

To replace the HTTP certification for DFL firewall

[Topology]

PC-----SW-----(lan1)DFL
CA/DNS server--/

#####

CA/DNS server settings:

IP address: 192.168.1.200

PC IP address: 192.168.1.58

PC DNS address: 192.168.1.200

DFL LAN1 IP address: 192.168.1.1

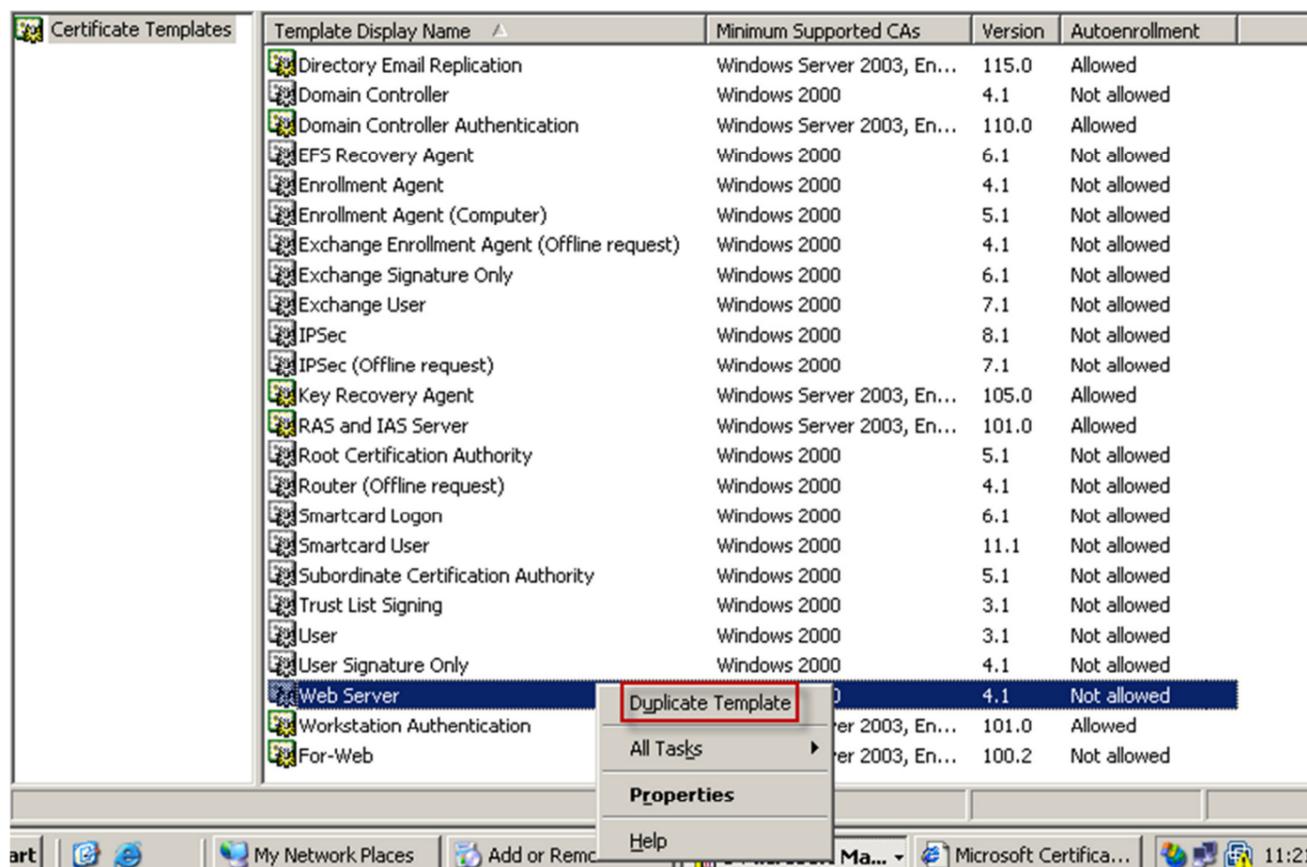
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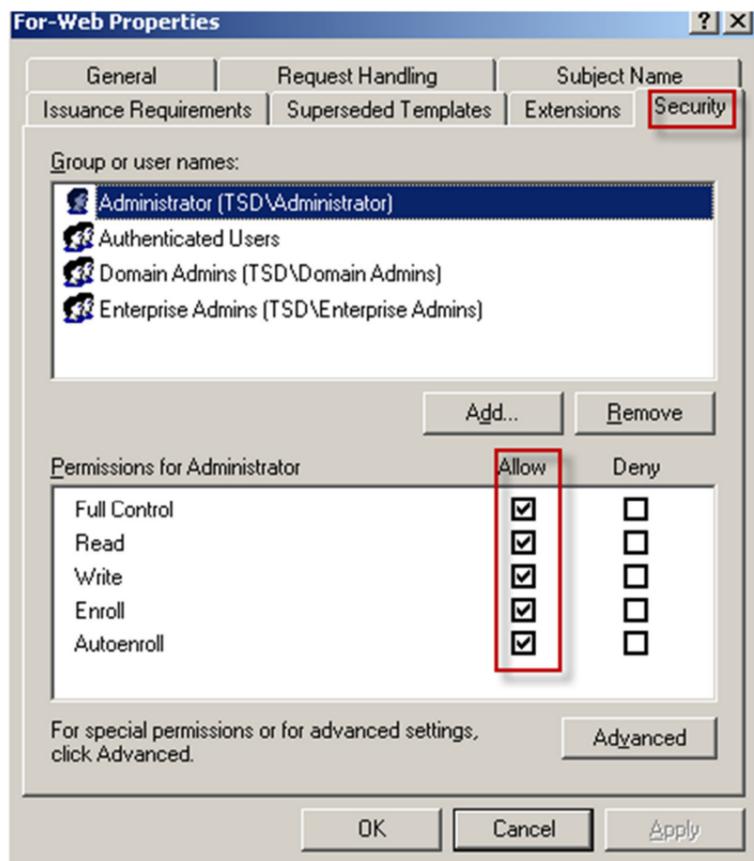
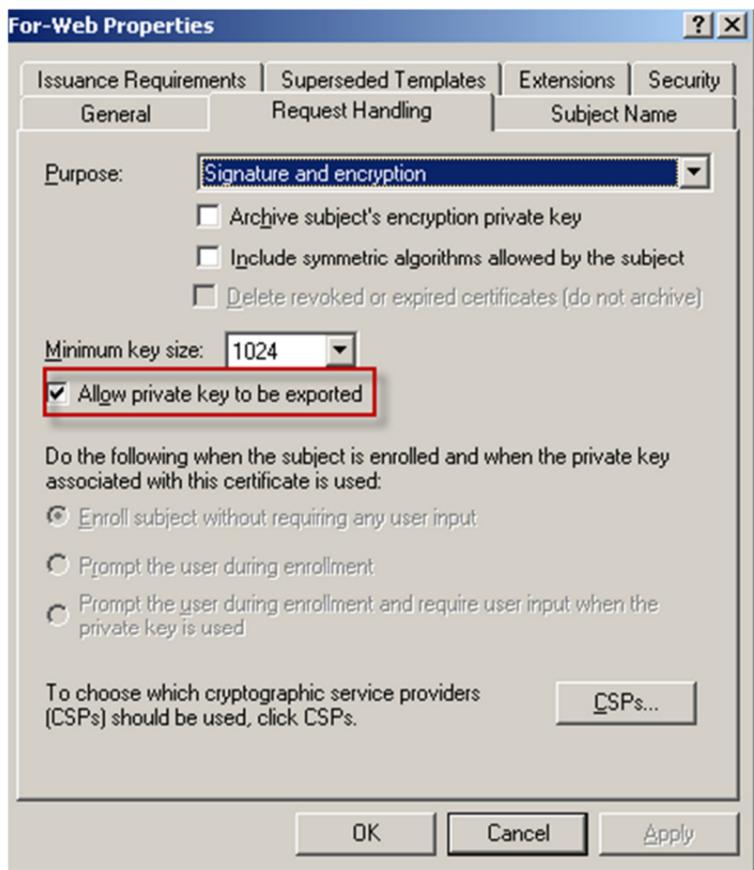
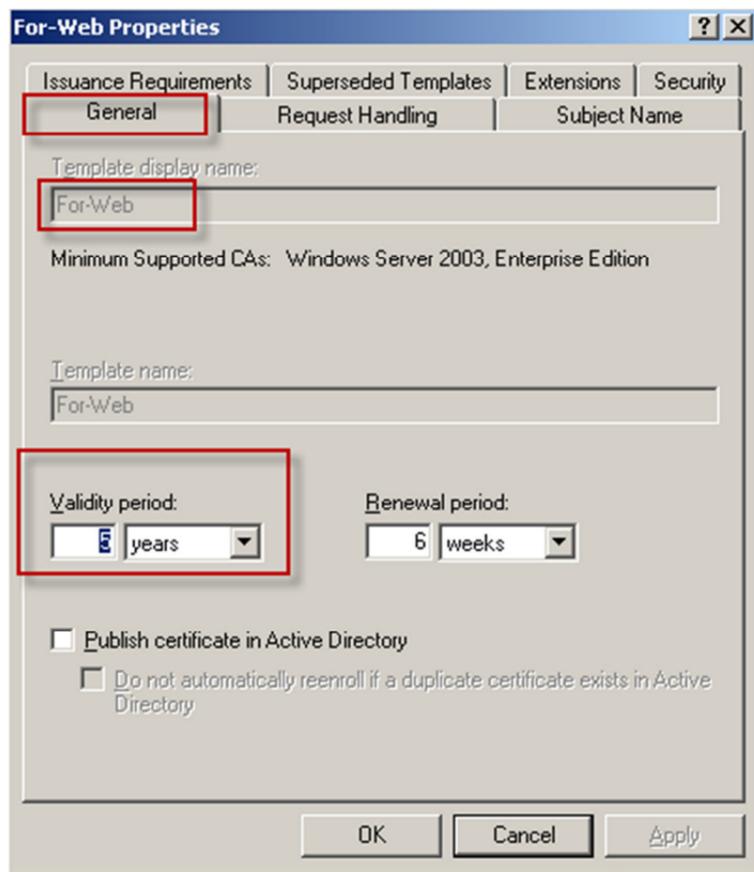
[Key points]

