



# CONESTOGA

Connect Life and Learning

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<b>Deliverable:</b>	Assignment 4
<b>Course Name:</b>	NTWK8201-24F-Sec2-Advanced Windows Desktop

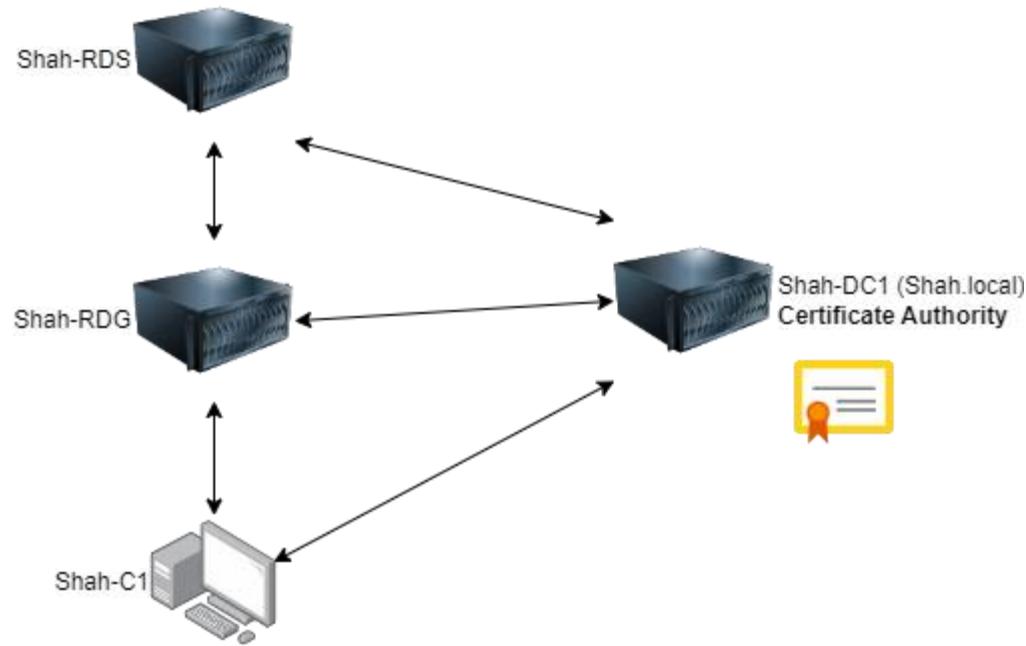
<b>Date Assigned:</b>	25/11/2024
<b>Date Due:</b>	06/12/2024
<b>Rules:</b>	<ul style="list-style-type: none"><li>• Individual.</li><li>• Cheating is not allowed.</li><li>• Plagiarism counts as cheating!</li><li>• That FAILURE to submit work in the course can result in a grade of 'F' or 'I' for failure to complete the course!</li></ul>

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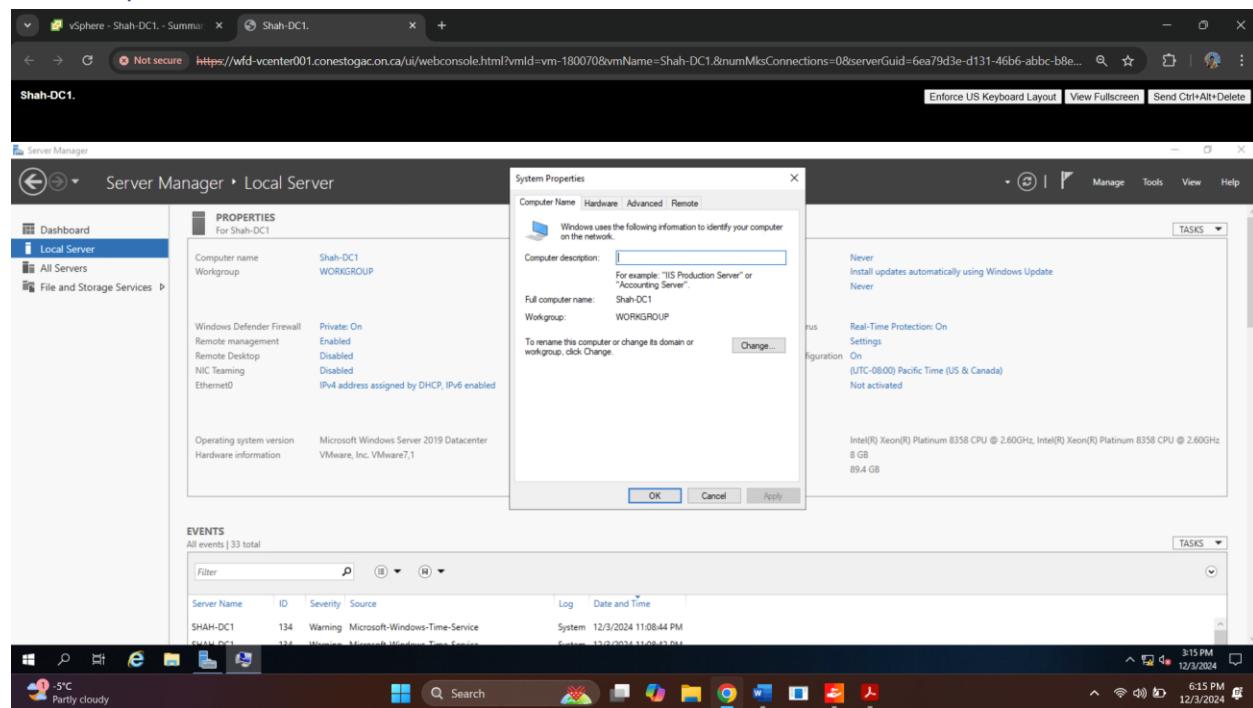
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## Practical Assignment 4

### Diagram



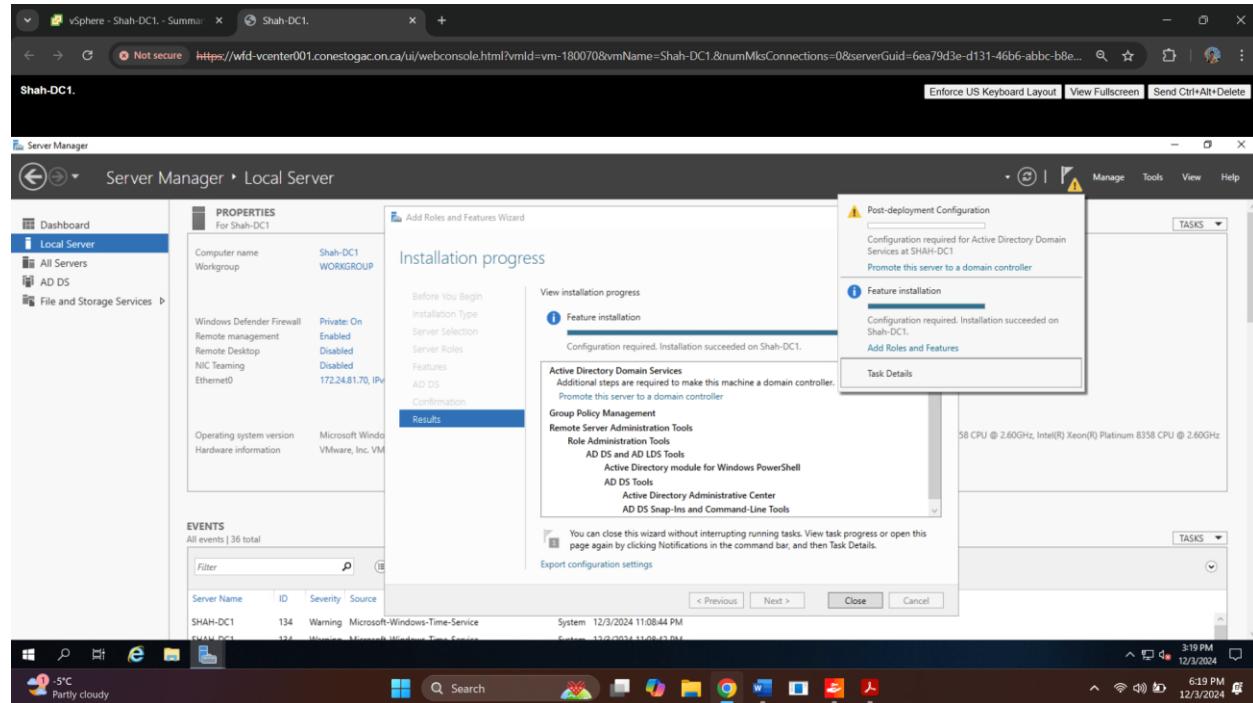
Install your first Windows Server with the hostname Shah-DC1.



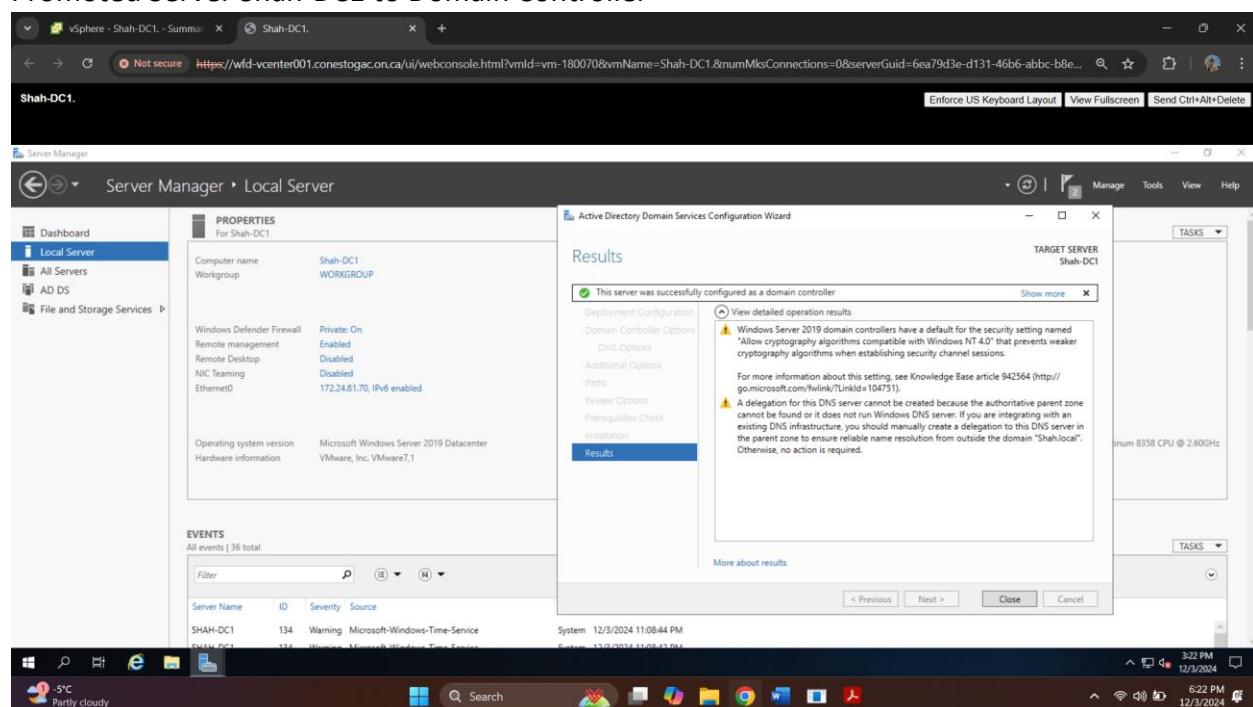
## Practical Assignment 4

Promote your first Windows Server to a domain controller with the domain name **Shah.local**.

Installed Active Directory Domain Services on Shah-DC1 server

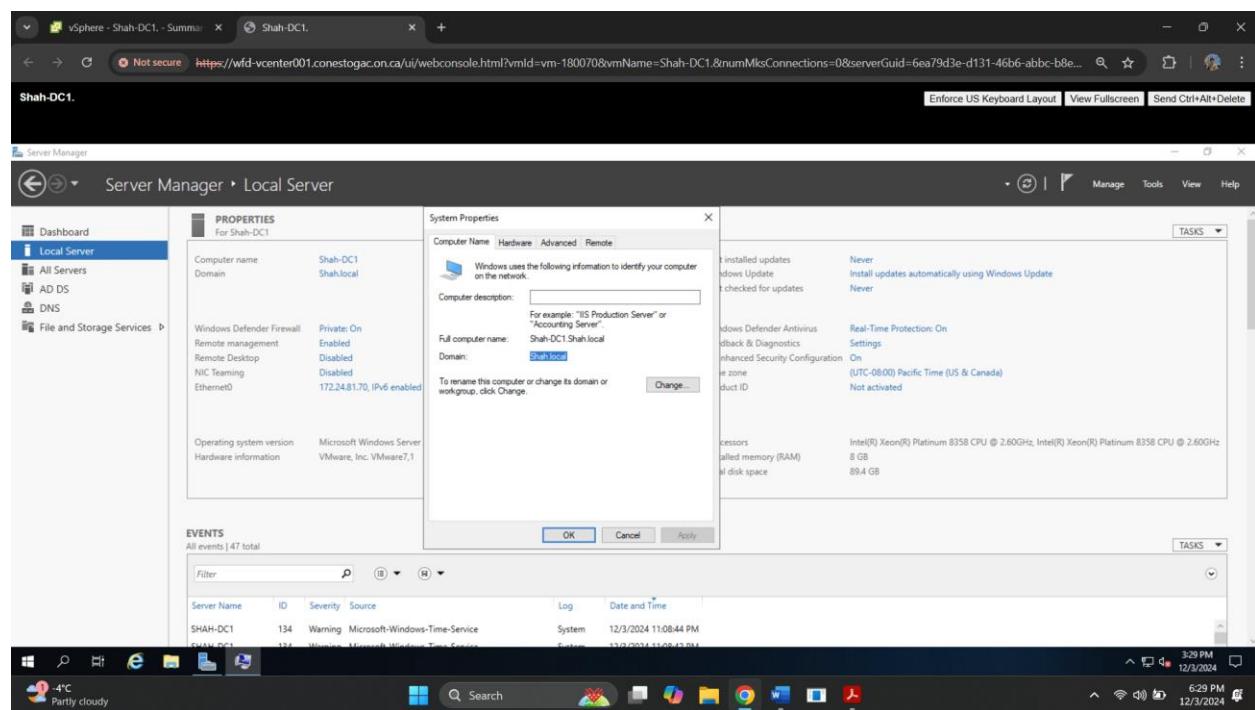


Promoted Server Shah-DC1 to Domain Controller



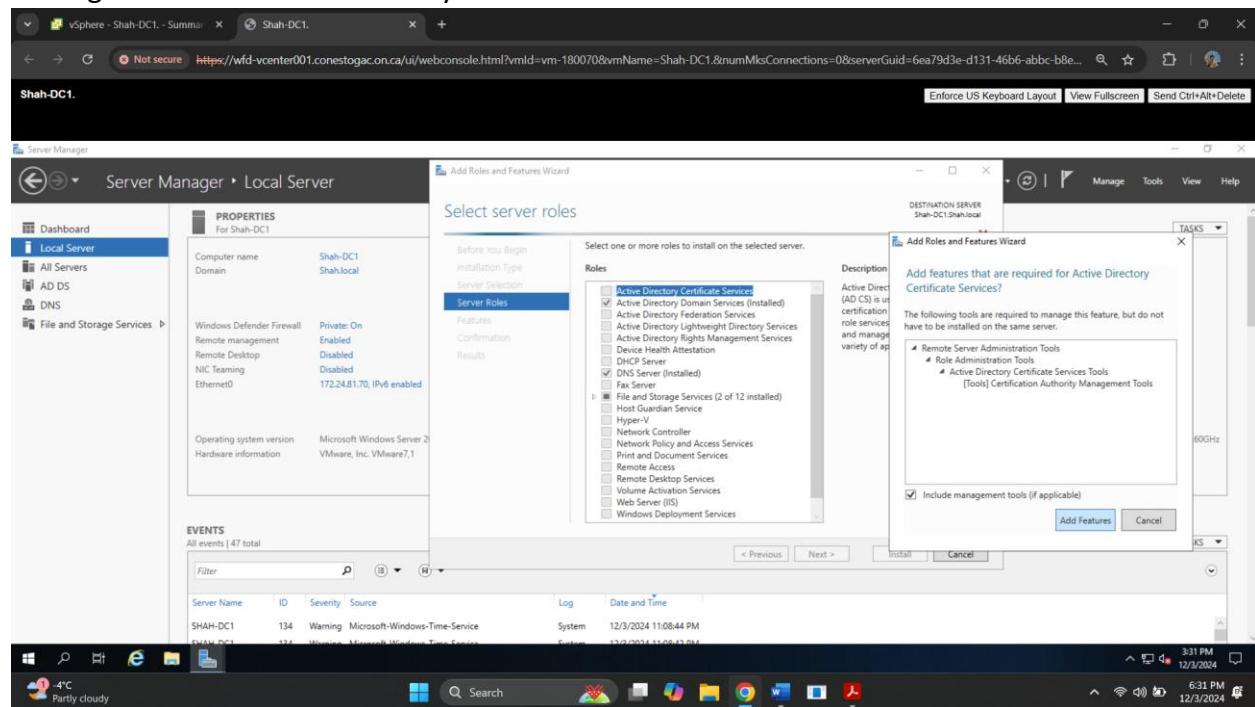
## Practical Assignment 4

### Domain Name: Shah.local



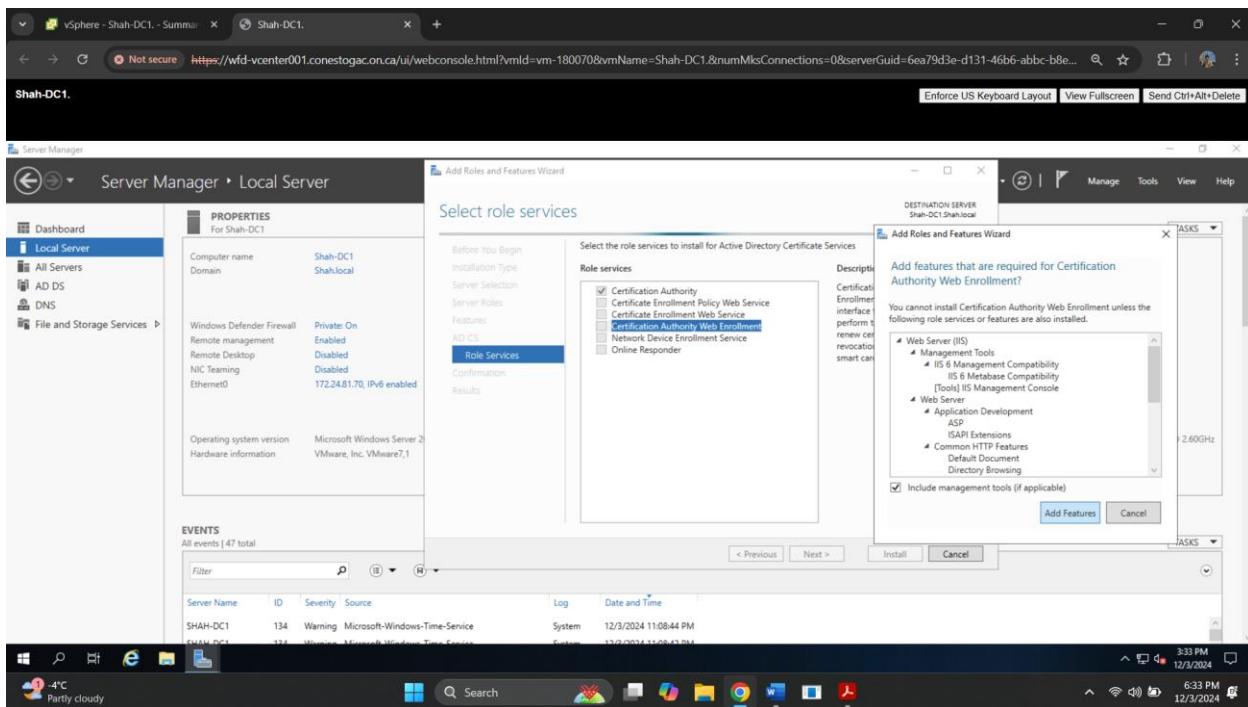
Install the Certificate Services Role on Shah-DC1 and configure the internal Certificate Authority.

