

## Lab 5.4. HTTPS

- Tạo CA server cấp Certificate cho máy chủ web server
- Cấu hình Web server để truy cập Website qua giao thức HTTPS

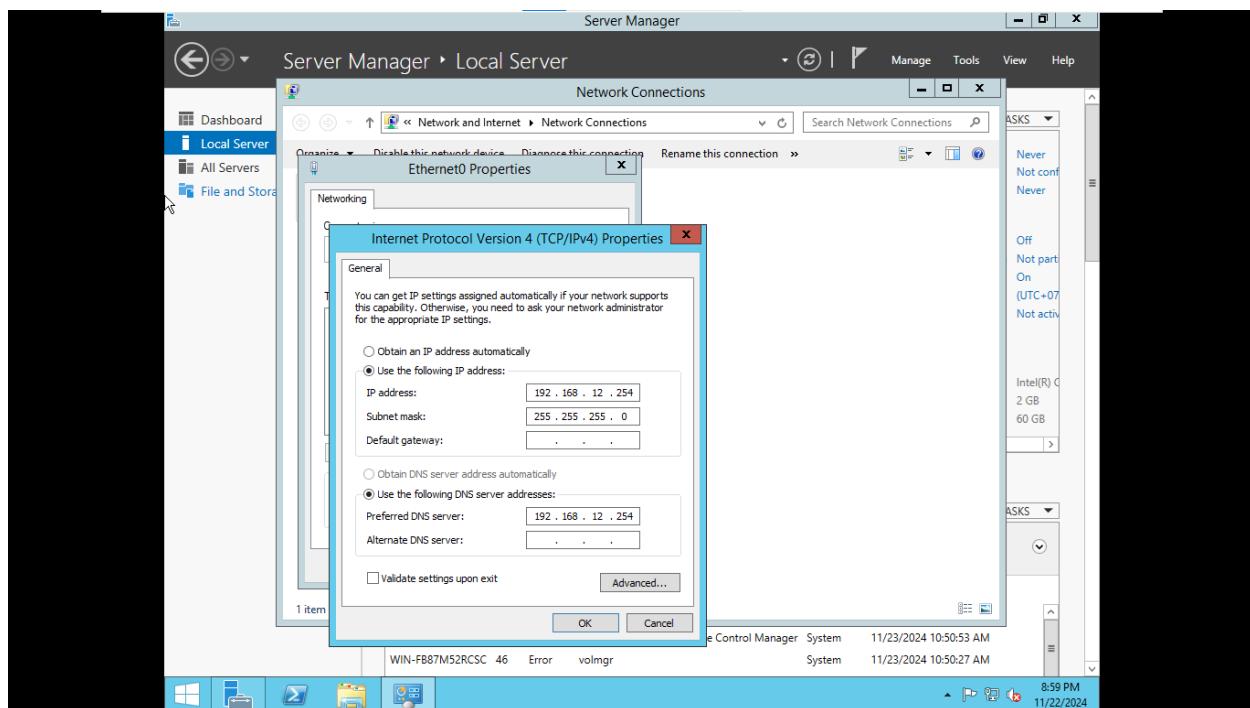
Mô hình Lab:



Cách thực hiện:

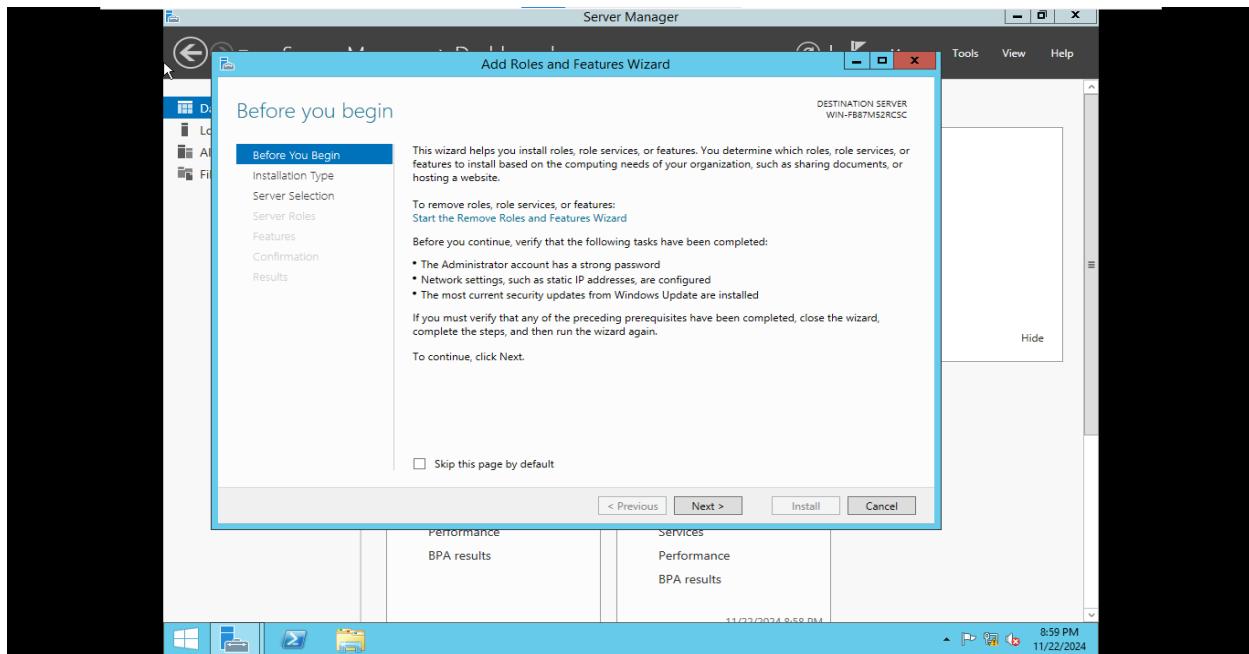
Đầu tiên, cấu hình trên CA Server

B1: Cấu hình IP:

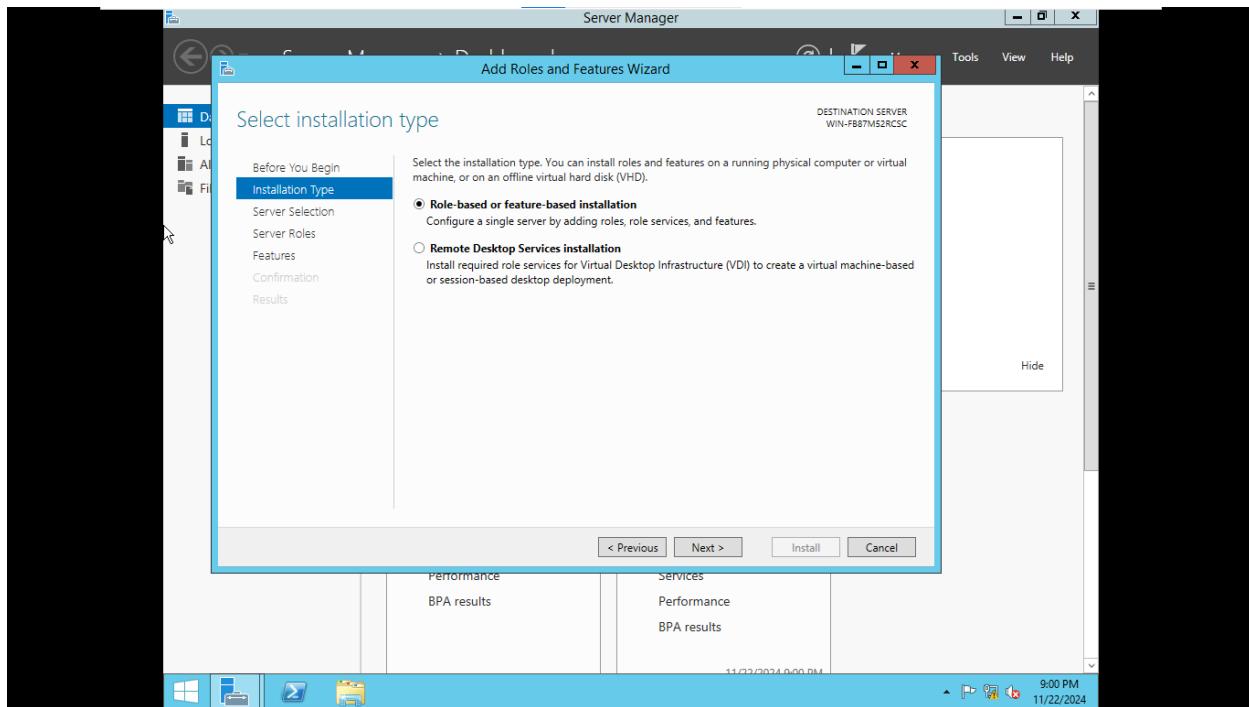


## B2: Nâng cấp lên Domain Controller :

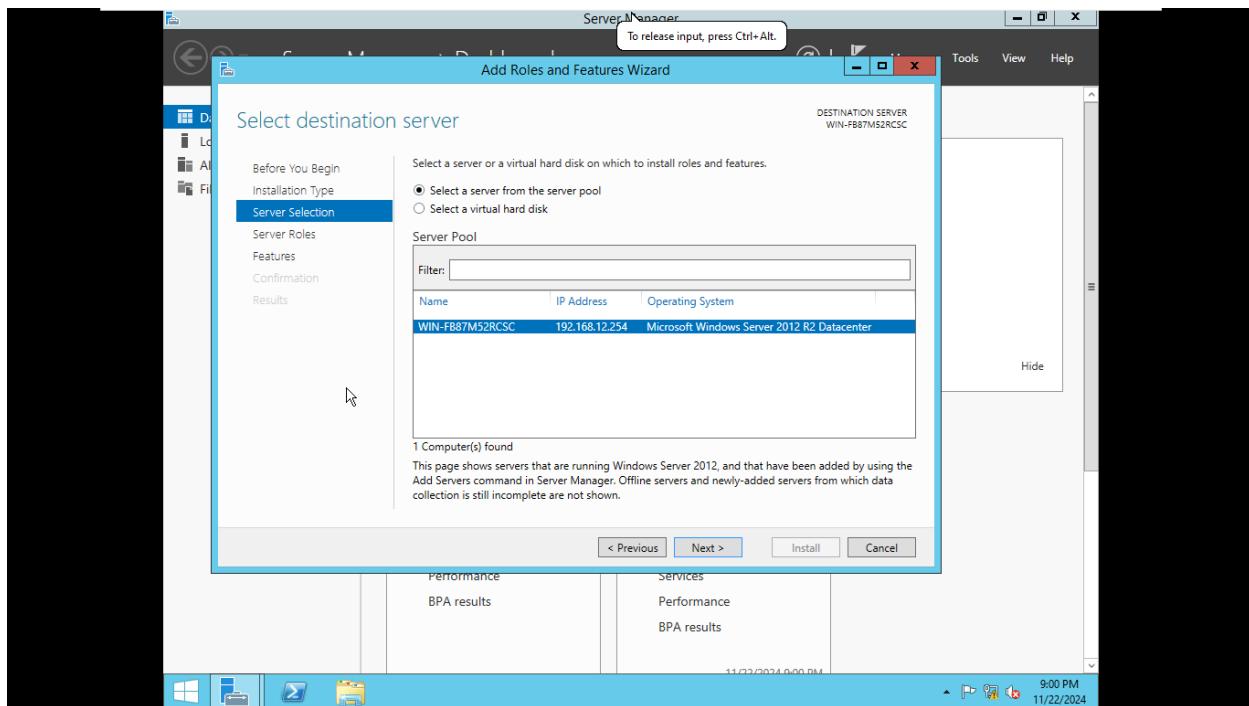
Nhấn Next



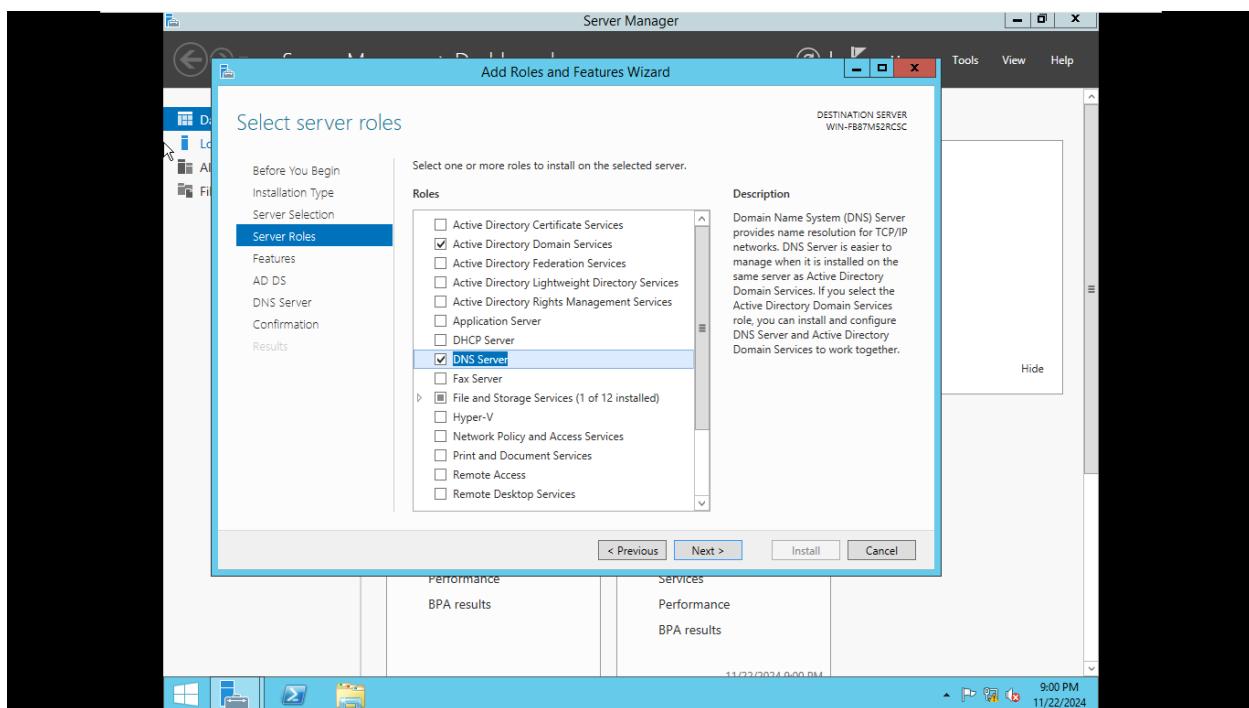
Nhấn Next



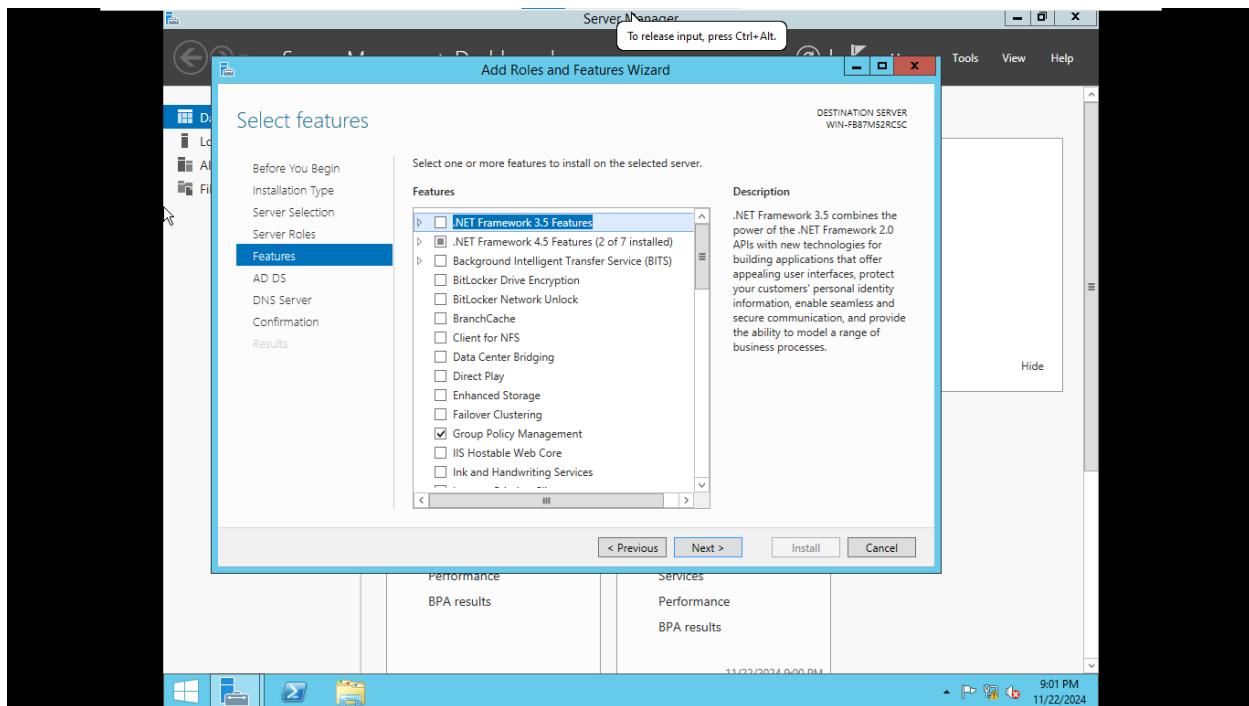
Nhấn Next



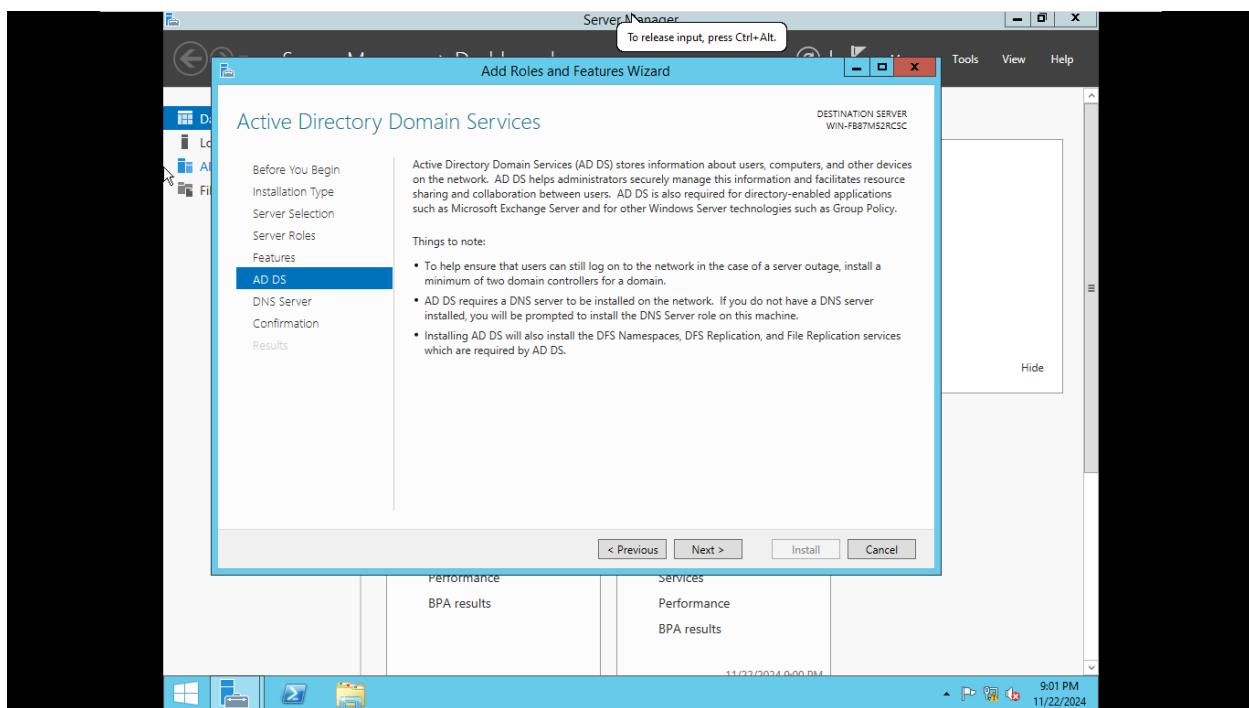
Tick chọn Active Directory Domain Services , DNS Server -> Next