- 1. DFL needs to be installed a self-certification(including private and public key)
- 2. PC needs to be installed the CA-certification(Public key only) in the "Trusted certification authorities"

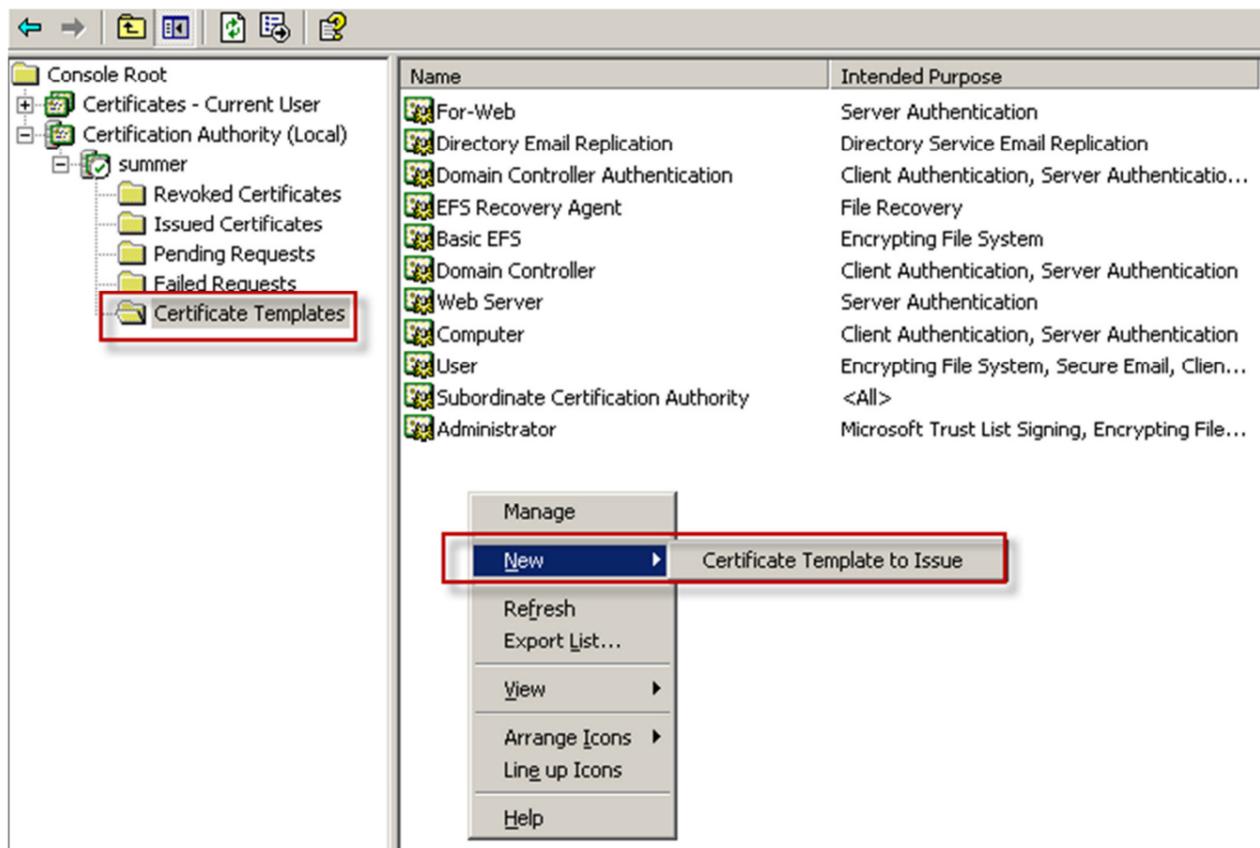
1. Build up a windows CA server. (Brief installation)

- a. Install DNS server
- b. Issue the command of "dcpromo".
- c. Install IIS
- d. Install CA server
- e. Create a CA template, name the template and allow its private key is exportable.