Adding feature of Active Directory Certificate Services on Domain Controller: Shah-DC1

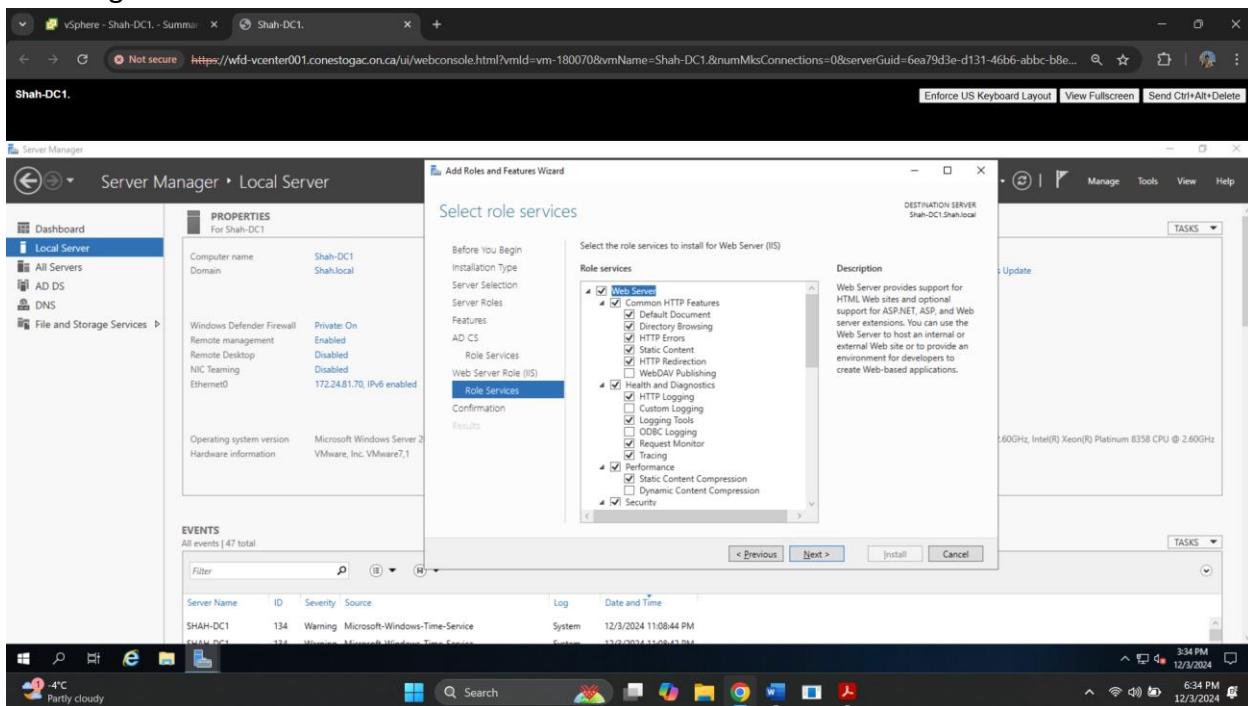


## Practical Assignment 4

### Selecting Certificate Authority and Certificate Authority Web Enrollment to add roles on Shah-DC1 server.

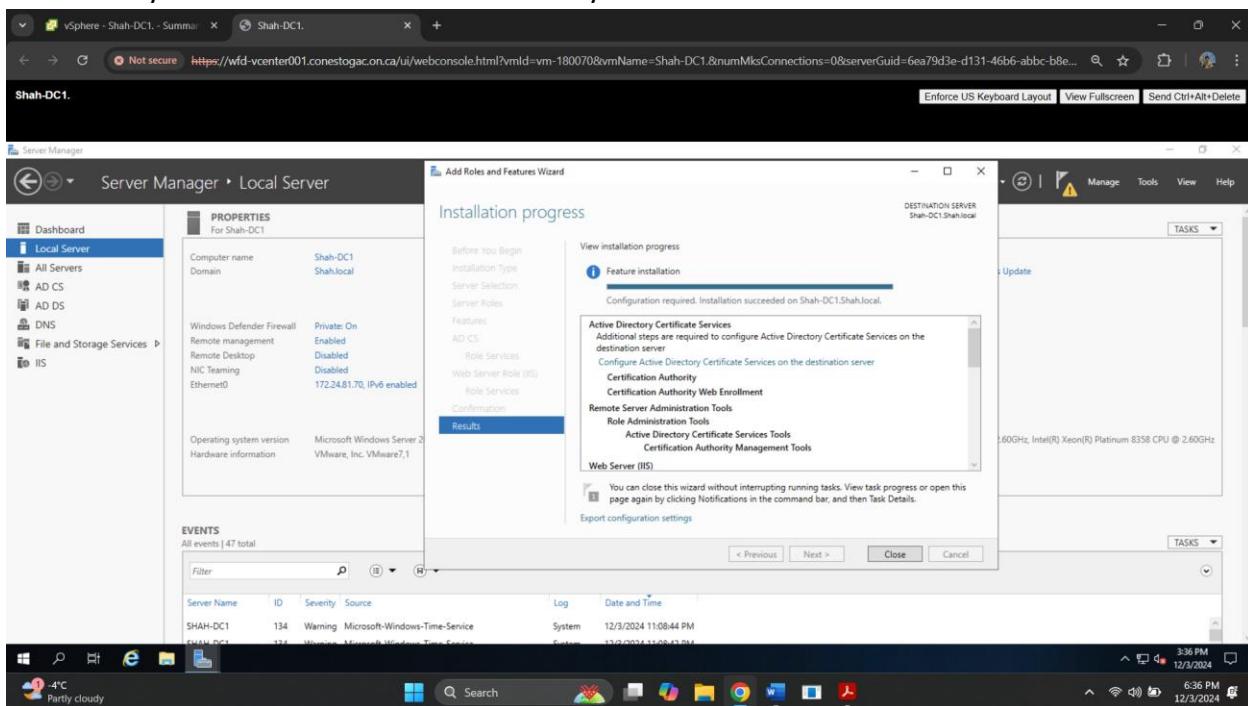


### Selecting role services to install

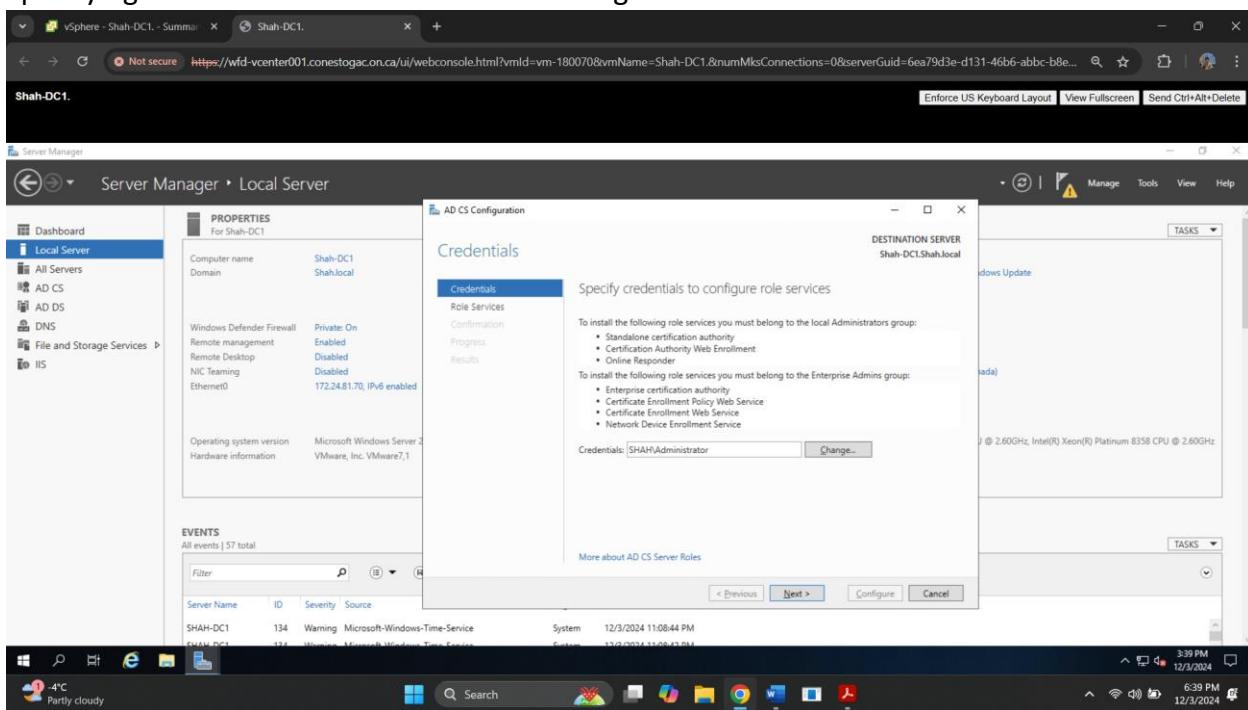


## Practical Assignment 4

Successfully installed the Certificate Authority roles on server.

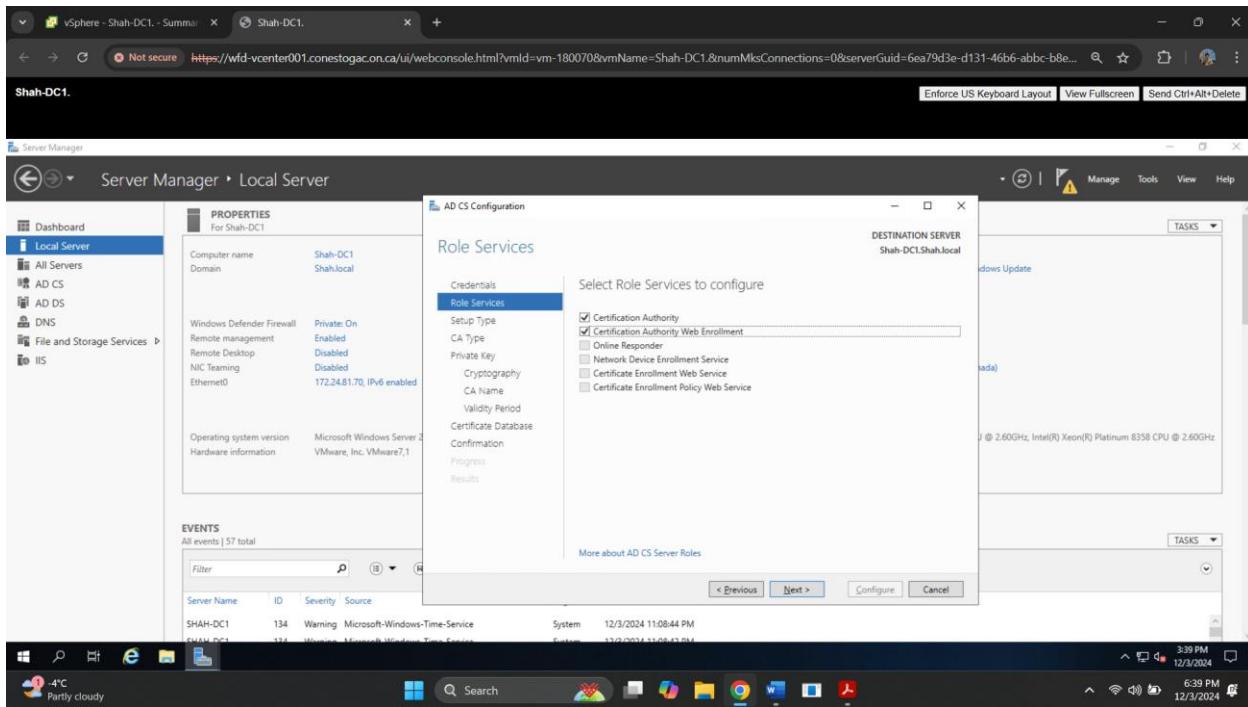


Specifying credentials of administrator to configure the role.

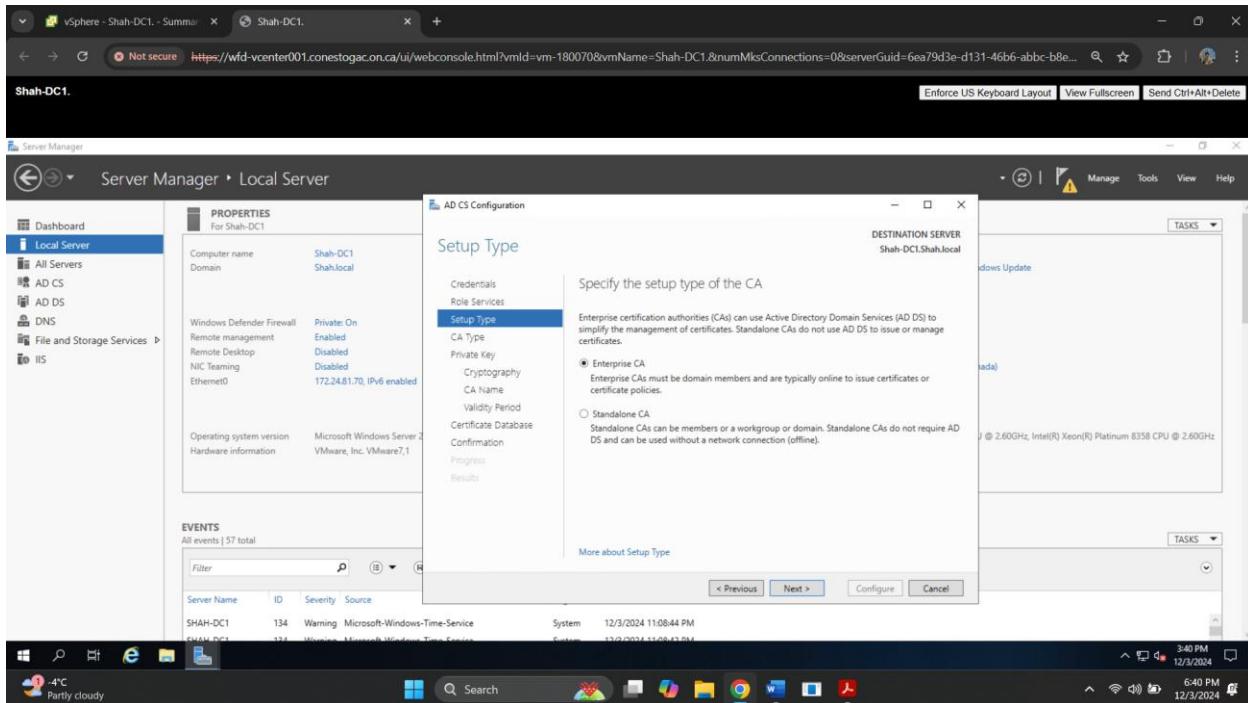


## Practical Assignment 4

Selecting role services to configure such as certificate authority, certificate authority web enrollment.