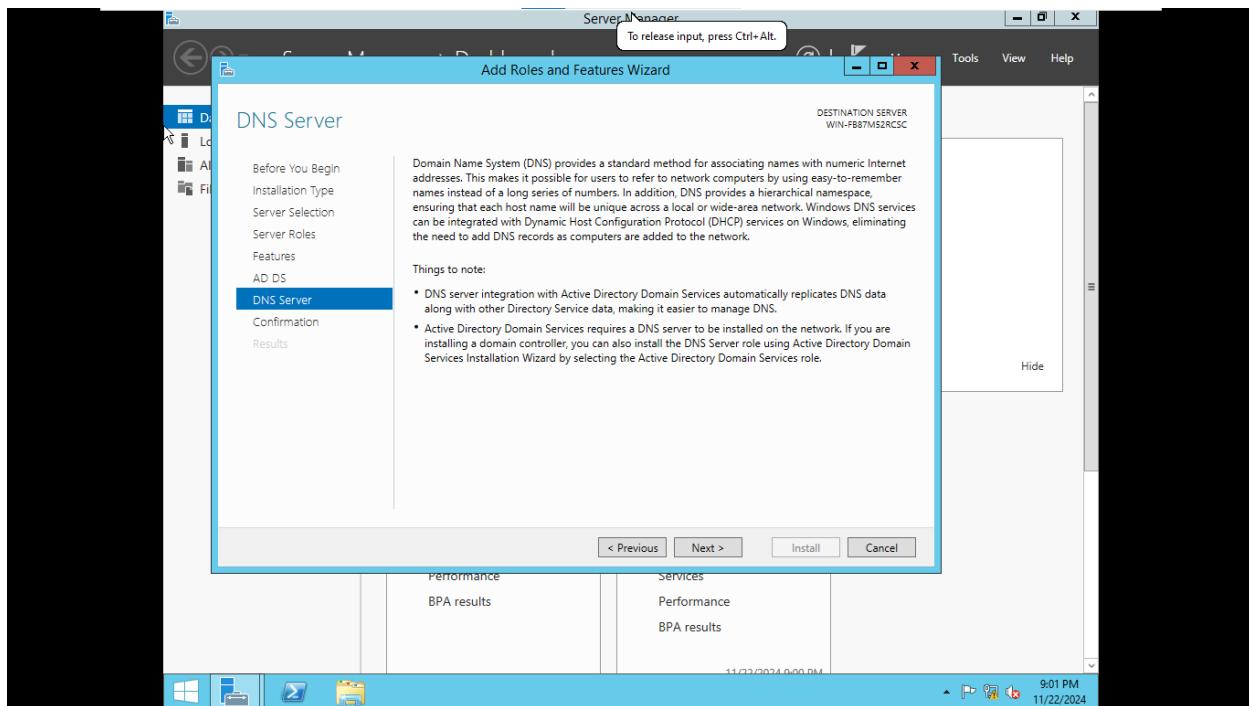
Nhân Next



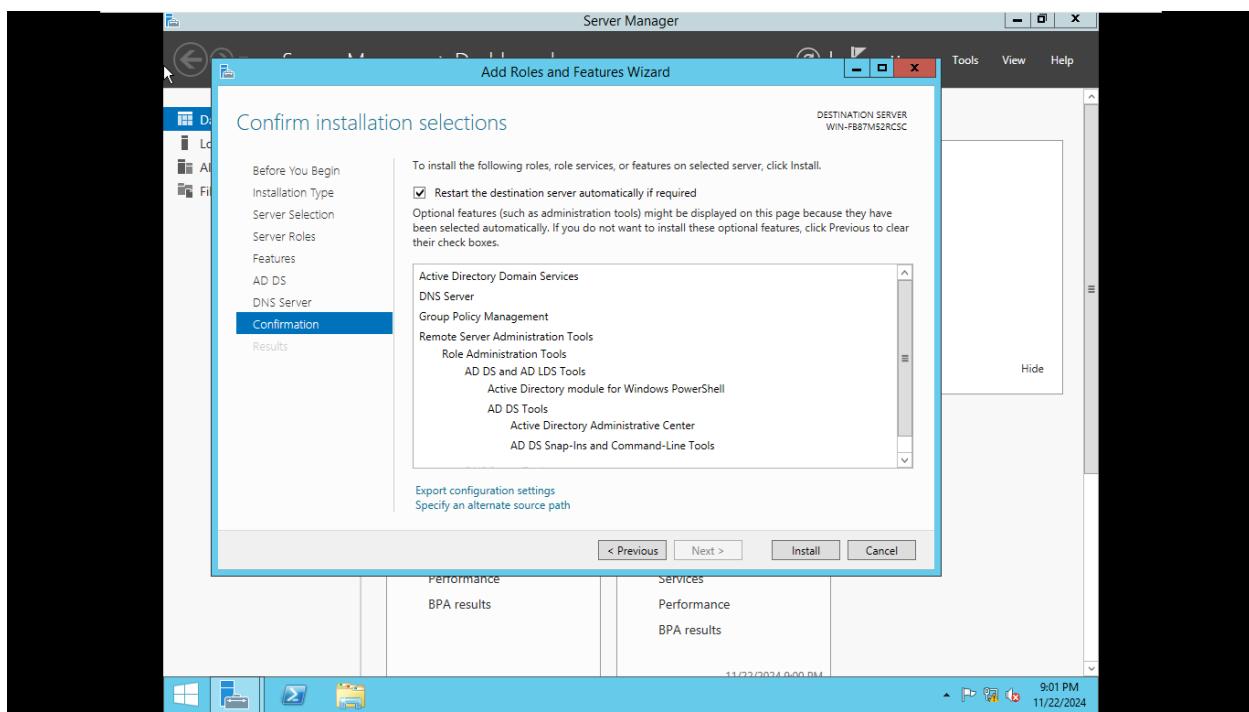
Nhân Next



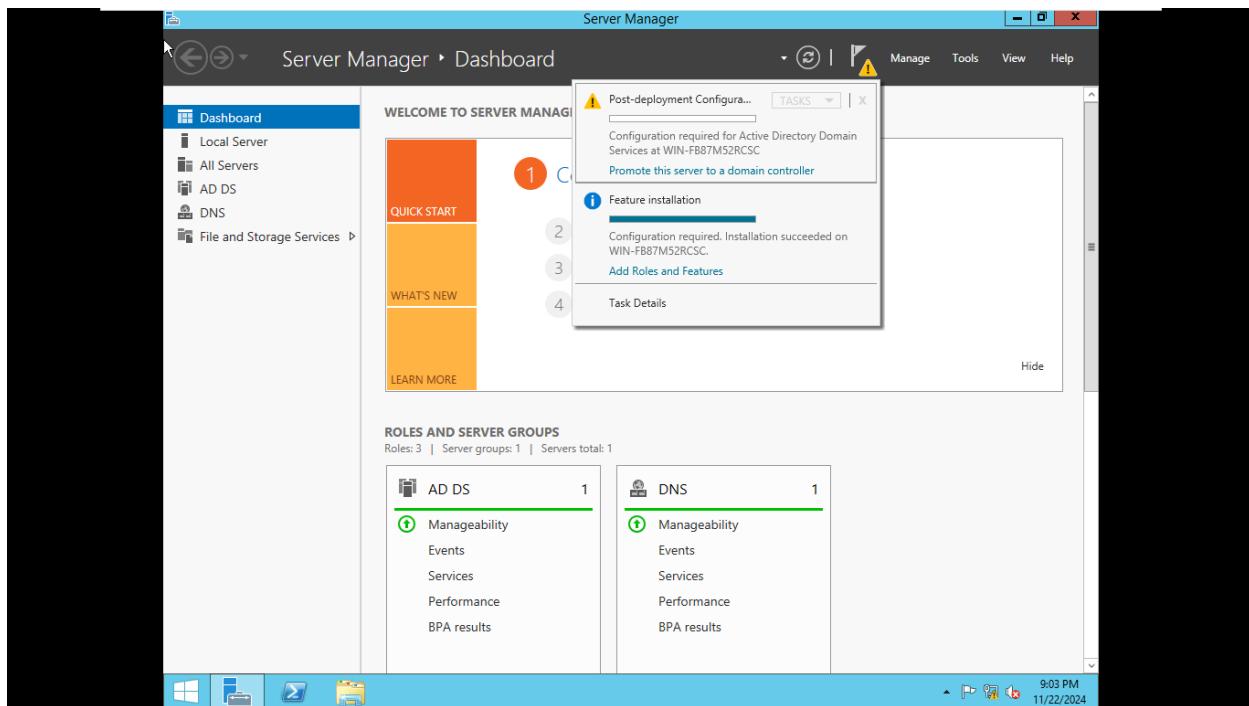
Nhấn Next



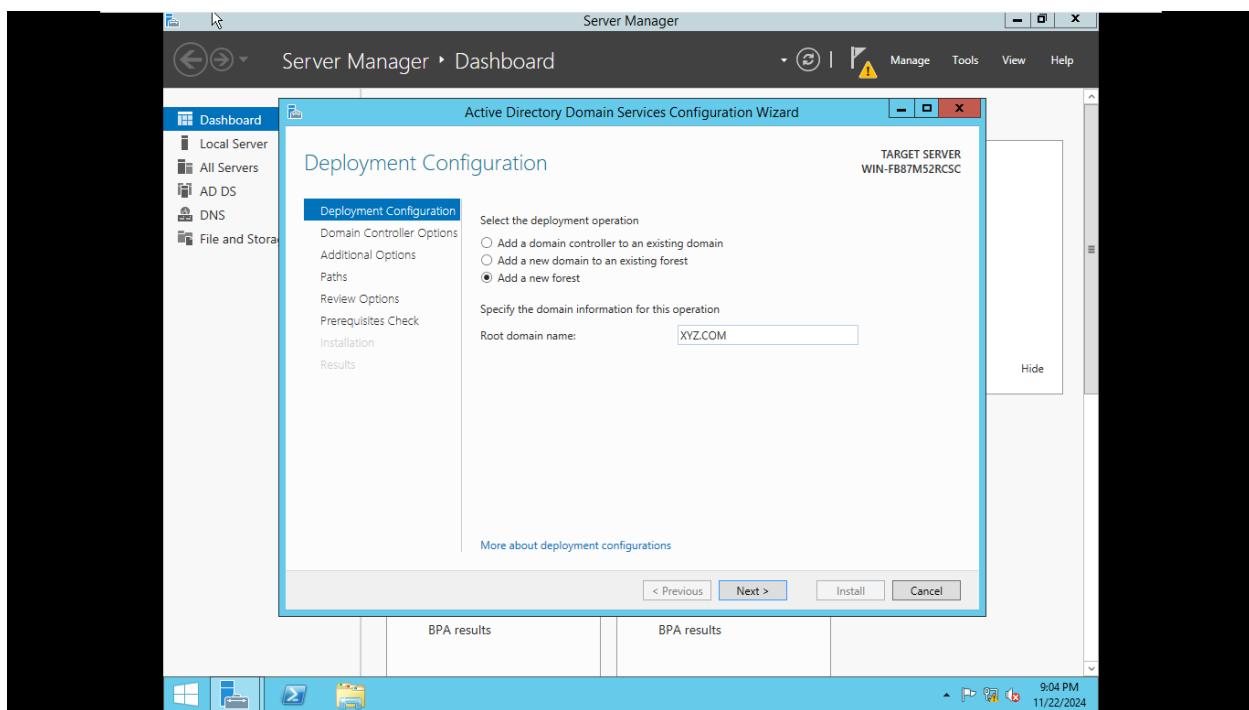
Nhấn Install để tiến hành cài đặt



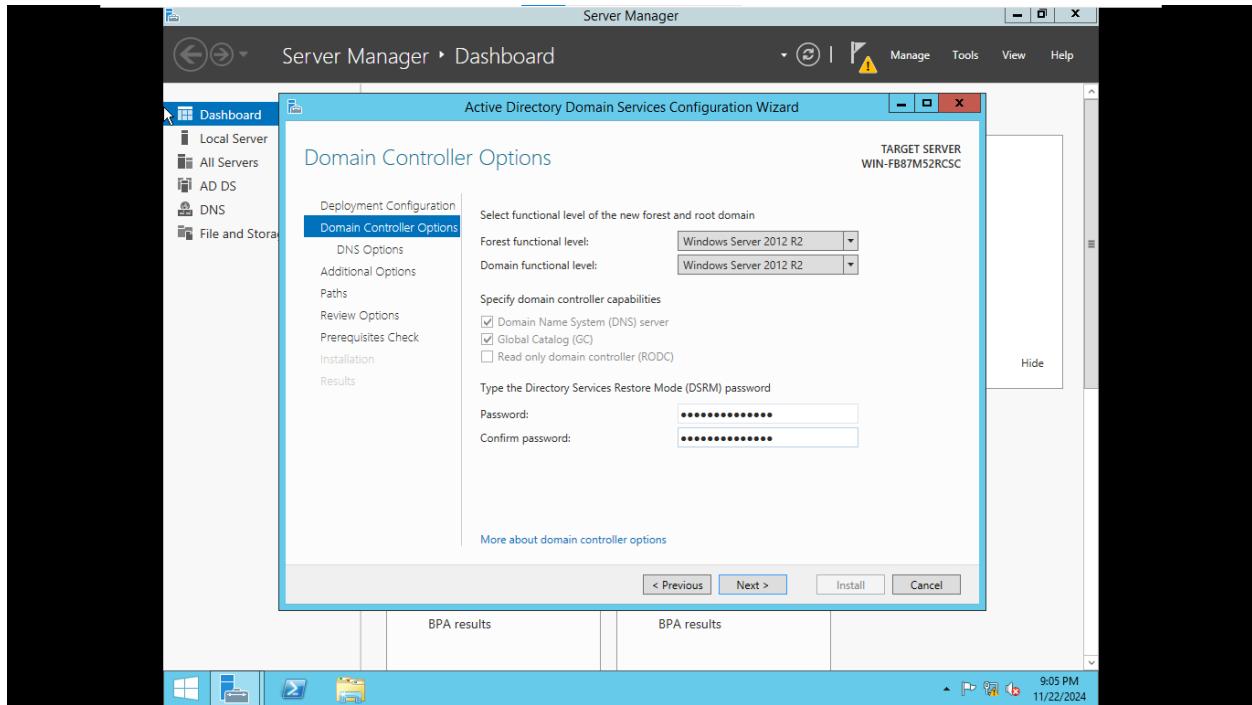
### B3: Chọn Promote this server to a domain controller



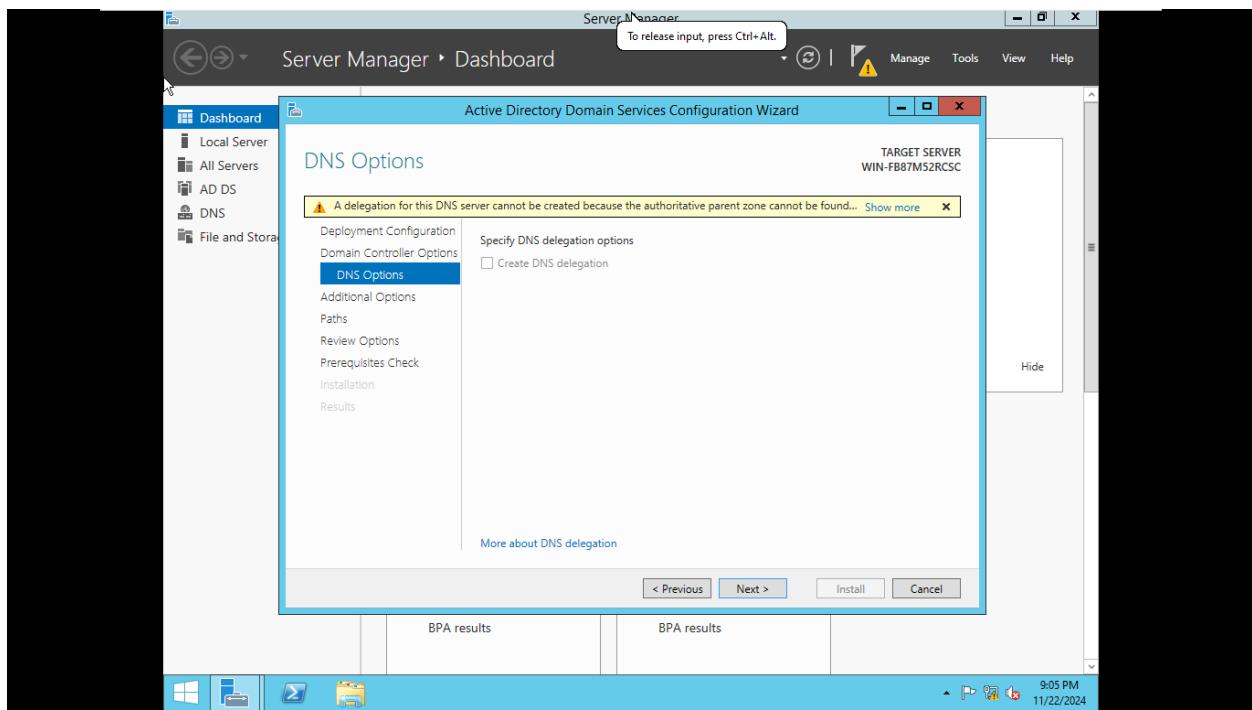
Nhấn Next



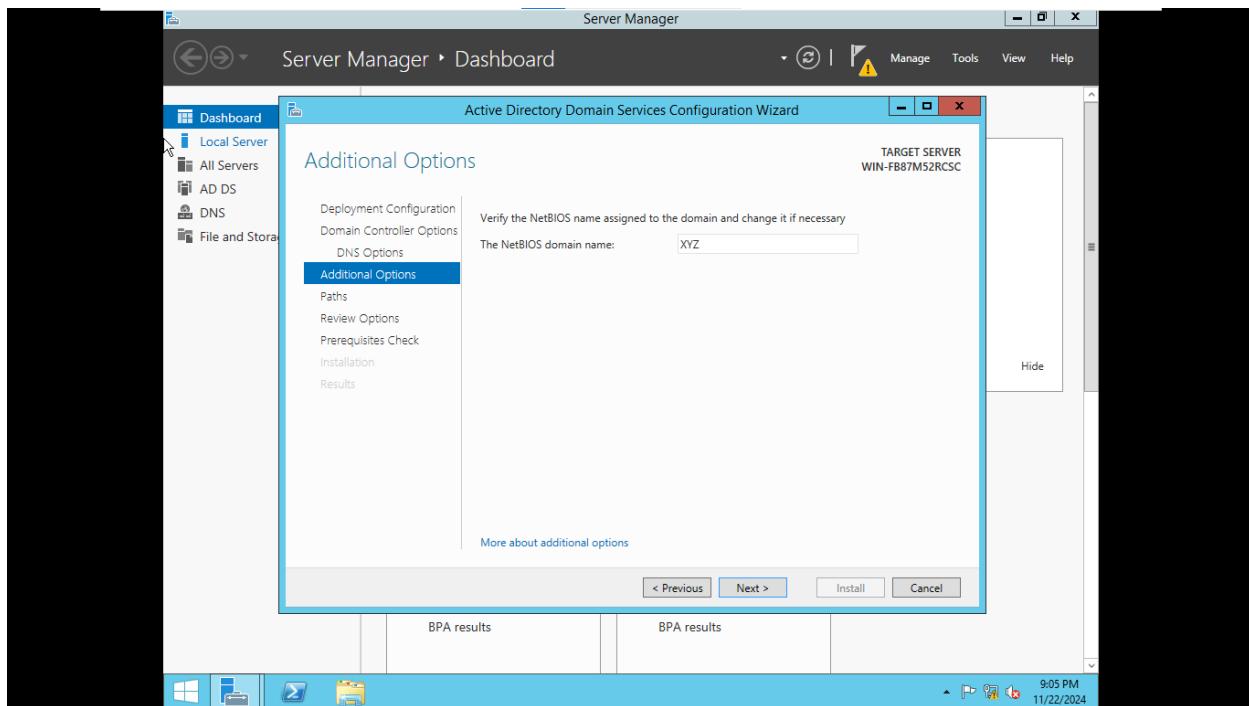
Nhập Password và Confirm Password -> Next