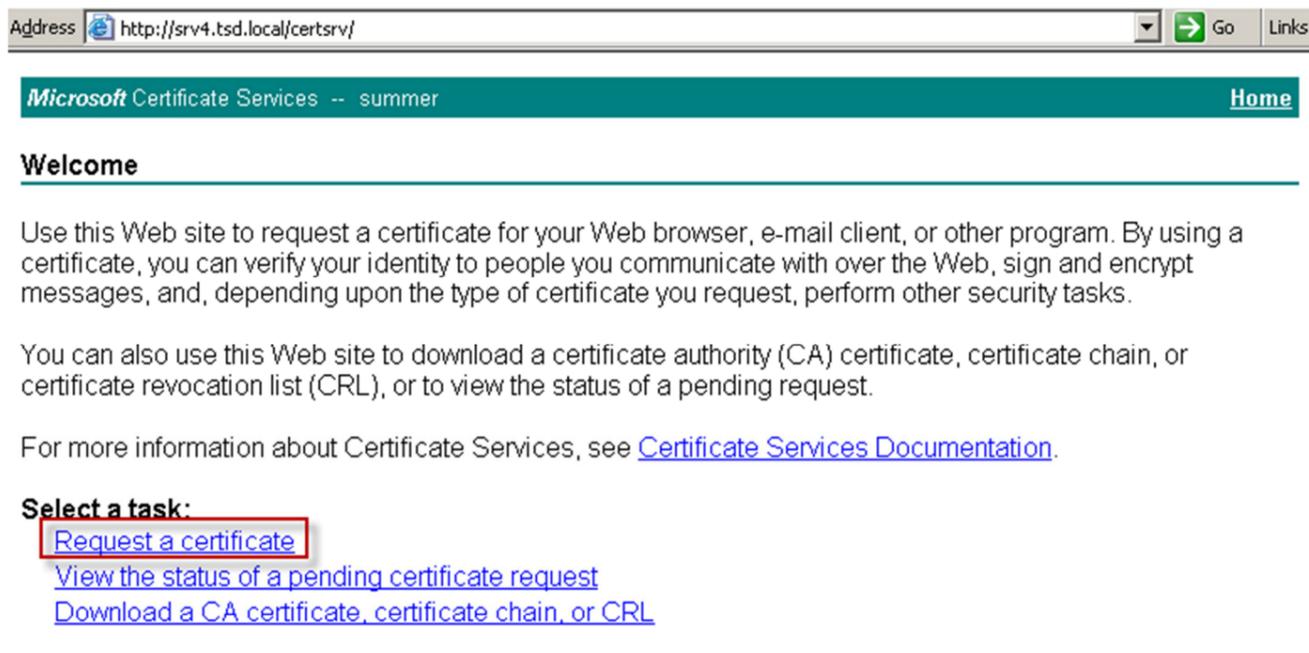




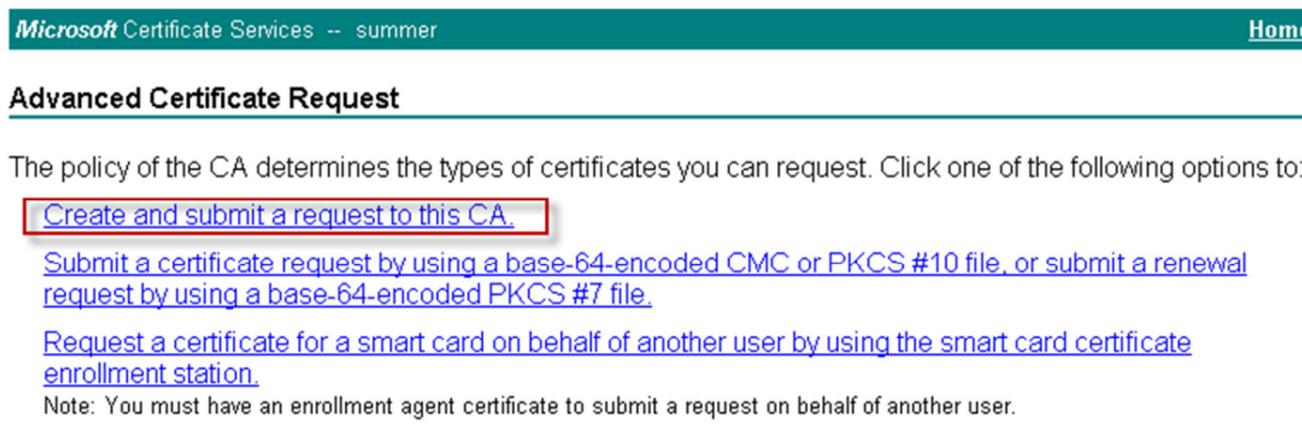
f. Publish the CA template(For-Web) created at step "e".



2. To apply a self-certification and download the CA server's certification.
 - a. Connect to the web certificate service of CA server and request a certificate.



- b. Go to "advanced certificate request"



Advanced Certificate Request

Certificate Template:

For-Web

Identifying Information For Offline Template:

Name:

E-Mail:

Company:

Department:

City:

State:

Country/Region:

This name must be the same with the web server's URL and it must be able to resolution by public DNS, otherwise the certification will be recognized as non-trusted certification on client's browser.

Key Options:

Create new key set Use existing key set

CSP:

Key Usage: Exchange

Key Size: Min: 1024 Max: 16384 (common key sizes: [1024](#) [2048](#) [4096](#) [8192](#) [16384](#))

Automatic key container name User specified key container name

Mark keys as exportable

Export keys to file

Enable strong private key protection

Store certificate in the local computer certificate store
Stores the certificate in the local computer store instead of in the user's certificate store. Does not install the root CA's certificate. You must be an administrator to generate or use a key in the local machine store.