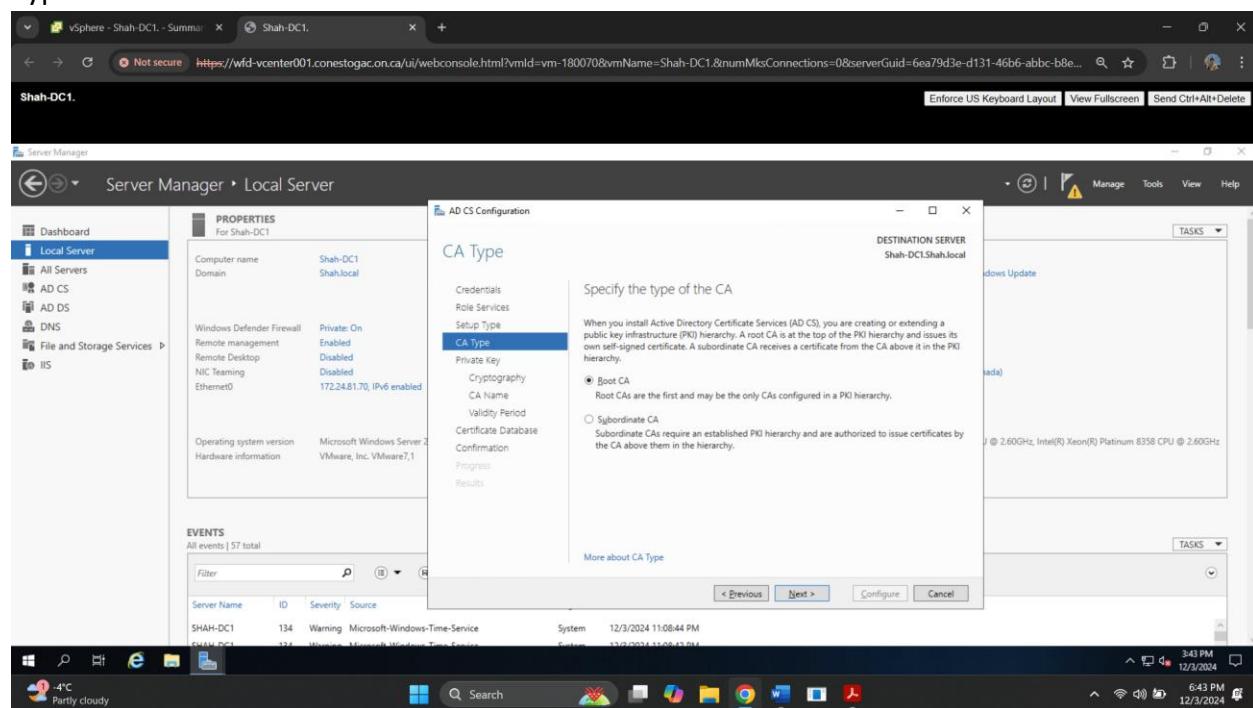


Selecting the Certificate type as Enterprise CA

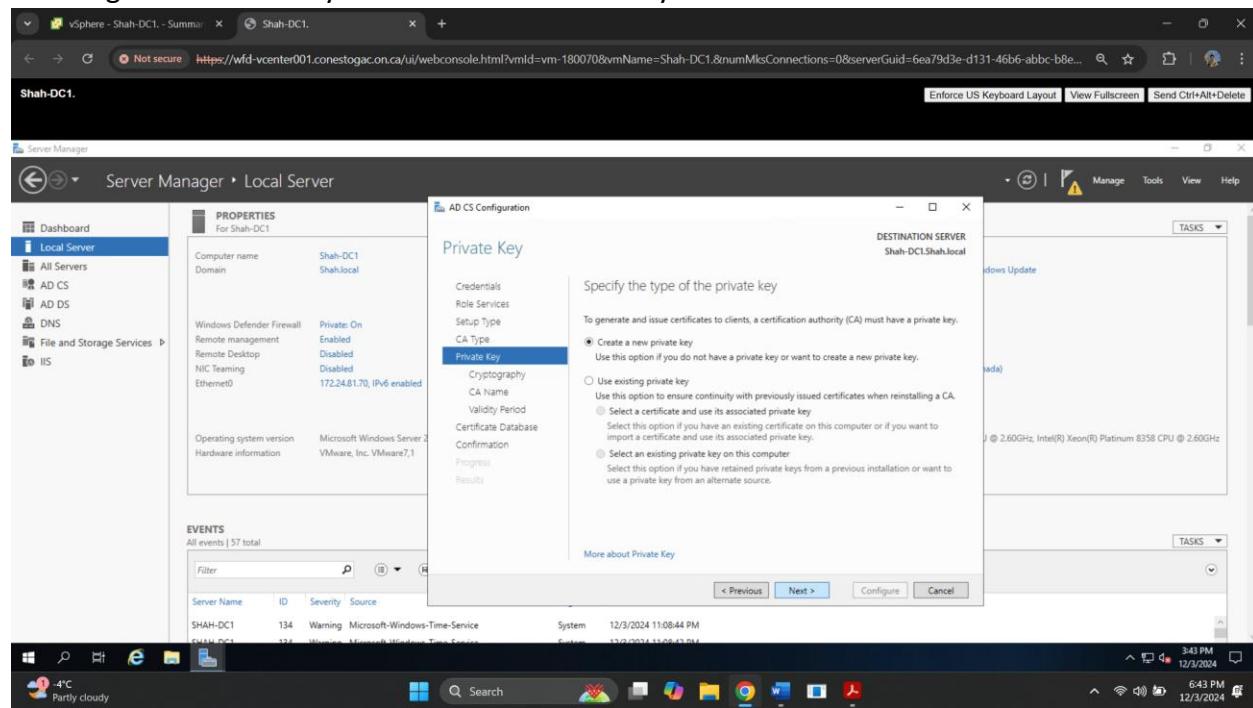


## Practical Assignment 4

### Type of CA as Root CA

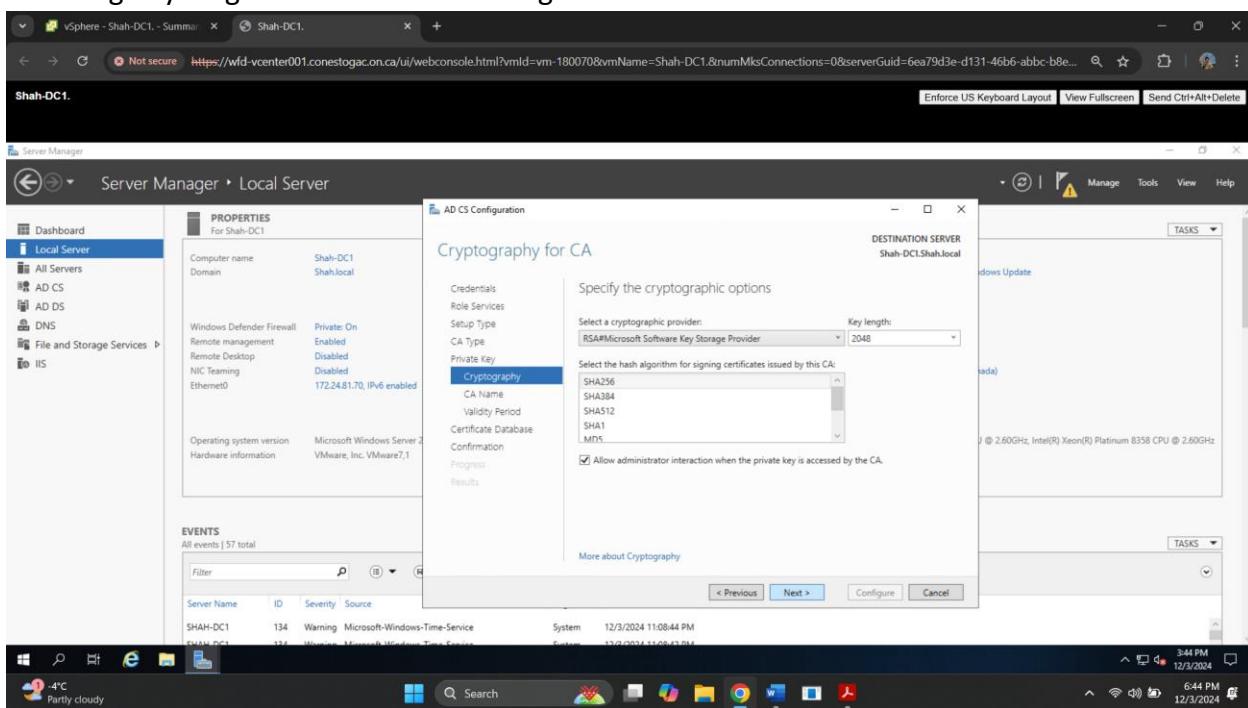


### Creating New Private key for a certificate authority.

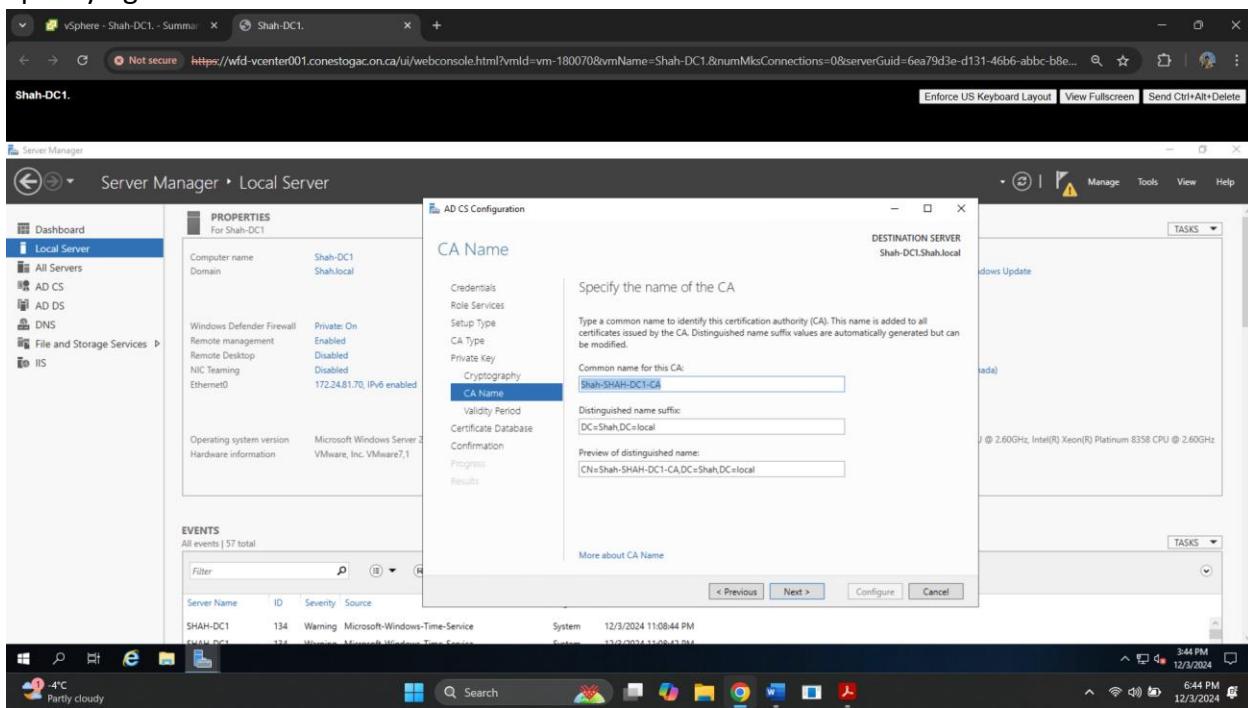


## Practical Assignment 4

### Selecting Key length as 2048 with hash algorithm as SHA256

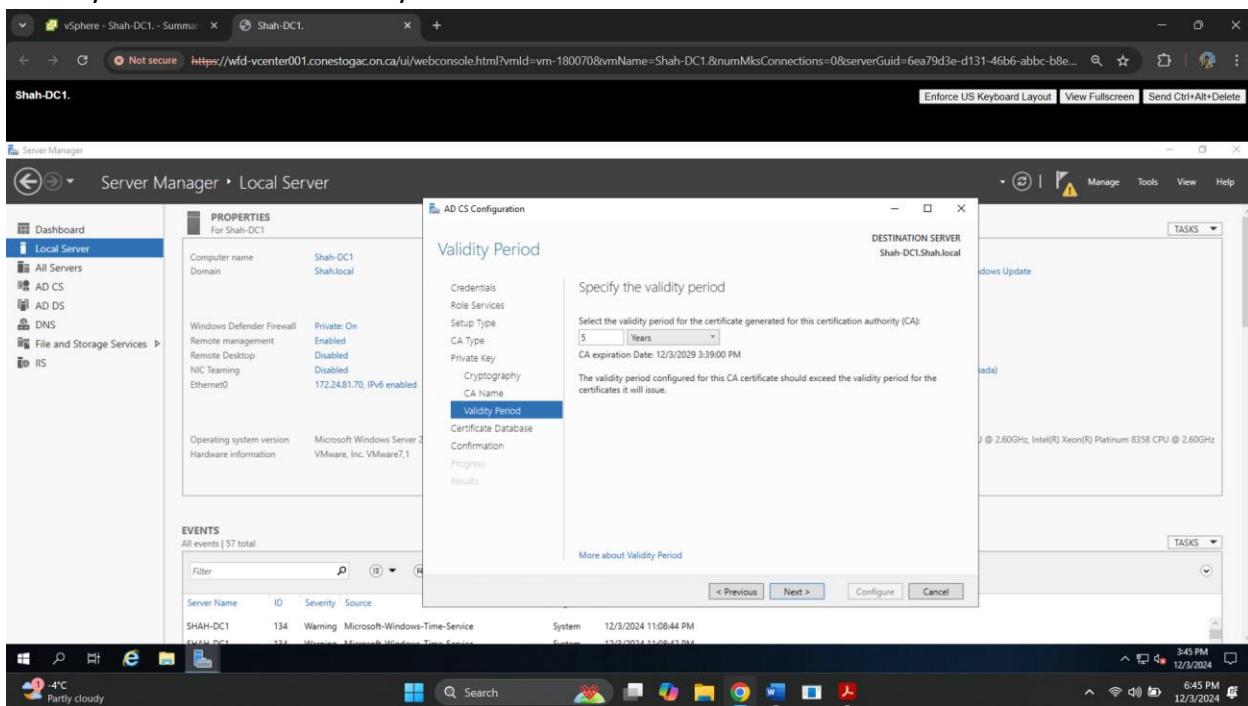


### Specifying the name of the CA

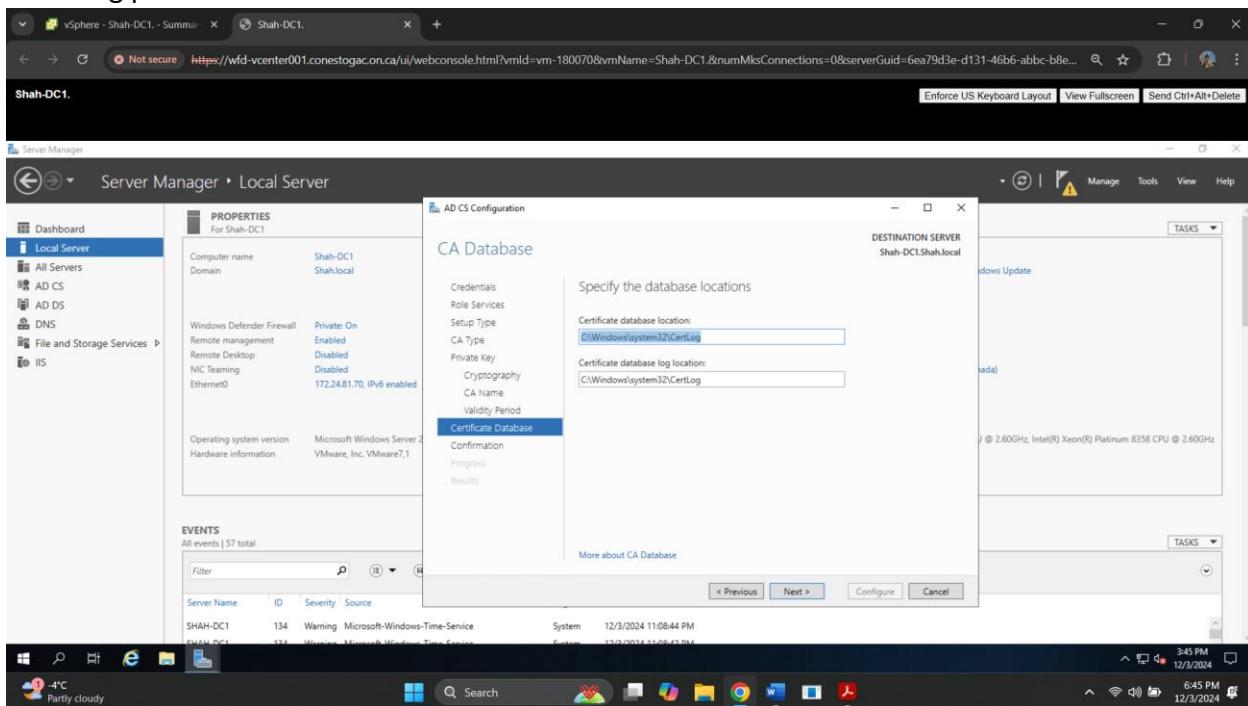


## Practical Assignment 4

### Validity of the Certificate as 5 years

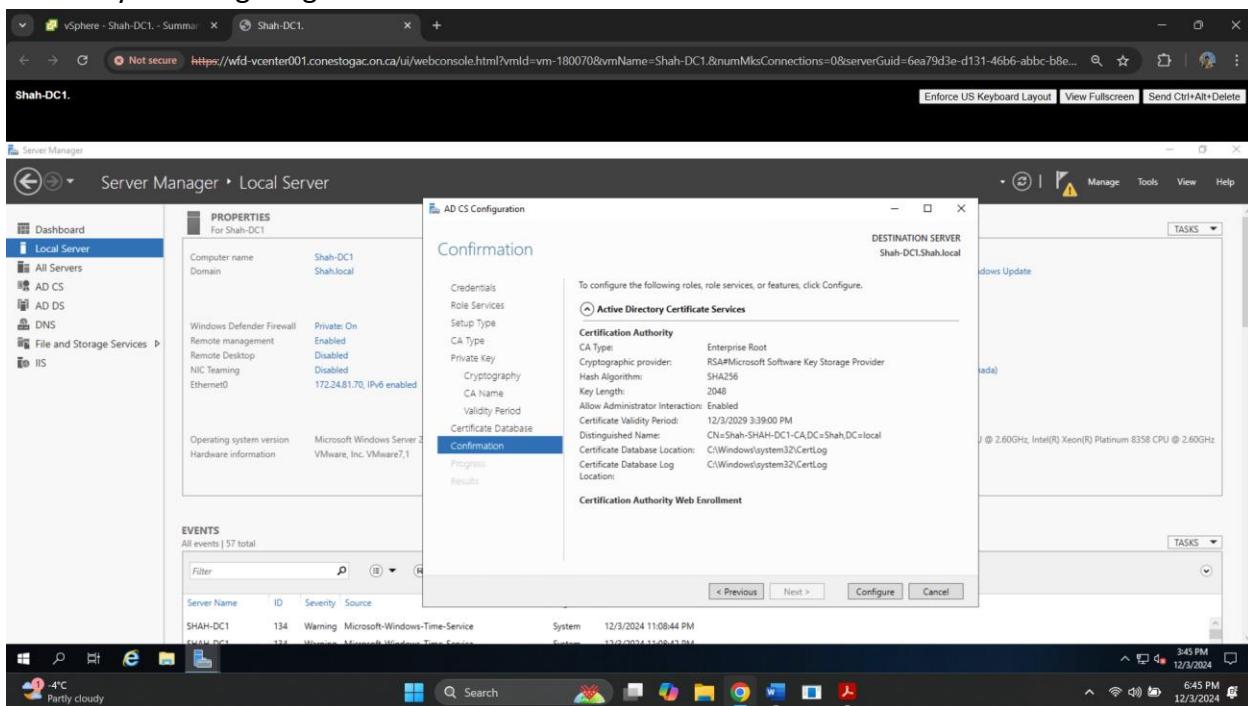


### Selecting path to save the certificate.

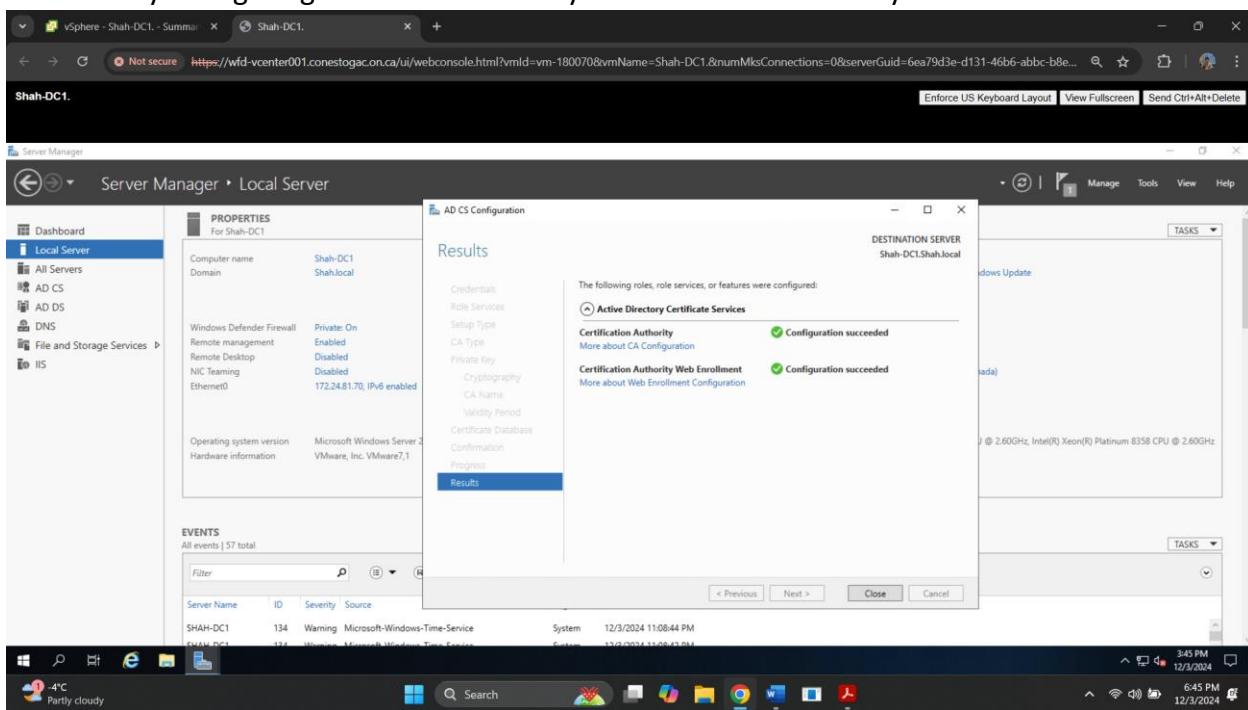


## Practical Assignment 4

### Summary of configuring certificate



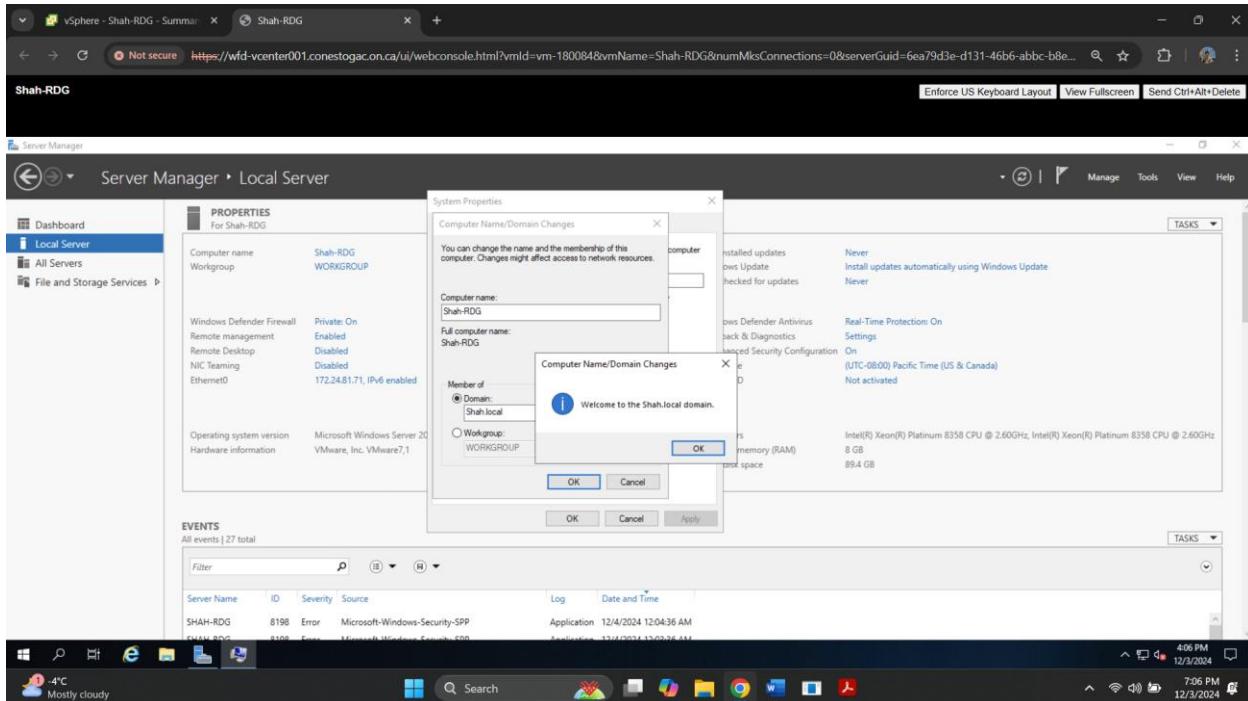
Successfully configuring certificate authority and certificate authority web enrollment



## Practical Assignment 4

Install your second Windows Server with hostname **Shah-RDG** and join it to **Shah.local**.