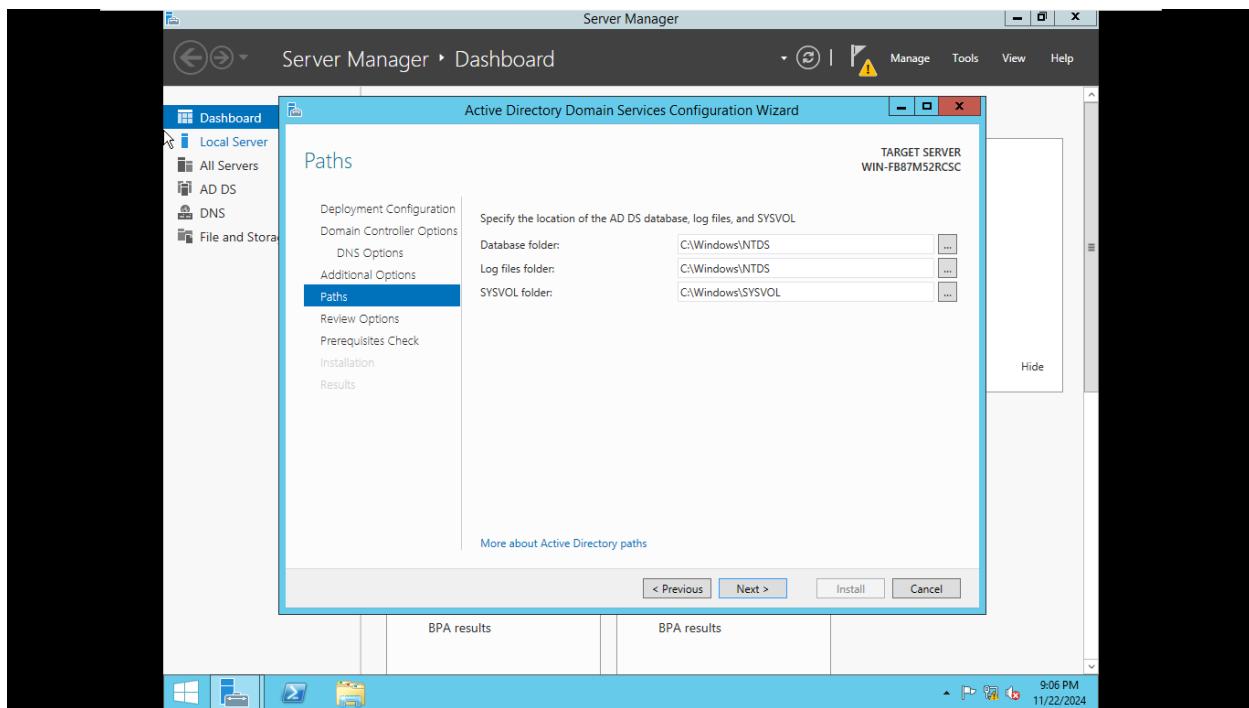
Nhấn Next



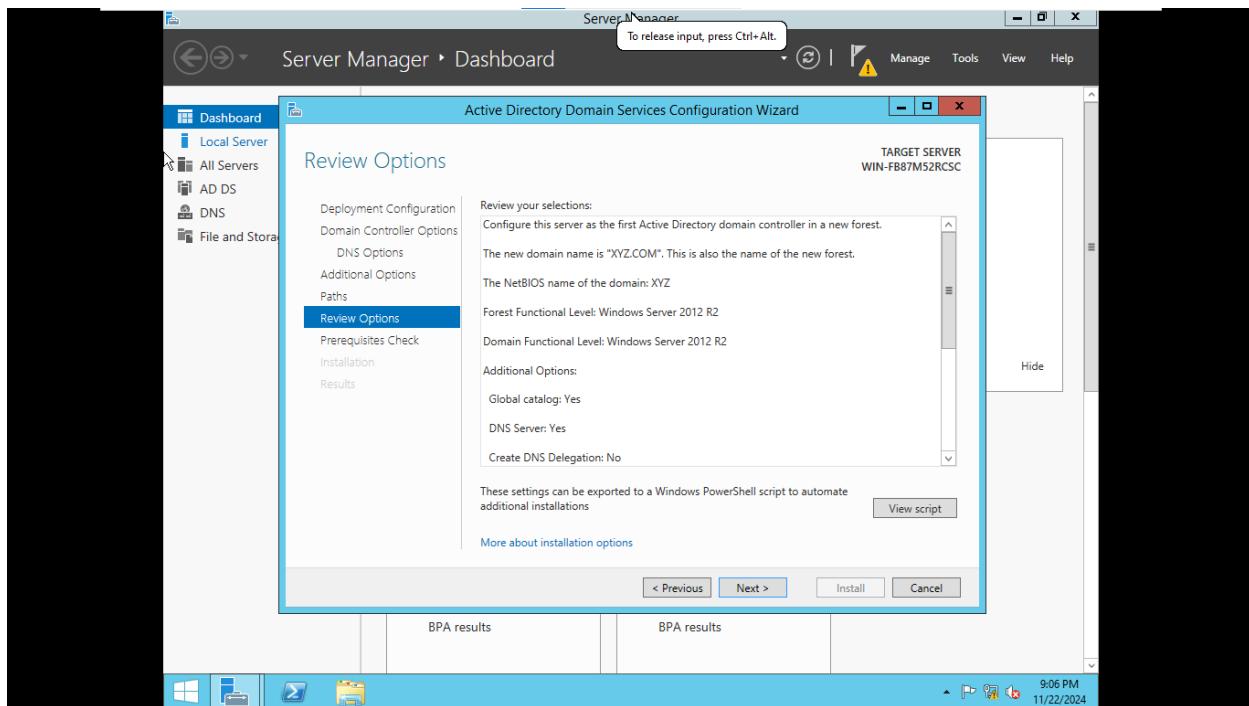
Nhấn Next



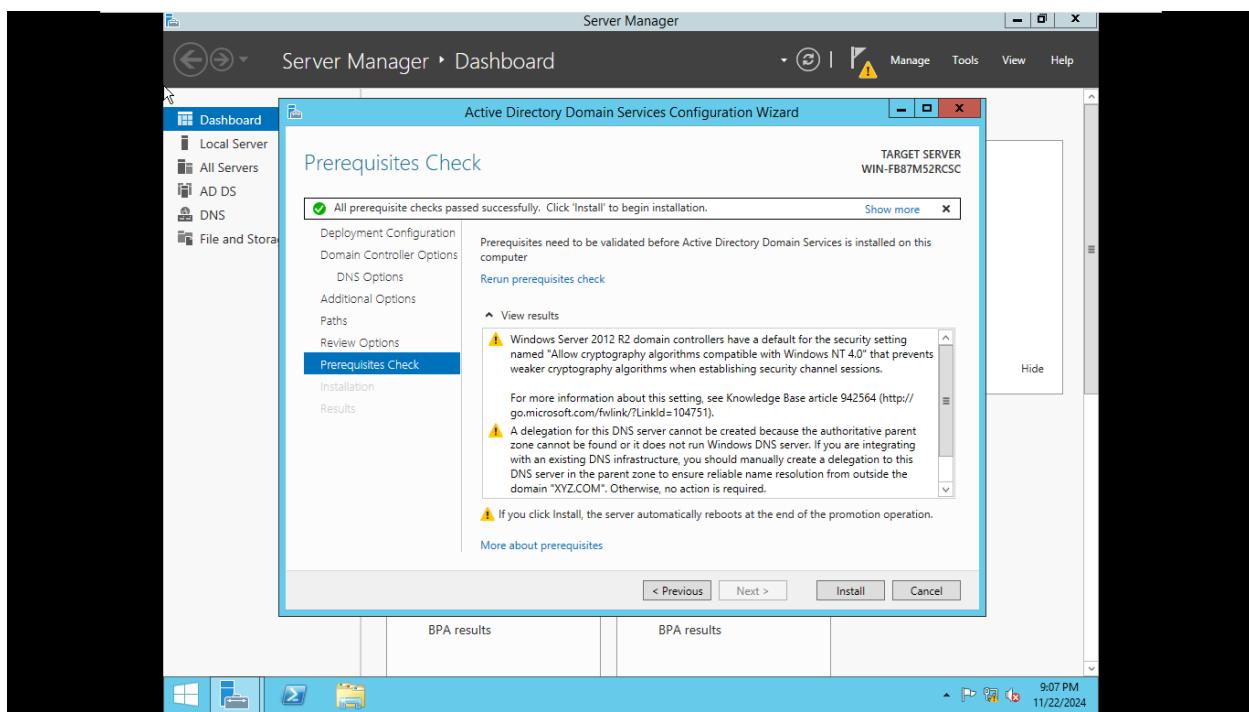
Nhấn Next



## Nhấn Next

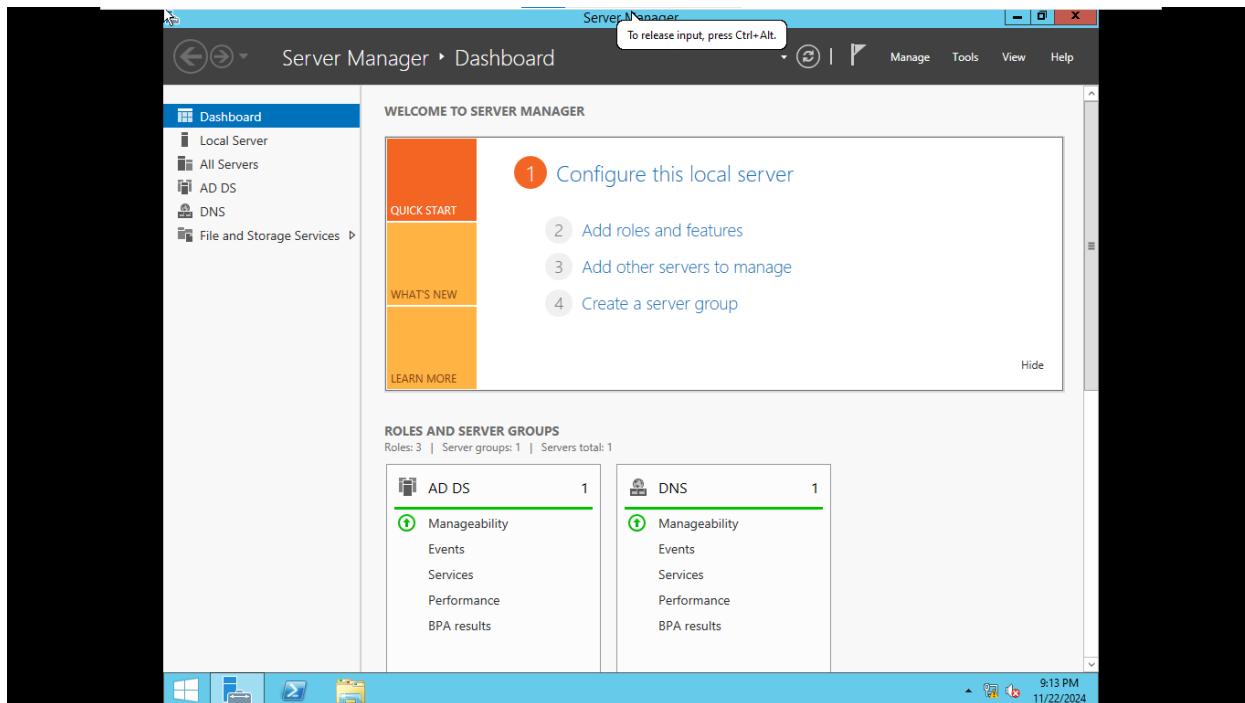


## Nhấn Install để tiến hành cài đặt

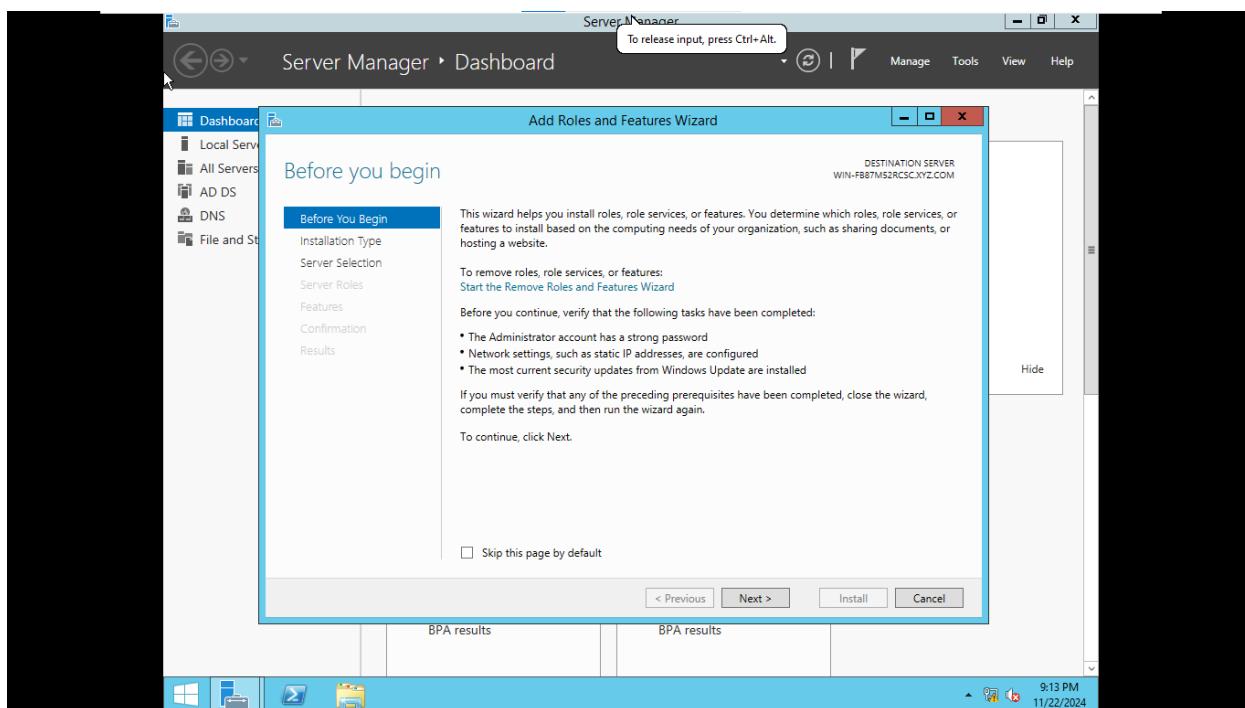


## B4: Cài Active Directory Certificate Services

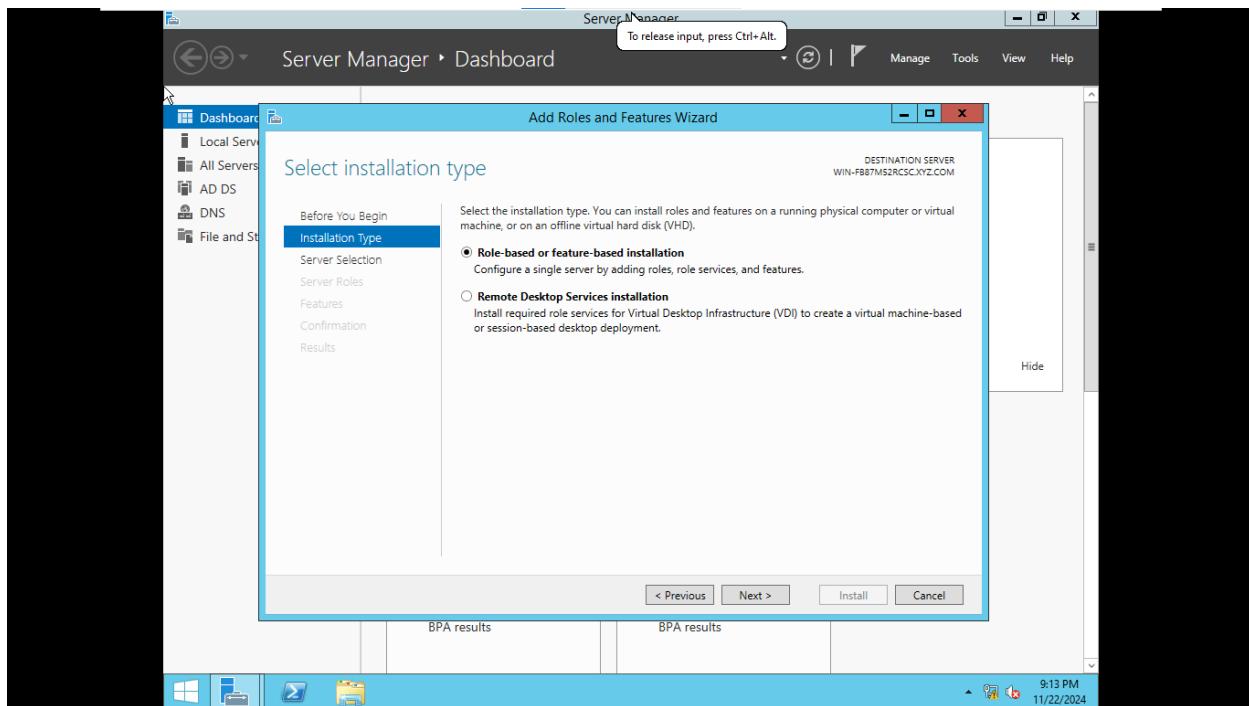
Nhấn Add Roles and features



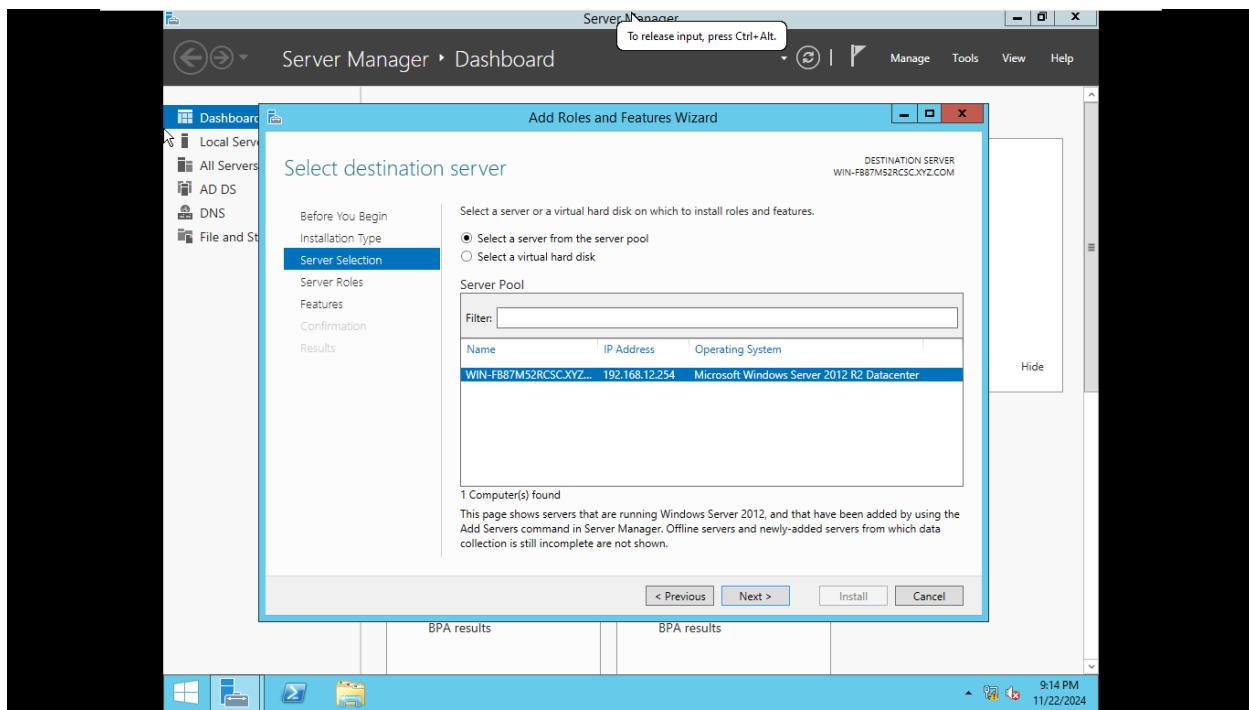
Nhấn Next



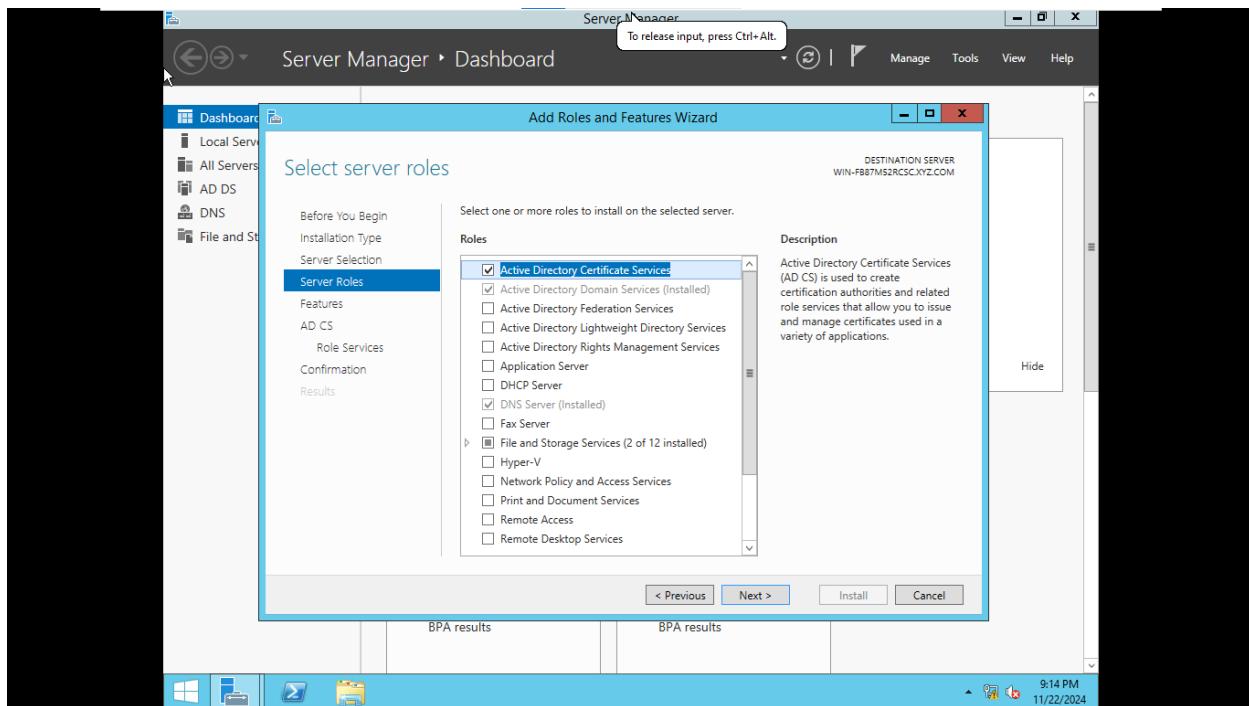
Nhân Next



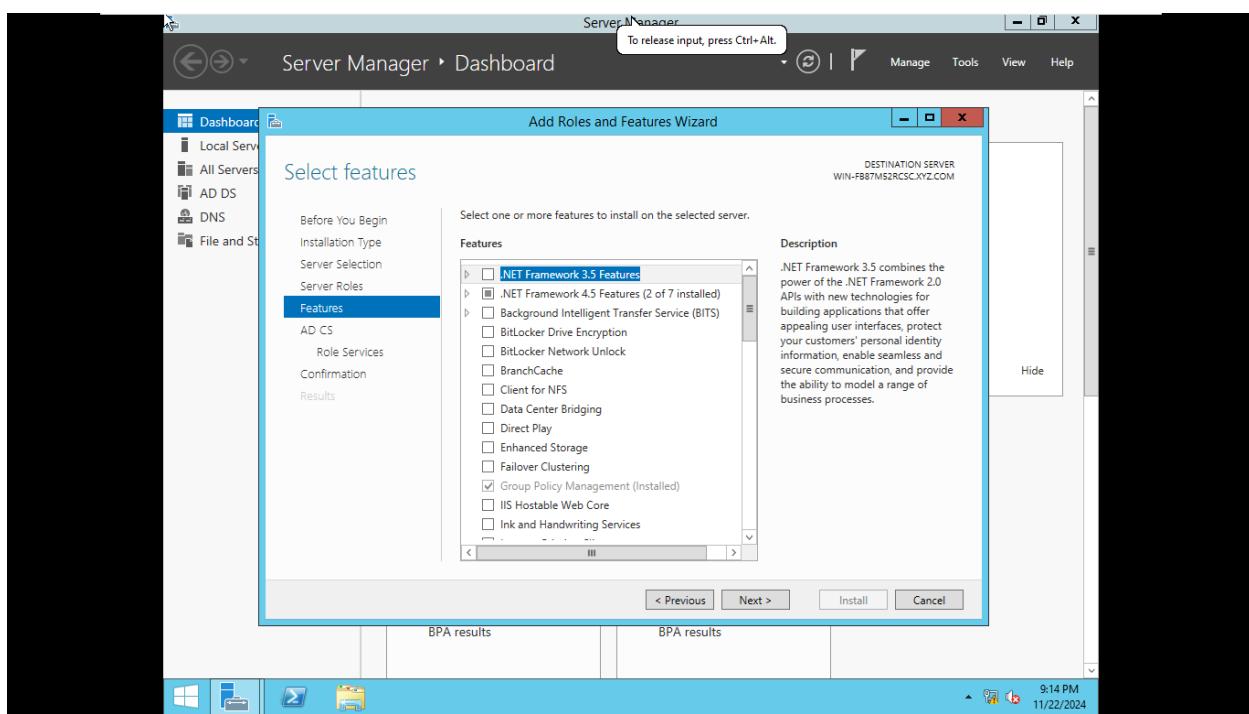
Nhân Next



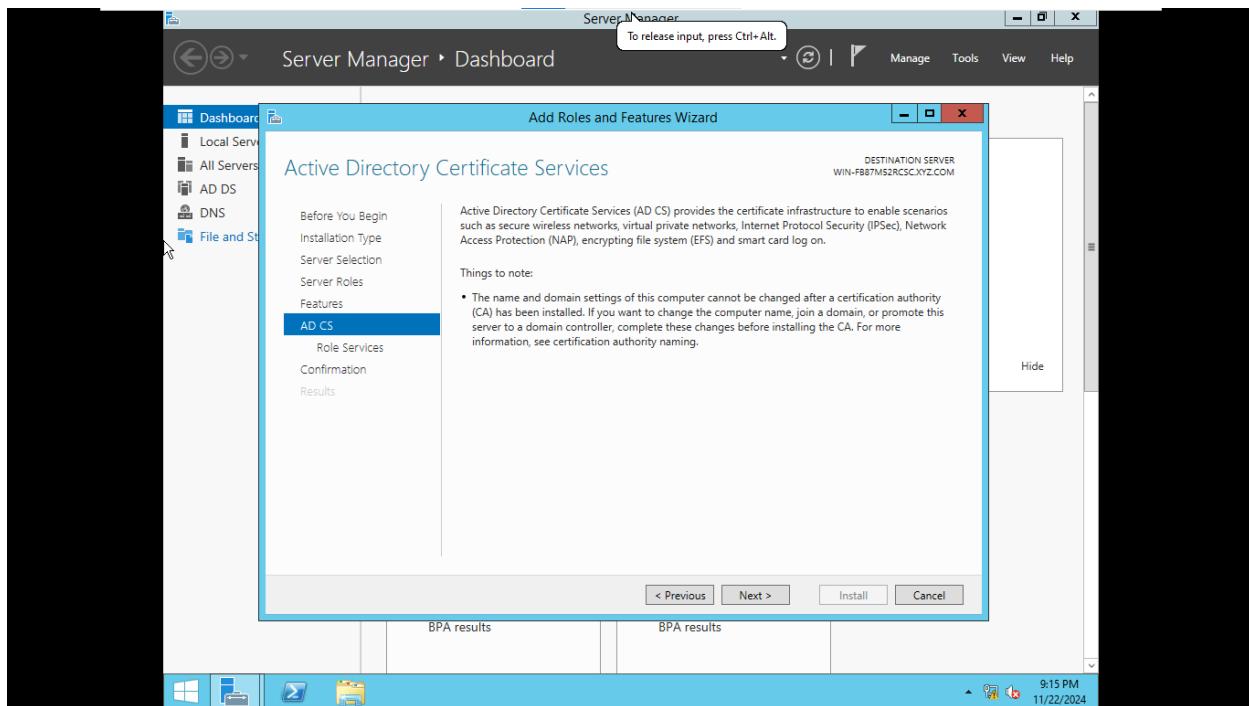
Tick chọn Active Directory Certificate Services -> Next



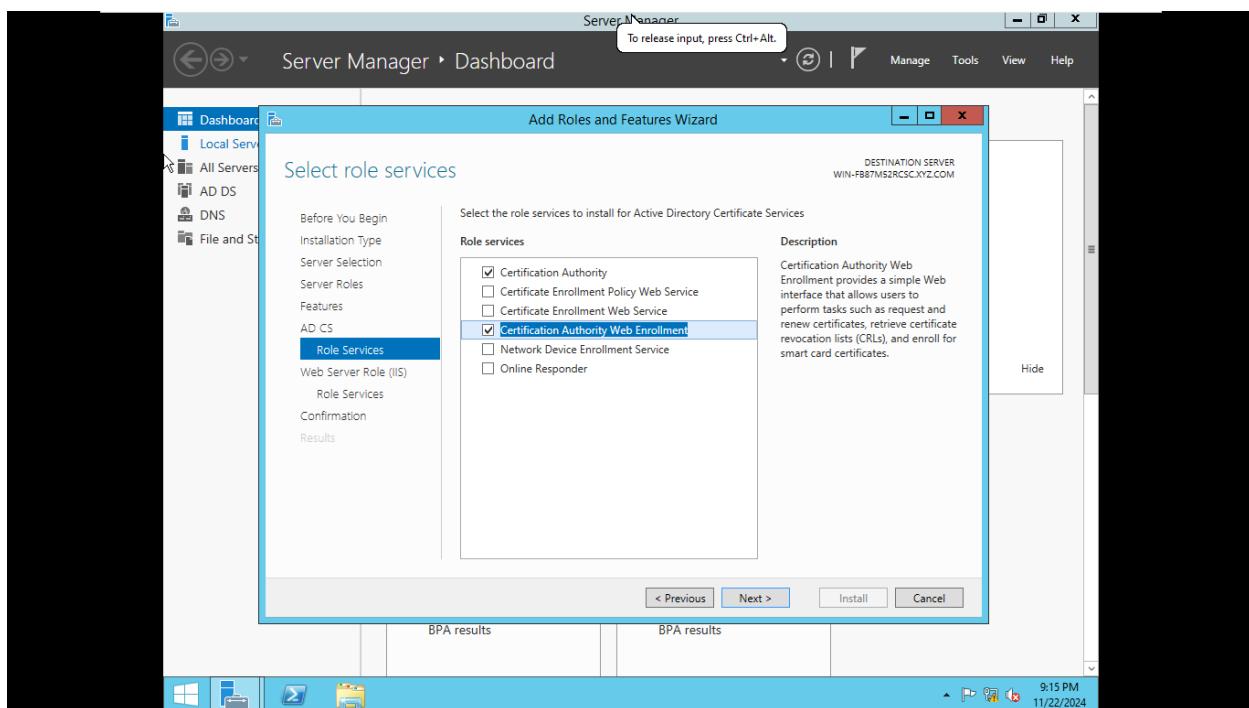
Nhấn Next



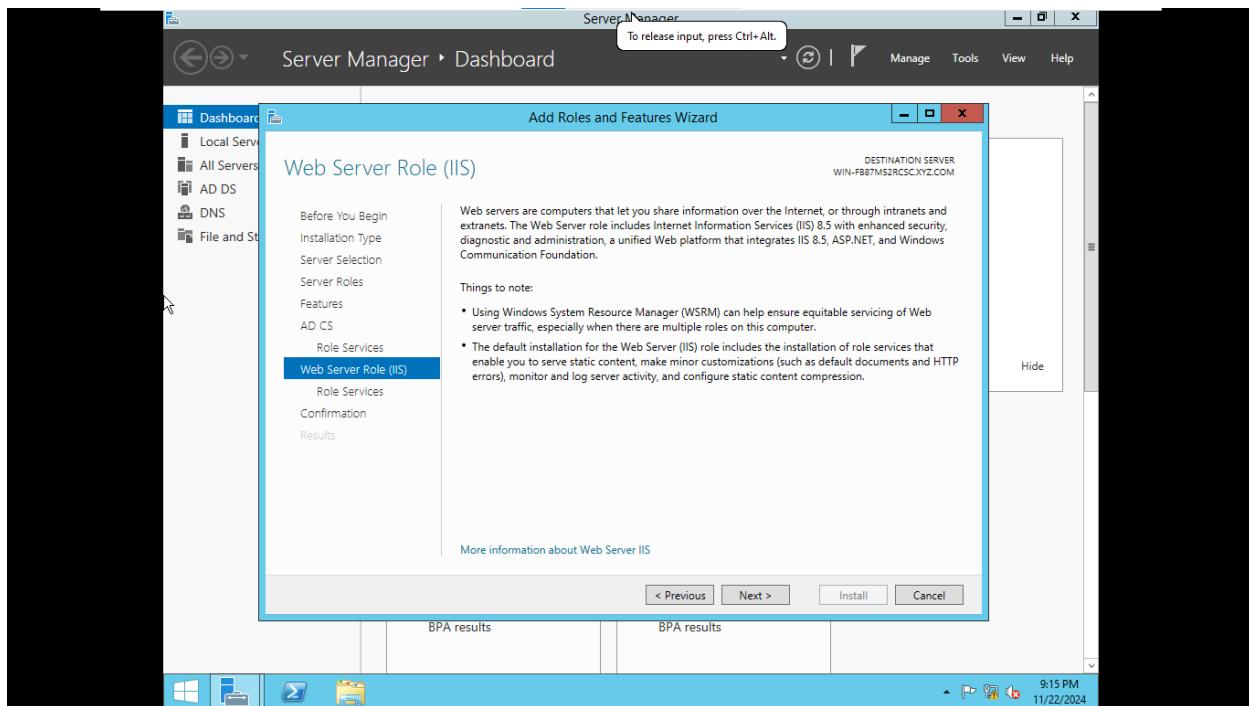
Nhấn Next



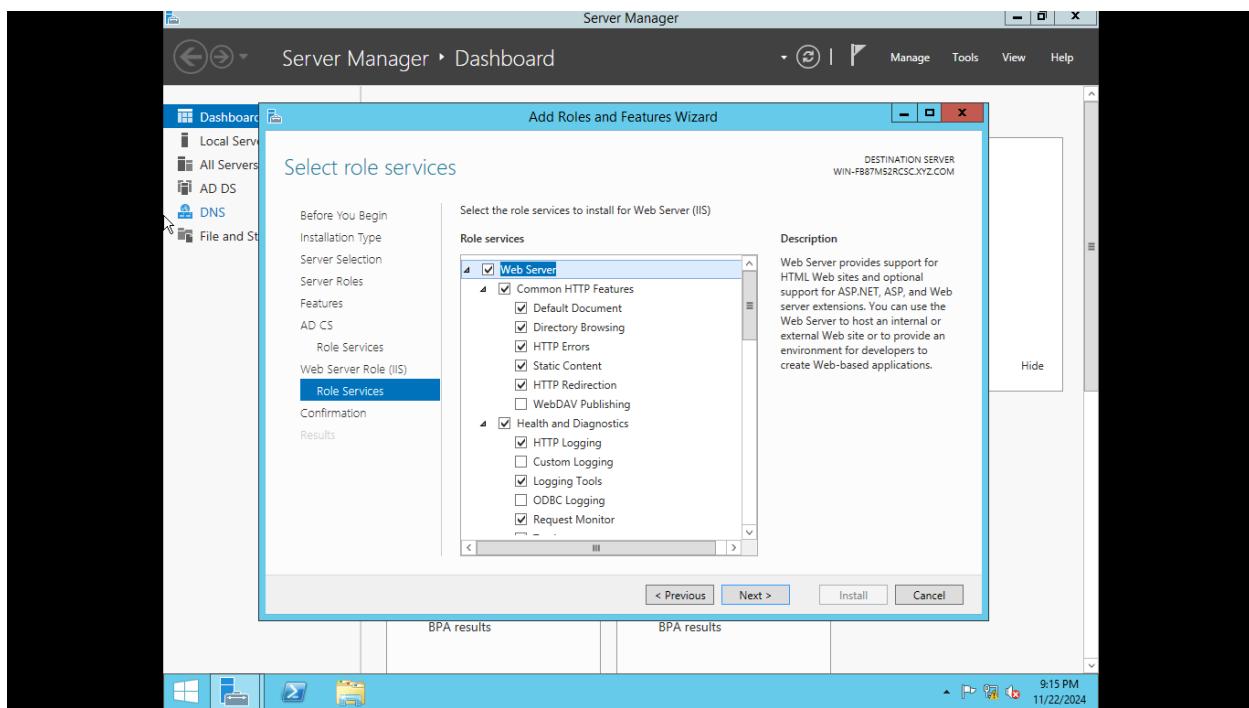
Tick chọn Certification Authority, Certification Authority Web Enrollment -> Next



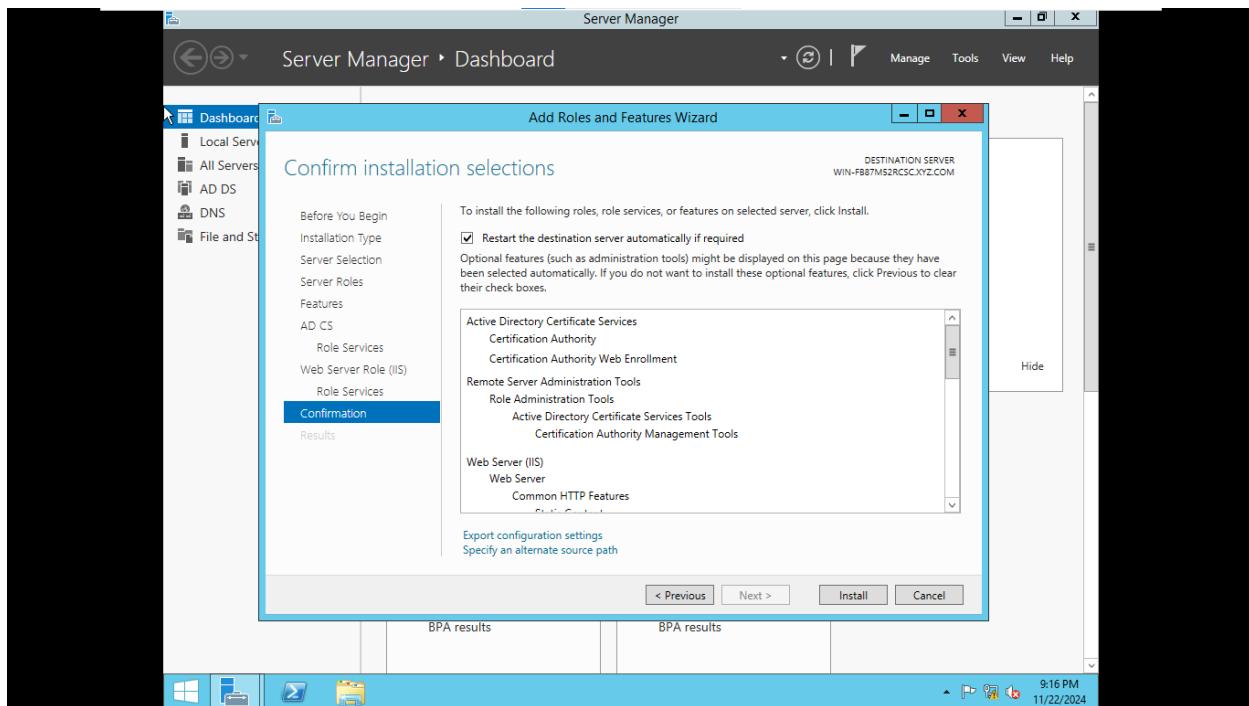
Nhân Next



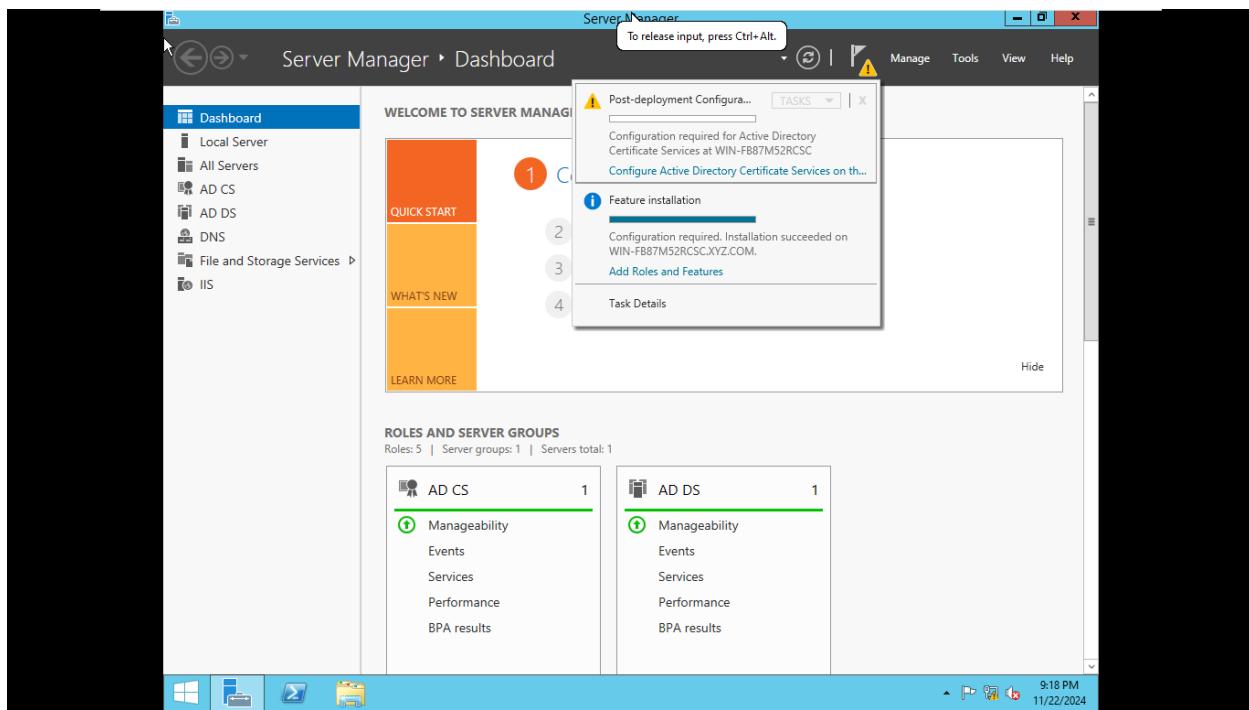
Nhân Next



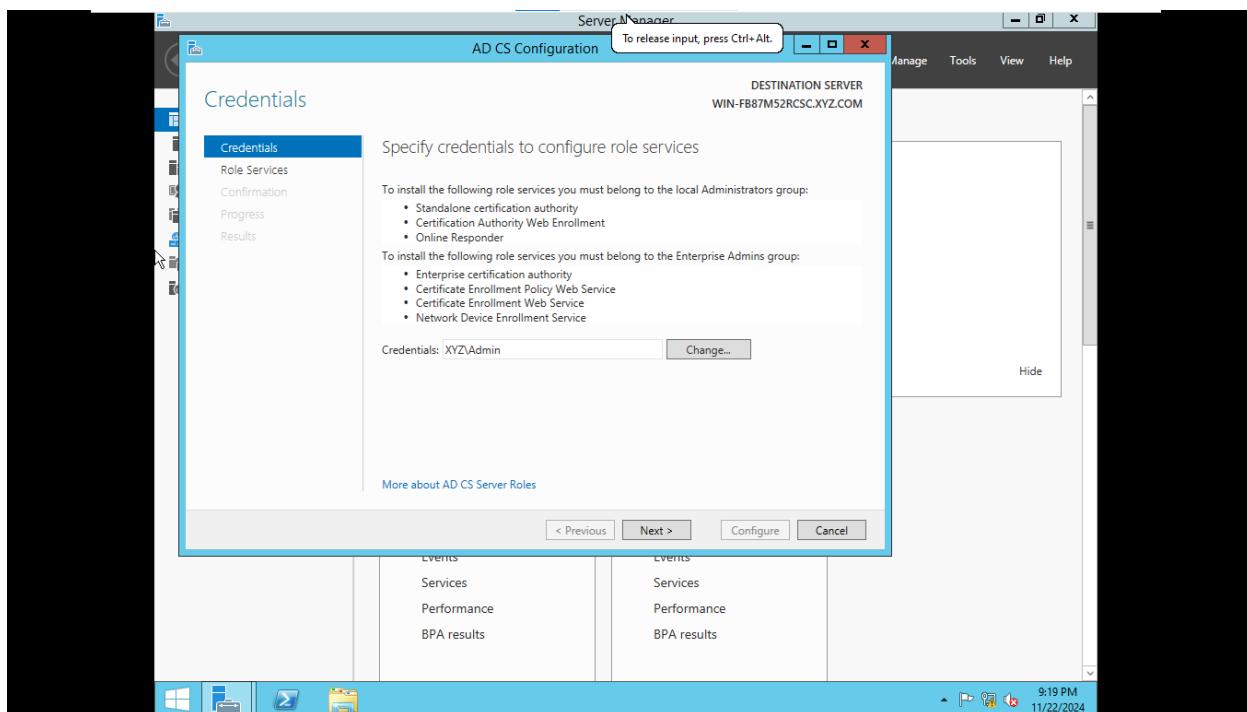
Nhấn Install để tiến hành cài đặt



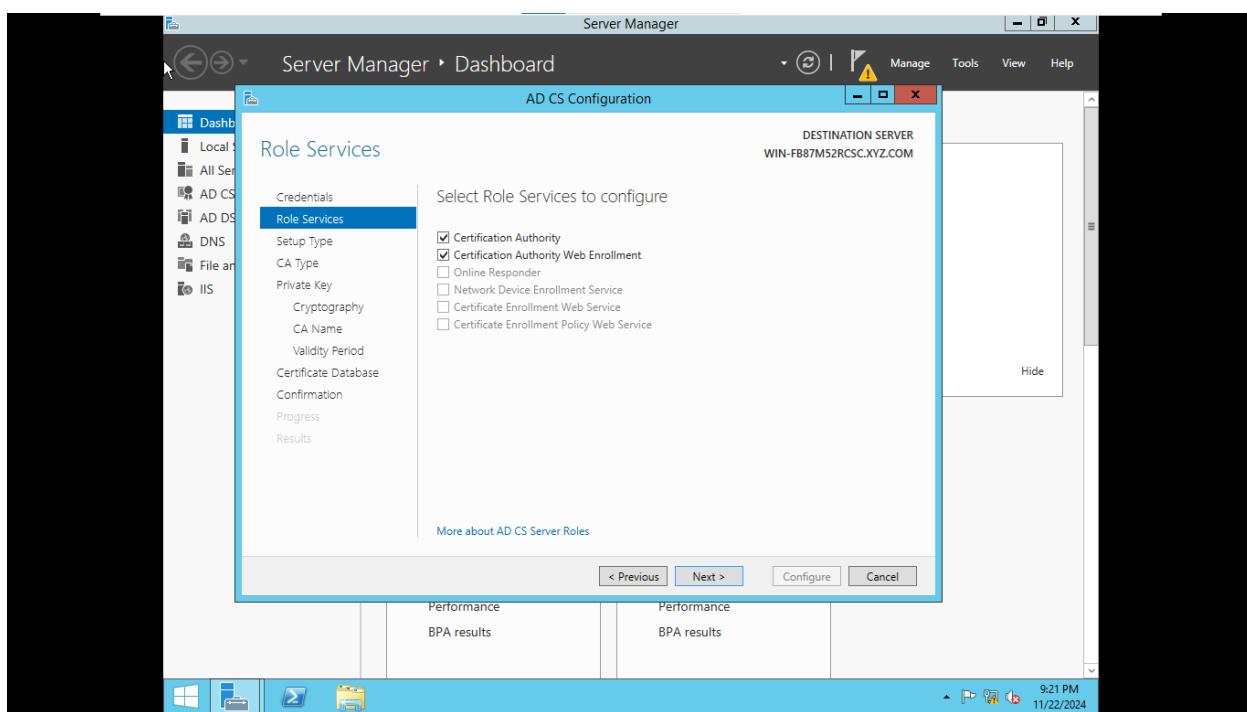
### B5: Chọn Configure Active Directory Certificate Services on th...