Additional Options:

Request Format: CMC PKCS10

Hash Algorithm:

Only used to sign request.

Save request to a file

Attributes:

Friendly Name:

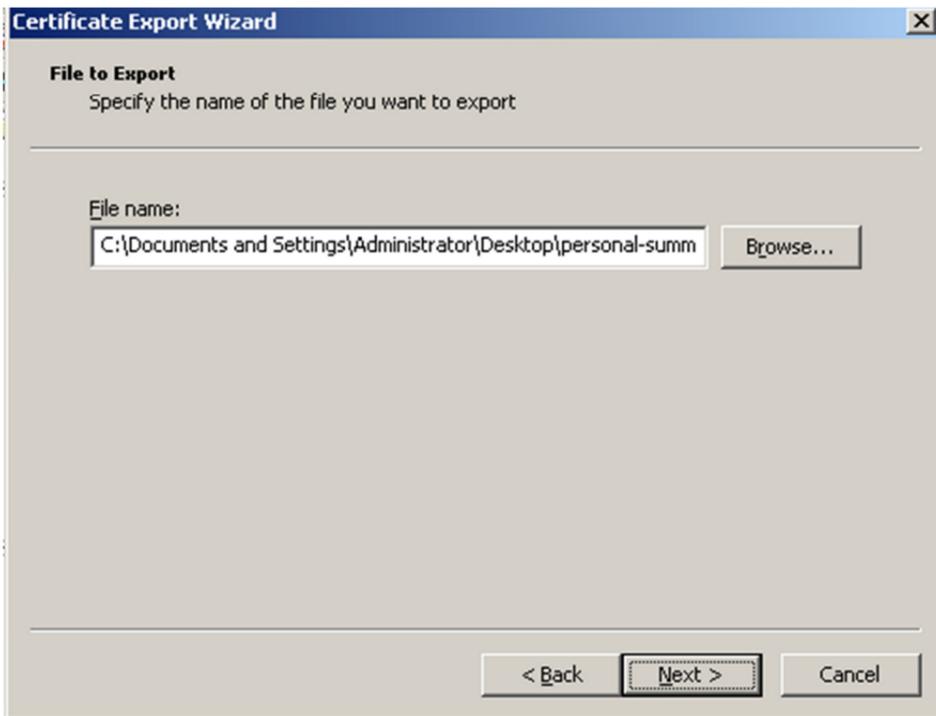
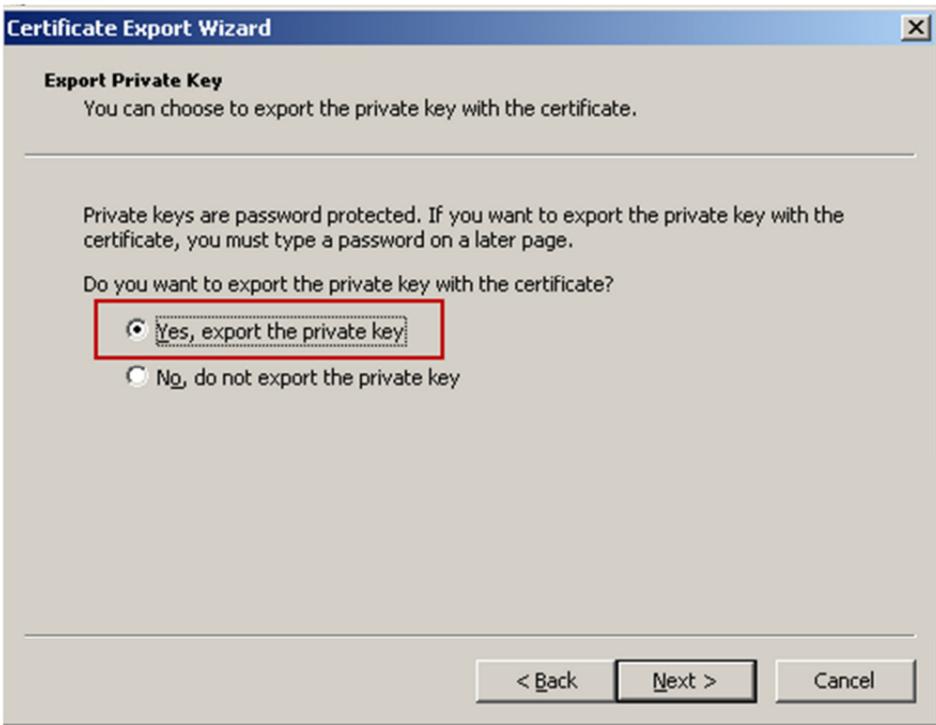
Submit >

c. Export the self-certification.

Issued To	Issued By	Expiration Date	Intended Purposes	Friendly Name	Status	Certificate Tem...
Administrator	Administrator	7/27/2014	File Recovery	<None>		
summer	summer	8/5/2013	Server Authentication	<None>		For-Web
summer.tsd.local	summer	8/5/2013	Server Authentication	<None>		For-Web
test	summer	8/4/2013	Server Authentication	<None>		For-Web

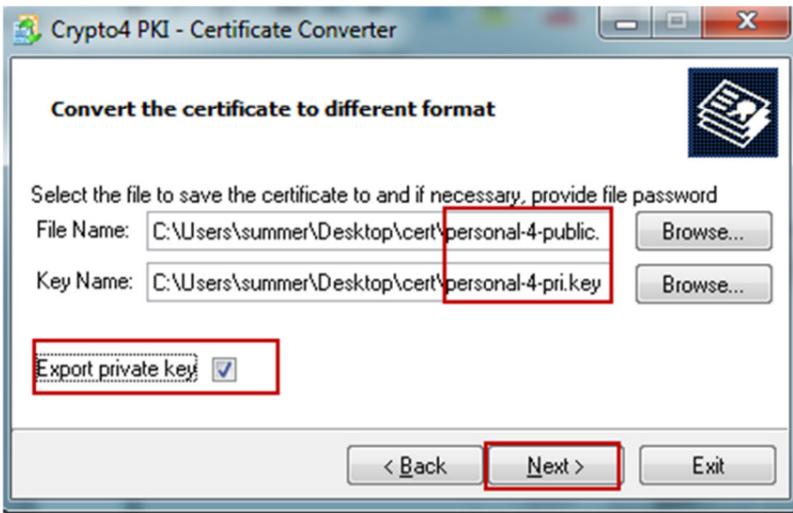
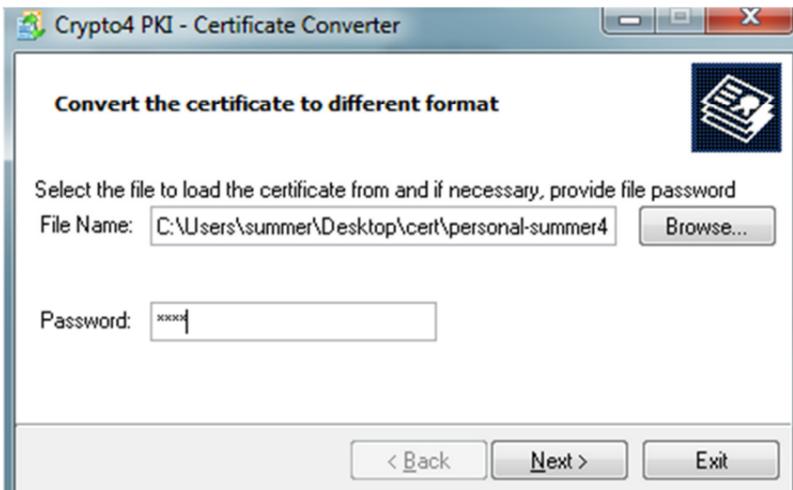
Context menu for 'summer.tsd.local':