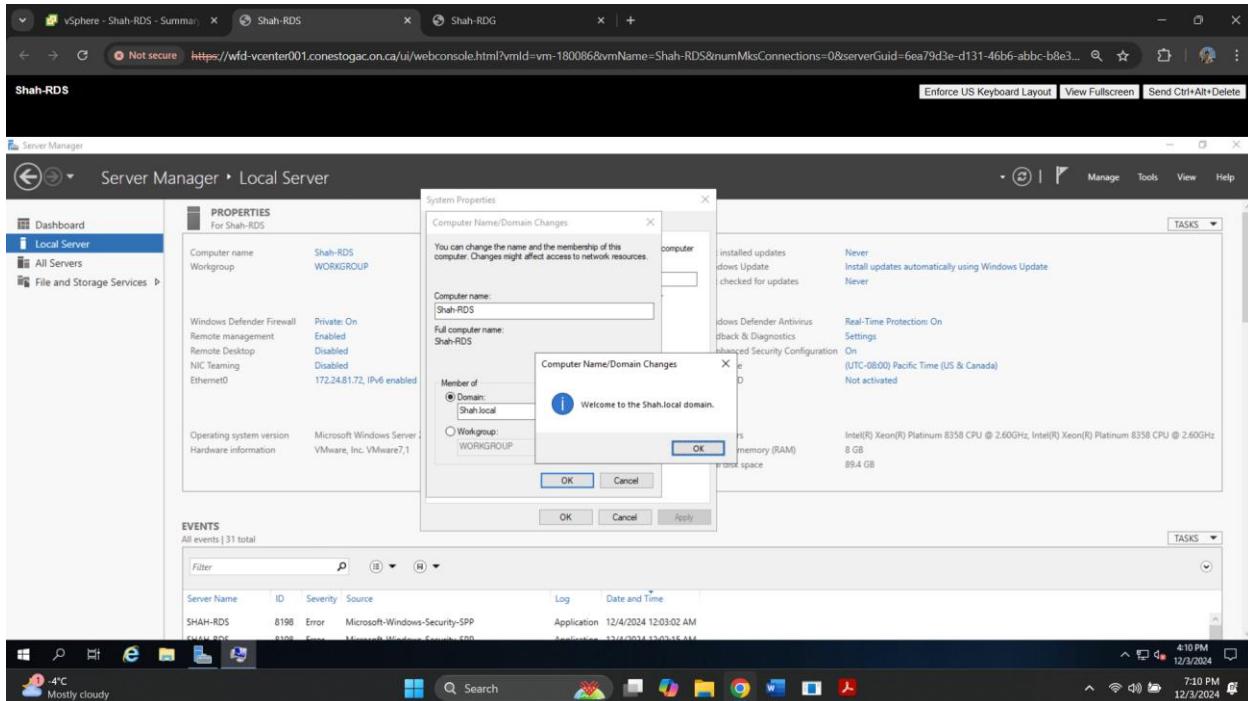
Joining Shah-RDG server to domain Shah.local



## Practical Assignment 4

Install your third Windows Server with hostname Shah-RDS and join it to Shah.local.

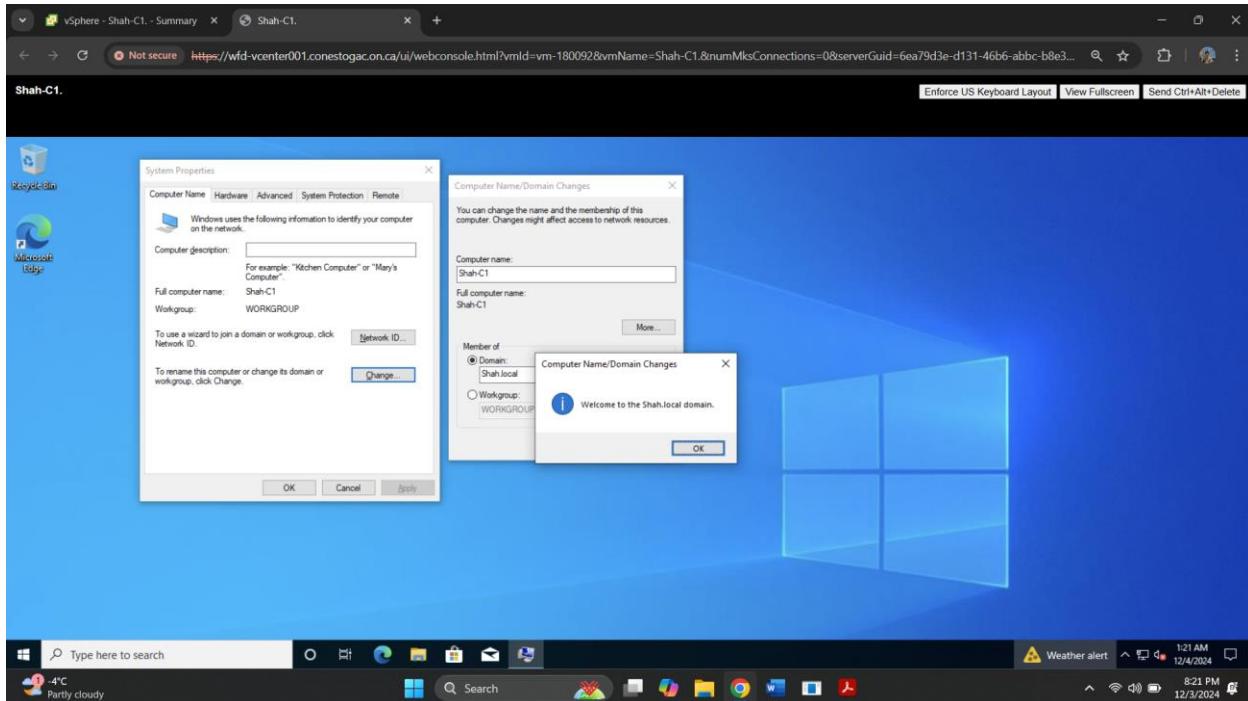
Joining Server Shah-RDS to domain Shah.local



## Practical Assignment 4

Install a Windows 10 client with hostname **Shah-C1** and join it to **Shah.local**.

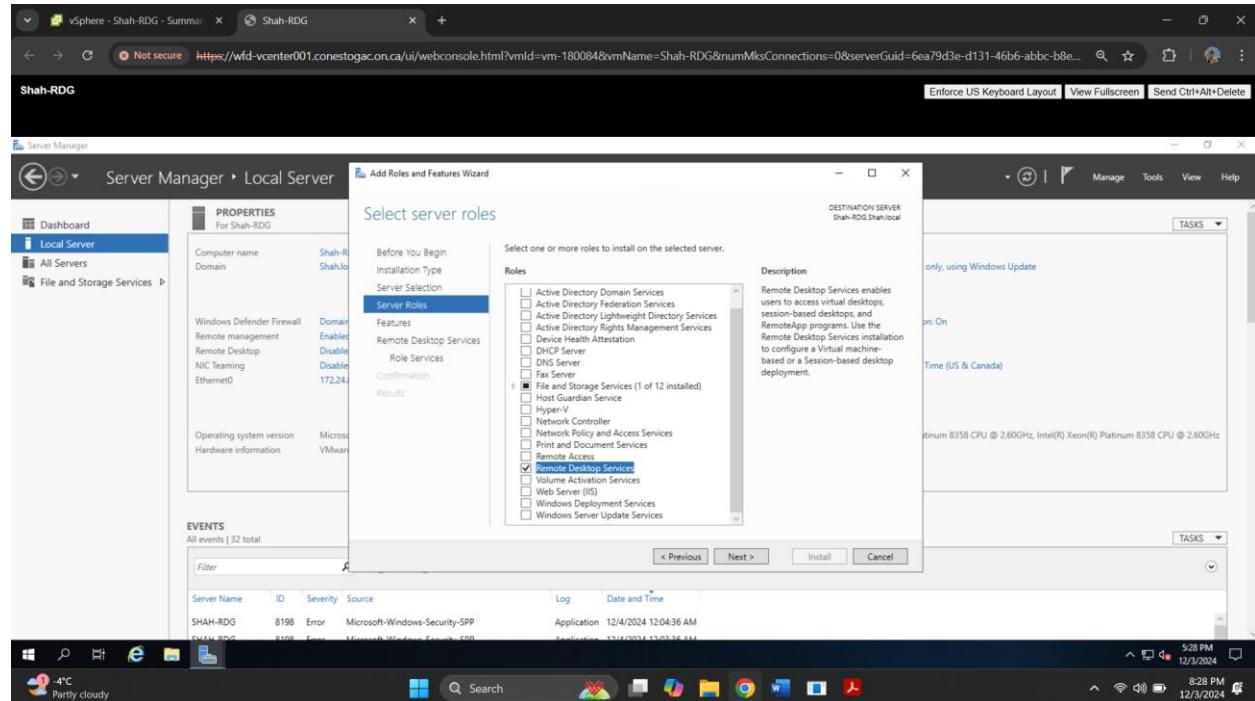
Joining Client system Shah-C1 with domain Shah.local



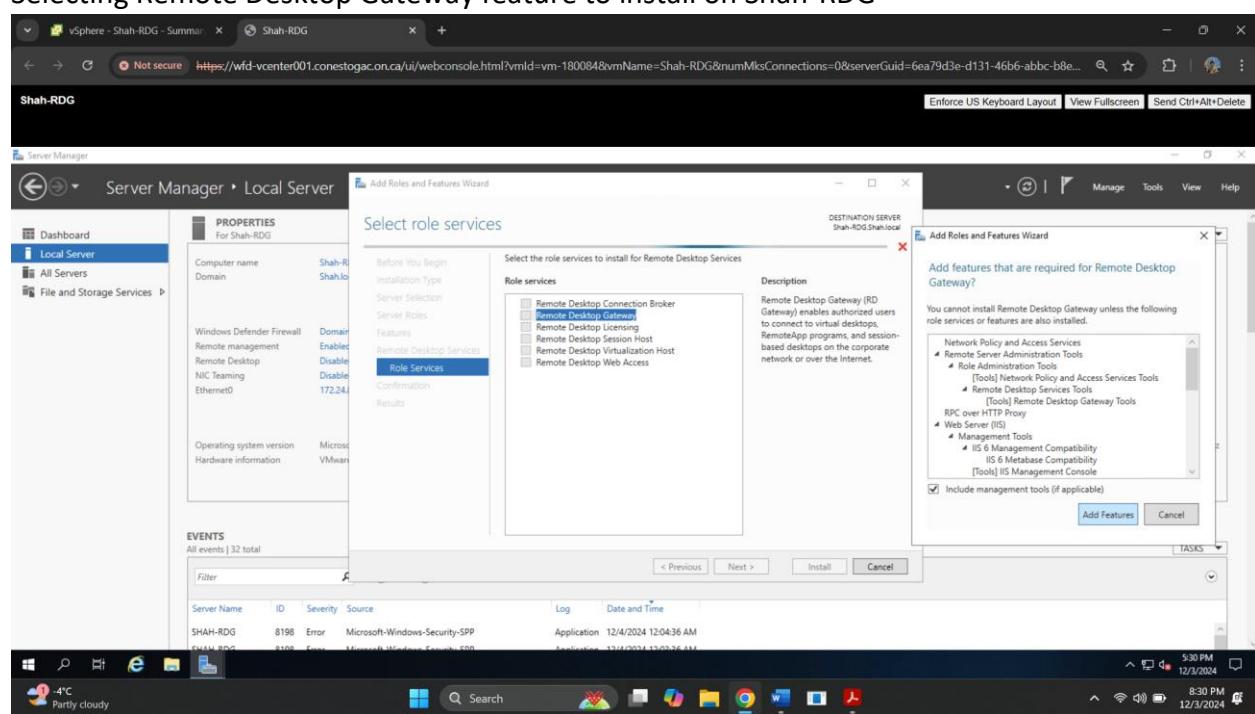
## Practical Assignment 4

Configure the Remote Desktop gateway role with appropriate user and group permissions on Shah-RDG.