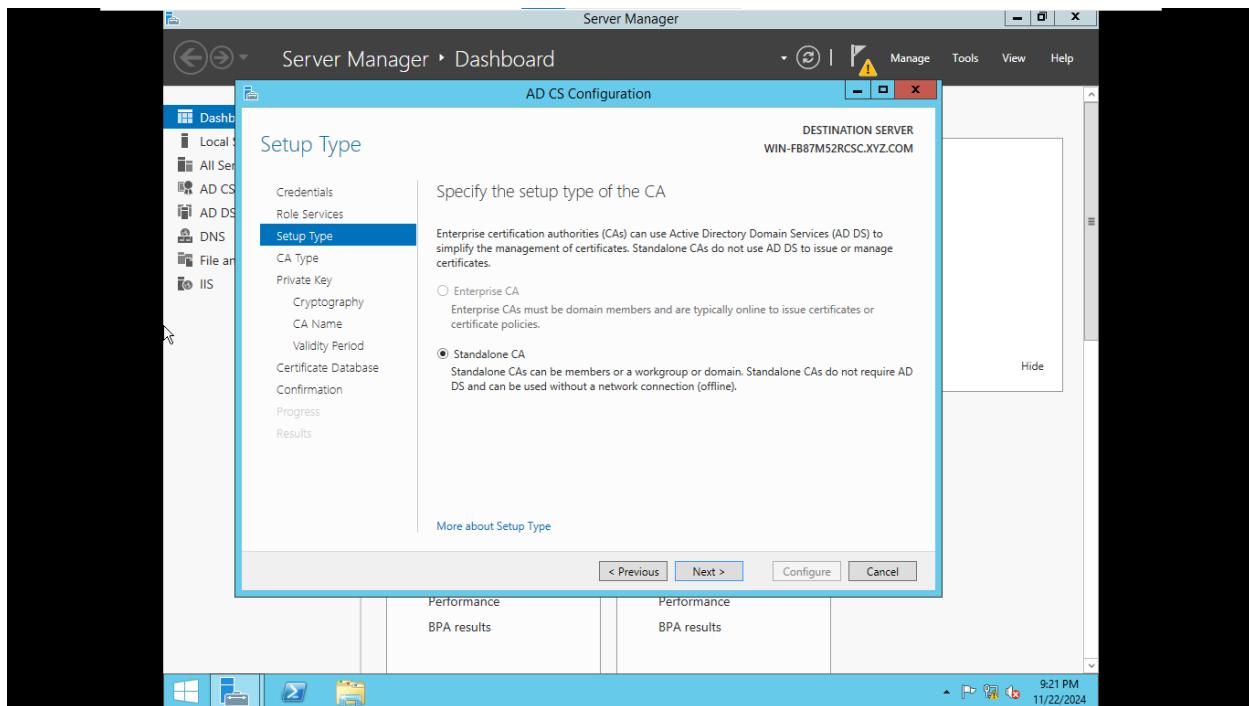
Nhấn Next



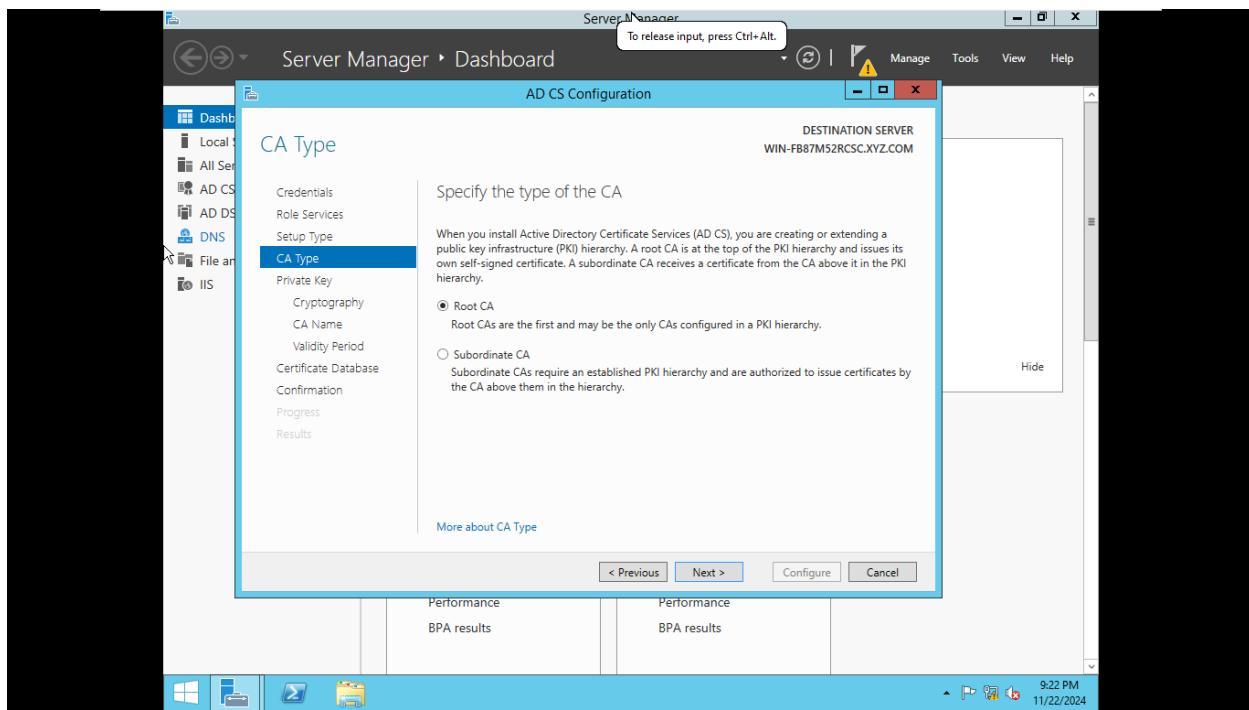
Tick chọn Certification Authority, Certificate Authority Web Enrollment -> Next