- Open
- All Tasks
 - Open
- Cut
- Copy
- Delete
- Properties
- Export...
- Help





- d. The self-certification exports from Microsoft windows will be the format of "PFX", we have to convert the file to the format of x.509 by the tool of "CryptTo4"



- e. Upload the self-certification to DFL.

Certificate

An X.509 certificate is used to authenticate a VPN client or gateway when establishing an IPsec tunnel.

General

General

Name:

Disable CRLs (Certificate Revocation Lists)

Certificate Information

Certificate type: N/A
Public Key Algorithm: Unknown

Options

Don't upload anything
Don't upload anything right now

Upload X.509 Certificate
Upload a previously created X.509 Certificate, along with its private key.

Upload a remote certificate
Upload a certificate belonging to a remote peer or a CA server

Upload X.509 certificate

Upload a previously created X.509 Certificate

General

C:\Users\summer\Desktop\cert\personal-4-public.cer

Upload X.509 private key

Now upload a private key matching the newly uploaded certificate

General

C:\Users\summer\Desktop\cert\personal-4-pri.key

Home Configuration Tools Status Maintenance

Remote Management
Setup and configure methods and permissions for remote management of this system.

Add

#	Name	Type	Mode	Interface	Network
1	RemoteMgmtHTTP	HTTP/HTTPS Management	Admin: HTTPS	lan1	lan1net

Remote Management Settings

Setup and configure methods and permissions for remote management of this system.

General

General

SSH Before Rules: Enable SSH traffic to the security gateway regardless of configured IP Rules.

WebUI Before Rules: Enable HTTP(S) traffic to the security gateway regardless of configured IP Rules.

WebUI Idle timeout: Number of seconds of inactivity until the HTTP(S) session is closed.

Local Console Timeout: Number of seconds of inactivity until the local console user is automatically logged out.

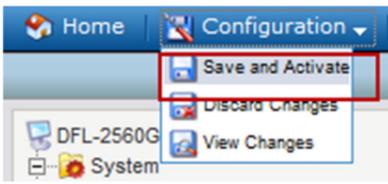
Validation Timeout: Specifies the amount of seconds to wait for the administrator to log in before reverting to the previous configuration.

WebUI HTTP port: Specifies the HTTP port for the web user interface.

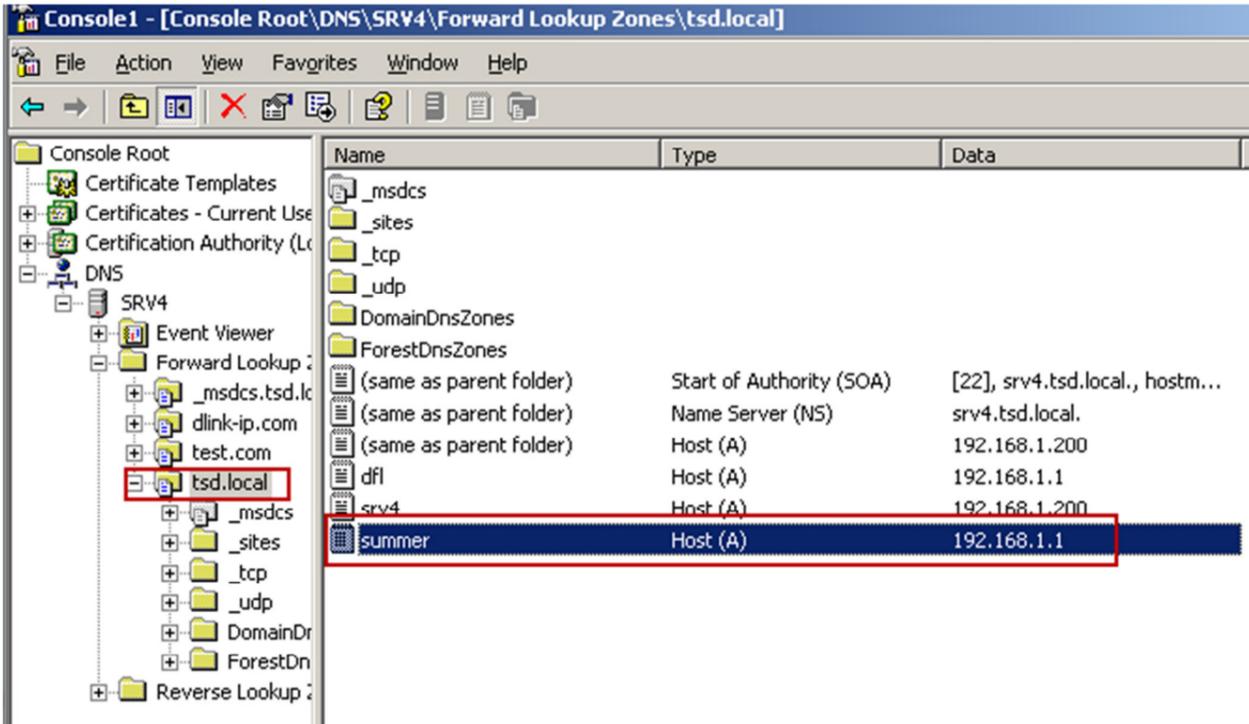
WebUI HTTPS port: Specifies the HTTP(S) port for the web user interface.

HTTPS Certificate: Specifies which certificate to use for HTTPS traffic. Only RSA certificates are supported.