### Installing Remote Desktop Services on Shah-RDG Server

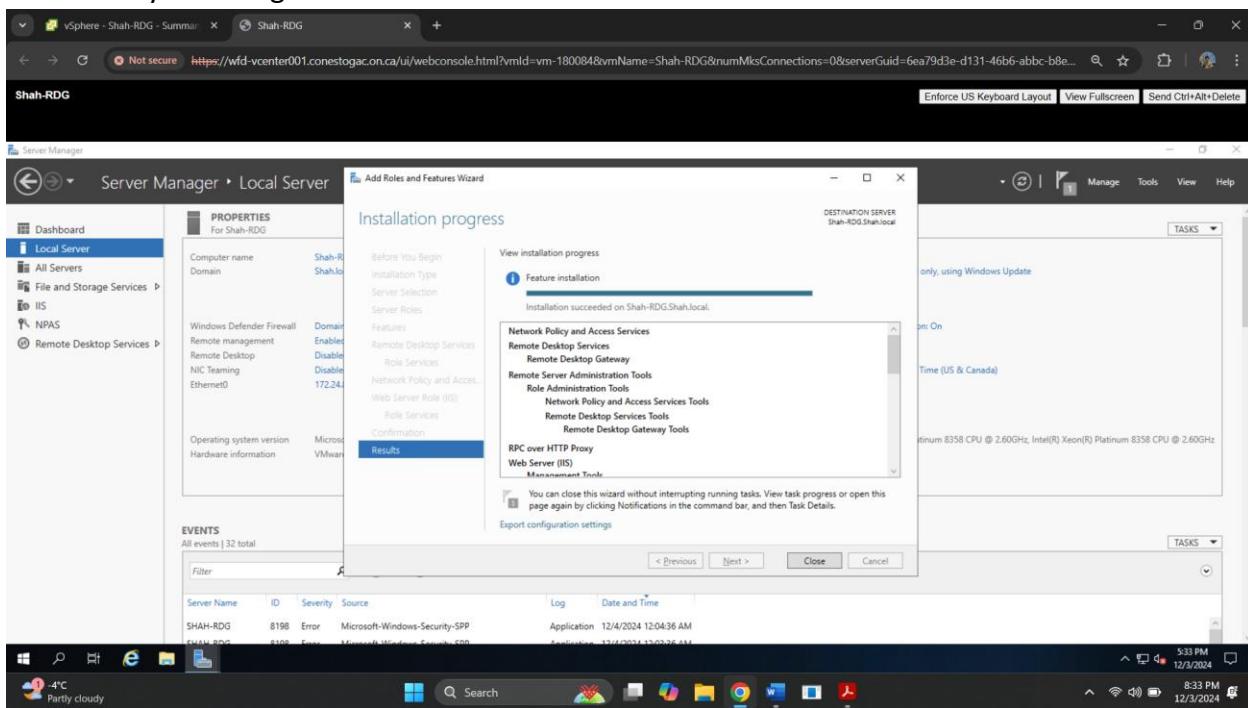


### Selecting Remote Desktop Gateway feature to install on Shah-RDG

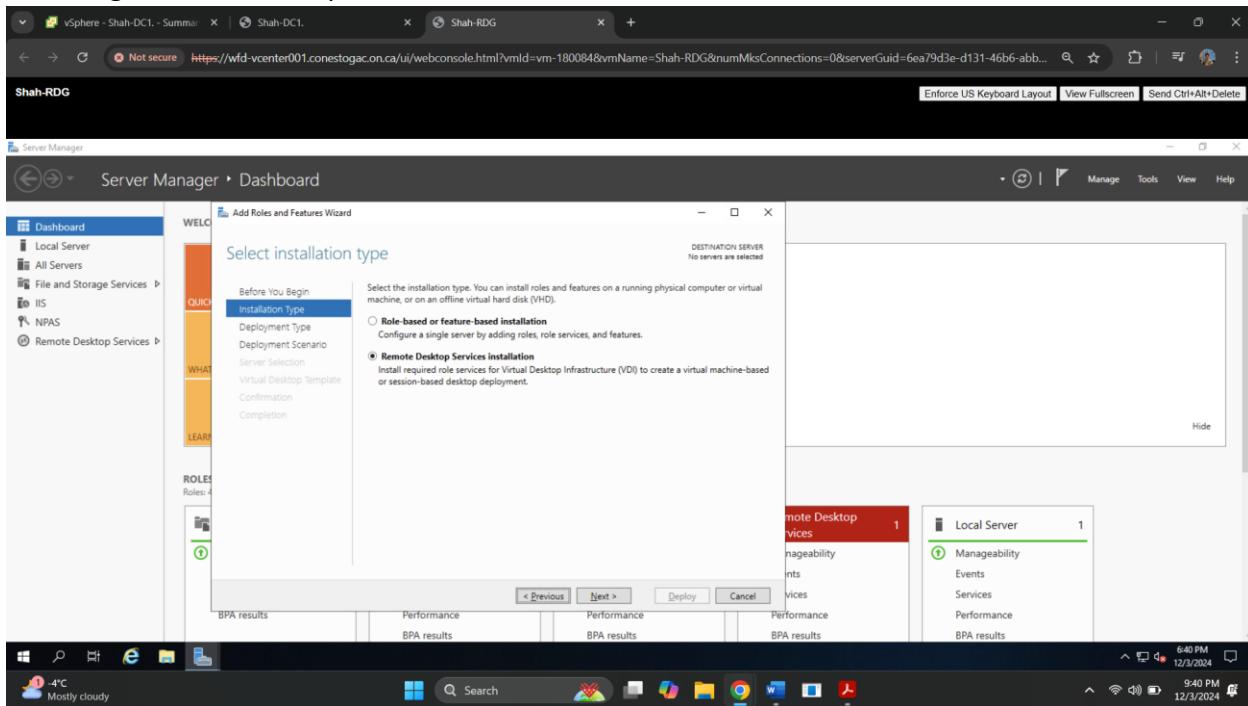


## Practical Assignment 4

### Successfully installing the feature on Shah-RDG

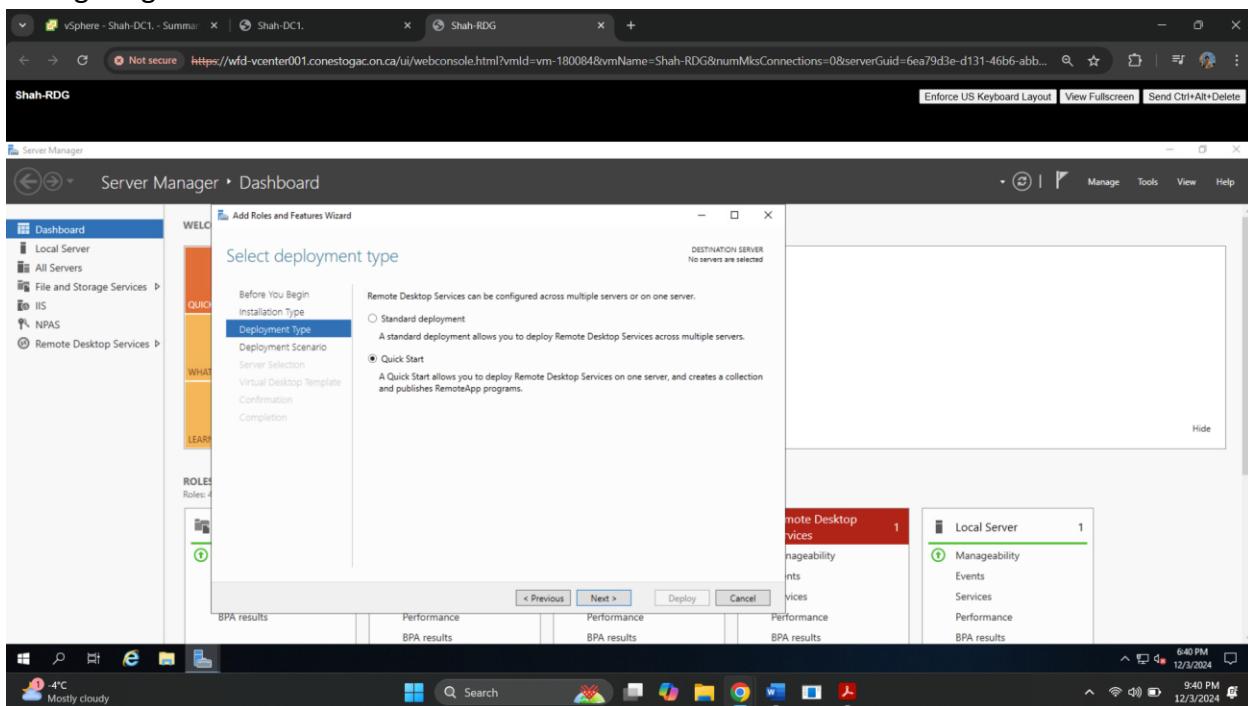


### Installing Remote desktop Services

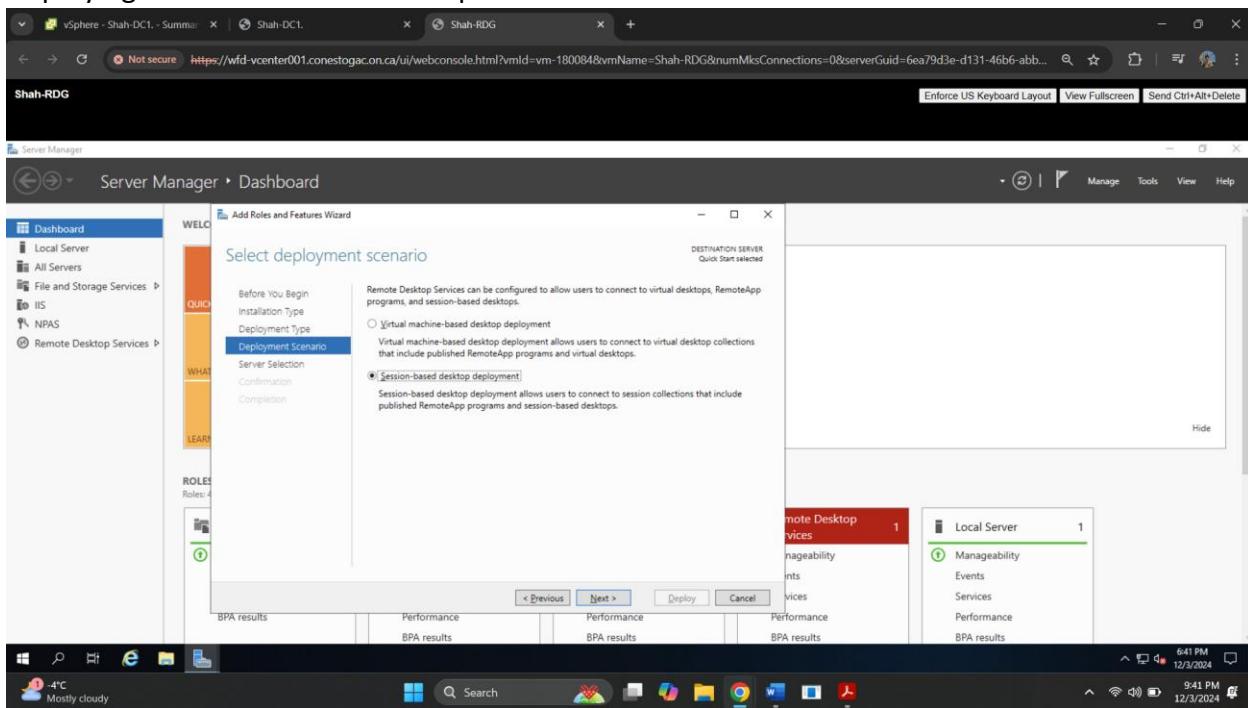


## Practical Assignment 4

### Configuring as Quick Start

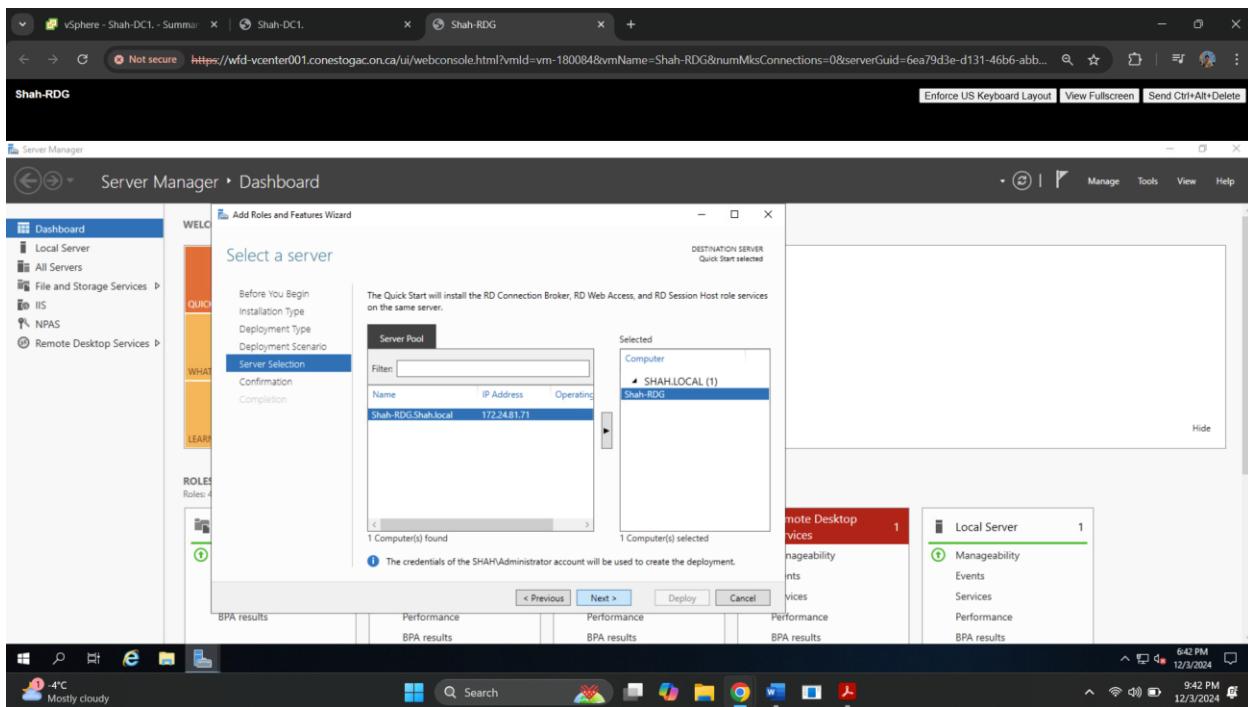


### Deploying as Session Based Desktop

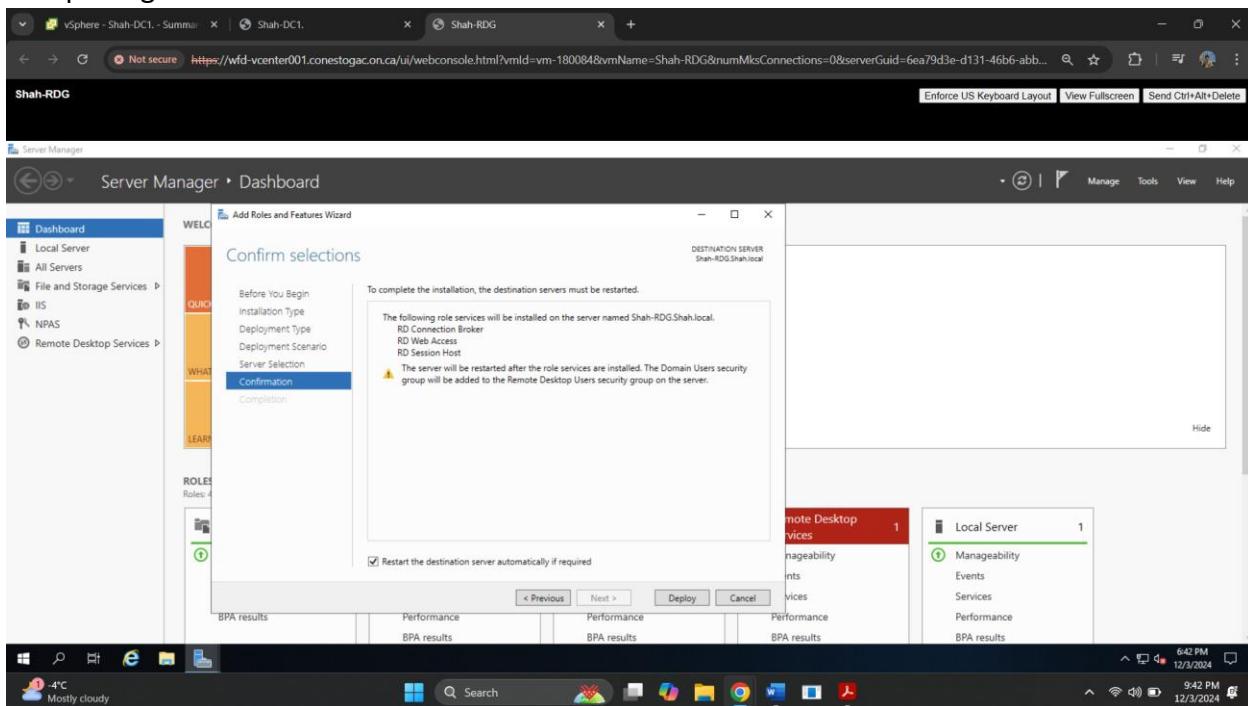


## Practical Assignment 4

By login of domain administrator, installing as RD connection broker, RD web access and RD Session

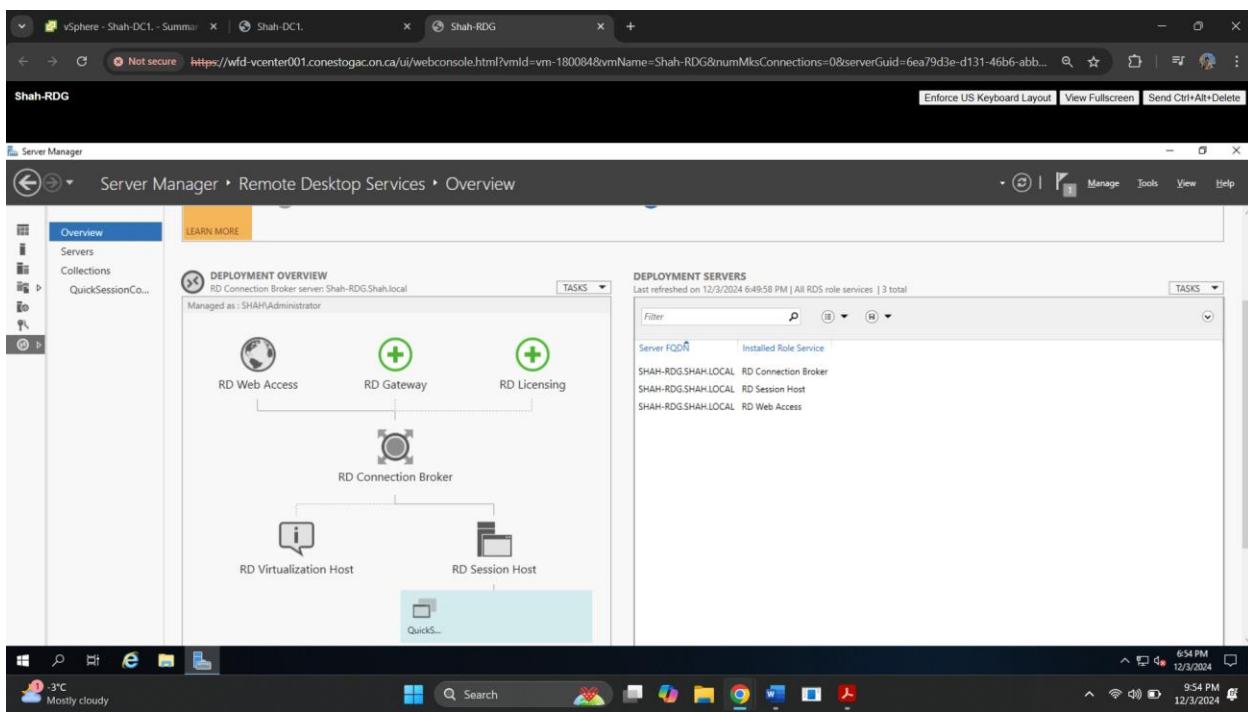
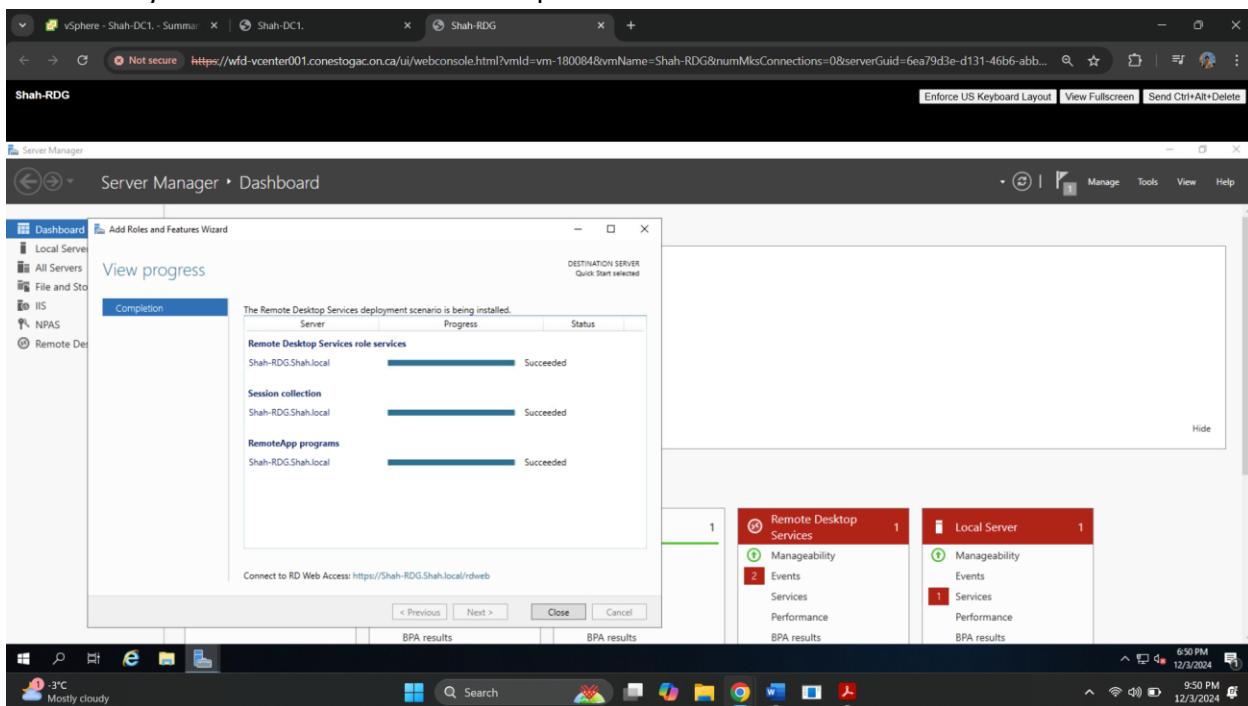


Completing the installation on Shah-RDG server



## Practical Assignment 4

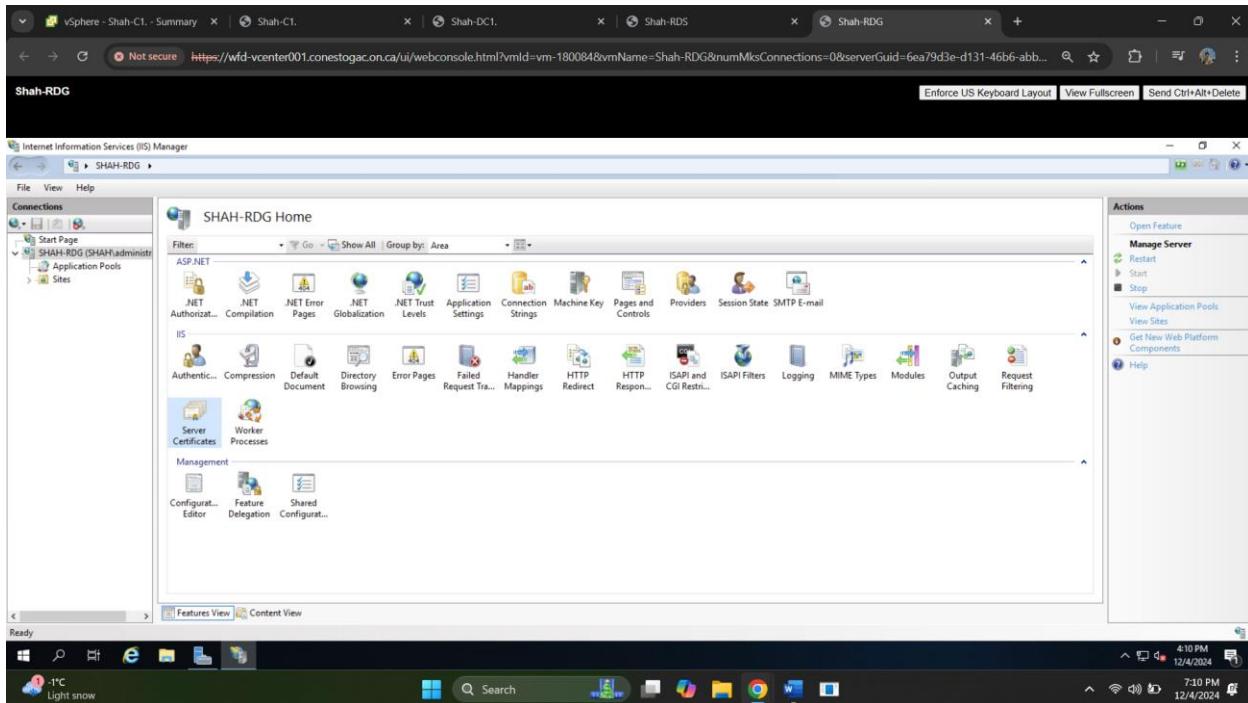
Successfully installed the Remote Desktop Services on the Shah-RDG Server



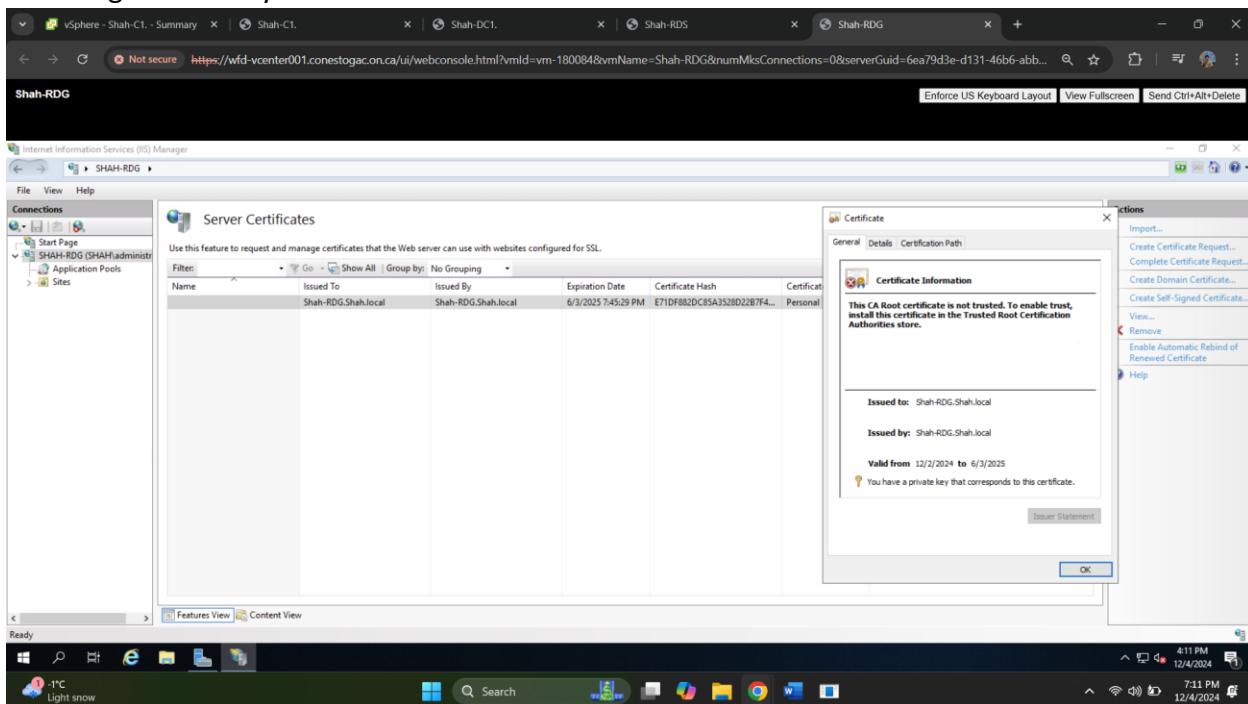
## Practical Assignment 4

Export the self-signed certificate from the Remote Desktop Gateway, get it signed by the Certificate Authority and import the signed Certificate back into the Remote Desktop Gateway.