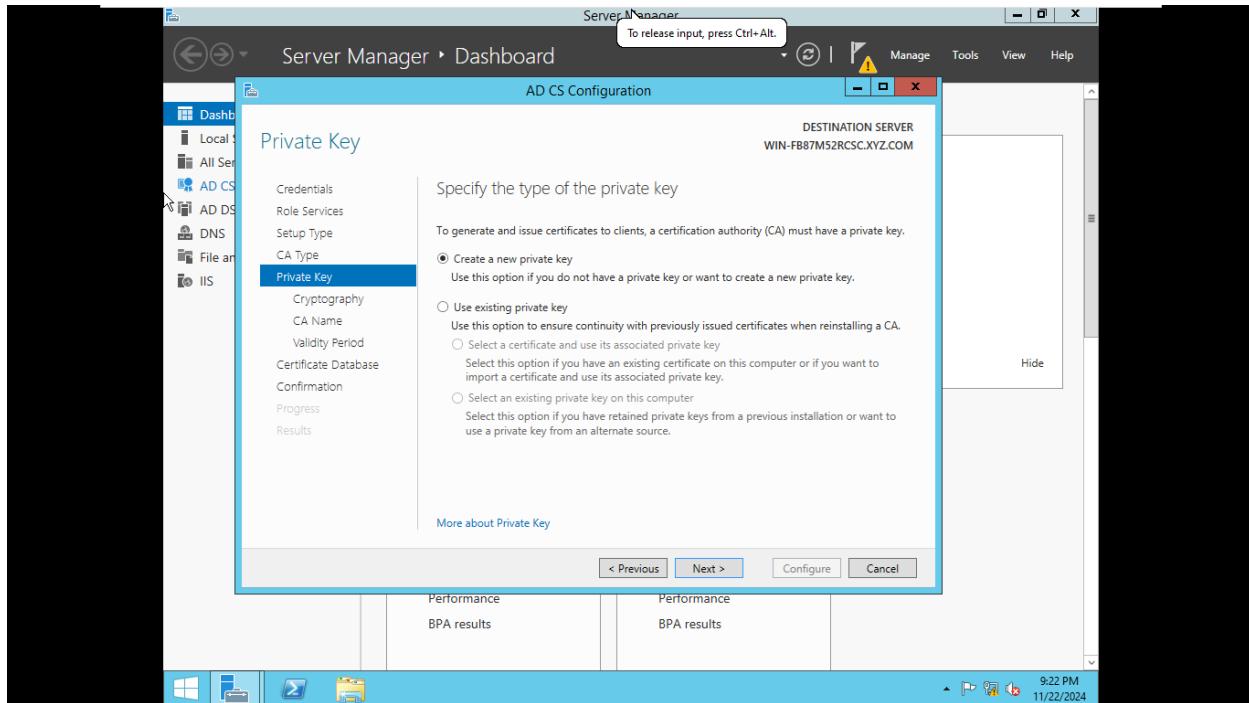
Nhấn Next



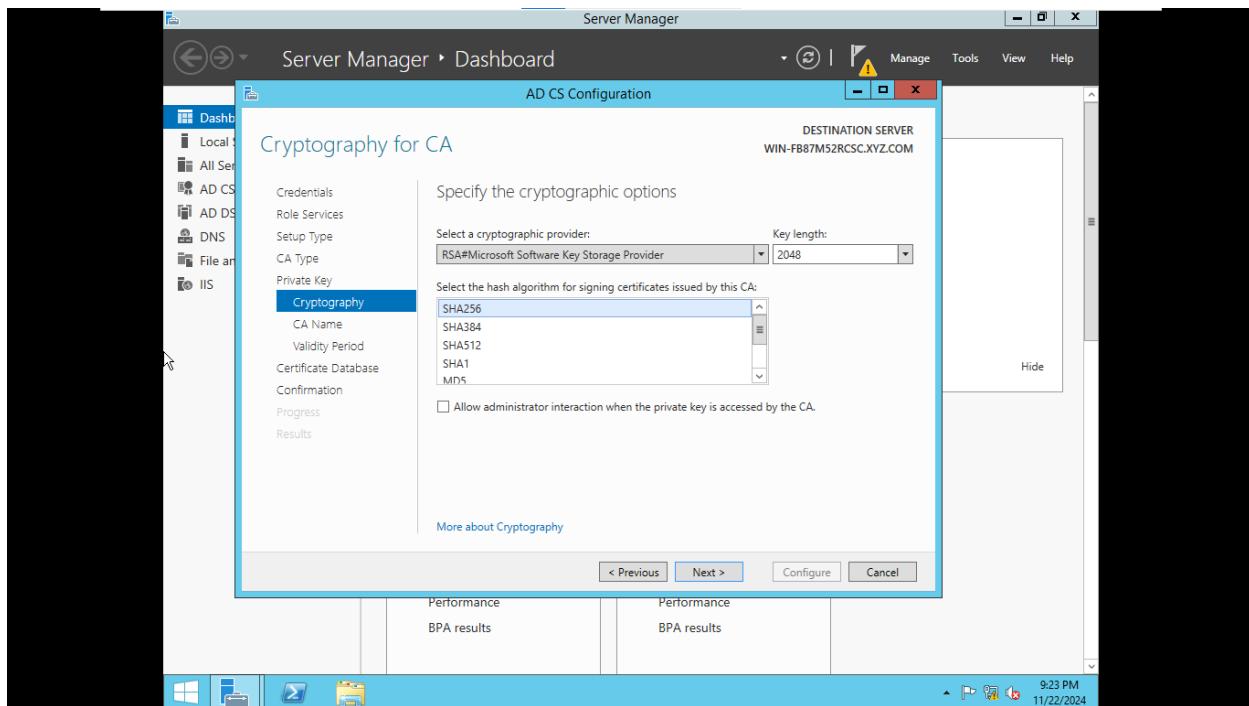
Chọn Root CA -> Next



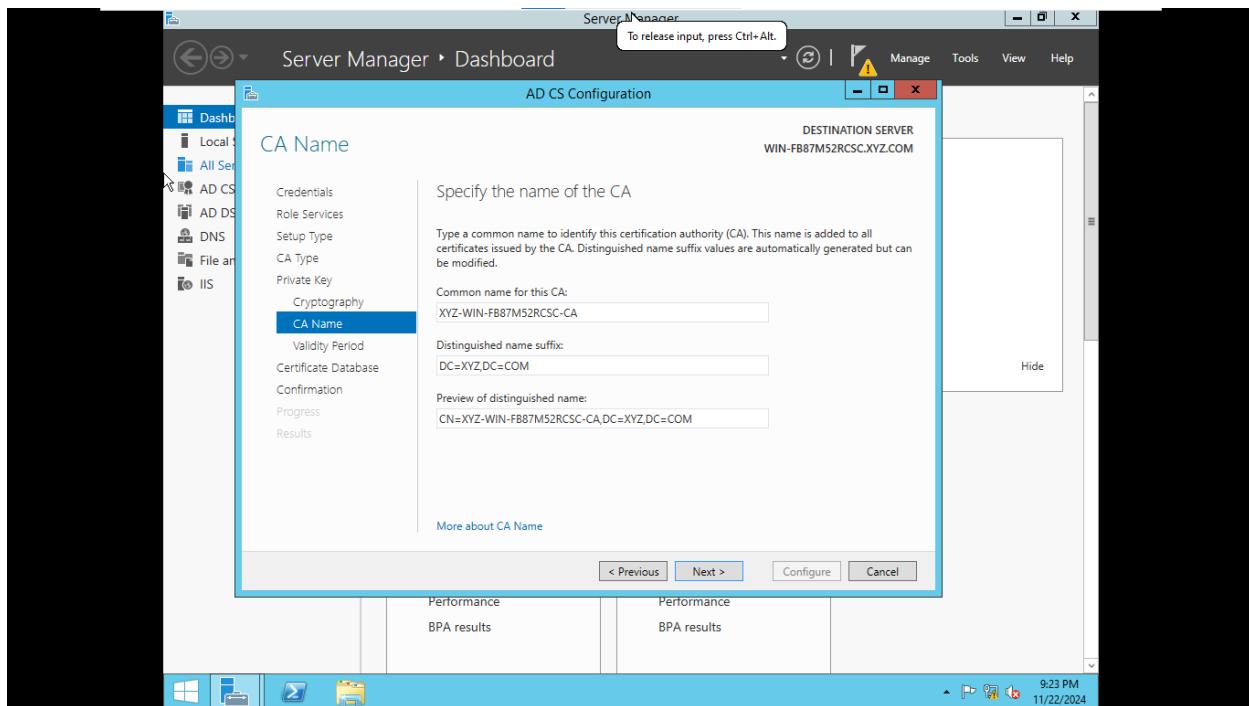
Chon Create a new private key -> Next



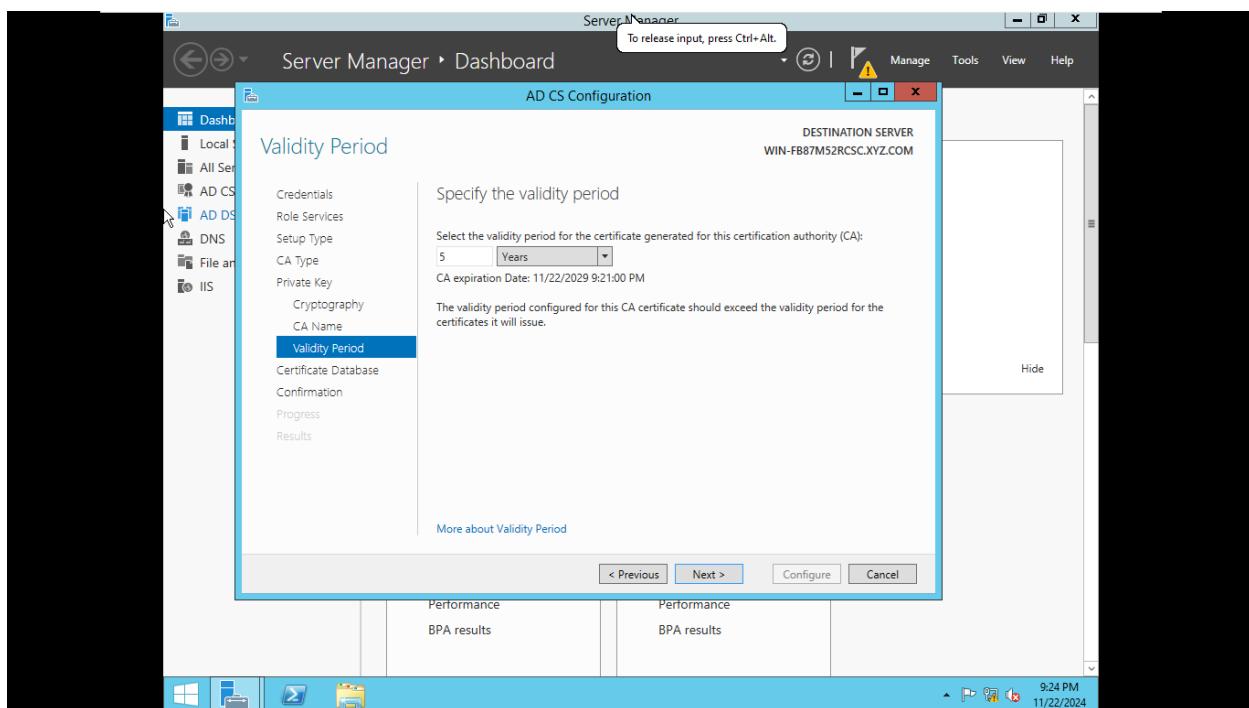
Chon SHA256 -> Next



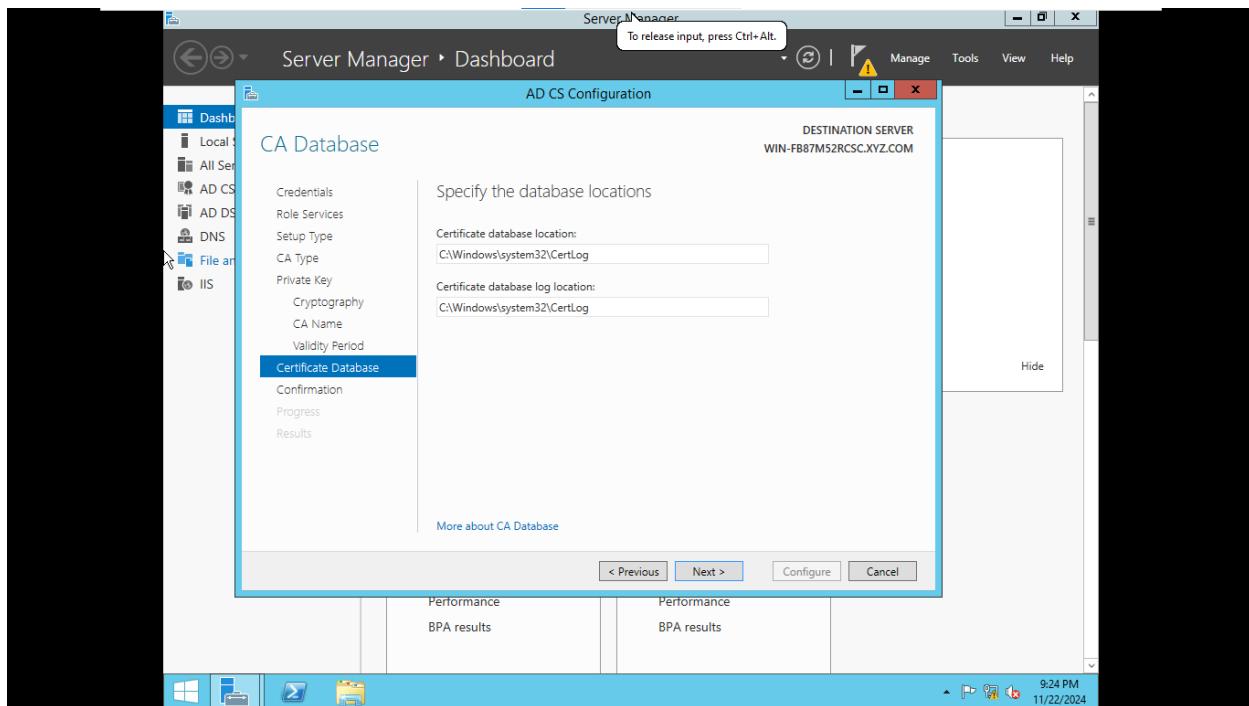
Nhân Next



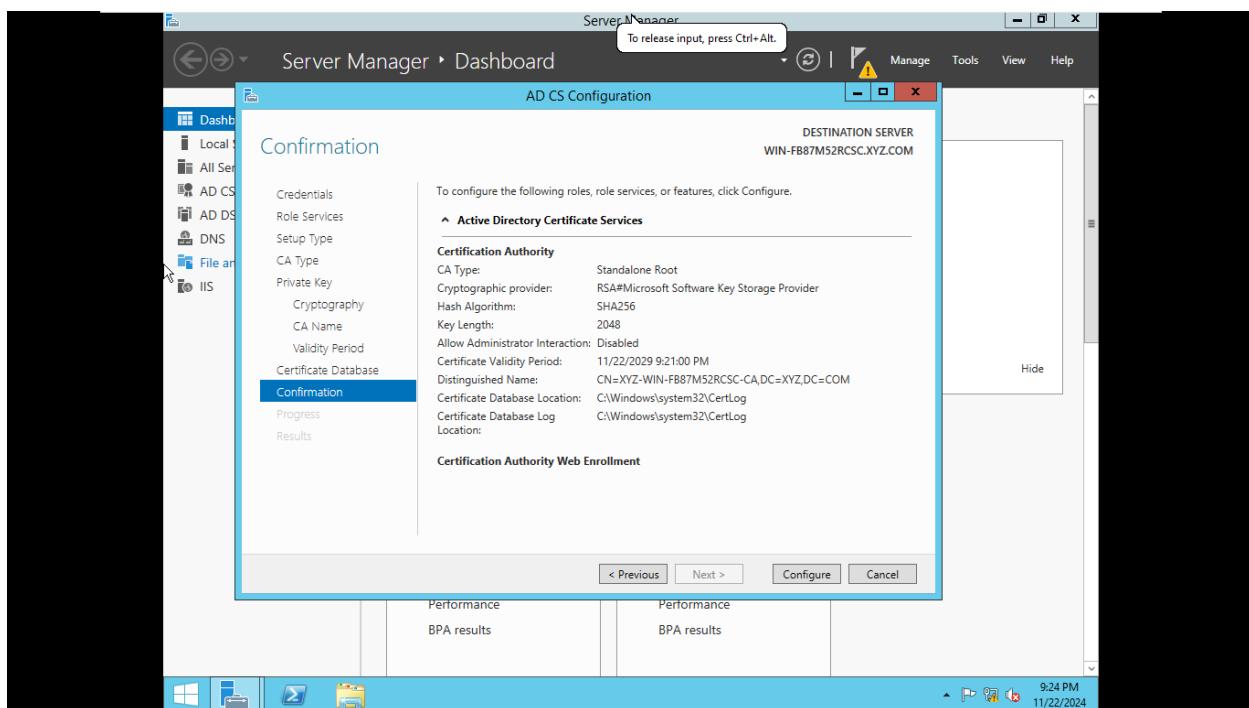
Nhân Next



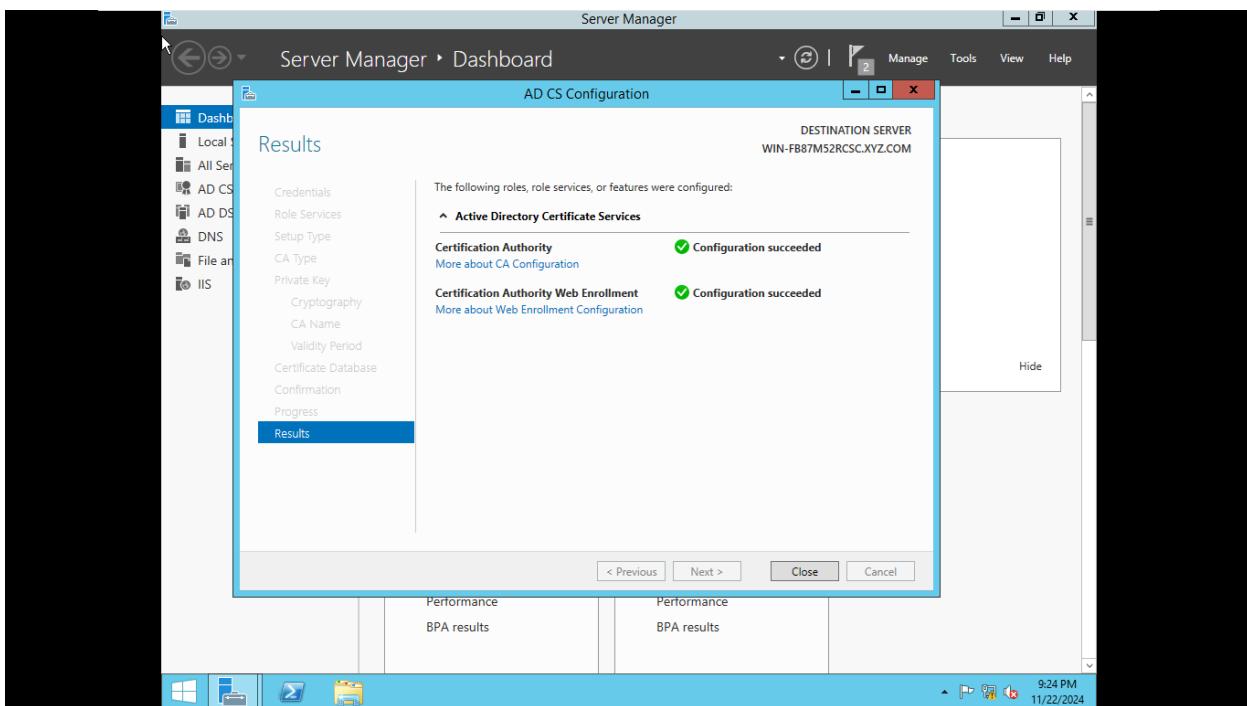
Nhấn Next



Nhấn Configure

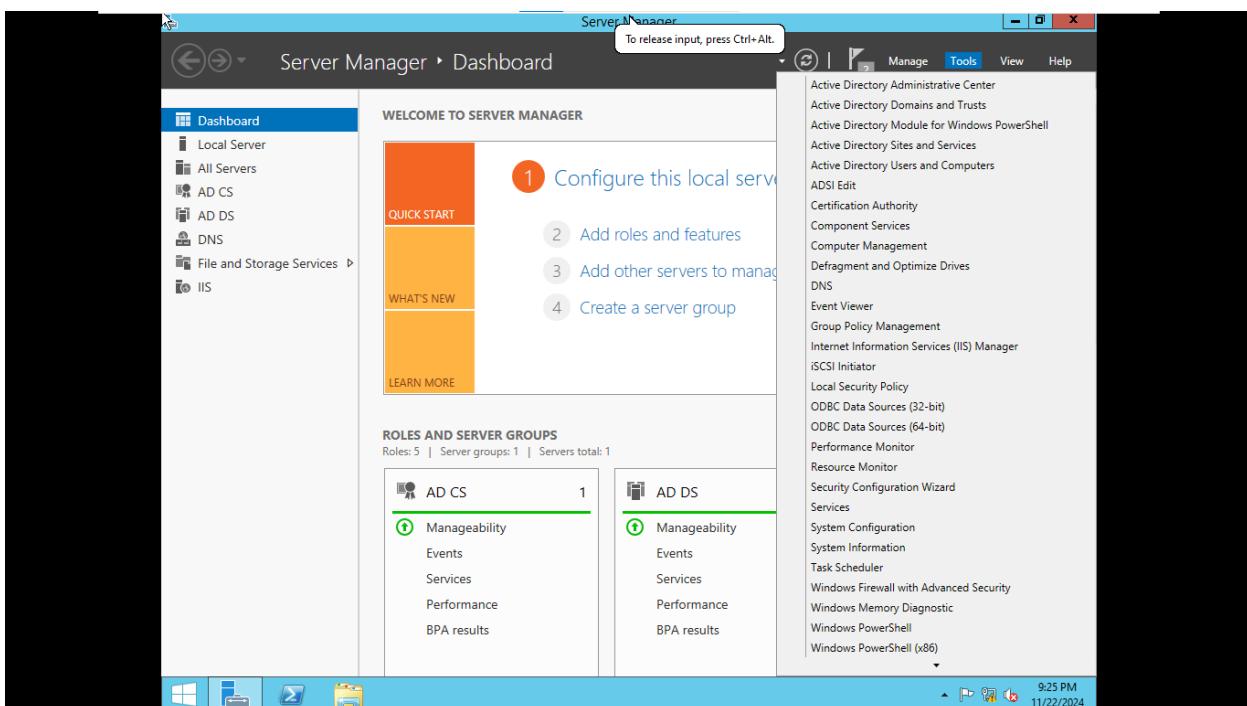


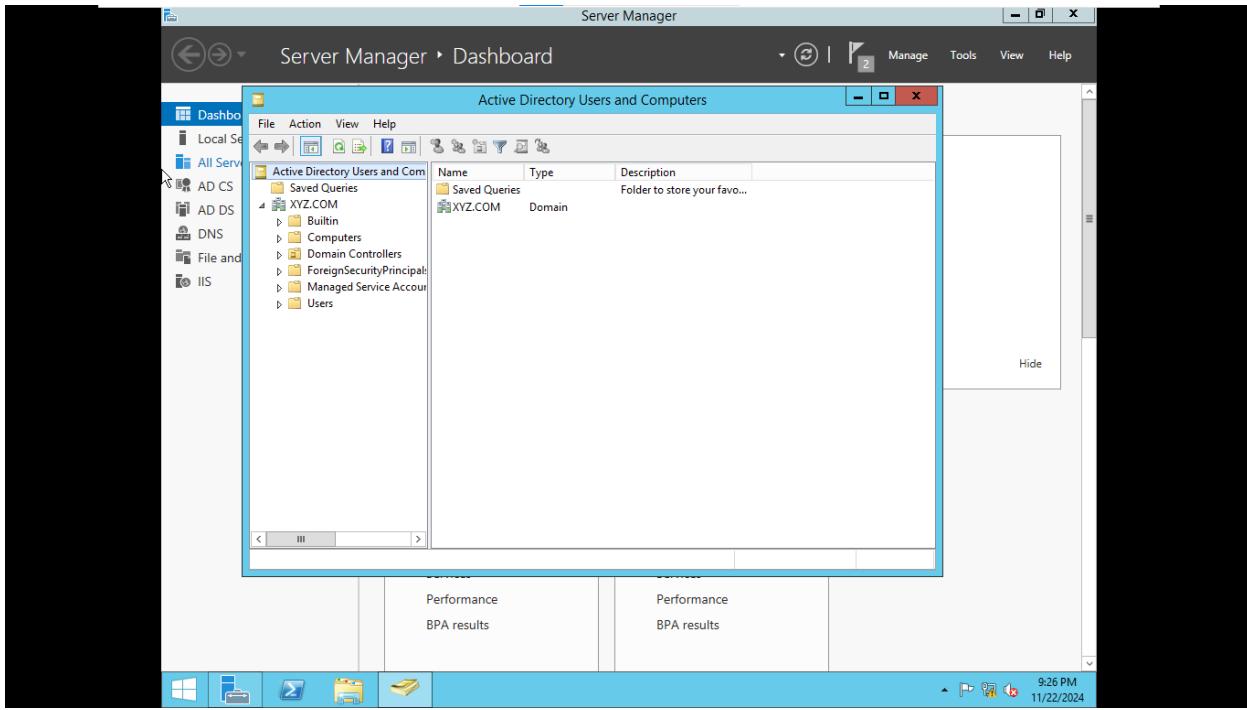
## Cấu hình thành công



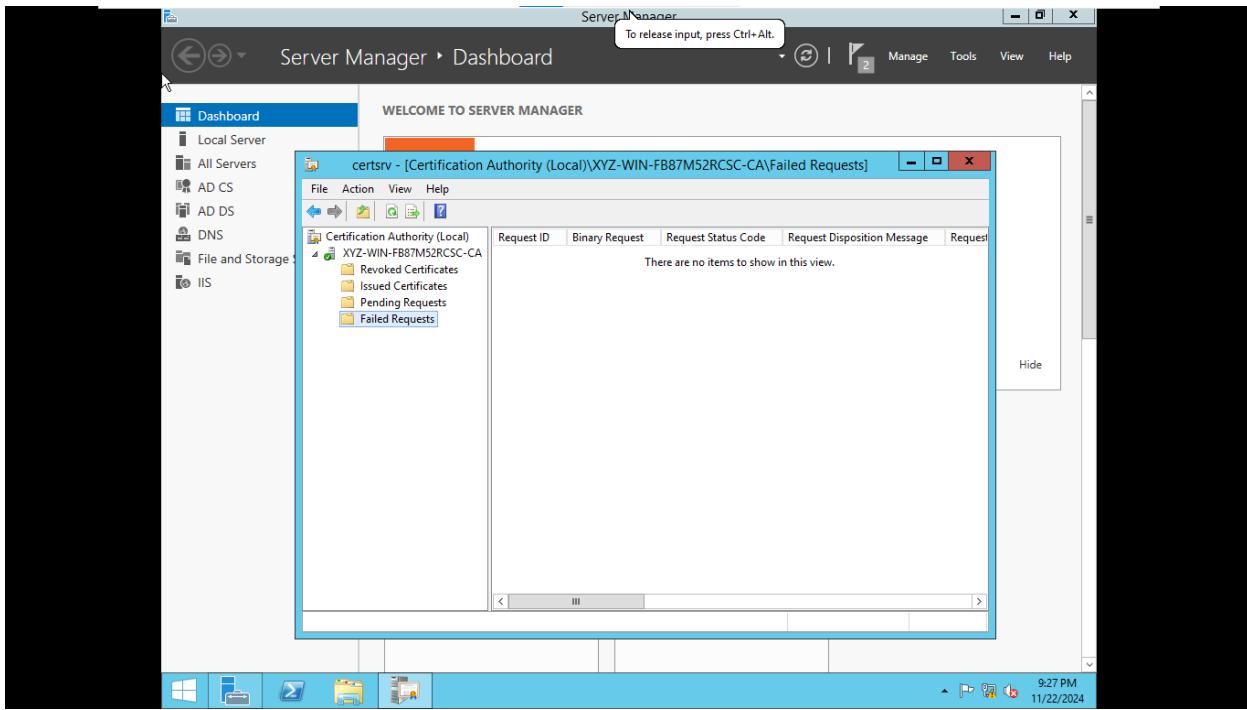
## Kiểm tra kết quả:

Chọn Active Directory User and Computers



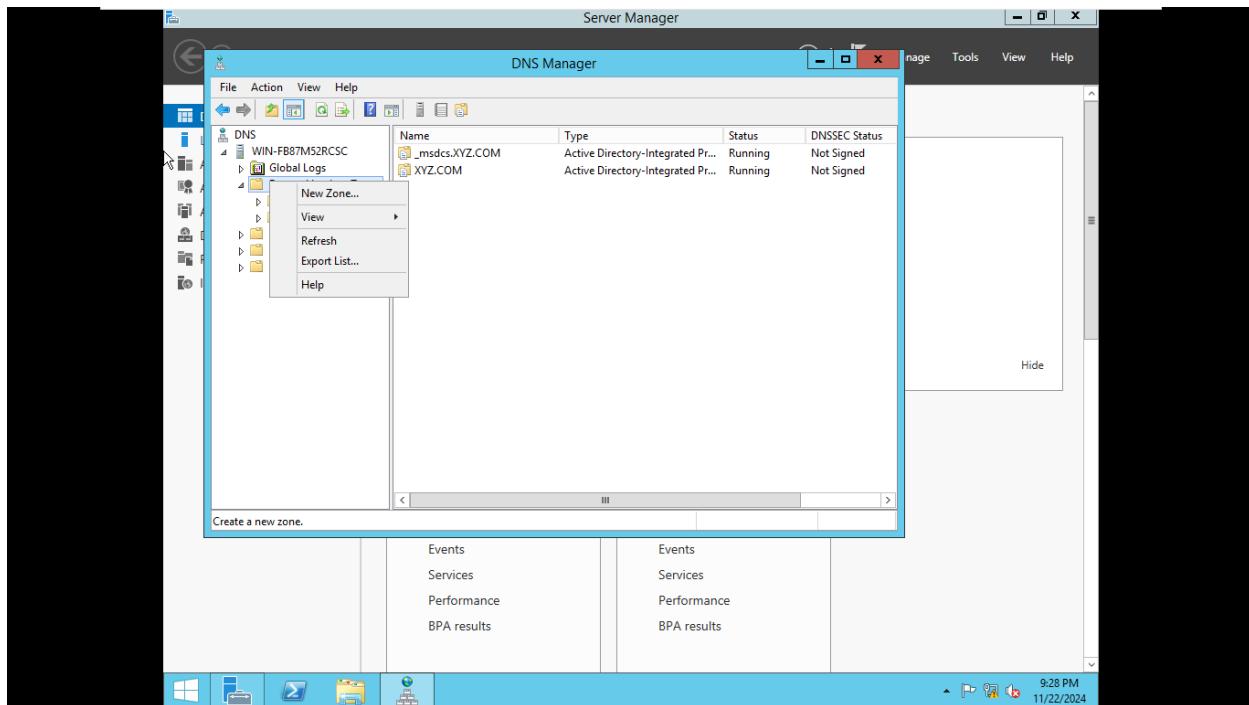


## Chọn Certificate Authority

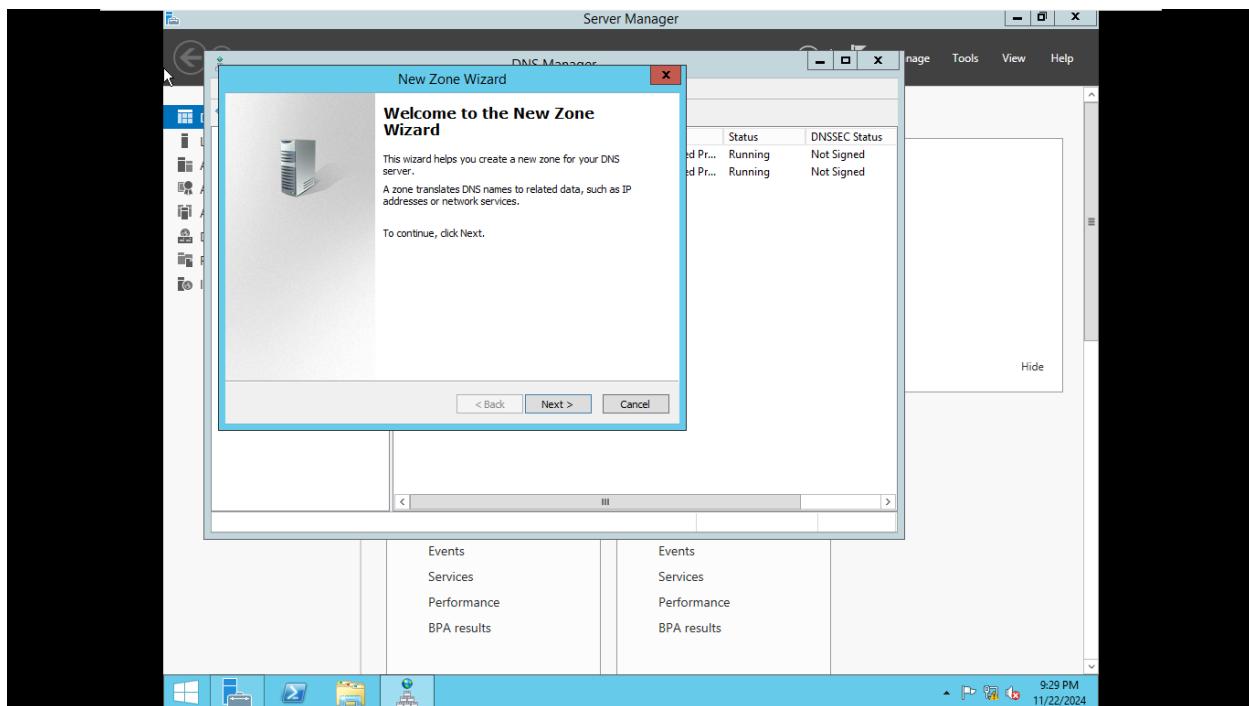


## B6: Cấu hình DNS cho Máy Server: [www.cntt.vn](http://www.cntt.vn)

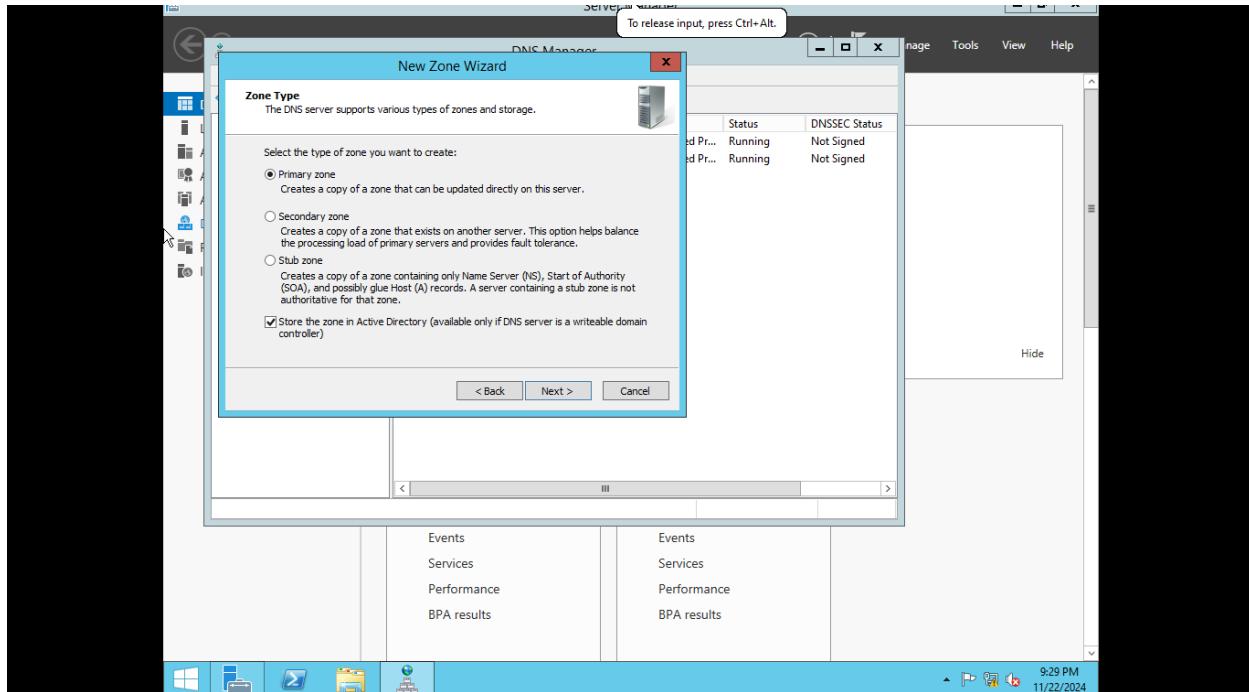
Right Click -> New Zone



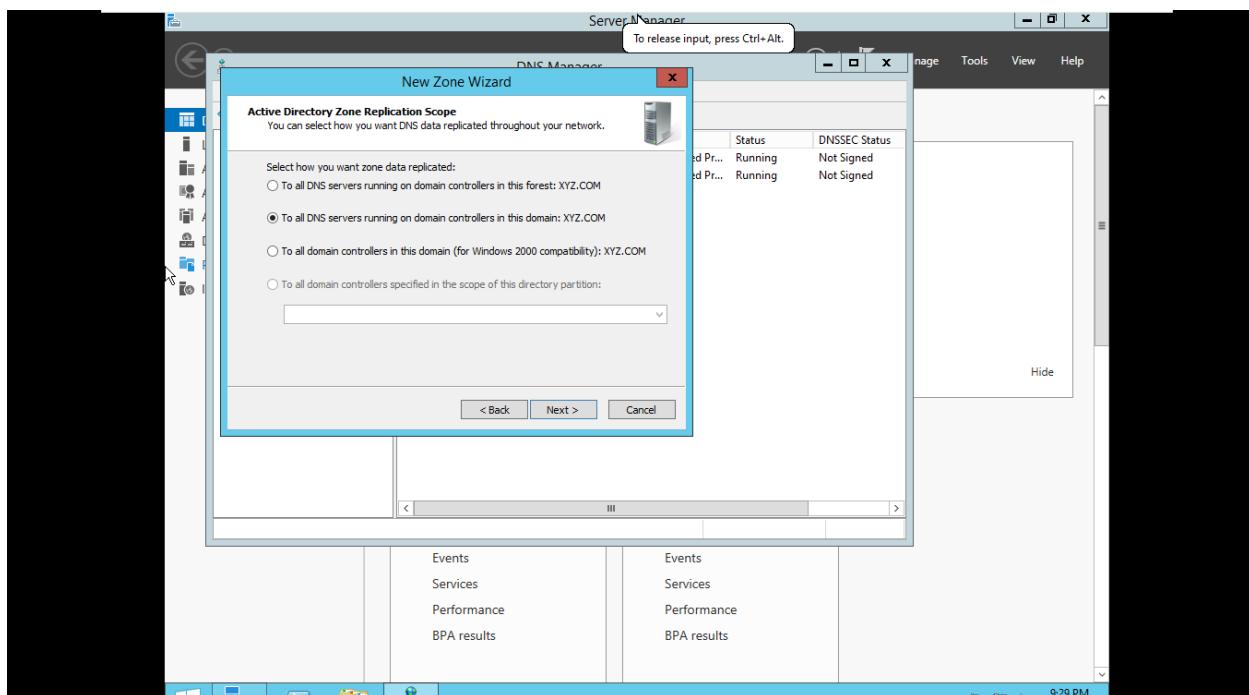
Nhấn Next



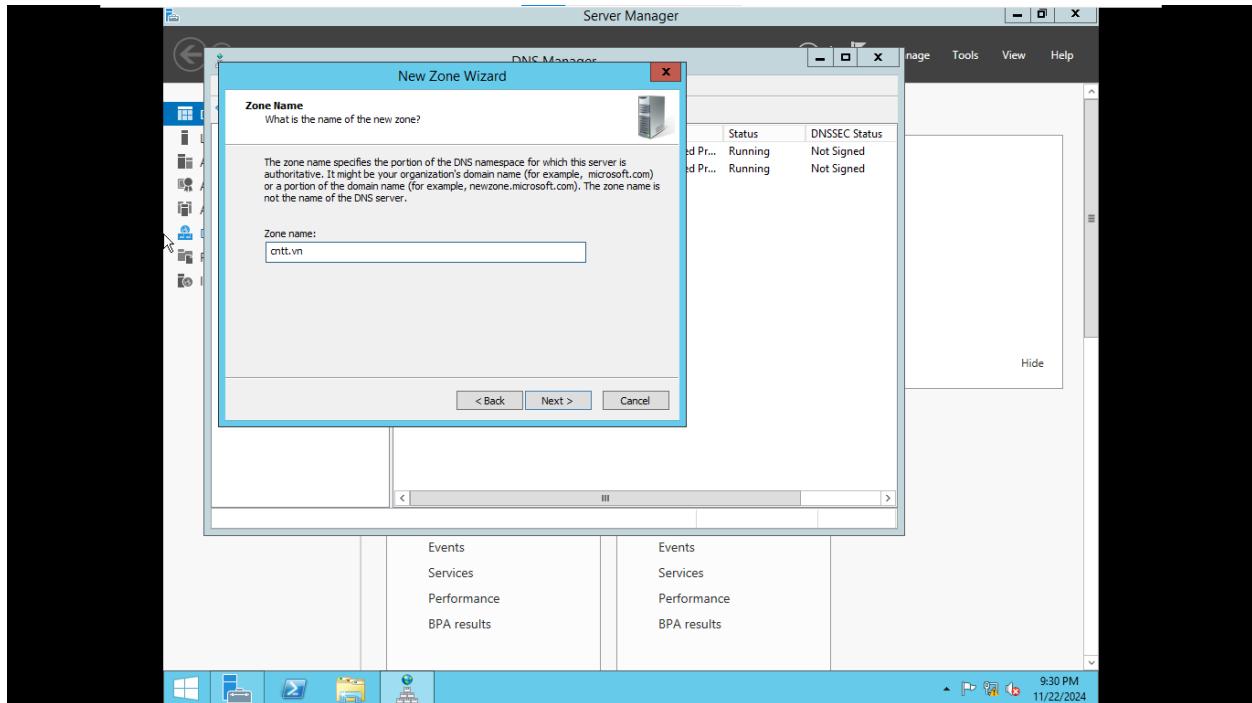
Chọn Primary zone -> Next



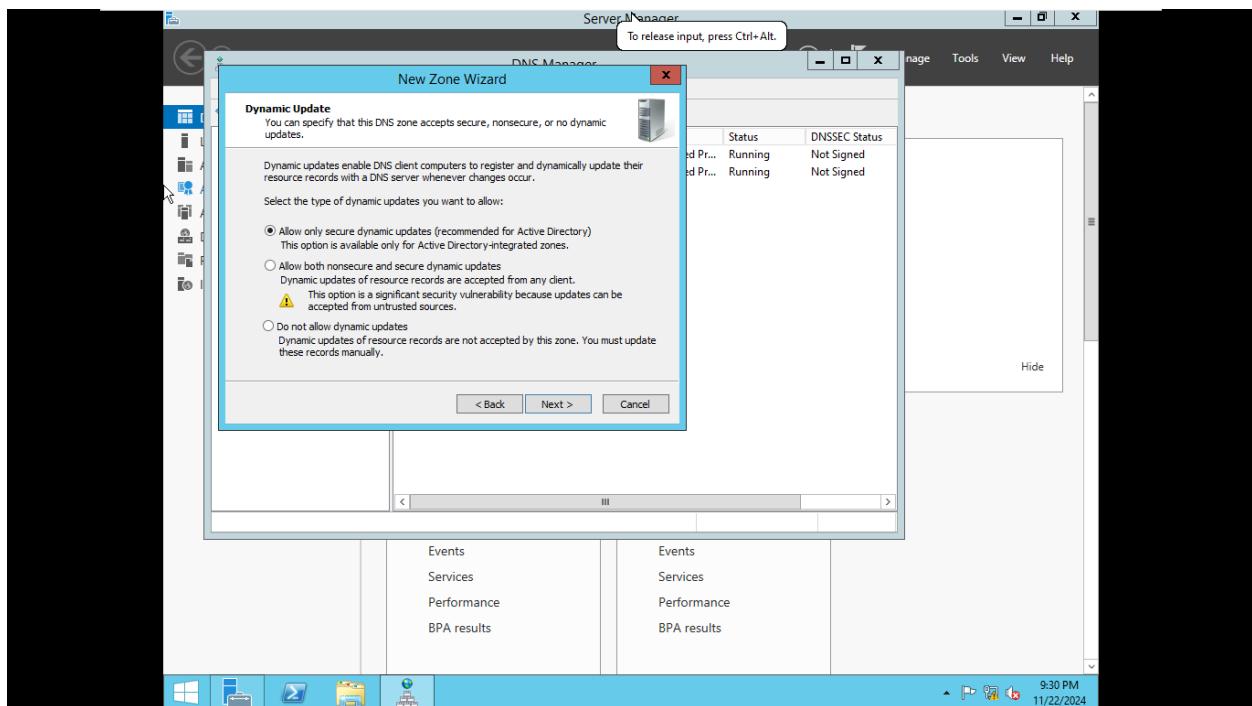
Nhấn Next



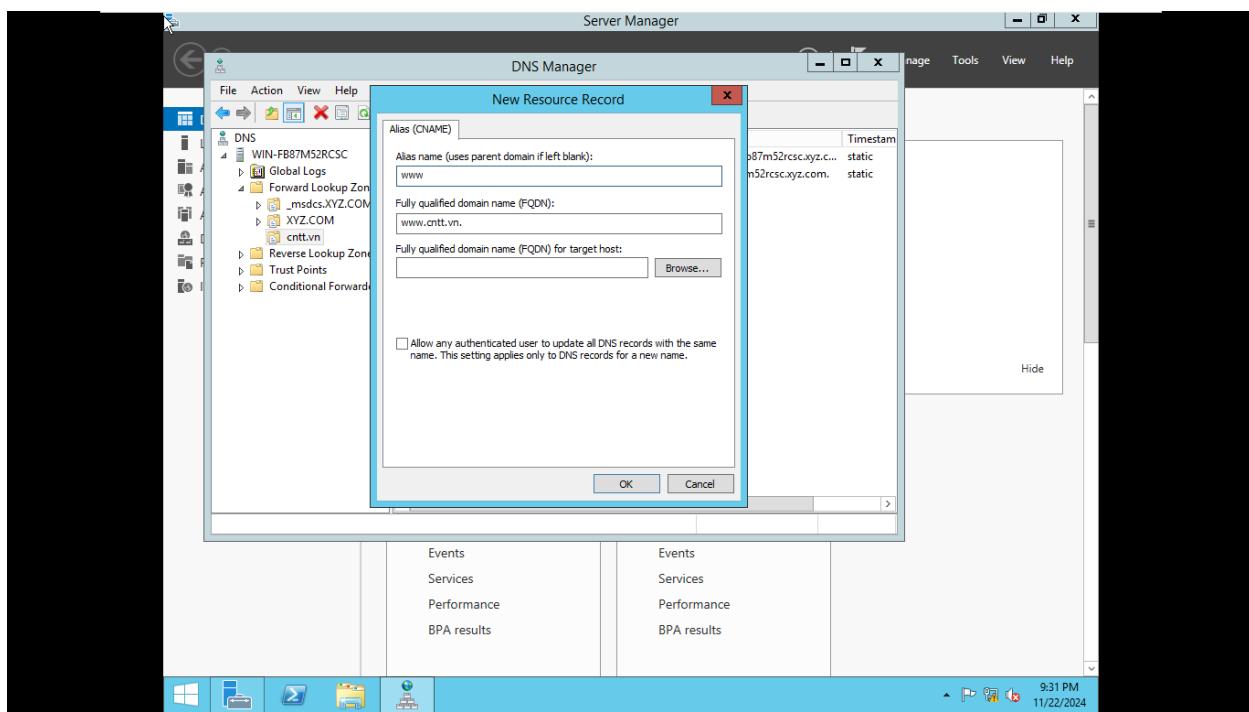
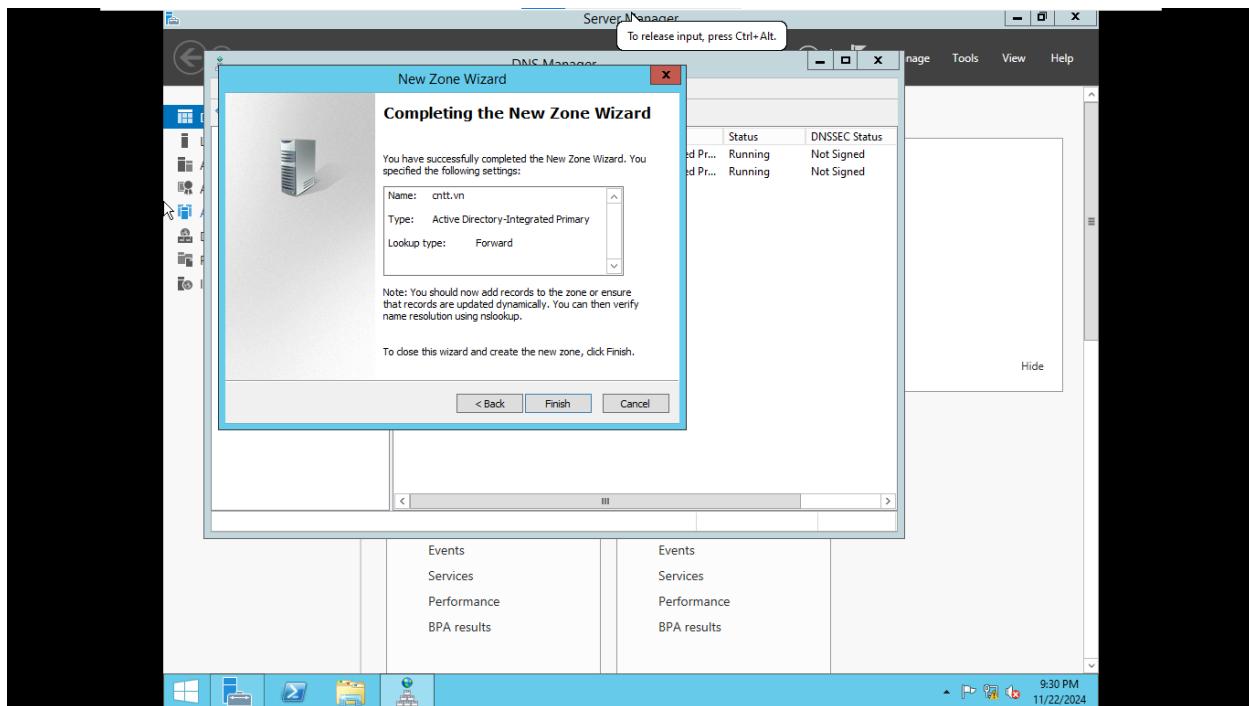
Nhập cttt.vn -> Next

