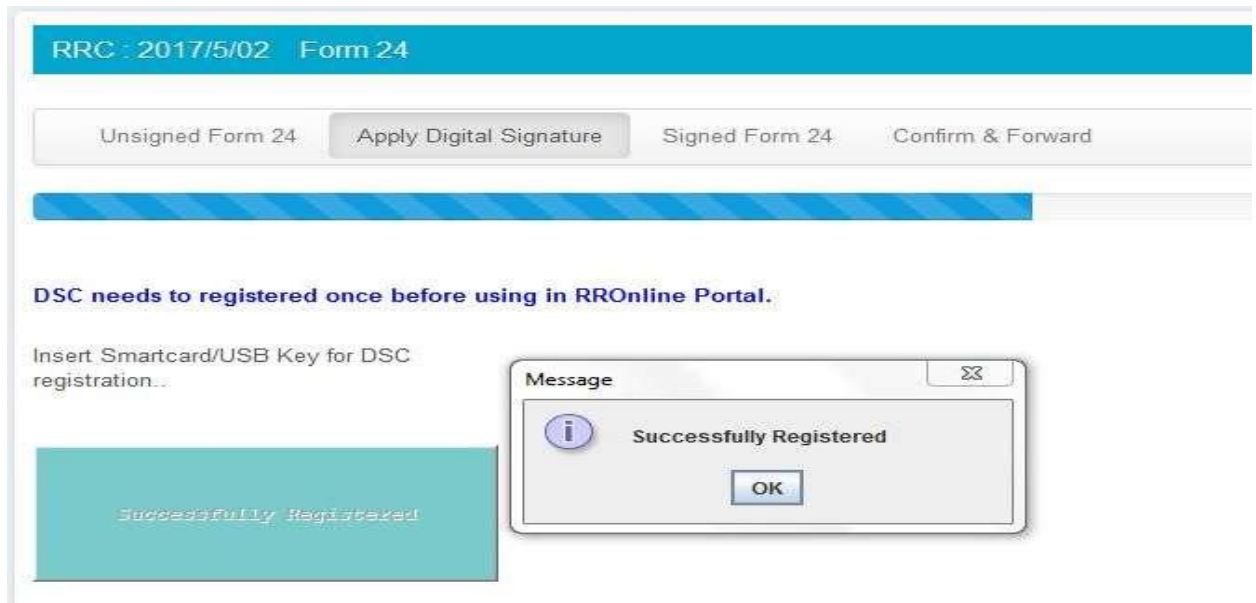
Selection of appropriate driver path (.dll / .so file) needs to be done once only.

Listed below are few DSC dll's

DSC Type	Library file (Windows)	Library file (Linux)
SafeSign	aetpkss1.dll	aetpkss1.so
eMudhra	eMudhra\eMudhra CSP V1.0\wdpkcs.dll	1. WatchData/eMudhra_3.4.3/lib/libpkcs11 wrapper.so 2. WatchData/eMudhra_3.4.3/lib/libwdpkcs_eMudhra_343.so
TRUST KEY	1. TRUST KEY\TRUST KEY CSP V1.0\wdpkcs.dll 2. C:\Windows\System32\TRUSTKEYP11_ND_v34.dll	1. WatchData/TRUSTKEY/lib/libpkcs11 wrapper.so 2. WatchData/TRUSTKEY/lib/libwdpkcs_TRUSTKEY.so
Belgium eID MiddleWare	beidpkcs11.dll	beidpkcs11.so
Gemalto Cryptocard token	libgtop11dotnet.dll	libgtop11dotnet.so
EPass	eps2003csp11.dll	
Aladdin e token	eTPKCS11.dll	
Safe net I key	dkck201.dll	
Starkey	aetpkss1.dll	
Watchdata PROXkey	SignatureP11.dll	Watchdata/Proxkey/lib/libwdpkcs_SignatureP11.so

(Note: DSC supplier can be contacted for identifying appropriate dll for your dsc)

6. On completion the following screen will be displayed and you can continue with form signing



7. On selecting **Apply Digital Signature** tab, below screen will be displayed. Insert the smart card and click on “**Click To Sign**” button.



8. Applying digital signature may lead to some pop up messages containing security warnings as shown below. Please act according to the messages (**Allow, Run and Don't Block**) to continue signing process.



Unsigned Form 24

Insert Smartcard/USB K



Security Warning

**Do you want to run this application?**

 **Name:** RROnline  
**Publisher:** UNKNOWN  
**Location:** http://localhost

**Running this application may be a security risk**

**Risk:** This application will run with unrestricted access which may put your computer and personal information at risk. The information provided is unreliable or unknown so it is recommended not to run this application unless you are familiar with its source.

[More Information](#)

Select the box below, then click Run to start the application

I accept the risk and want to run this application.

Unsigned Form

Insert Smartcard/US

Signing, Wait.

Security Warning

**Do you want to run this application?**

 **An unsigned application from the location below is requesting permission to run.**  
**Location:** http://localhost

[More Information](#)

Click **Cancel** to stop this app or **Run** to allow it to continue.