Open IIS manager and open Server Certificates

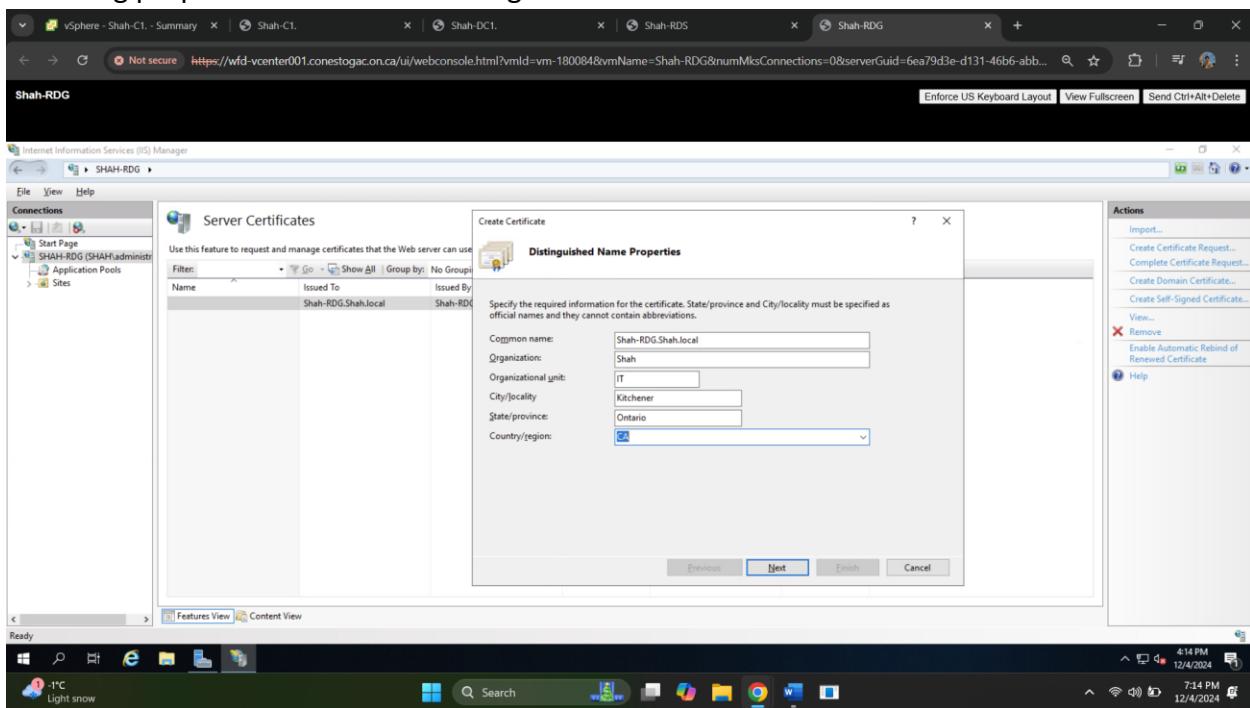


Checking the validity of the Server

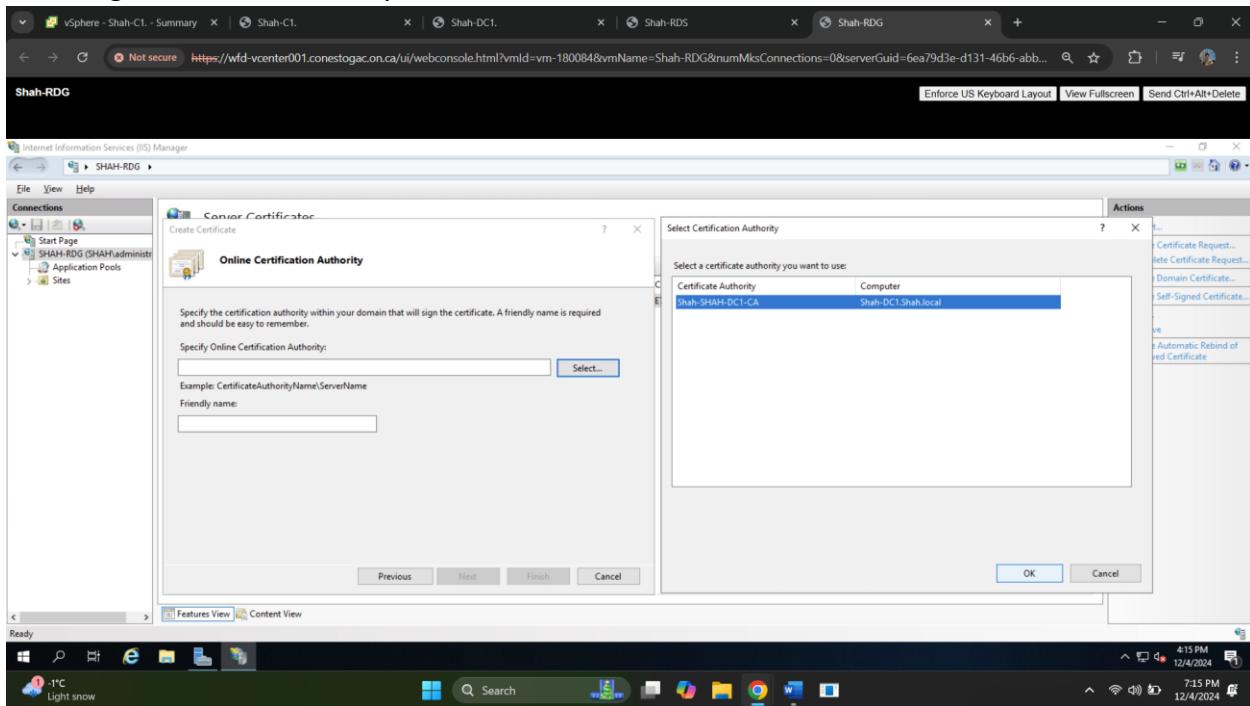


## Practical Assignment 4

### Providing properties details for creating certificate.

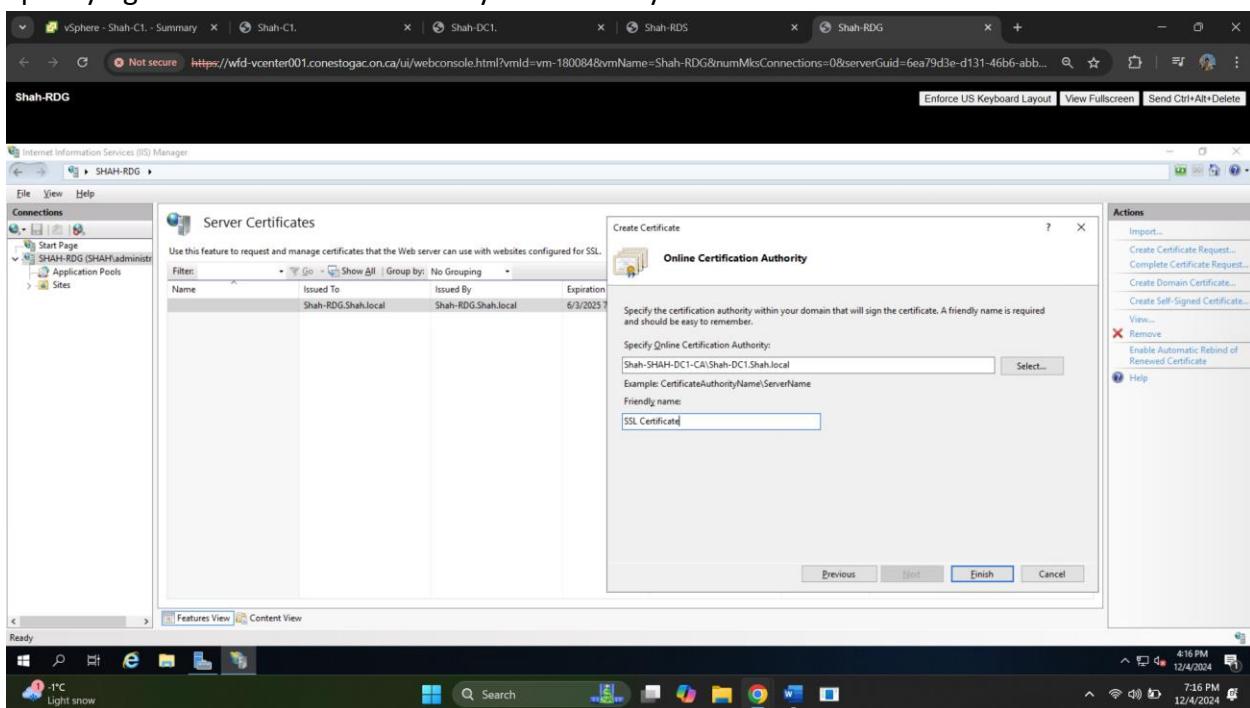


### Selecting Certificate Authority to use as Shah-SHAH-DC1-CA

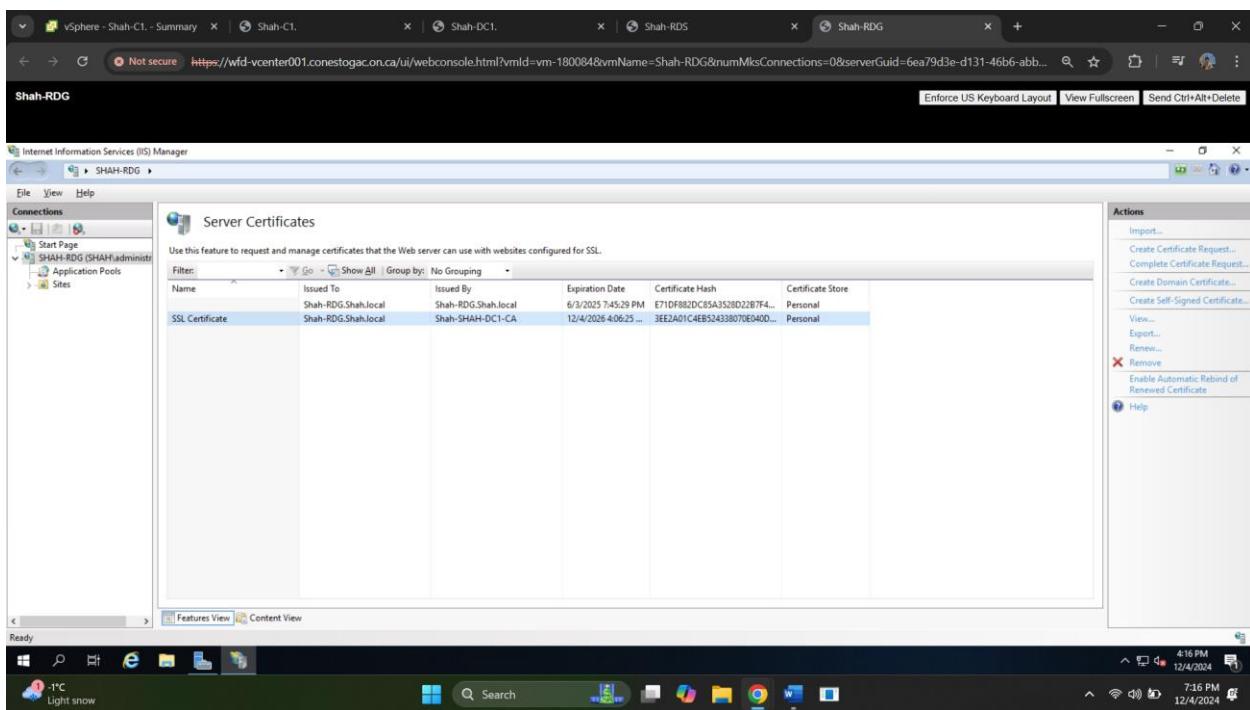


## Practical Assignment 4

### Specifying online certificate authority and friendly name as SSL Certificate

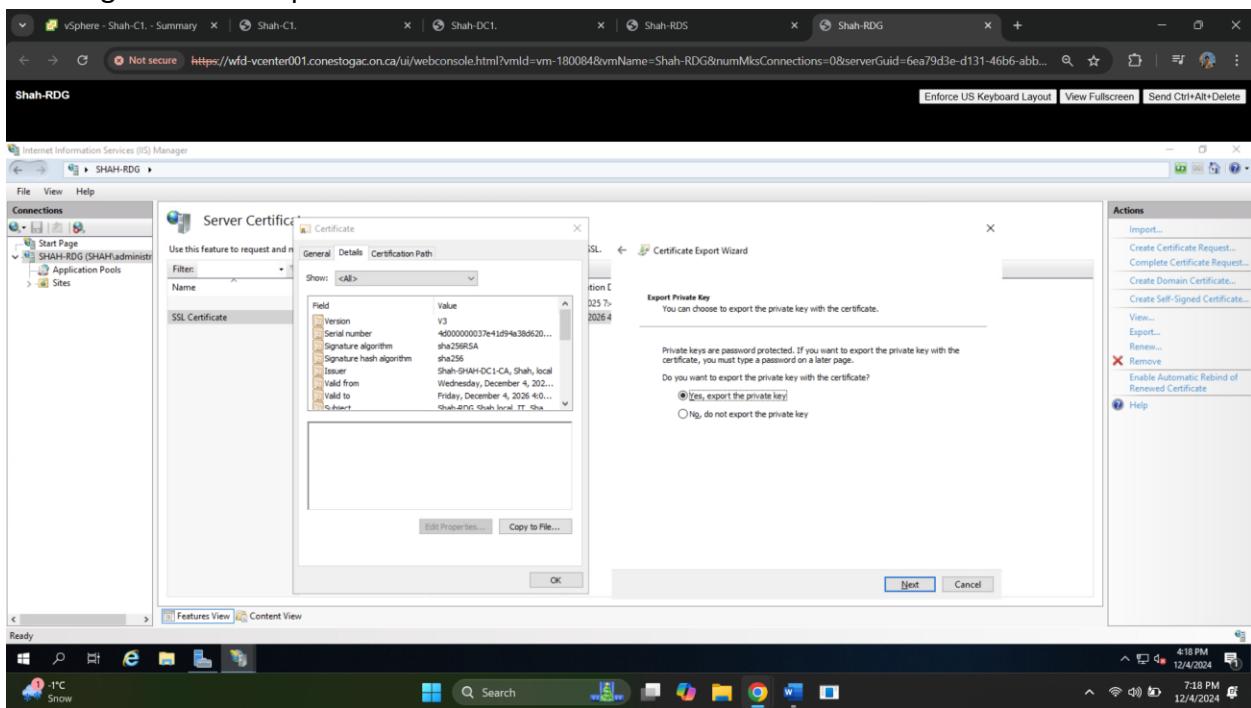


### Created new SSL Certificate

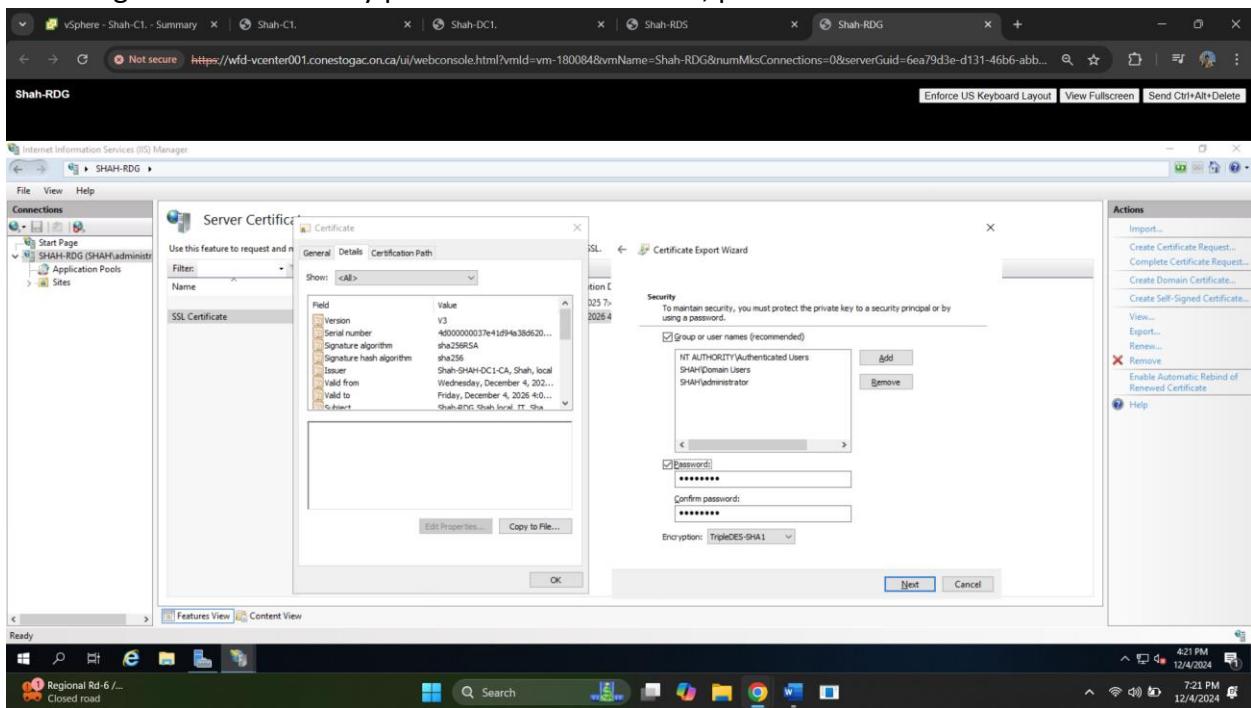


## Practical Assignment 4

### Creating certificate export file

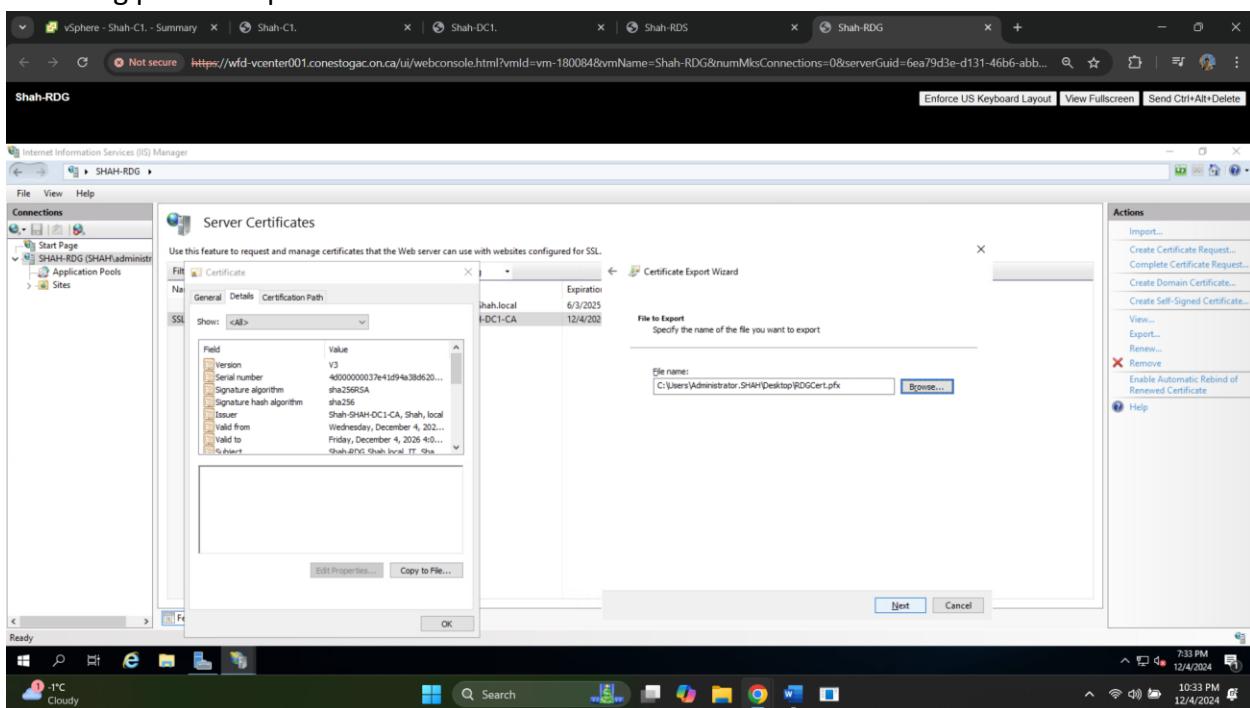


Providing certificate security password and username, password: Secret55

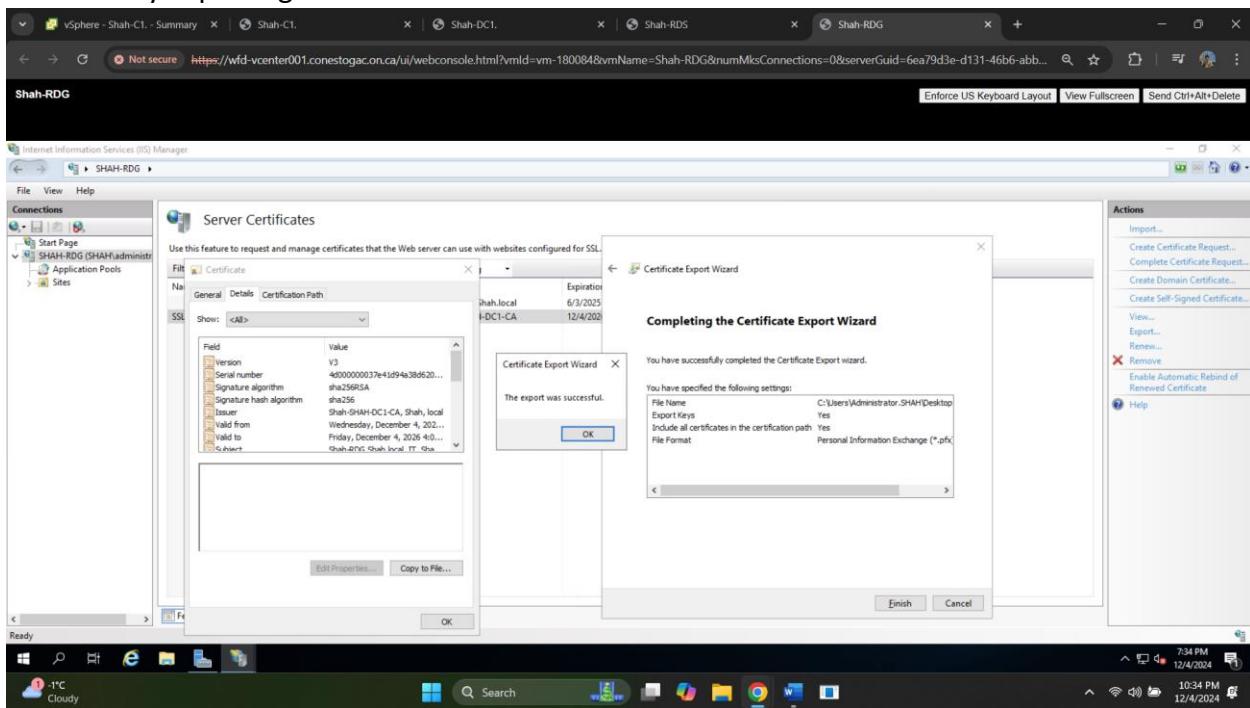


## Practical Assignment 4

### Providing path to export the file

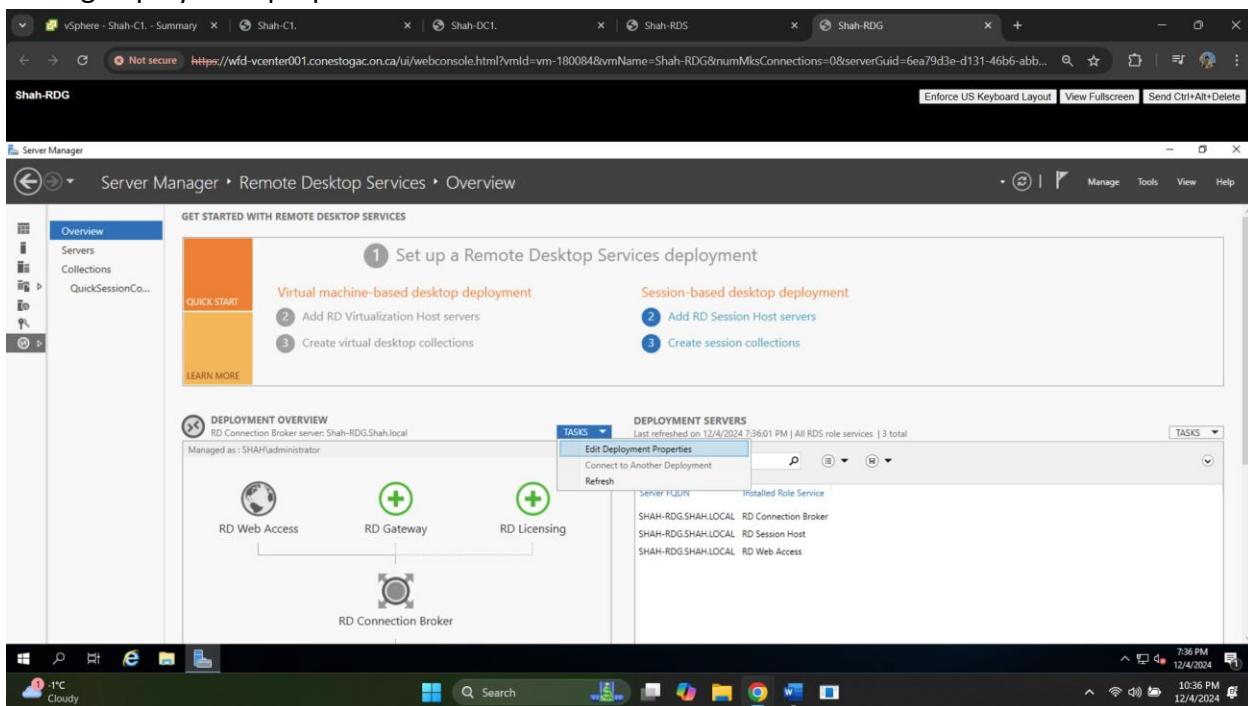


### Successfully exporting the Certificate

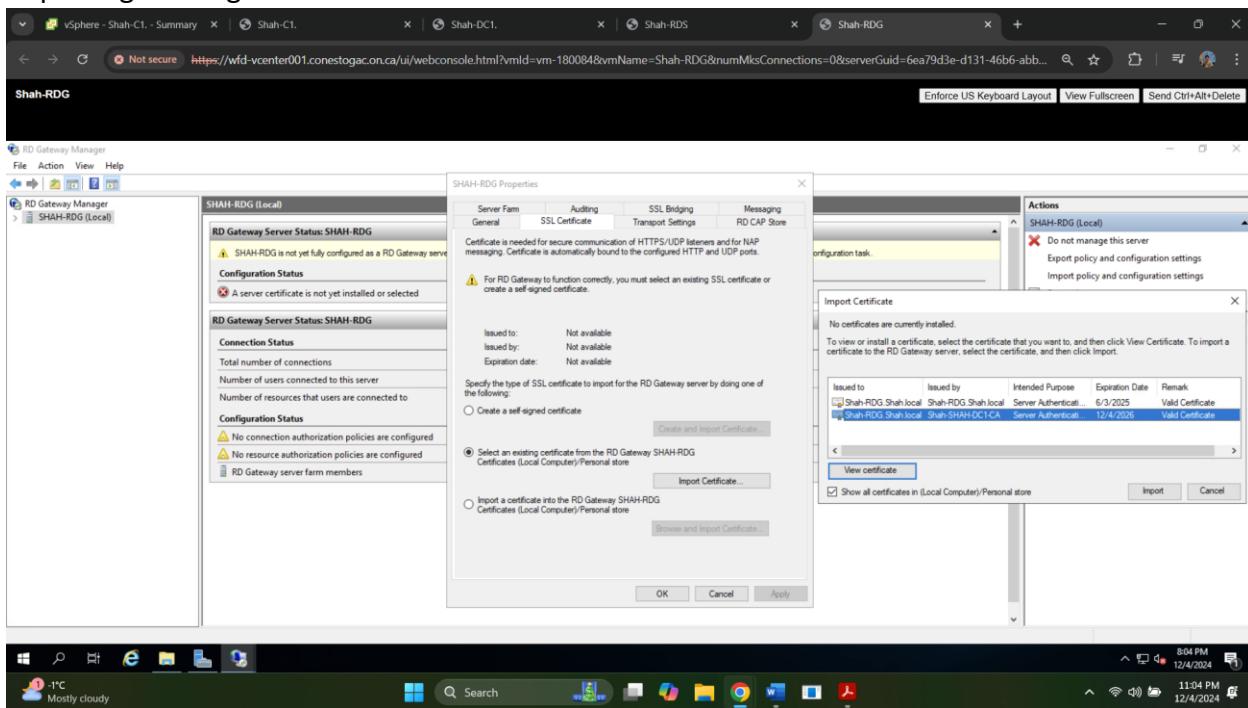


## Practical Assignment 4

### Editing deployment properties on Shah-RDG server

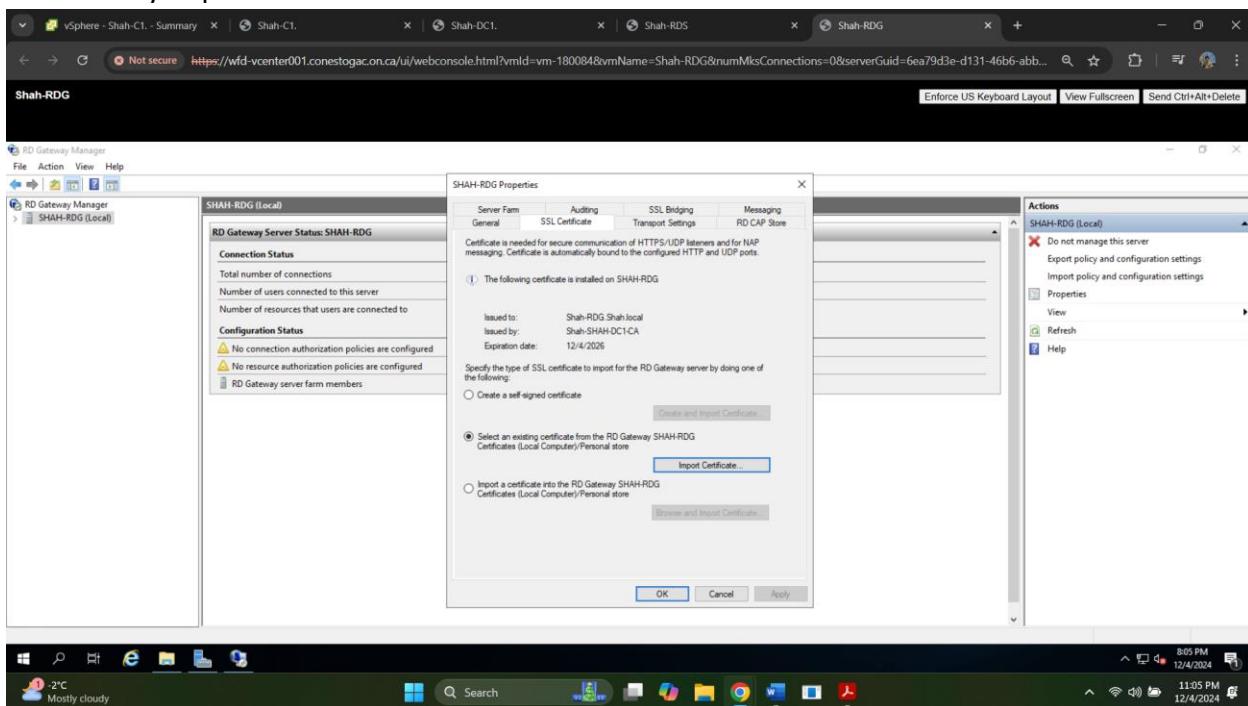