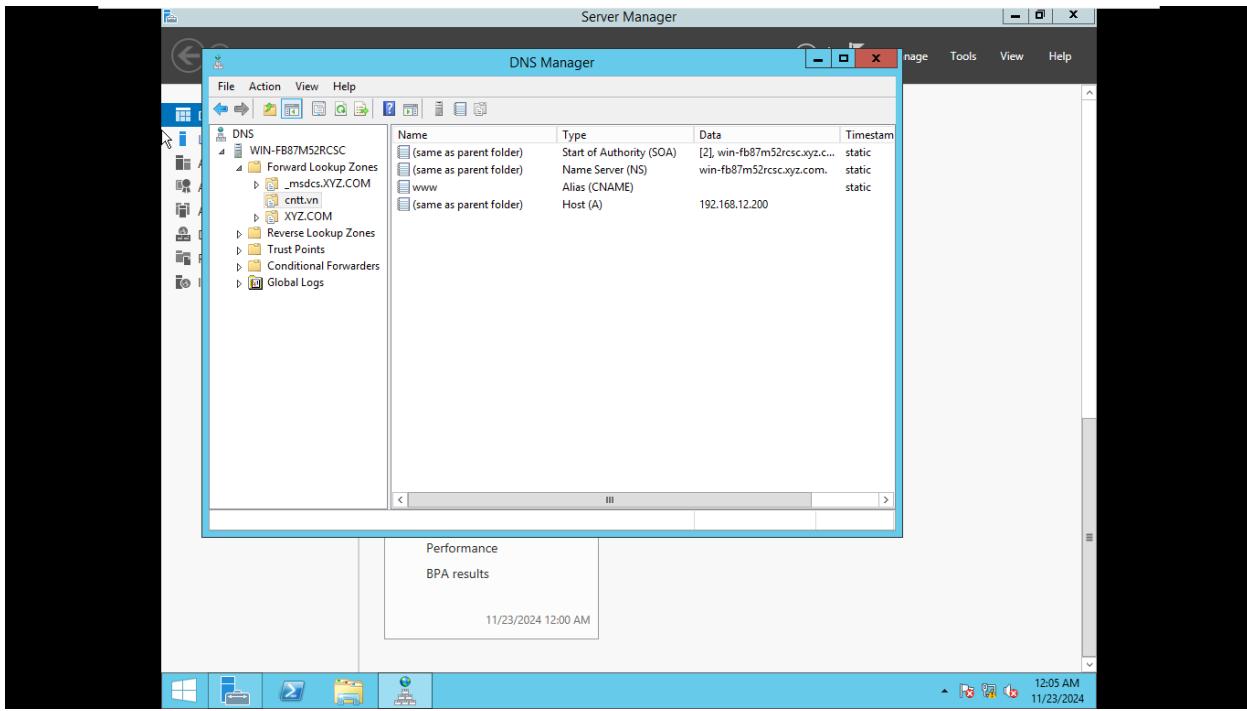
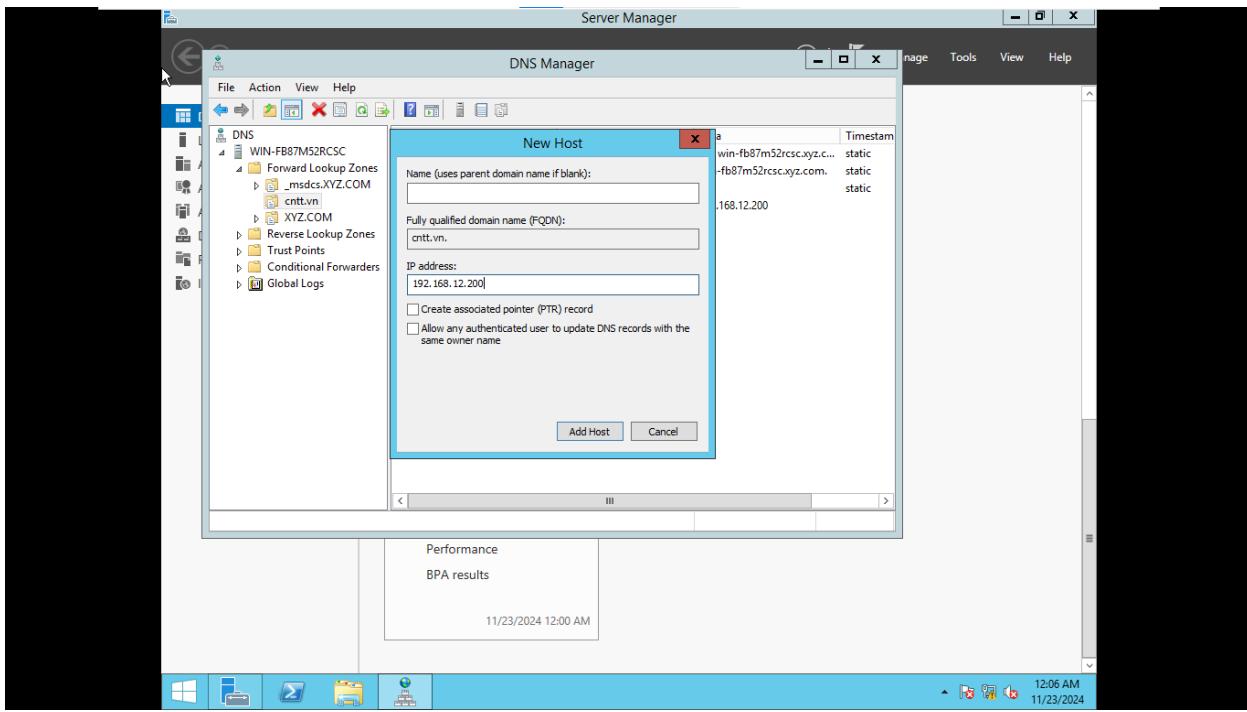