9. Enter pin code to proceed. If the implementation library file path is not appearing, browse and provide the appropriate path of .dll / .so file.
  - For Windows the file will be in Windows\SysWOW64" or "WINDOWS\system32" or "WINNT\system32"
  - For Linux machine the file will be in /usr/local/lib/ or /usr/lib/

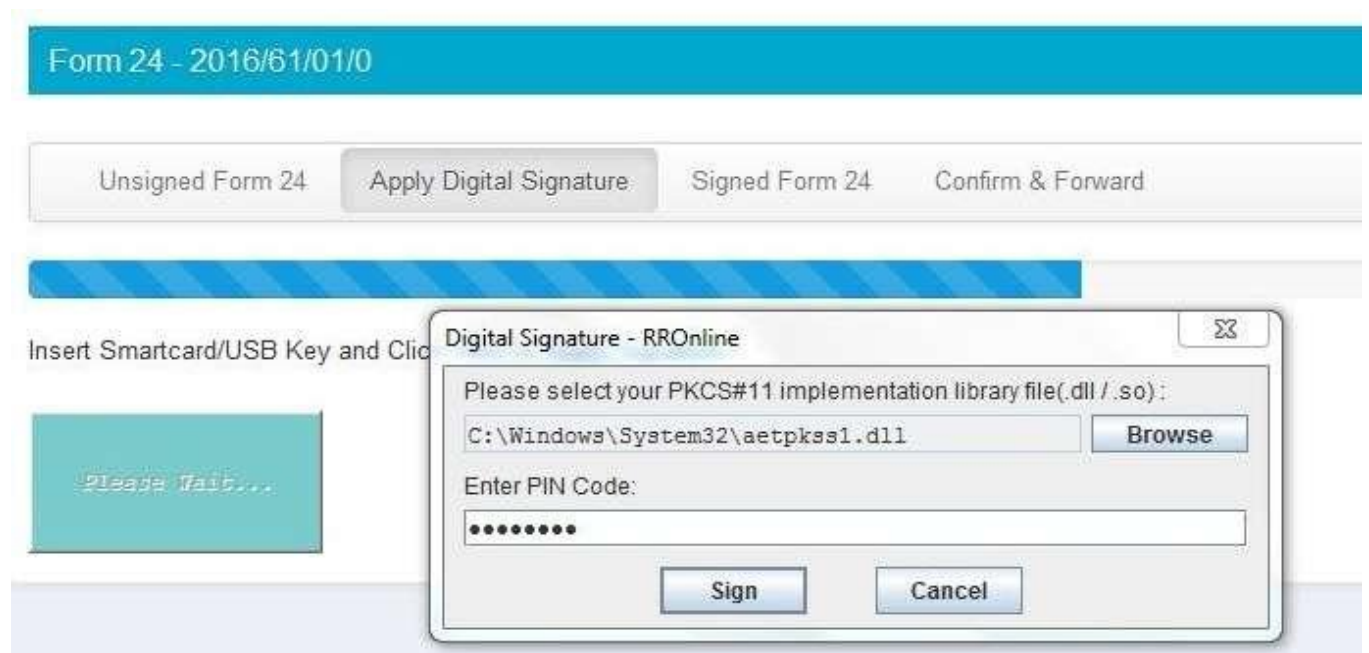
Selection of appropriate driver path (.dll / .so file) needs to be done once only.

Listed below are few DSC dll's

DSC Type	Library file (Windows)	Library file (Linux)
SafeSign	aetpkcs1.dll	aetpkcs1.so
eMudhra	eMudhra\emudhra CSP V1.0\wdpkcs.dll	WatchData/emudhra_3.4.3/lib/libpkcs11wrapper.so WatchData/emudhra_3.4.3/lib/libwdpkcs_eMudhra_343.so
TRUST KEY	TRUST KEY\TRUST KEY CSP V1.0\wdpkcs.dll	WatchData/TRUSTKEY/lib/libpkcs11wrapper.so WatchData/TRUSTKEY/lib/libwdpkcs_TRUSTKEY.so
Belgium eID MiddleWare	beidpkcs11.dll	beidpkcs11.so

Gemalto Cryptocard token	libgtop11dotnet.dll	libgtop11dotnet.so
EPass	eps2003csp11.dll	
Aladdin e token	eTPKCS11.dll	
Safe net I key	dkck201.dll	
Starkey	aetpkss1.dll	
Watchdata PROXkey	SignatureP11.dll	Watchdata/Proxkey/lib/libwdpkcs_SignatureP11.so

( Note : DSC supplier can be contacted for identifying the appropriate dll for your dsc )



10. After verification of pin code, the certificate will be signed successfully.



11. Signed certificate can be viewed / downloaded on selecting “Signed form” tab.



**To view Digitally Signed Certificate in browser, configure Firefox as shown below**

Select options → Applications → type “pdf” in search bar and select “Use Adobe Acrobat (in Firefox)”