### Importing existing certificate

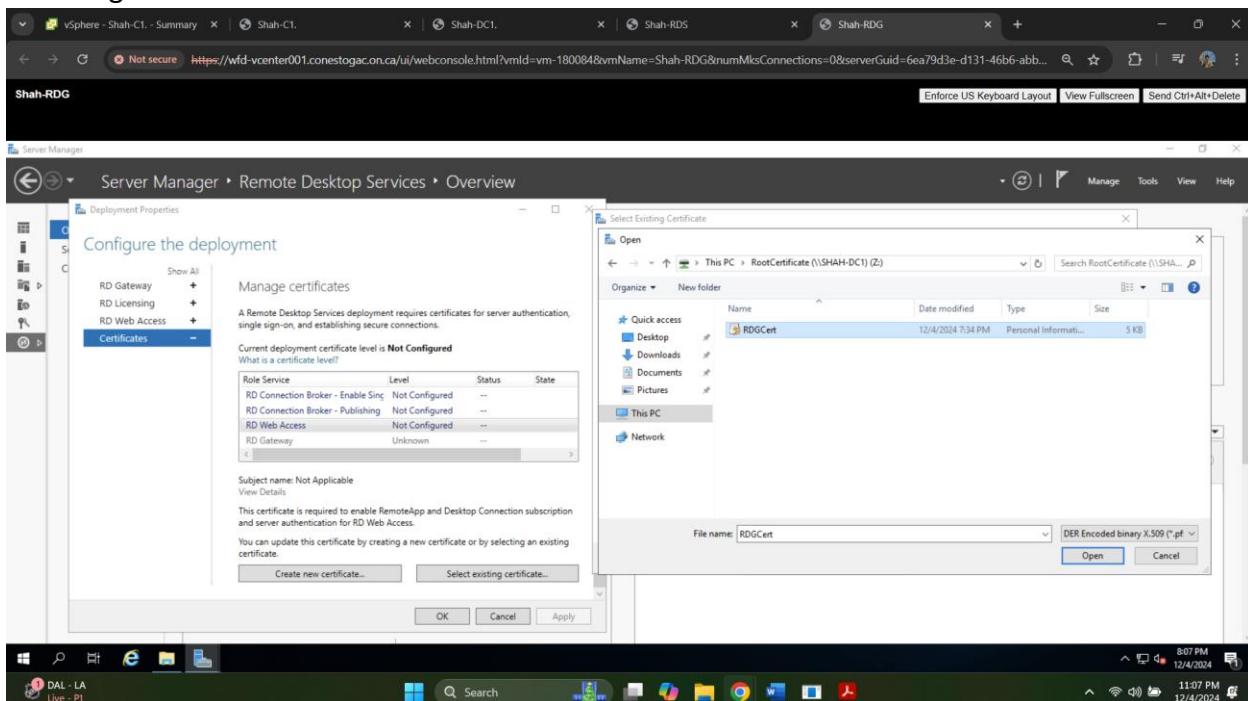


## Practical Assignment 4

Successfully imported and installed the certificate

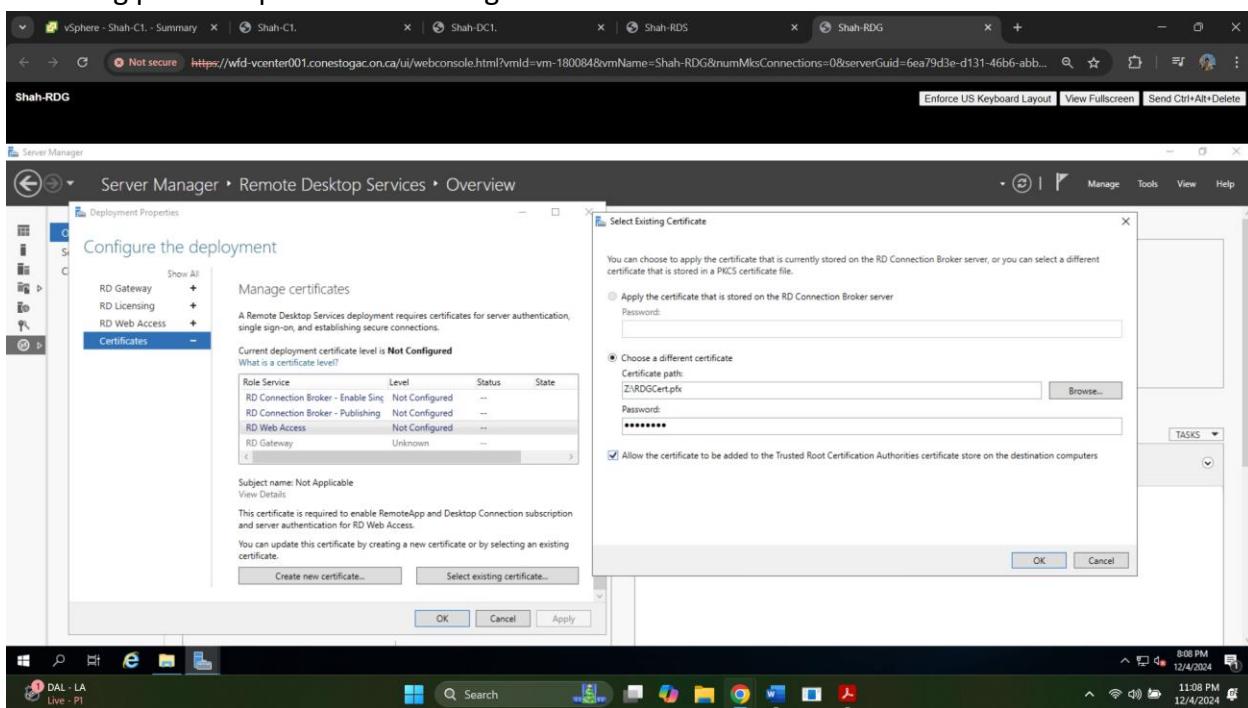


Selecting certificate for RD Web Access

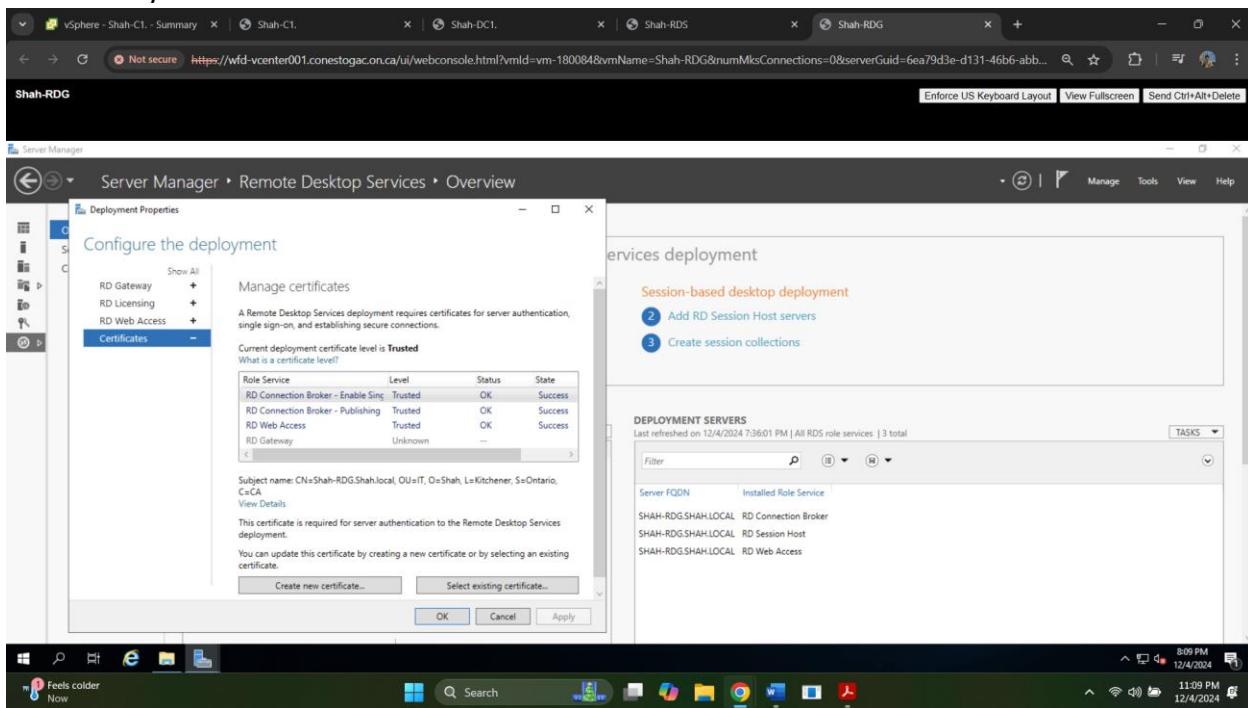


## Practical Assignment 4

### Providing path and password allowing certificate to be added as trusted root

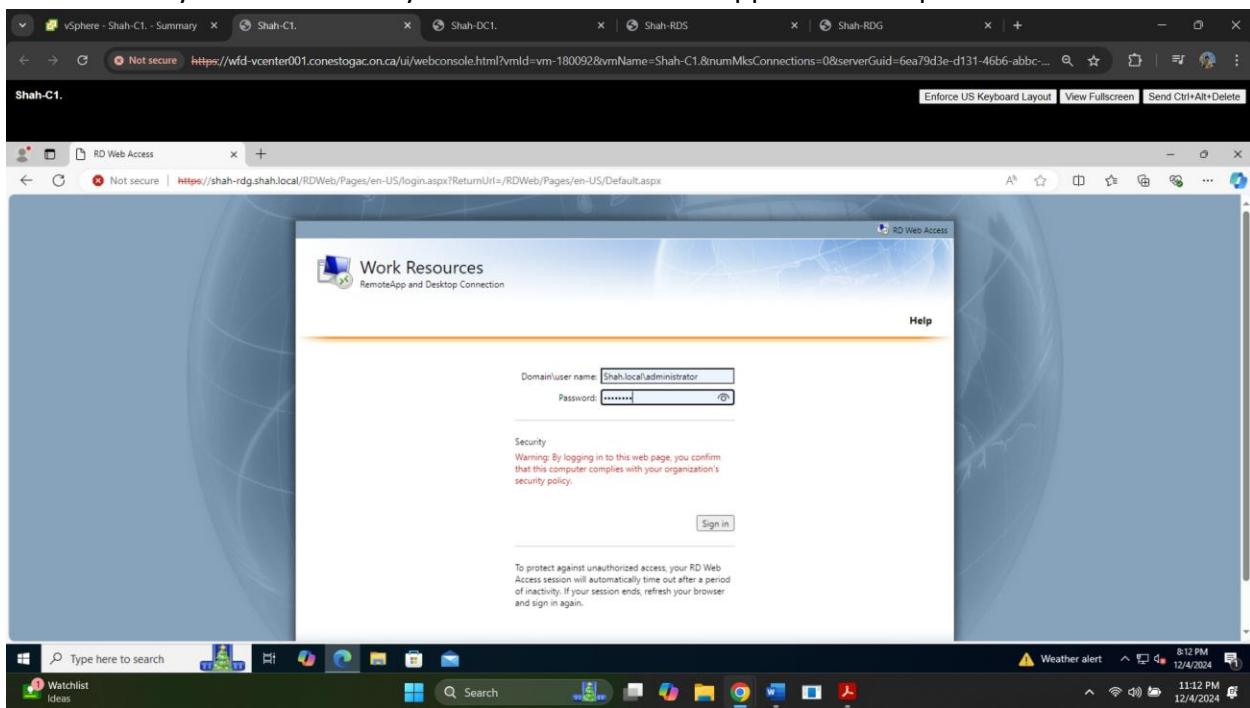


Successfully installed and status as OK as trusted level

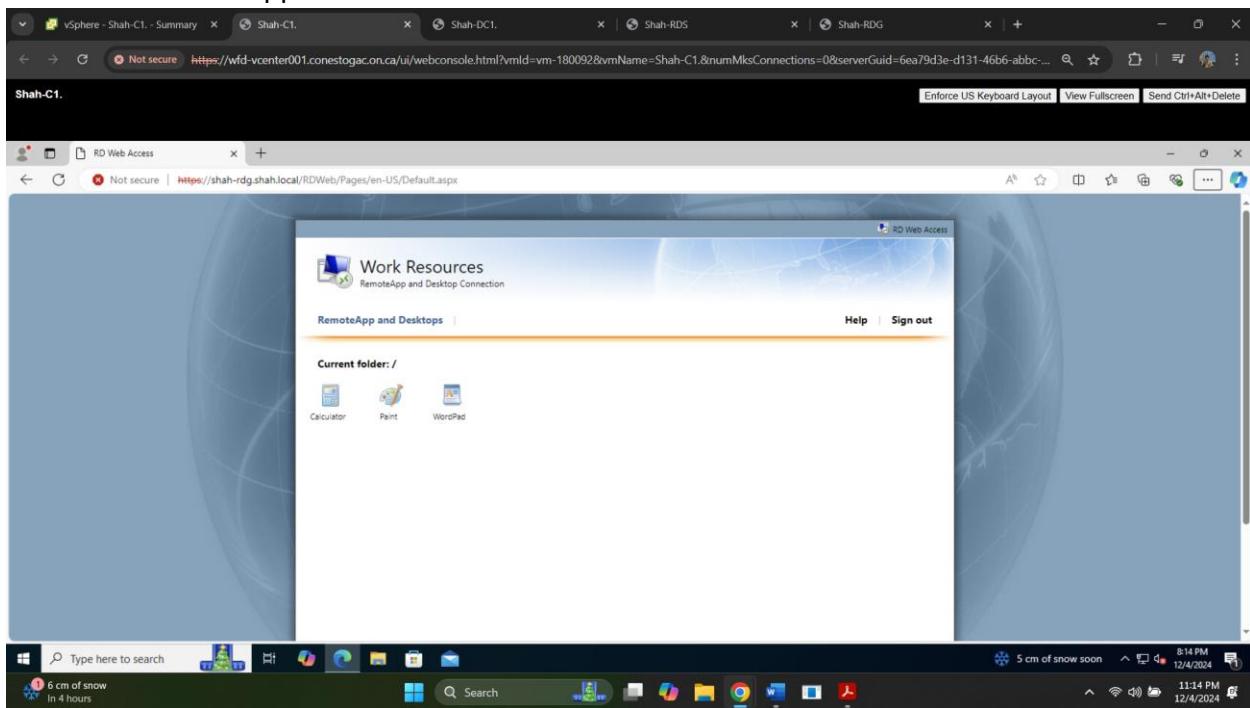


## Practical Assignment 4

From Client system Successfully able to access RemoteApp and desktop connection



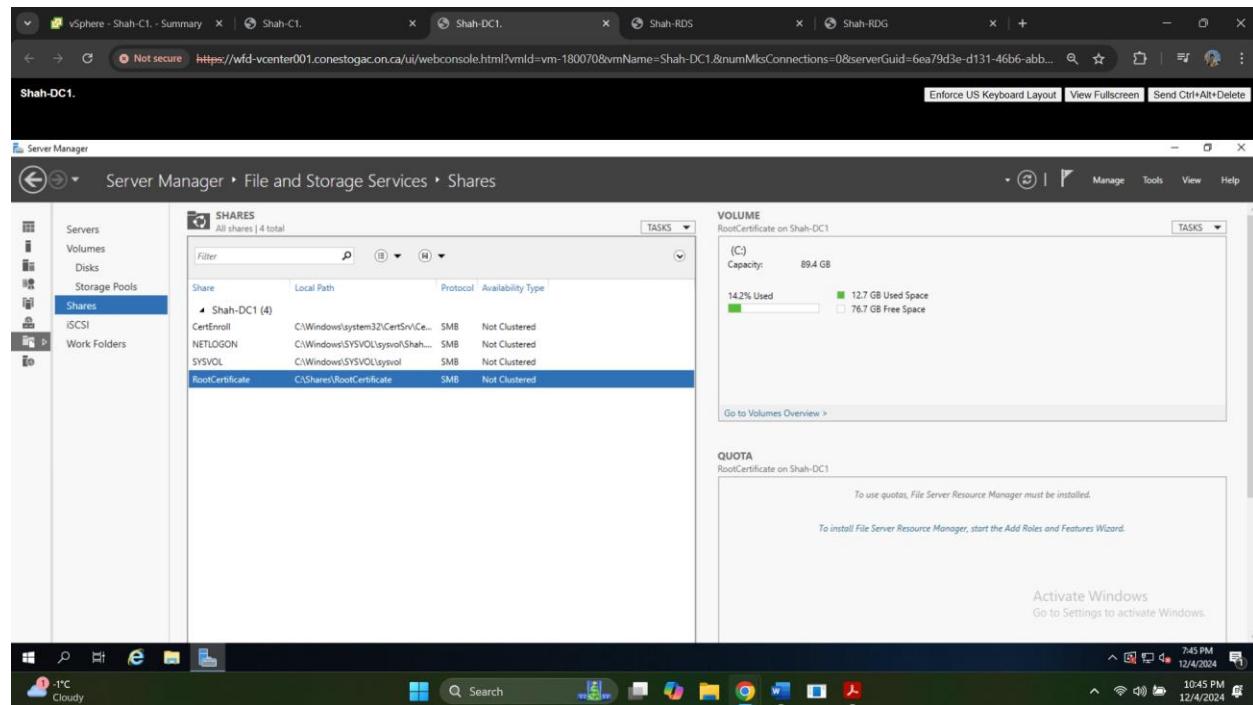
Able to access the application



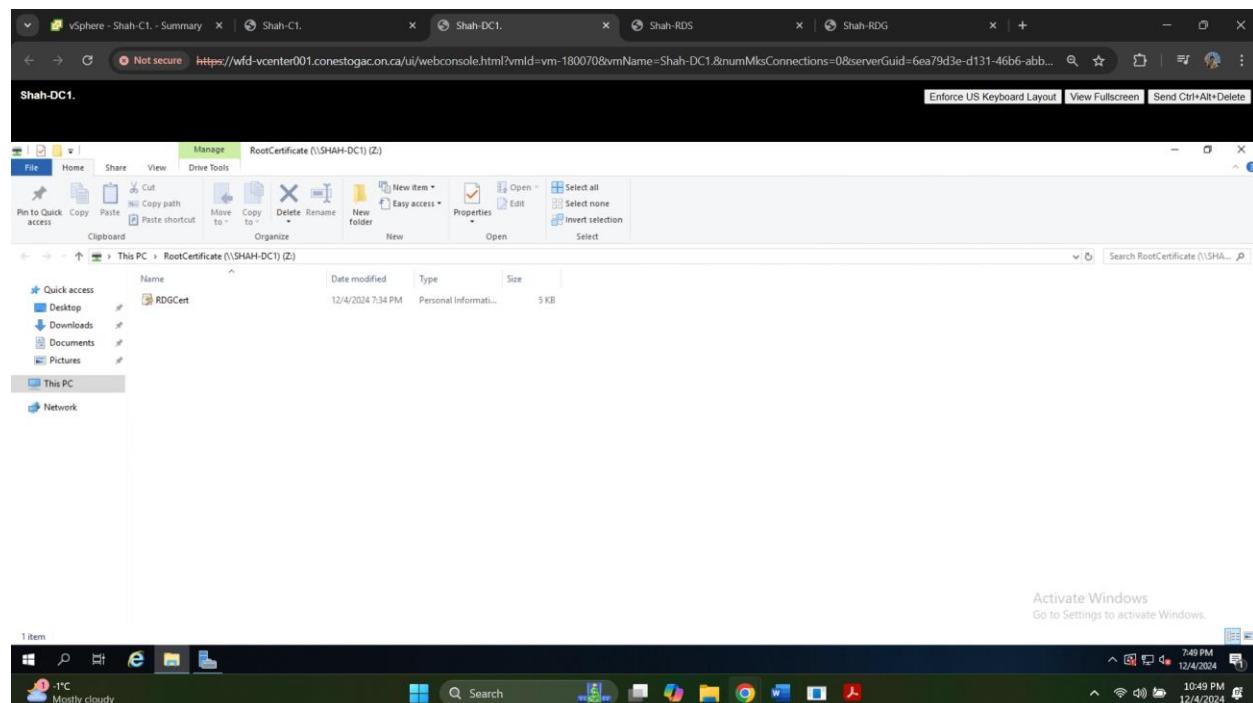
## Practical Assignment 4

Create a share on Shah-DC1 that will contain the Root Certificate.

Created Share drive as RootCertificate



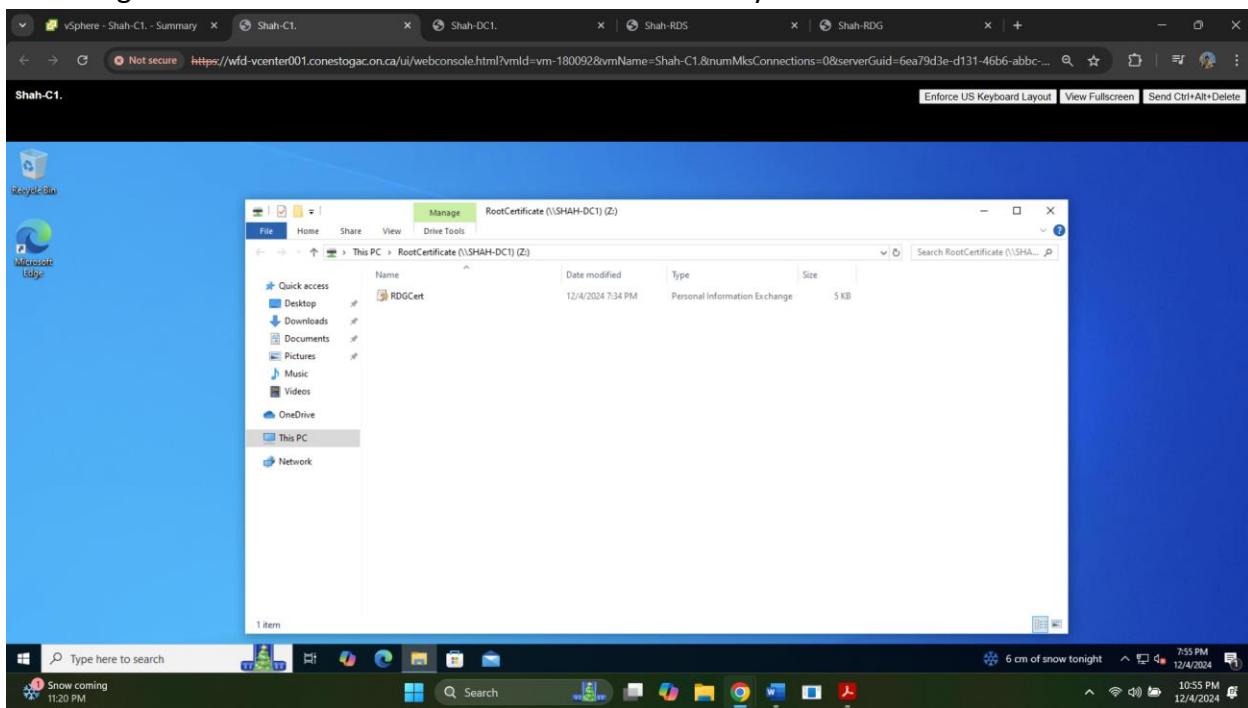
Certificate file saved on share drive RootCertificate



Use a shared folder on Shah-DC1 to share the root certificate with Shah-DC1

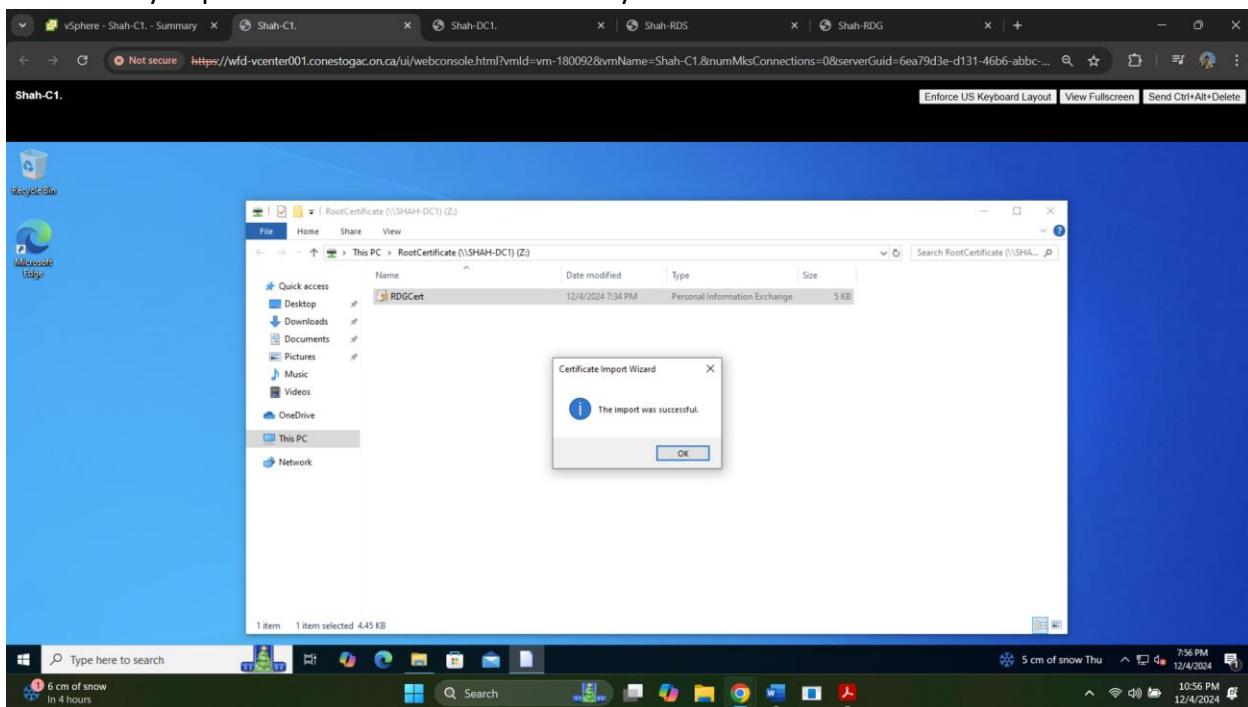
## Practical Assignment 4

### Accessing RDGCert certificate on share drive from client system



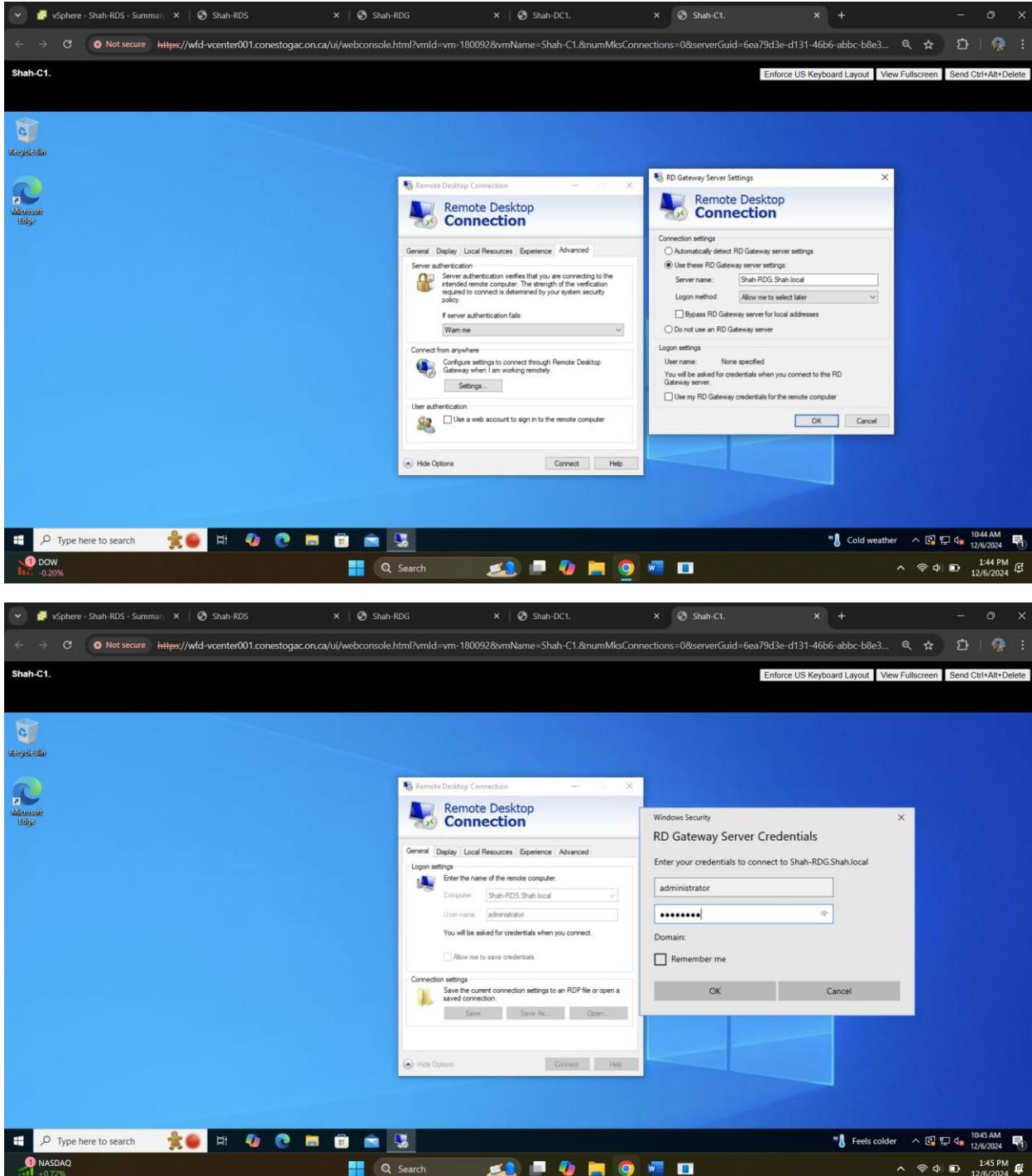
### Install the Root Certificate on Shah-C1.

Successfully imported the certificate on client system



## Practical Assignment 4

Use a Remote Gateway Desktop connection from **Shah-C1** to **Shah-RDS** through using the Remote Desktop Gateway on **Shah-RDG**.



## Practical Assignment 4

The screenshot shows a Windows Server 2019 desktop environment with the following windows open:

- vSphere - Shah-C1 - Summary**: A browser window showing the vSphere interface for the host.
- Shah-DC1**: A browser window showing the vSphere interface for the Datacenter.
- Shah-RDS**: A browser window showing the vSphere interface for the RDS host.
- Shah-RDG**: A browser window showing the vSphere interface for the RDG host.
- Server Manager**: The Local Server properties window for the Shah-RDS host. It displays system information, security settings (Windows Defender Firewall, Antivirus), processor details, and event logs.
- Events**: The Windows Event Viewer showing a list of 51 total events, including two errors from Microsoft-Windows-Security-SPP.
- Taskbar**: The standard Windows taskbar at the bottom of the screen.