Nhấn Next



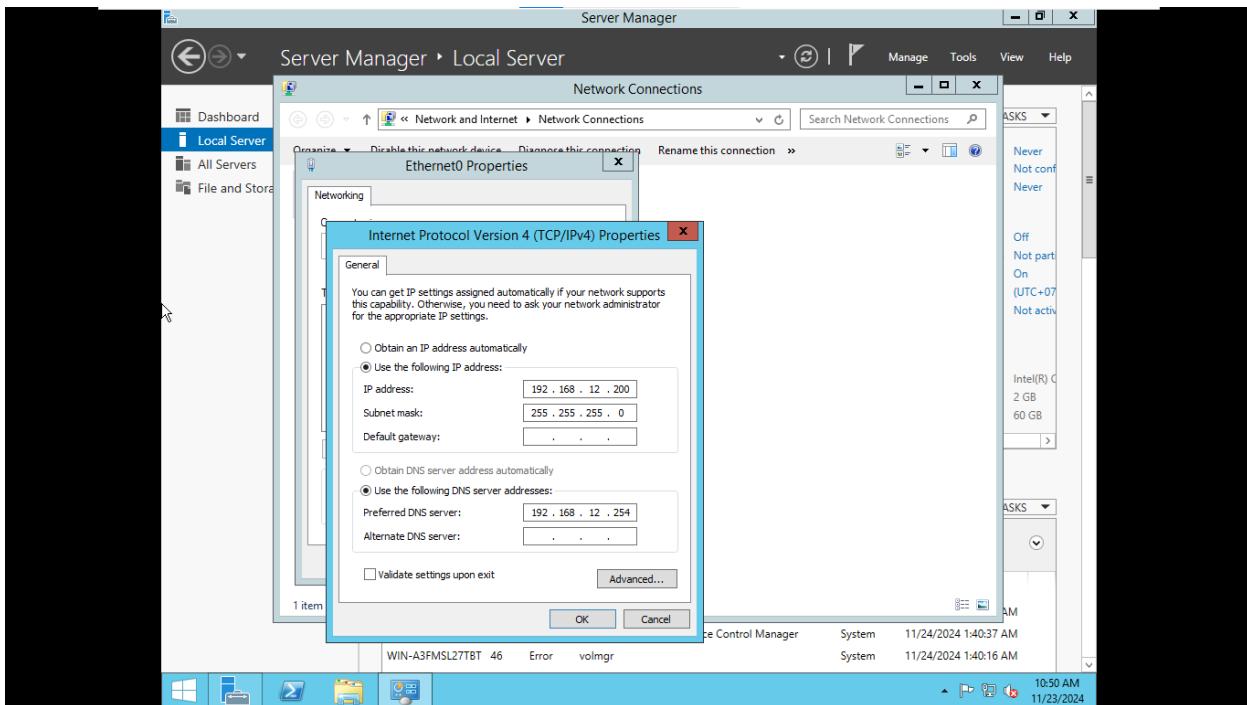
Nhân Finish





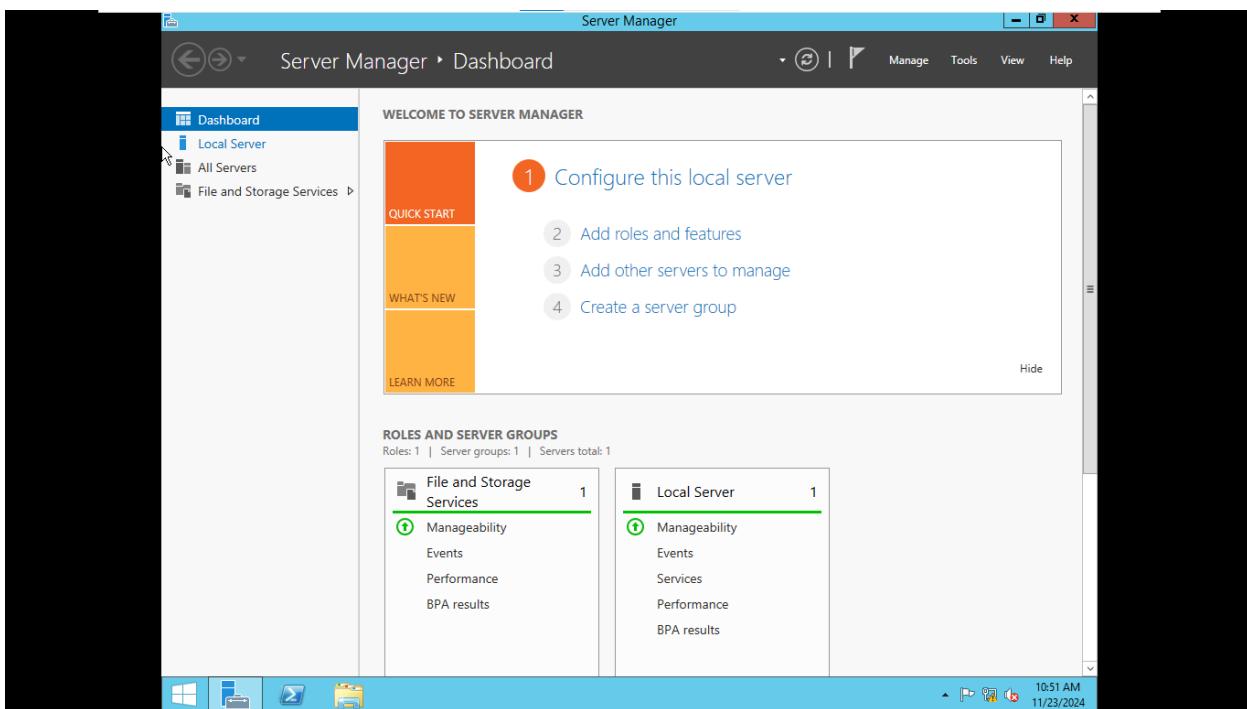
## Tiếp theo, cấu hình trên Web Server

### B1: Cấu hình địa chỉ IP:

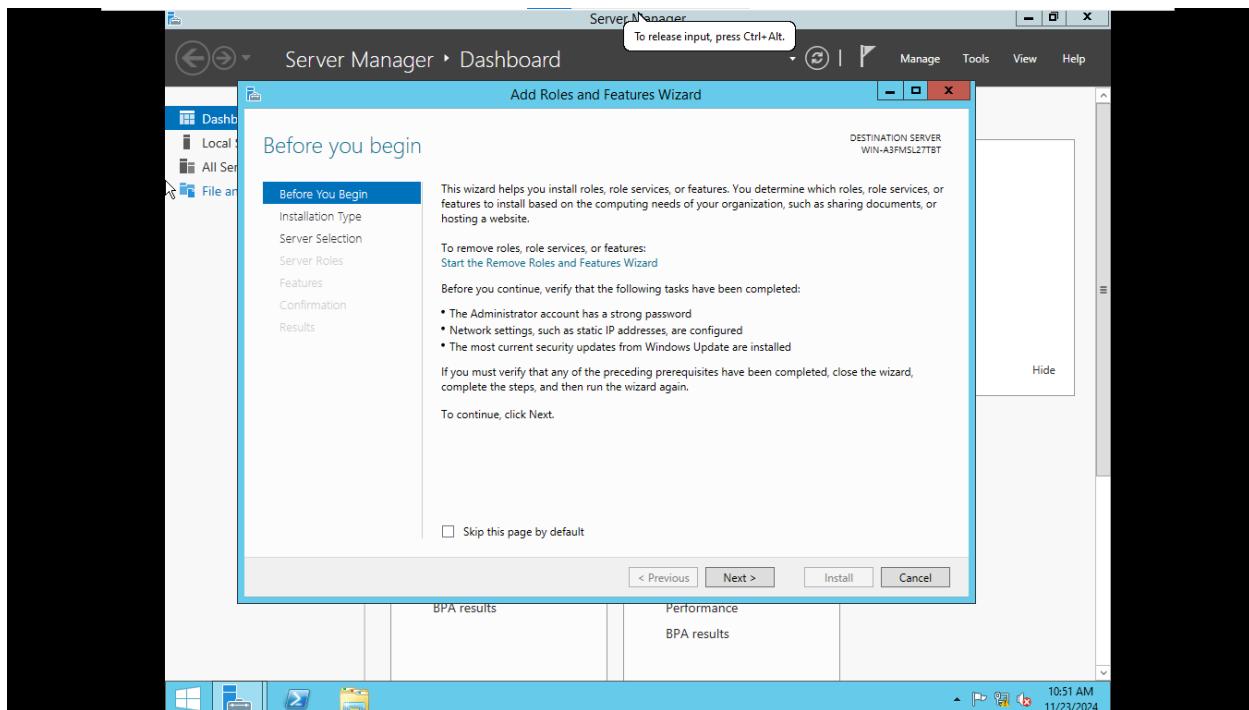


### B2: Cài dịch vụ Web server

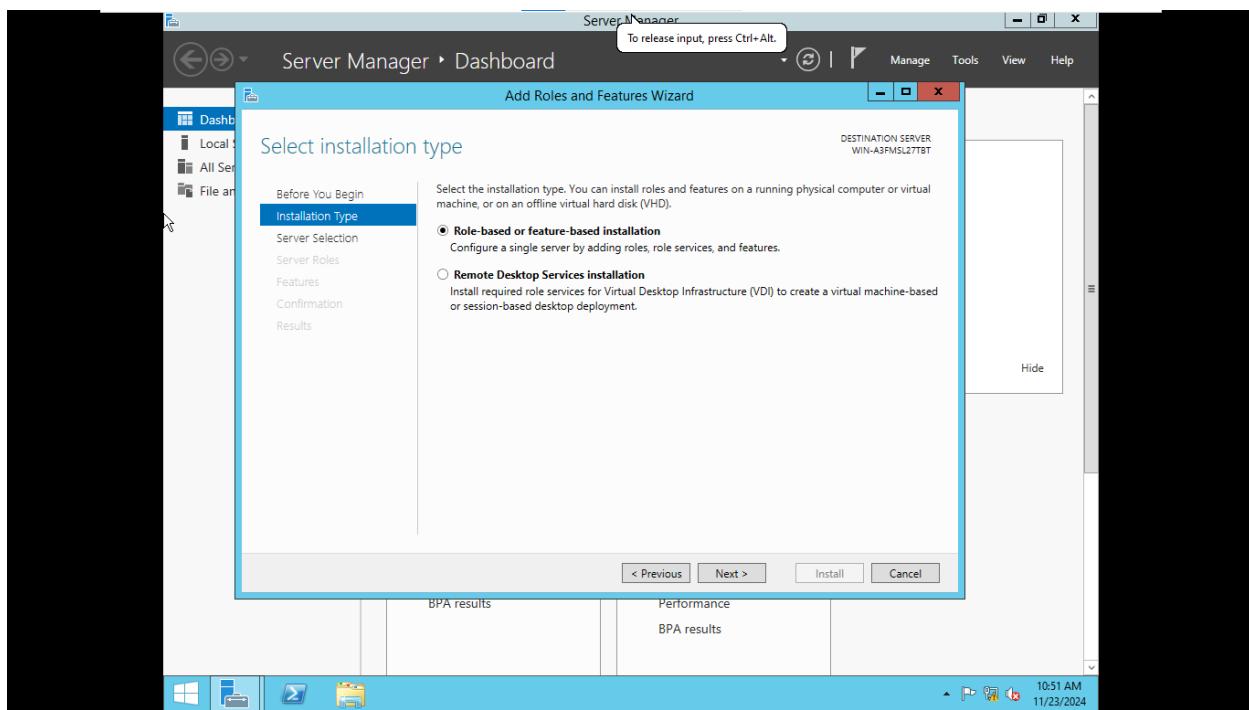
Nhấn Add roles and features



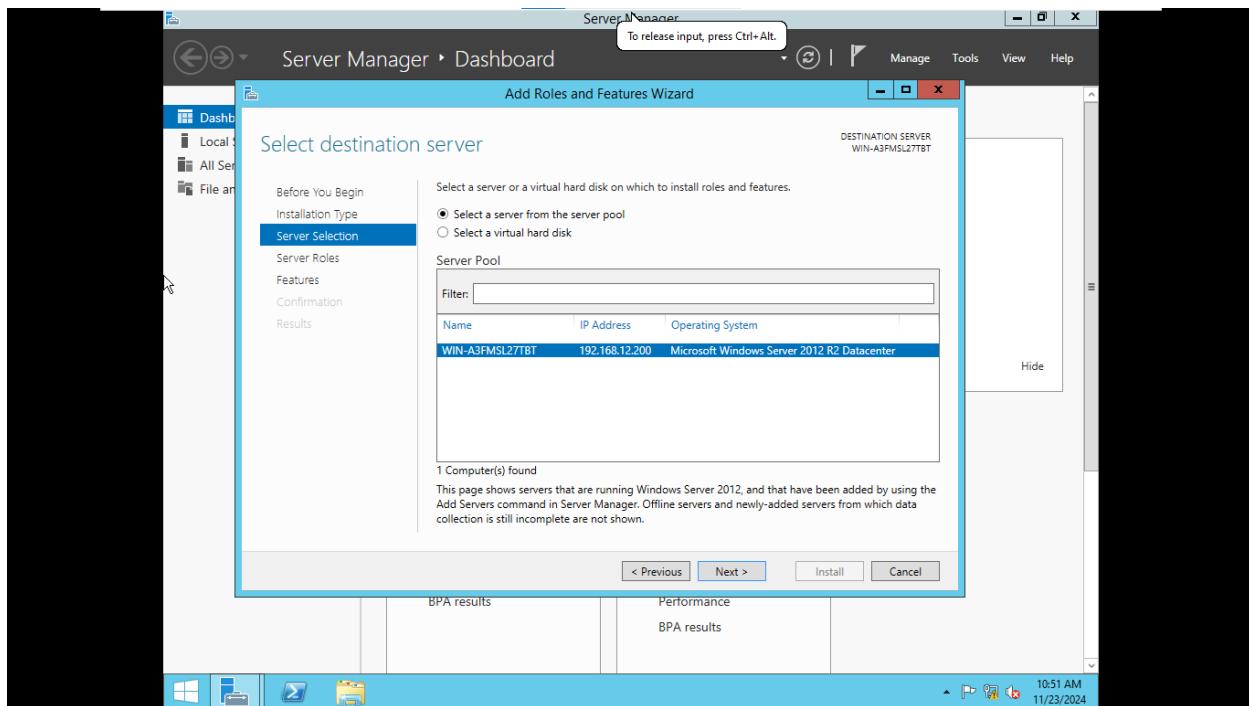
Nhấn Next



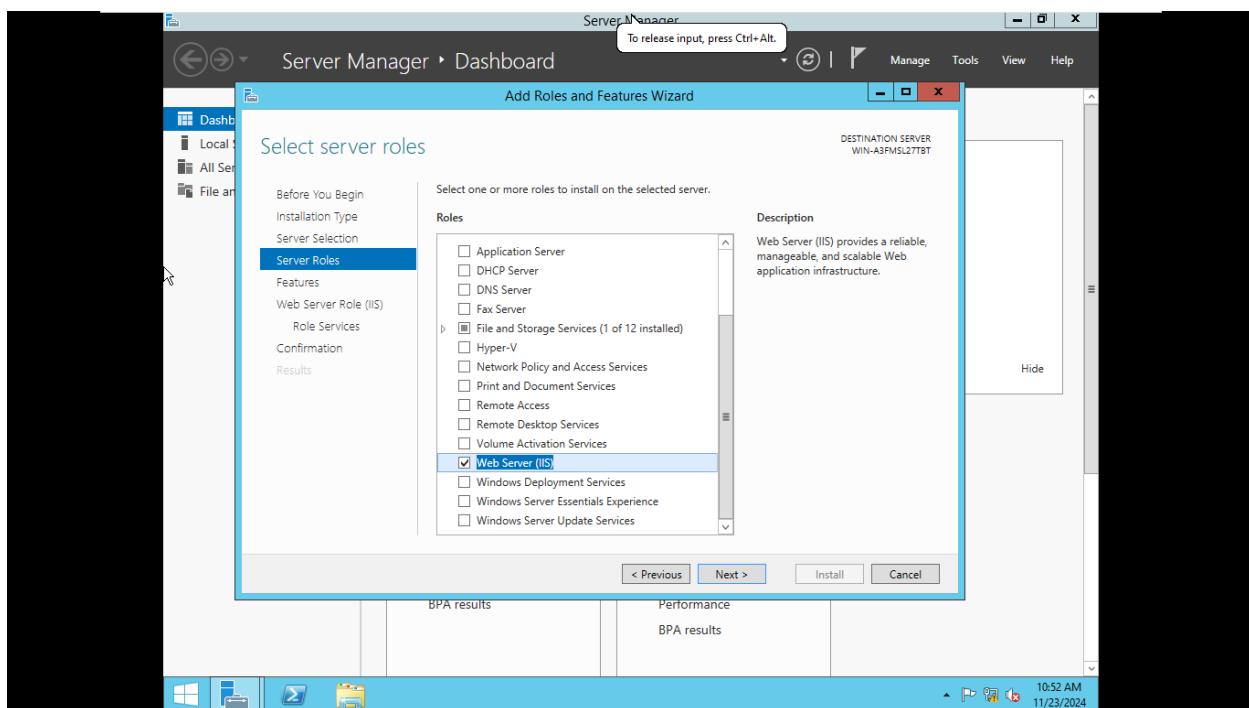
Nhấn Next



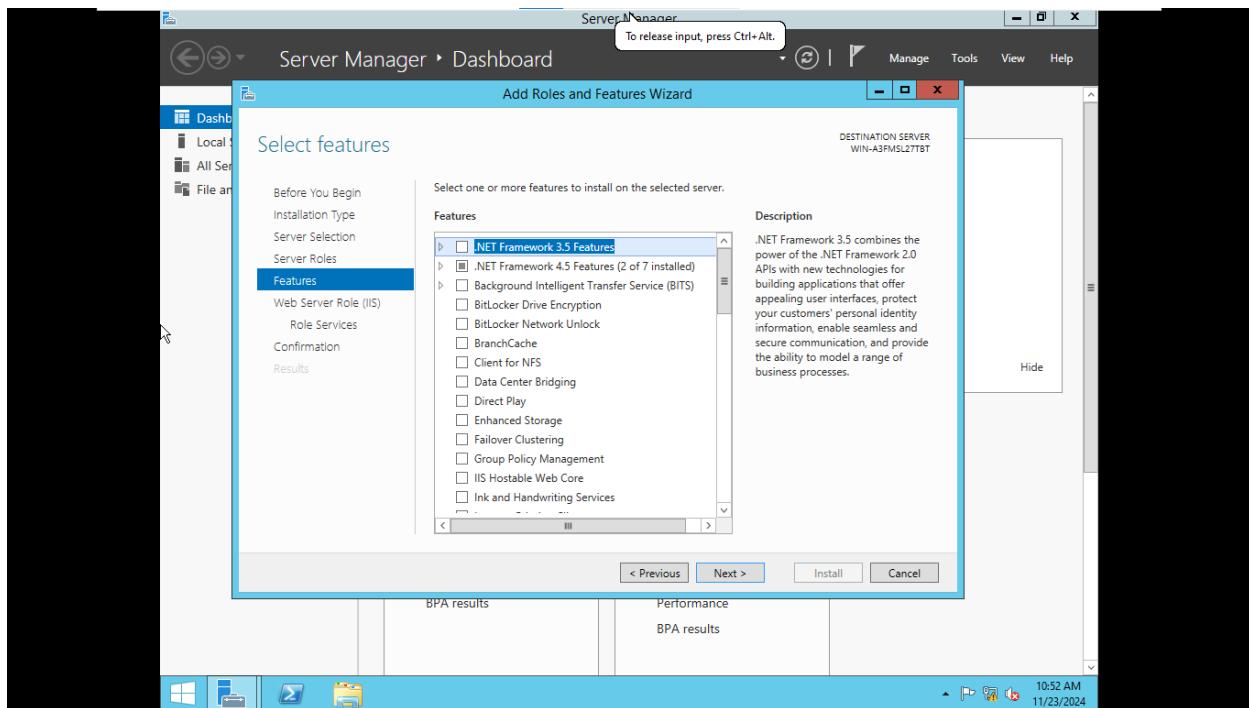
Nhấn Next



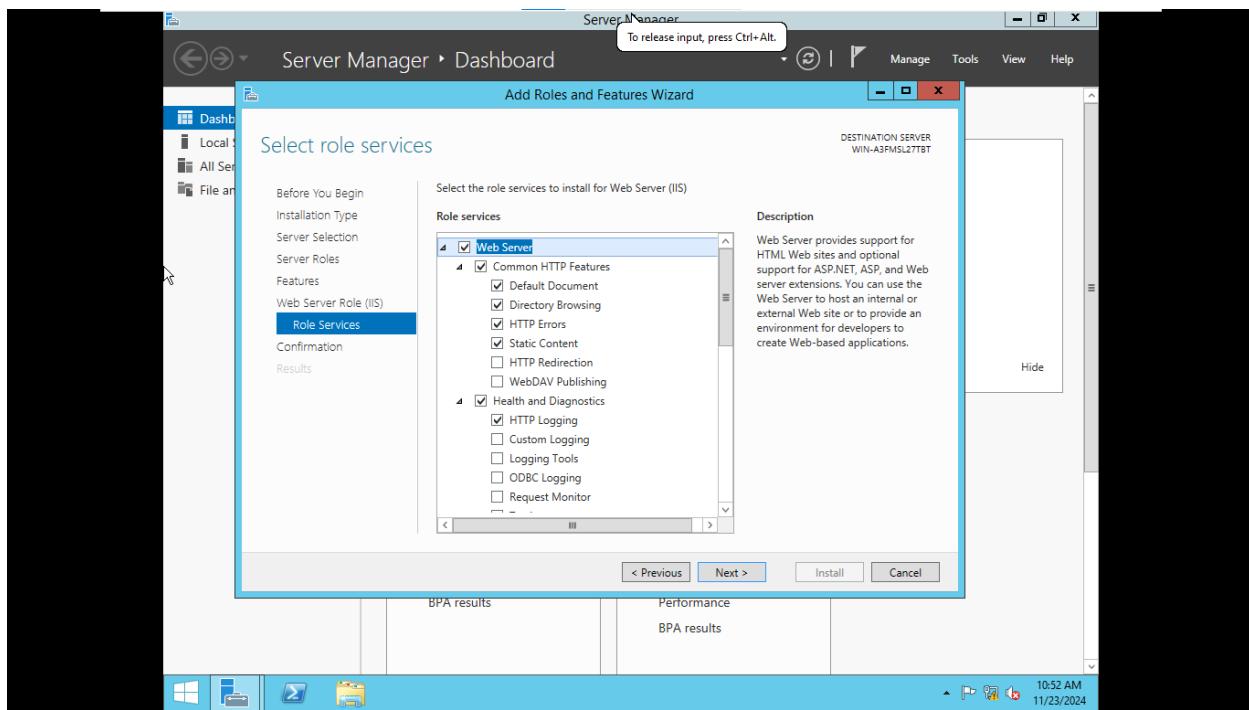
Tick chọn Web Server (IIS) -> Next



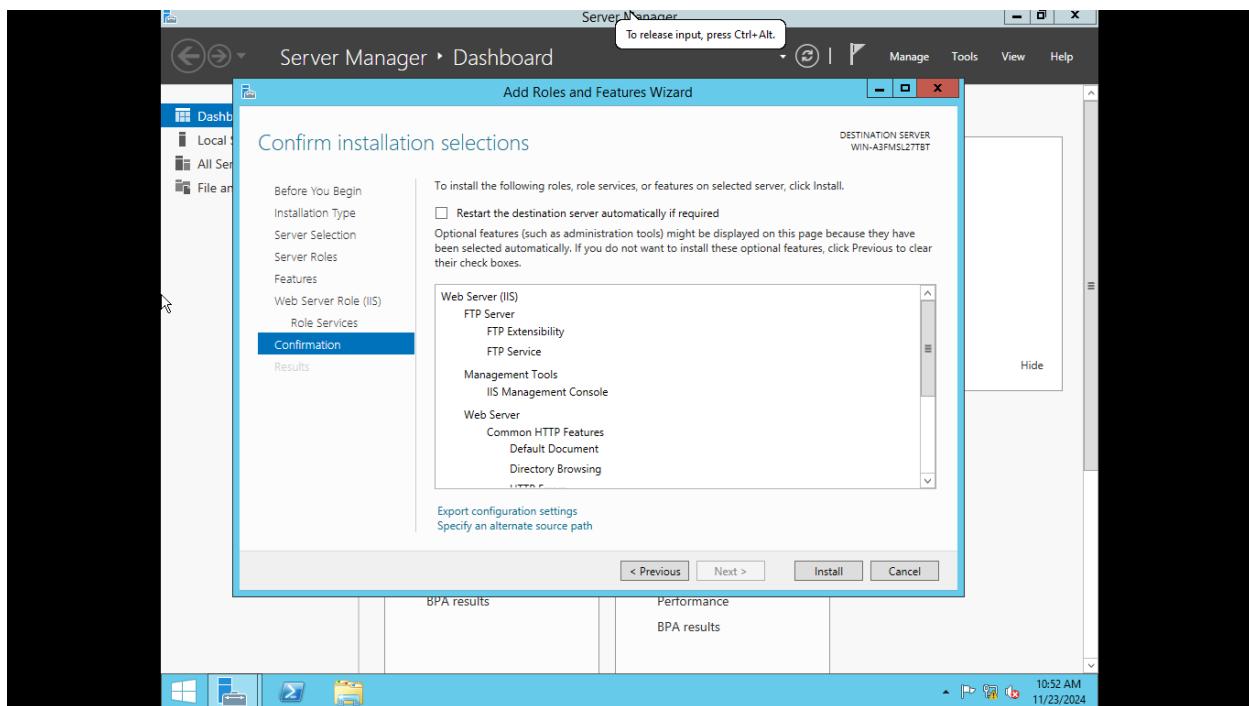
Nhấn Next



Nhấn Next

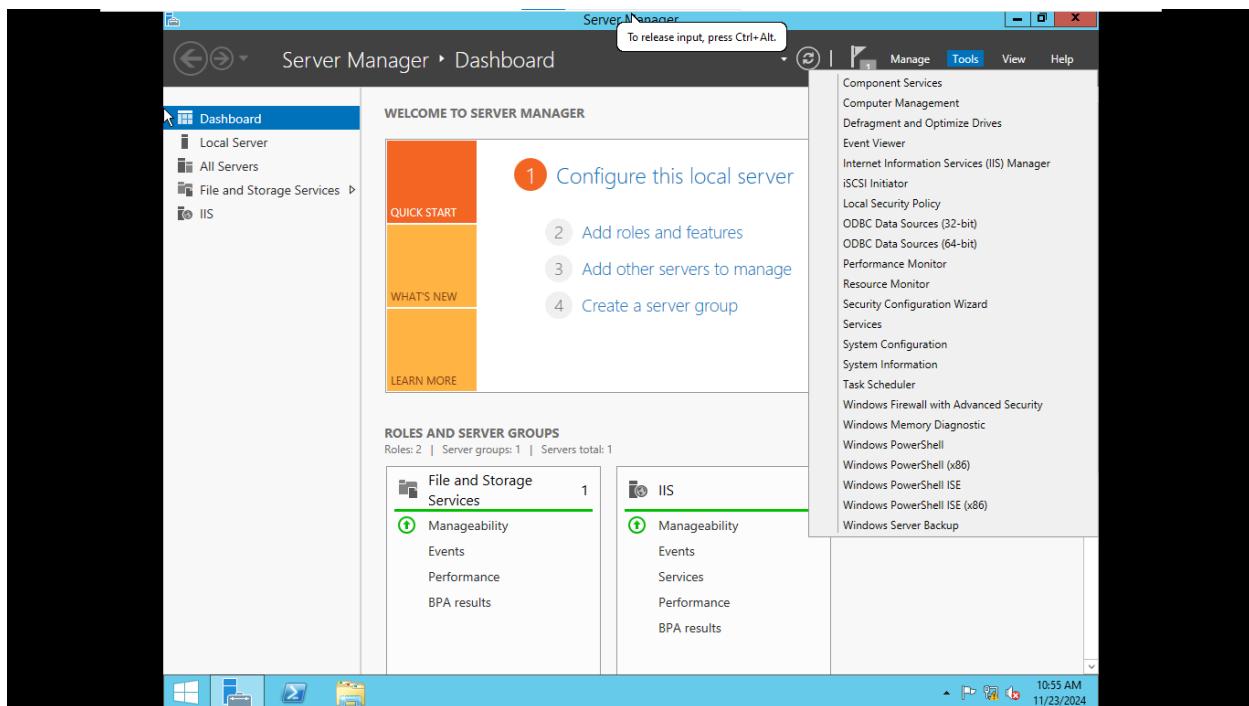


## Nhấn Instal để tiến hành cài đặt

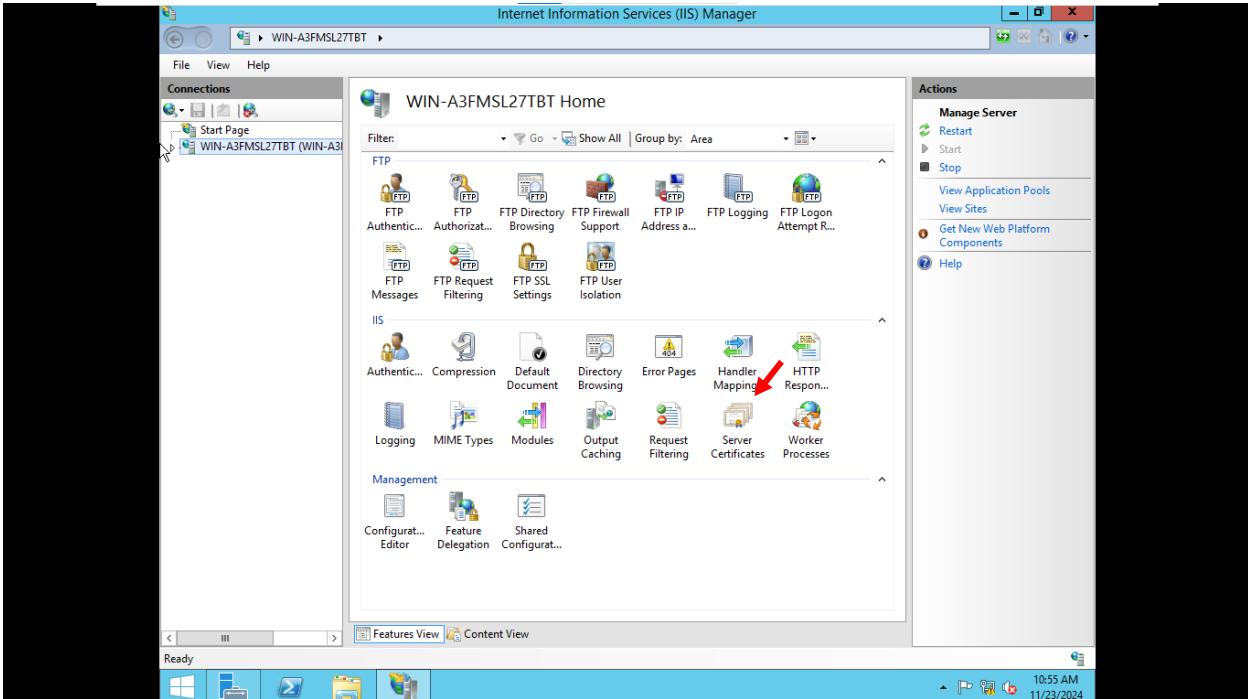


## B3: Cấu hình IIS

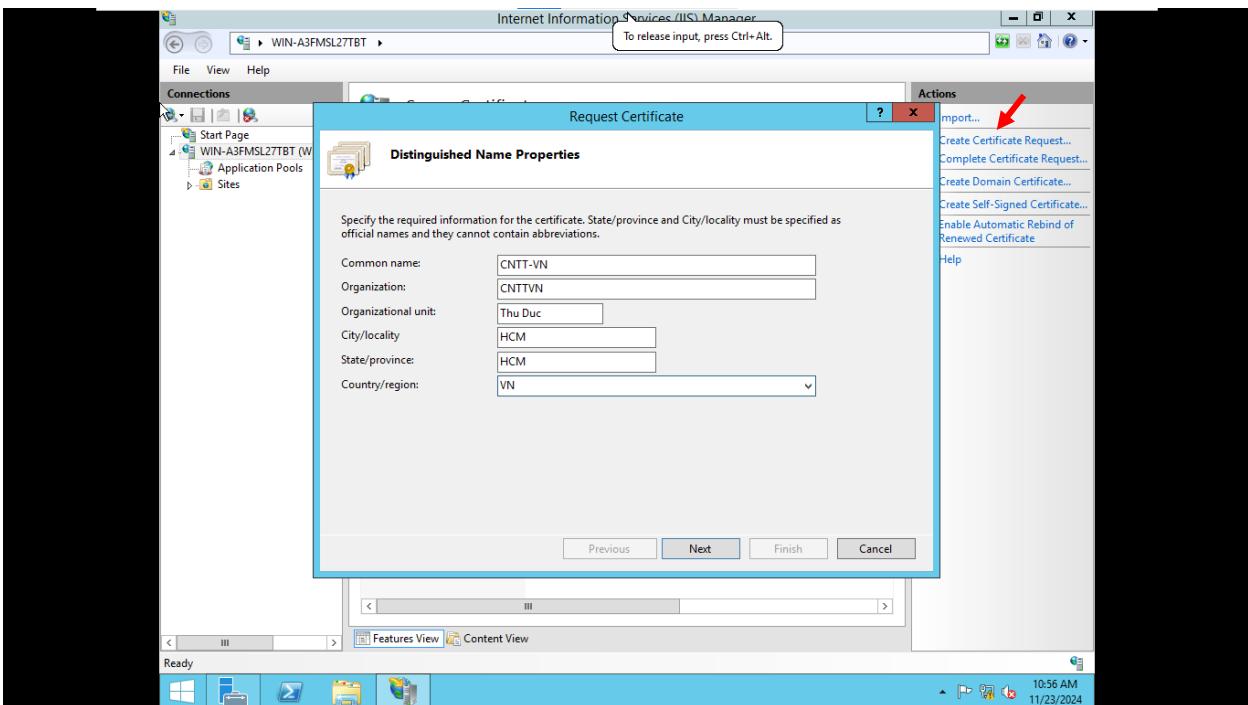
Nhấn Tools -> Internet Information Services (IIS) Manager



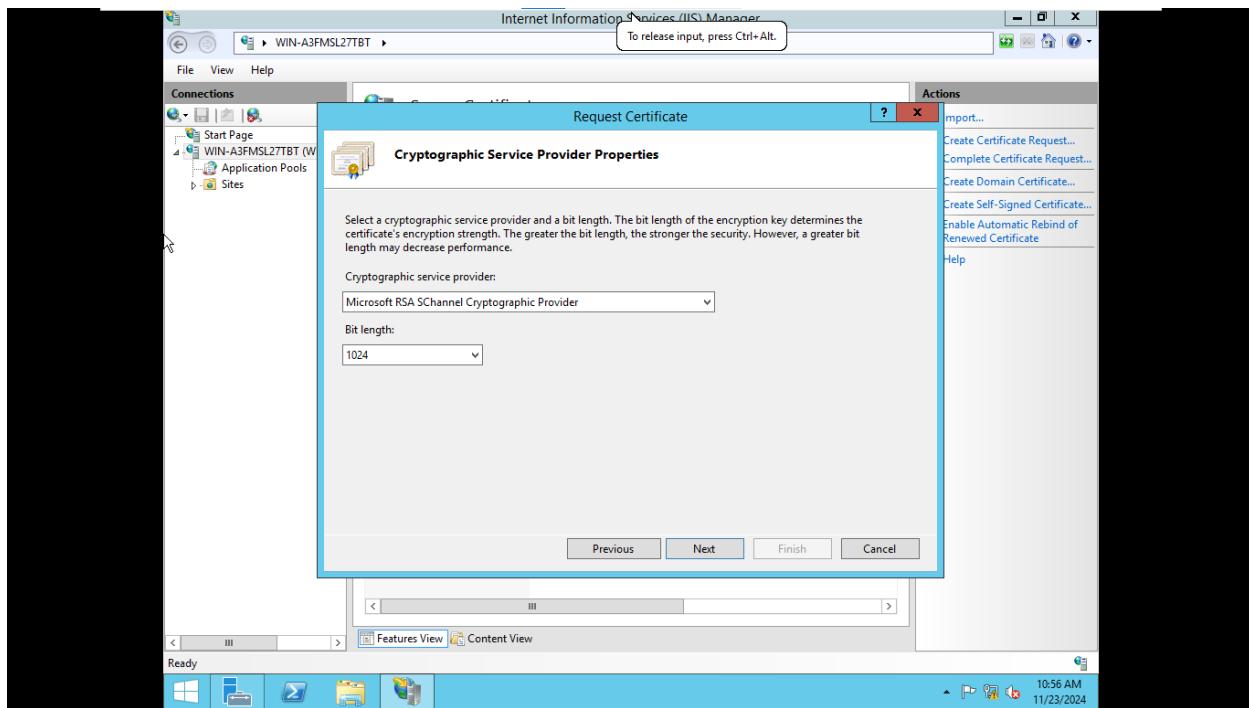
## Chọn Server Certification



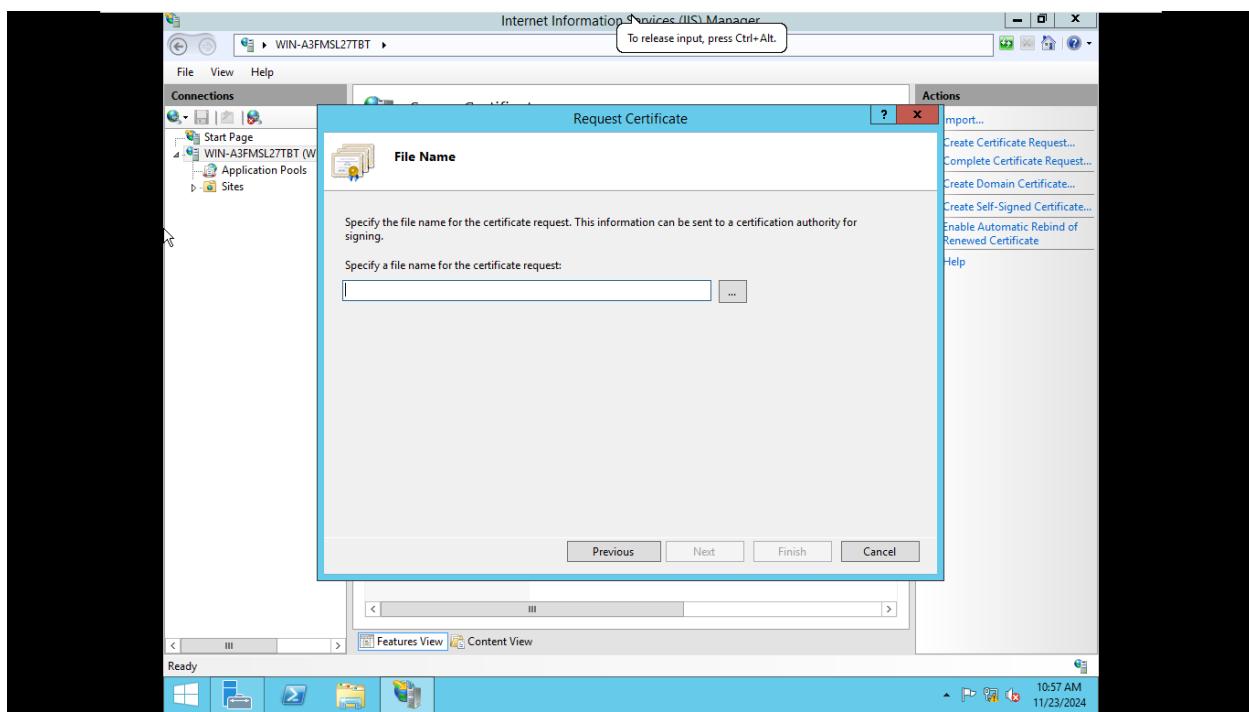
Nhấn Create Certificate Request... -> Nhập thông tin như bên dưới -> Next