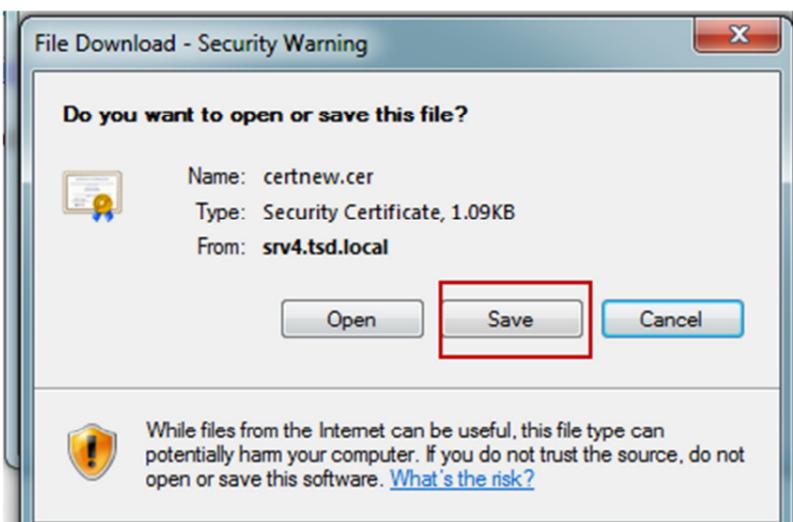
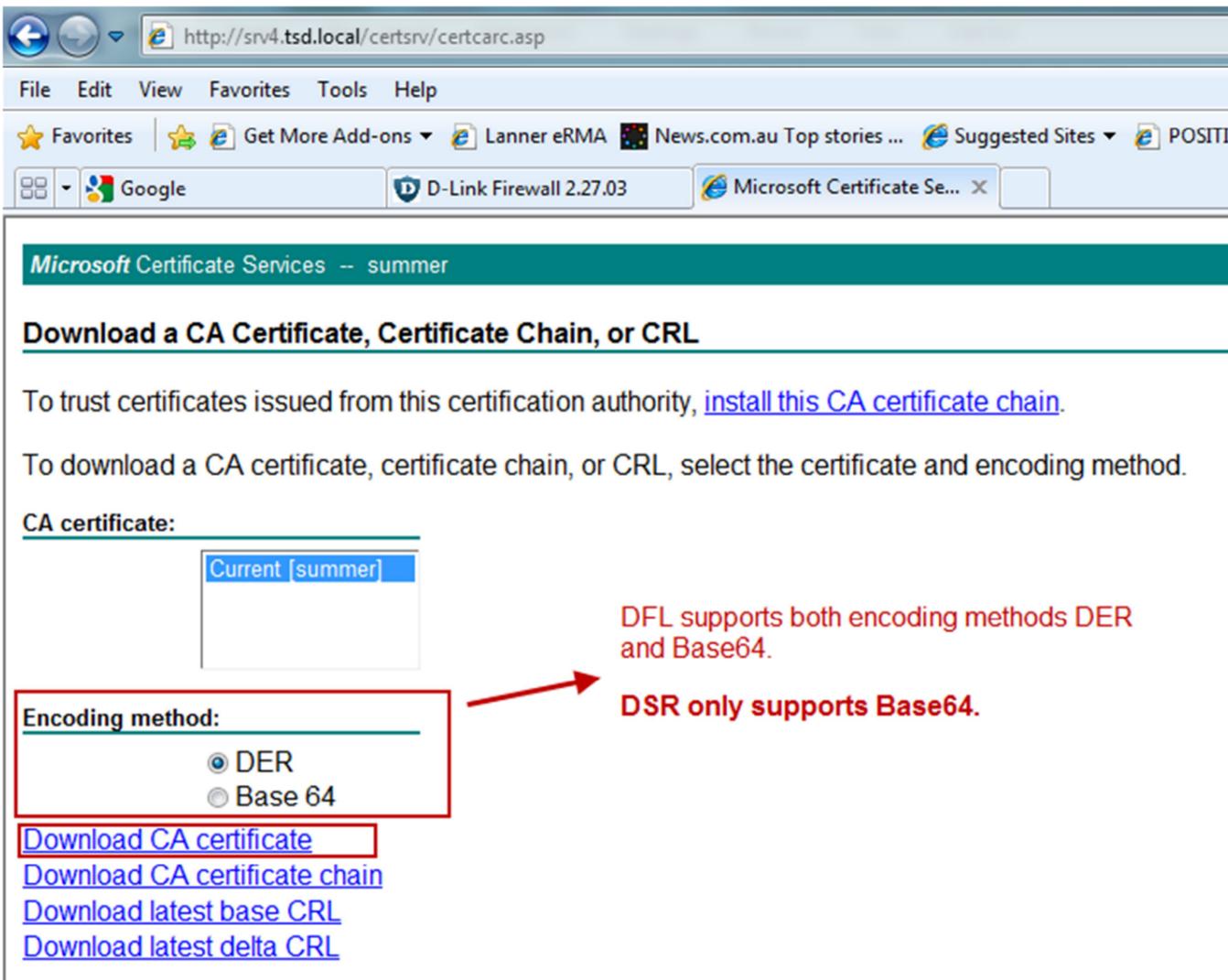
SNMP

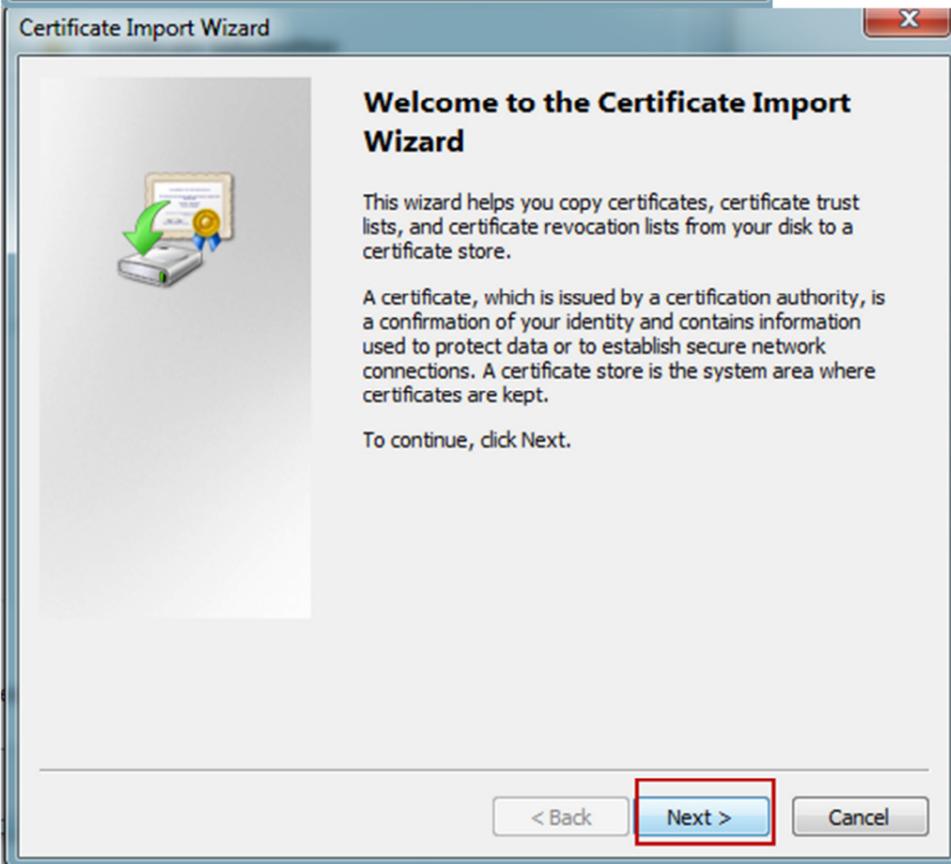
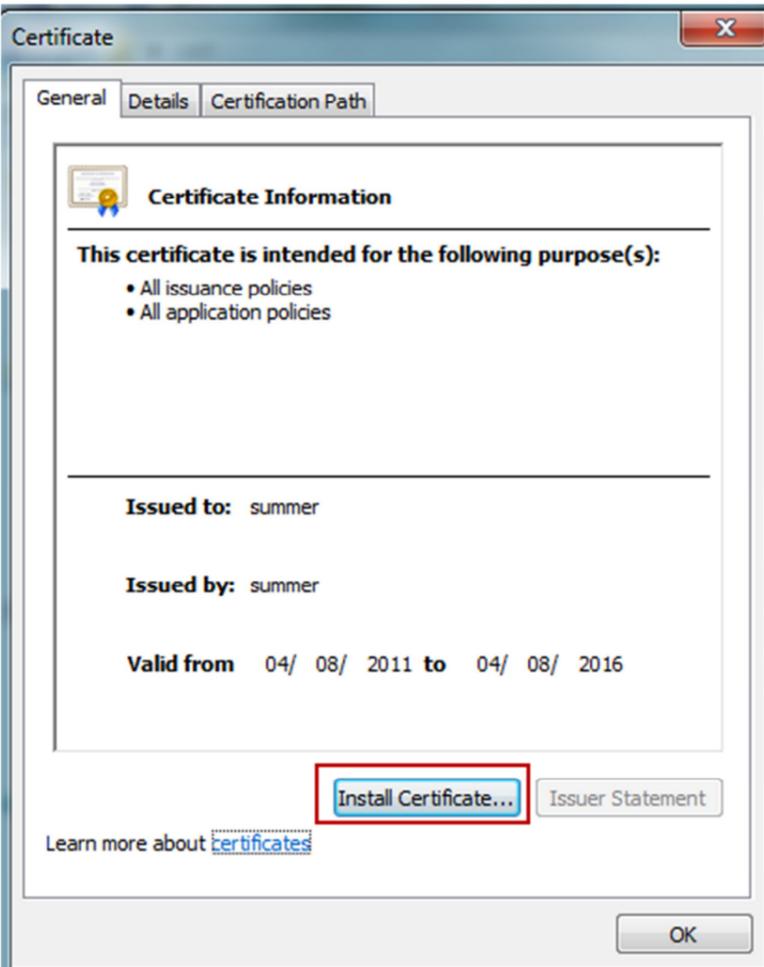
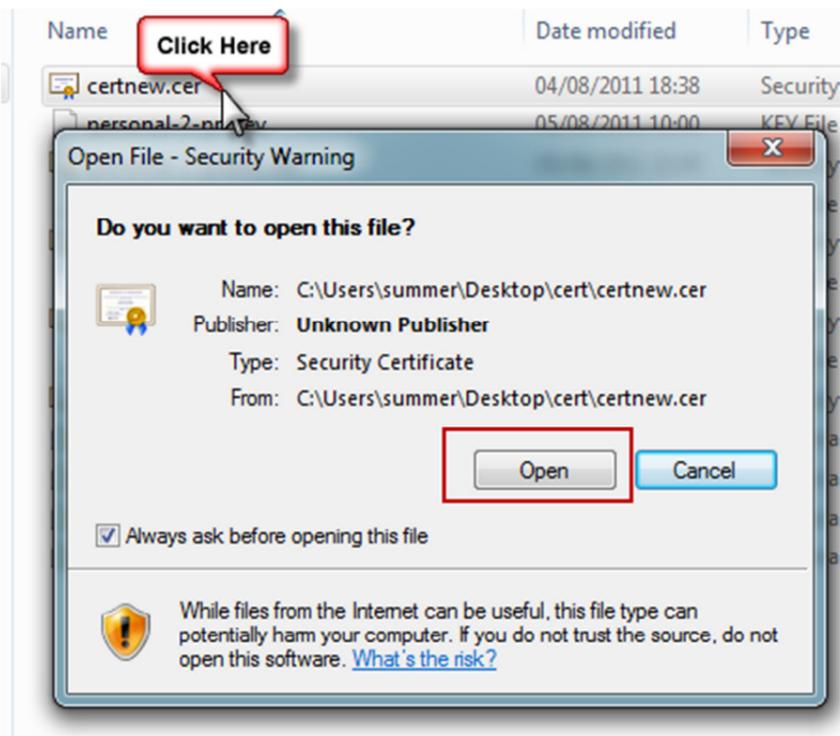


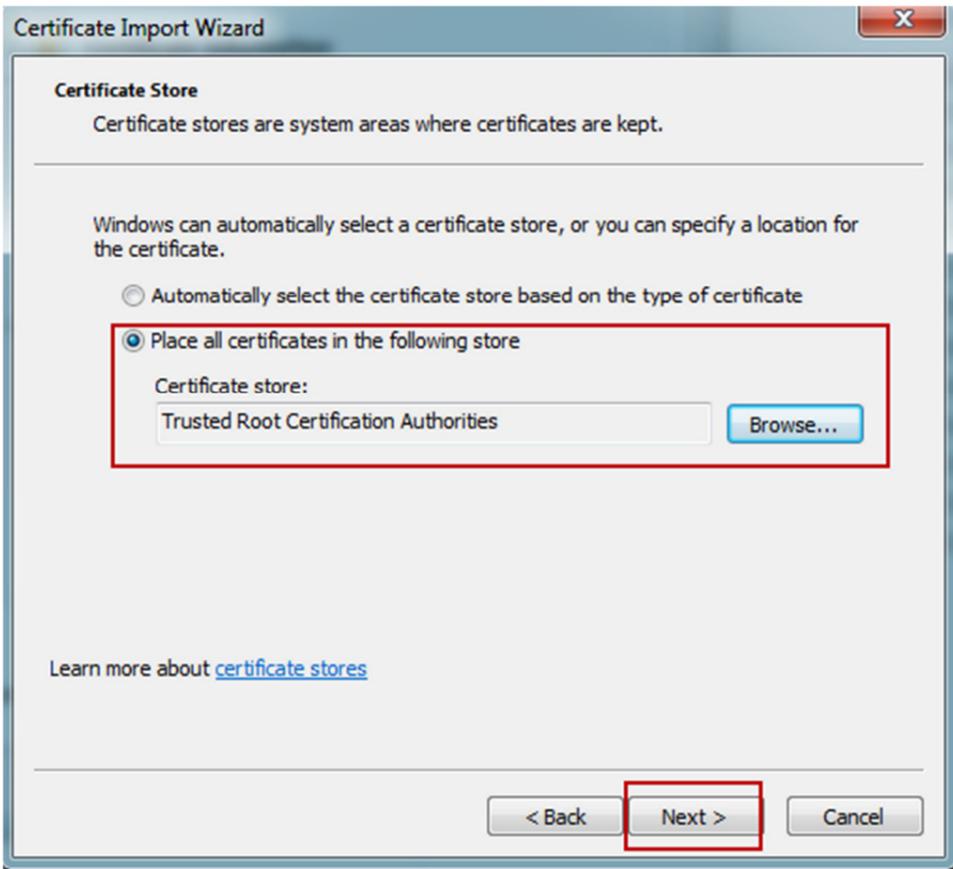
f. On the DNS server, make sure the DNS resolution is work without problem.



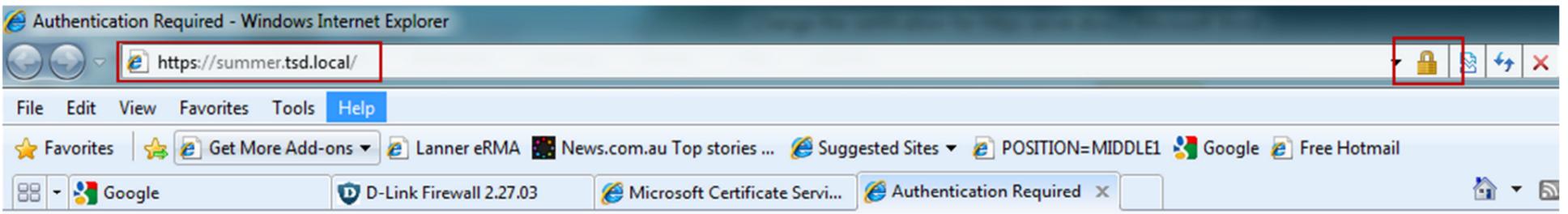
g. PC downloads CA server's certification, and install it into "trusted root certification authorities".

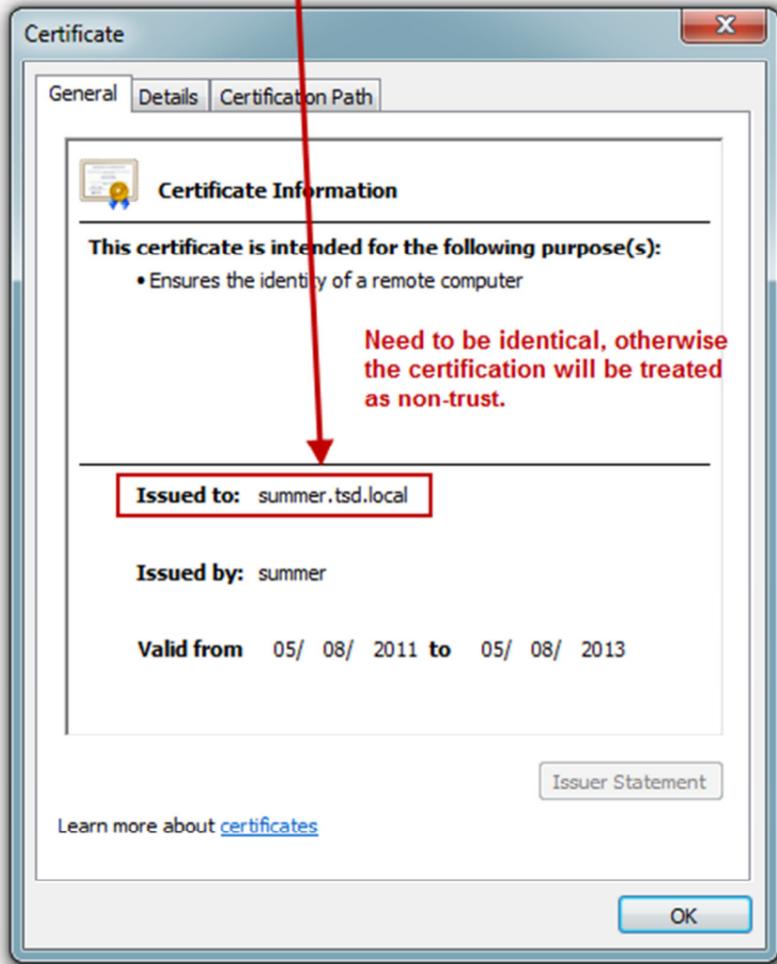
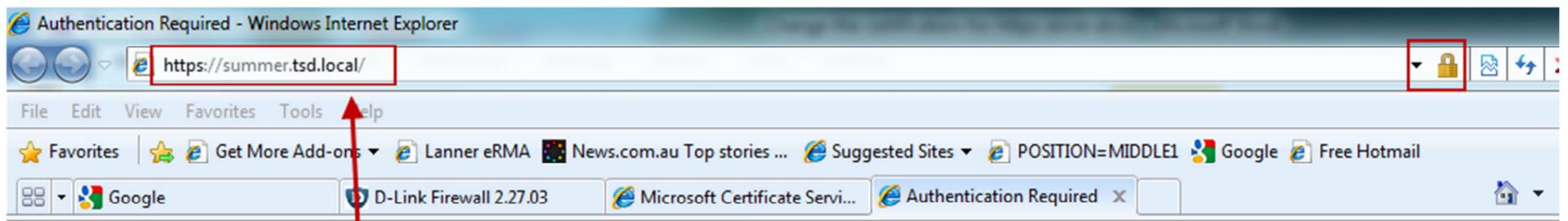






h. Now, double check the DNS settings of PC is set correctly, then connect to DFL via domain name (summer.tsd.local).





End of document.

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