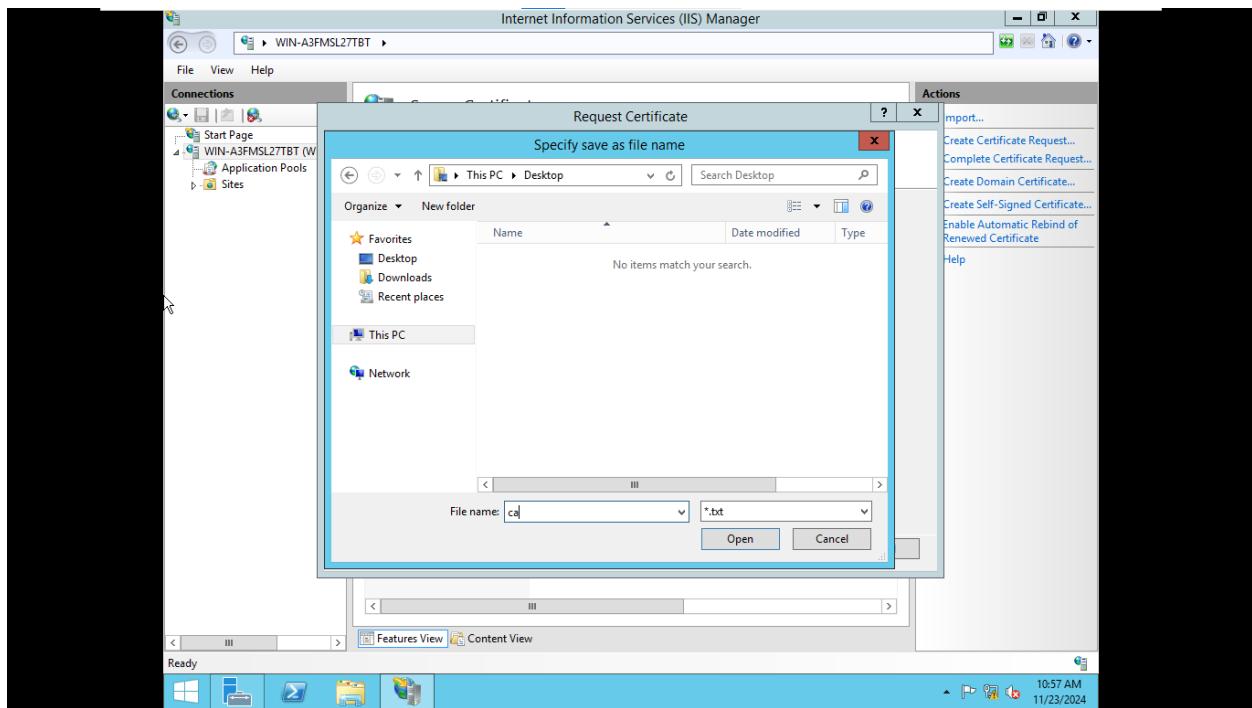
Nhấn Next



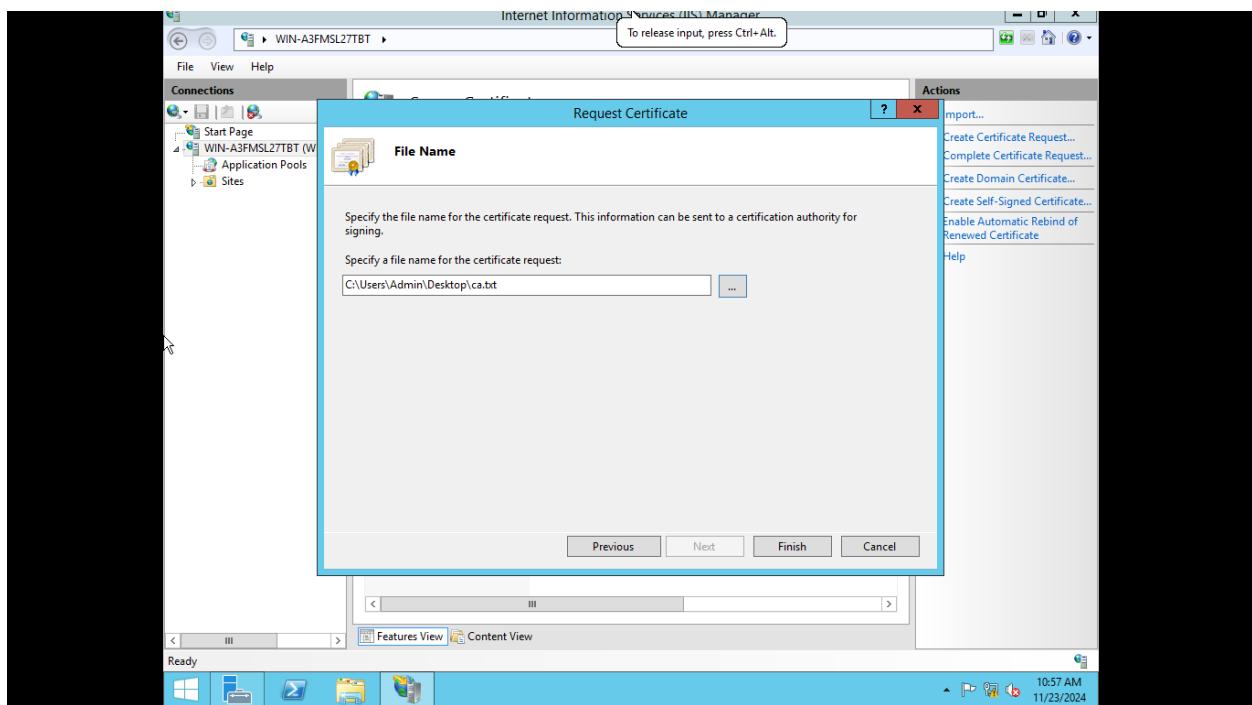
Nhấn ... để lưu file



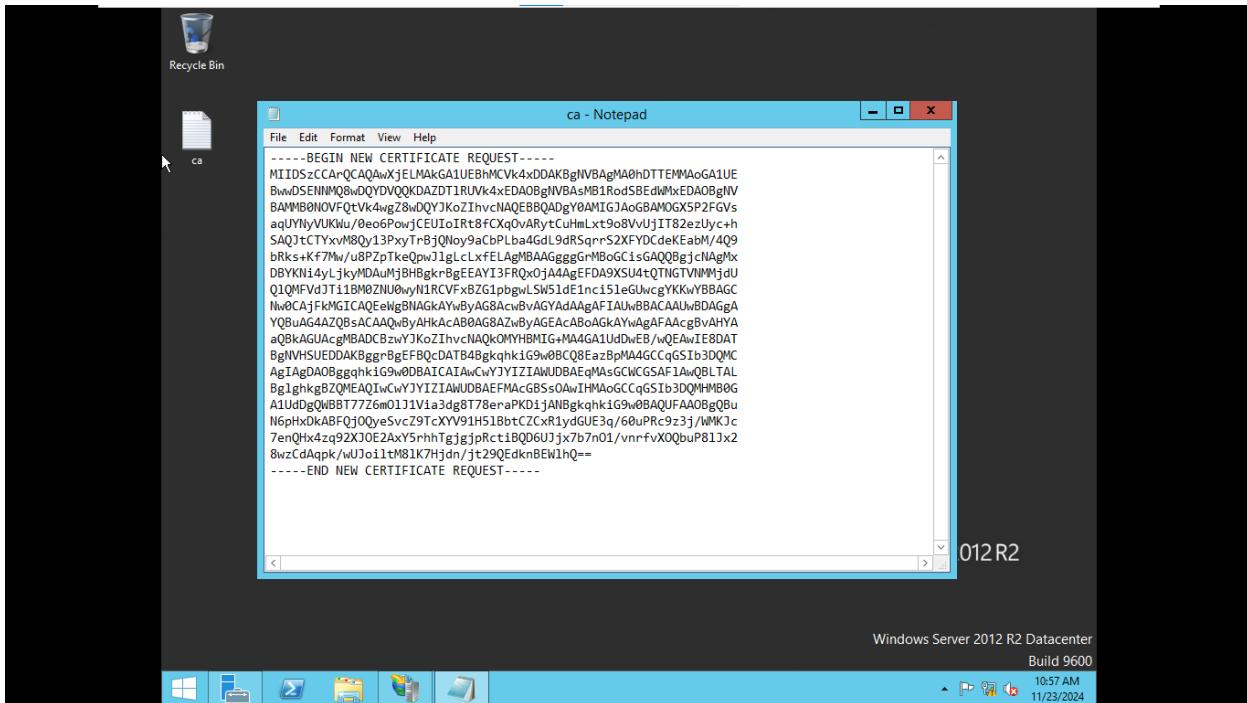
Đặt File name -> Open



Nhấn Finish để kết thúc

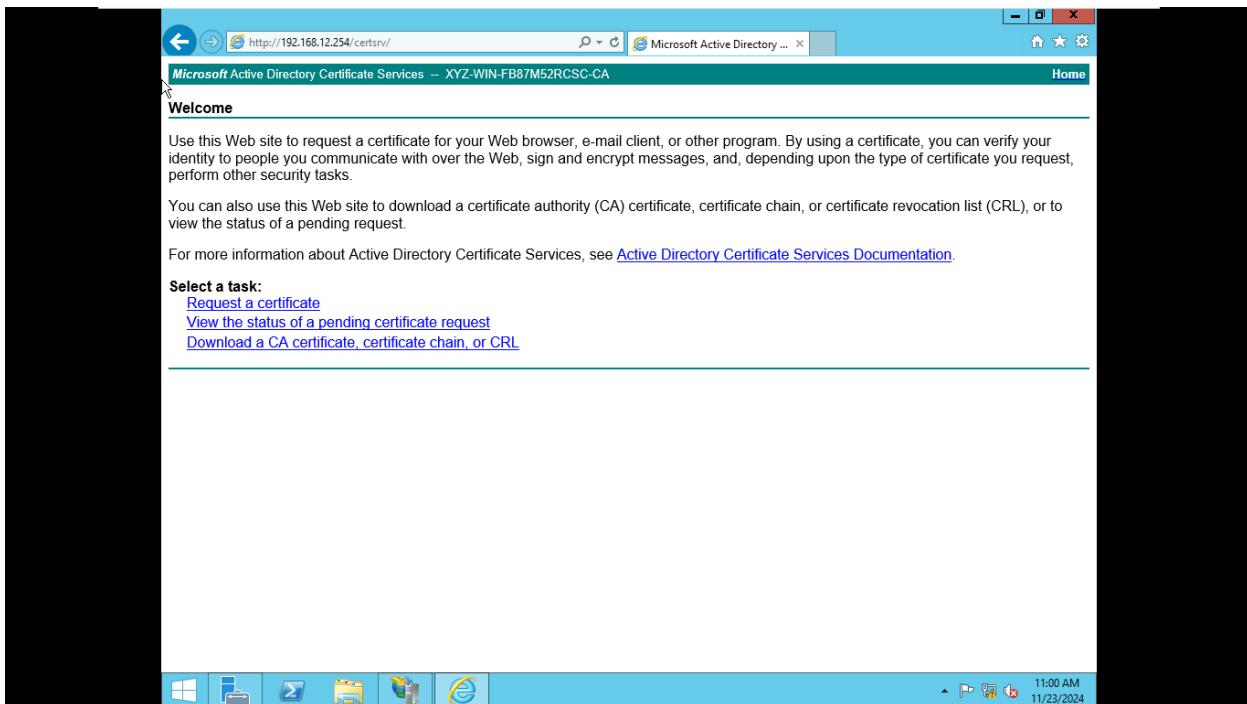


## File ca.txt

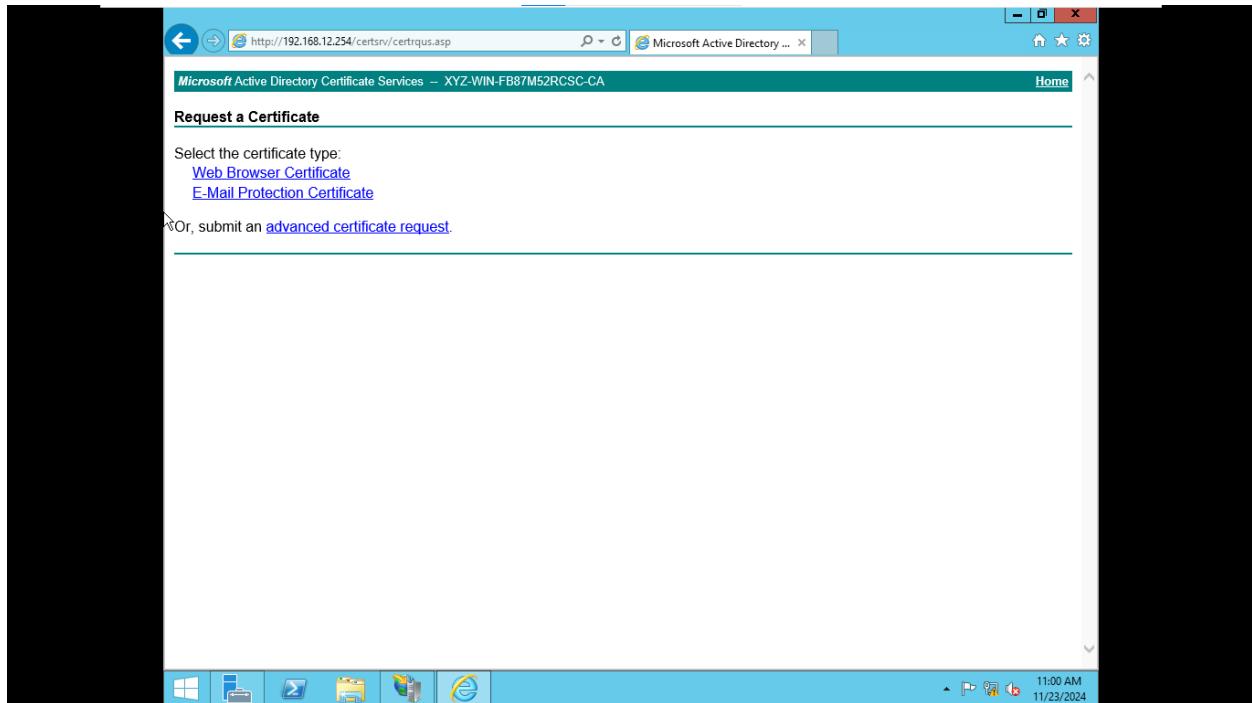


## B4: Truy cập vào CA Server : <http://192.168.12.254/certsrv>

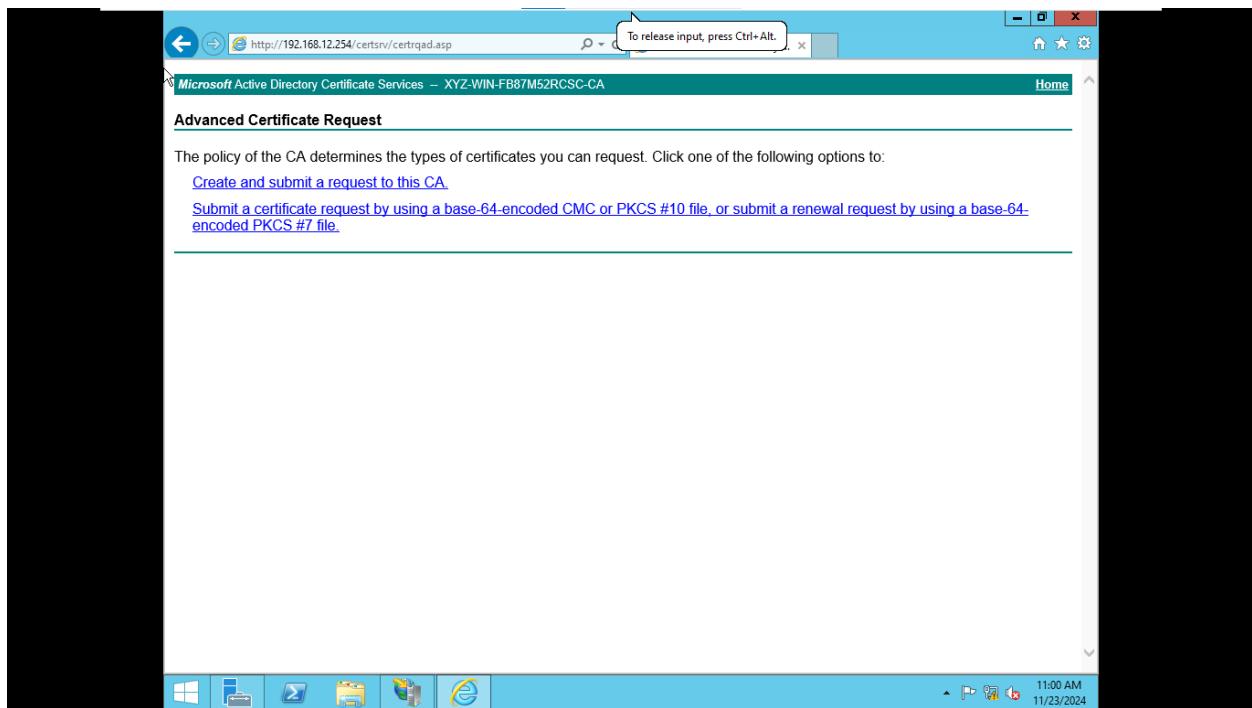
### Nhấn Request a certificate



## Nhấn advanced certificate request



Nhấn Submit a certificate request by using a base-64-encoded CMC or PKCS #10 file, or submit a renewal request by using a base-64-encoded PKCS #7 file



Mở File ca.txt -> Copy nội dung -> Paste vào Base-64-encoded certificate request... -> Submit

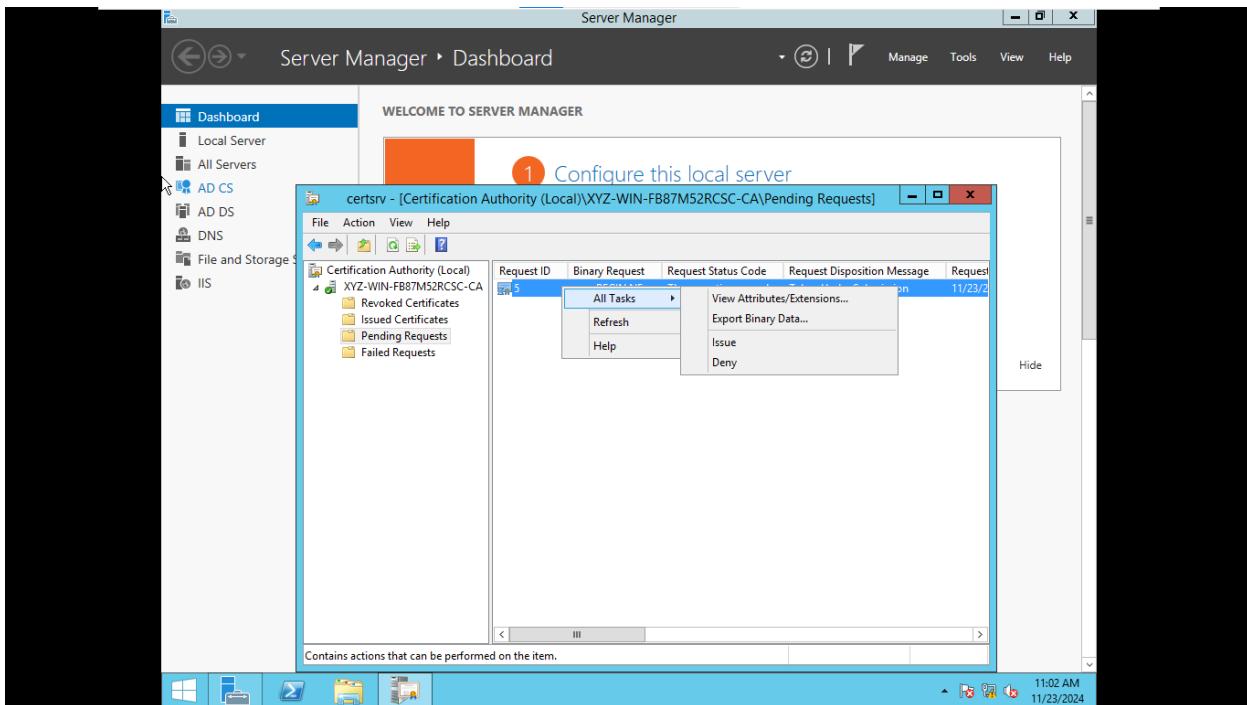
The screenshot shows a web browser window titled "Microsoft Active Directory Certificate Services – XYZ-WIN-FB87M52RCSC-CA". The page displays a "Submit a Certificate Request or Renewal Request" form. In the "Saved Request" section, there is a large text area containing a base-64 encoded certificate request. Below this, there is an "Additional Attributes" section with a dropdown menu labeled "Attributes:" and a "Submit >" button. The status bar at the bottom right indicates the time as 11:00 AM and the date as 11/23/2024.

Yêu cầu đã được gửi đến CA Server để xác nhận

The screenshot shows a web browser window titled "Back to Microsoft Active Directory Certificate Services (Alt+Left) IN-FB87M52RCSC-CA". The page displays a "Certificate Pending" message, stating that the certificate request has been received and the user must wait for an administrator to issue the certificate. It also mentions the Request Id (5) and provides instructions to return to the site in a day or two. A note at the bottom specifies that the user must return within 10 days. The status bar at the bottom right indicates the time as 11:01 AM and the date as 11/23/2024.

## Chuyển sang máy CA Server:

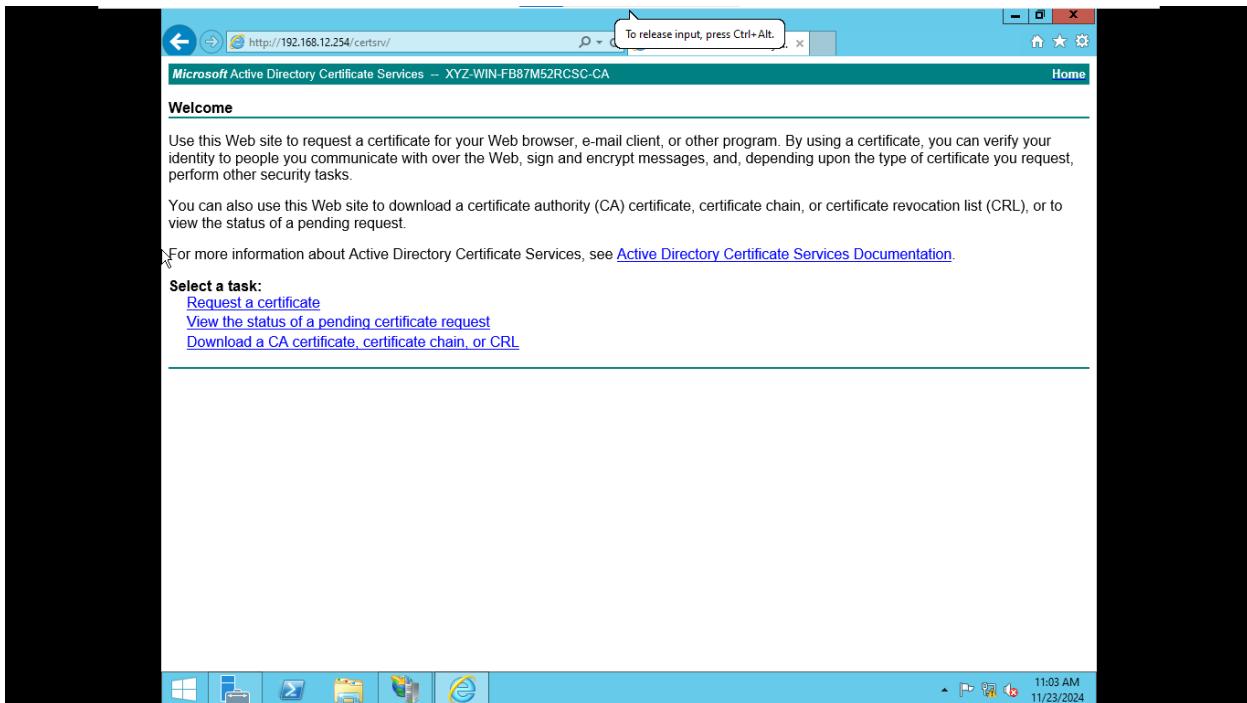
Nhấn Pending Request -> Right click vào yêu cầu -> All Tasks -> Issue



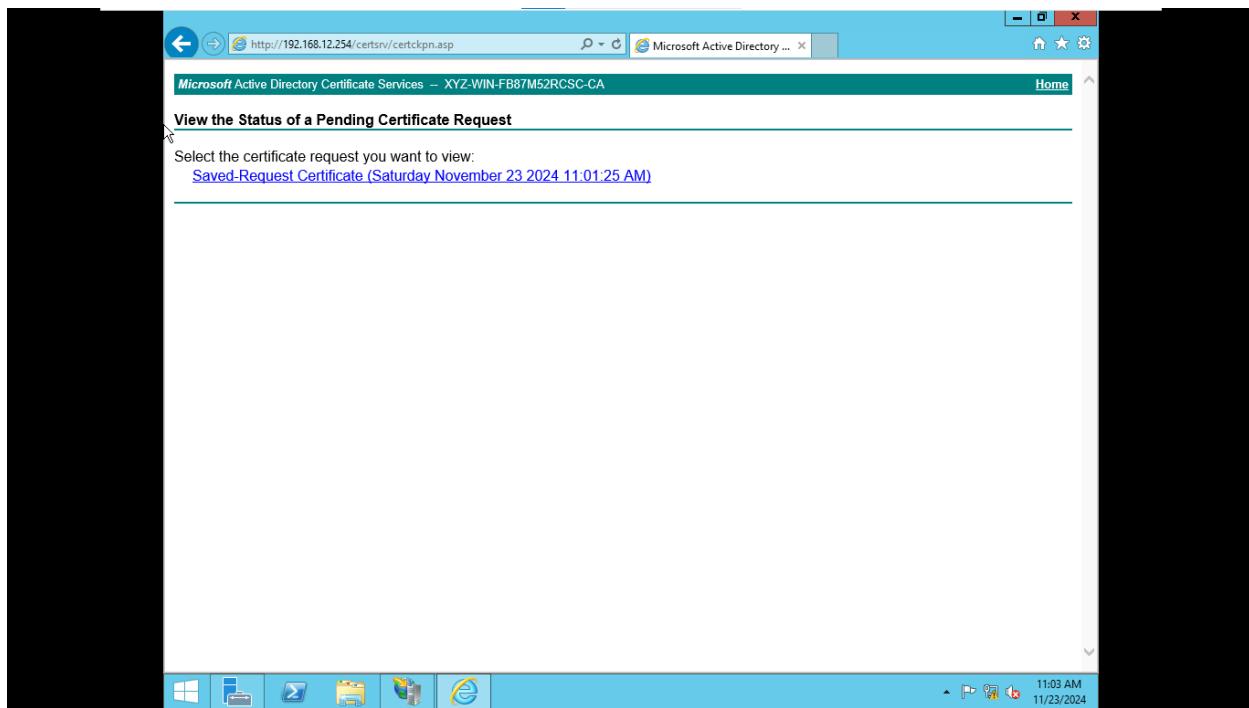
## Trở lại máy Web Server:

Truy cập vào CA Server : <http://192.168.12.254/certsrv>

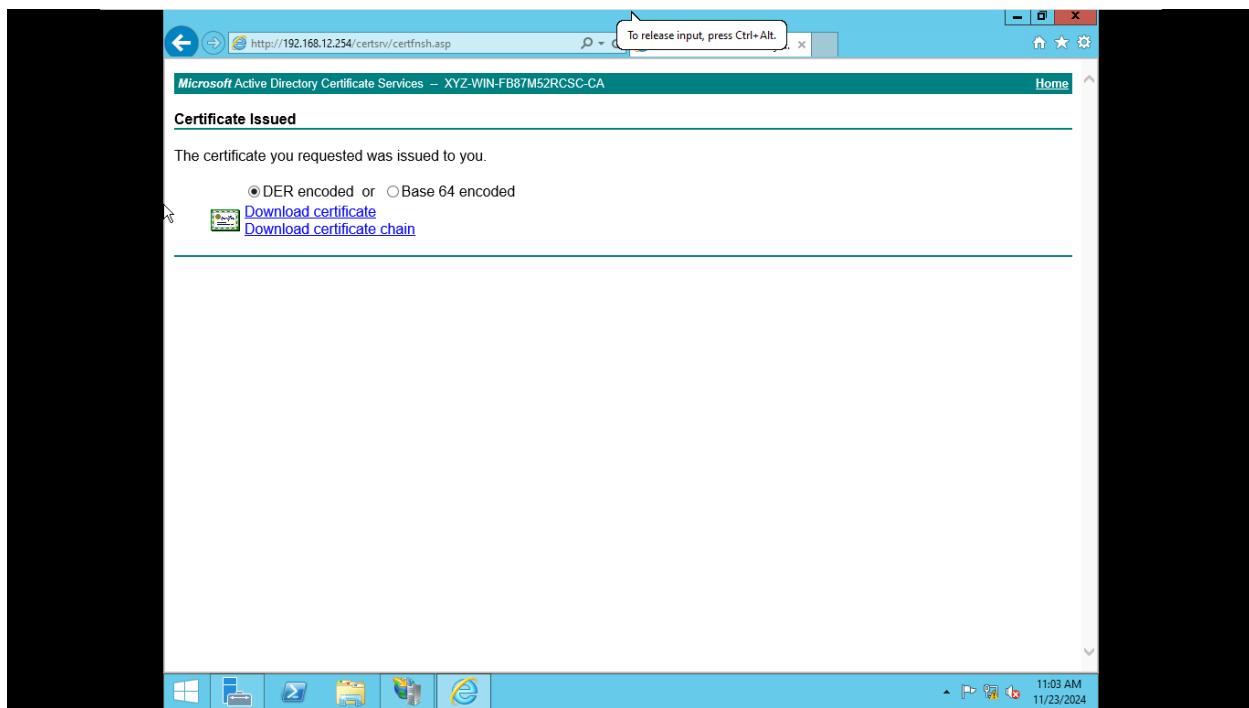
Nhấn View the status of a pending certificate request



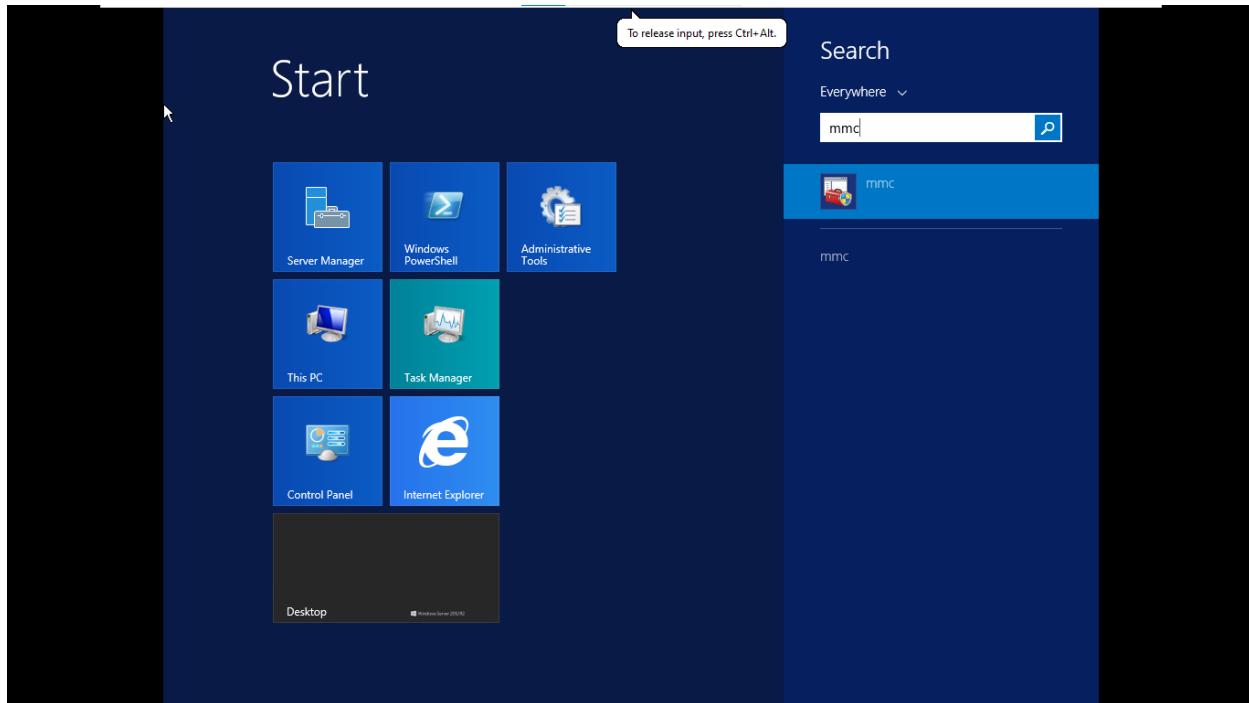
## Nhấn Saved-Request Certificate ...



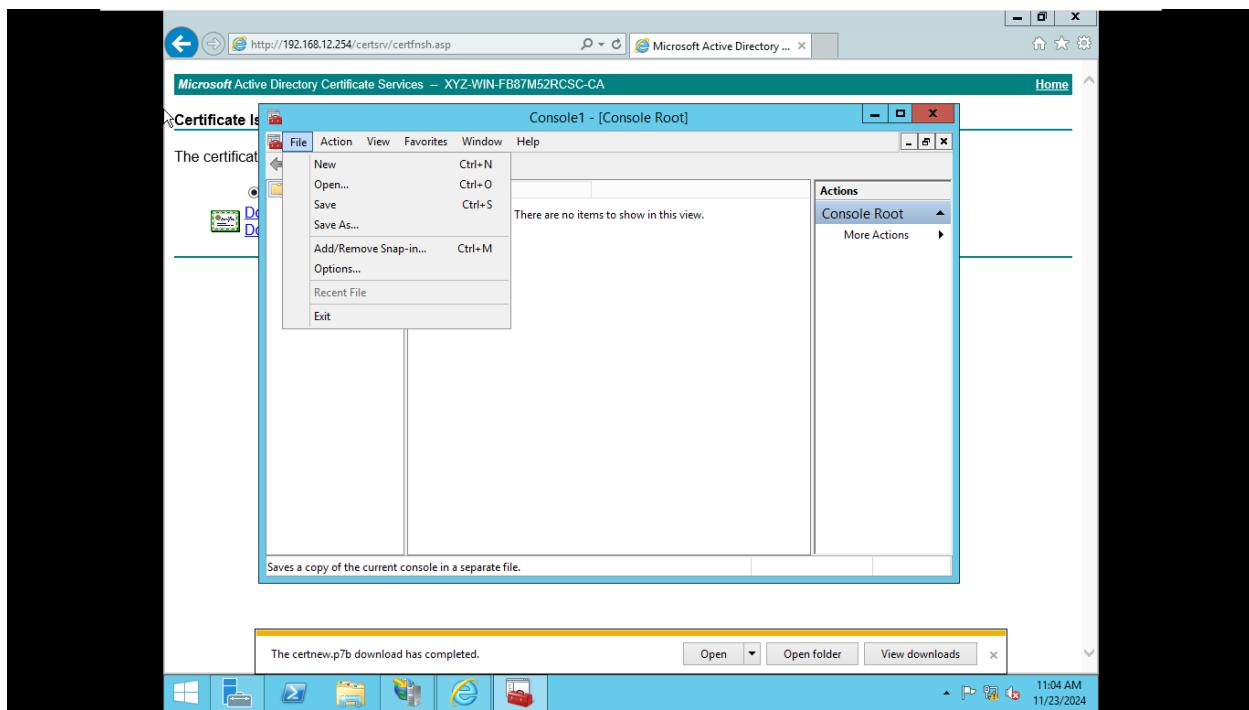
Download 2 file chứng chỉ bên dưới về máy



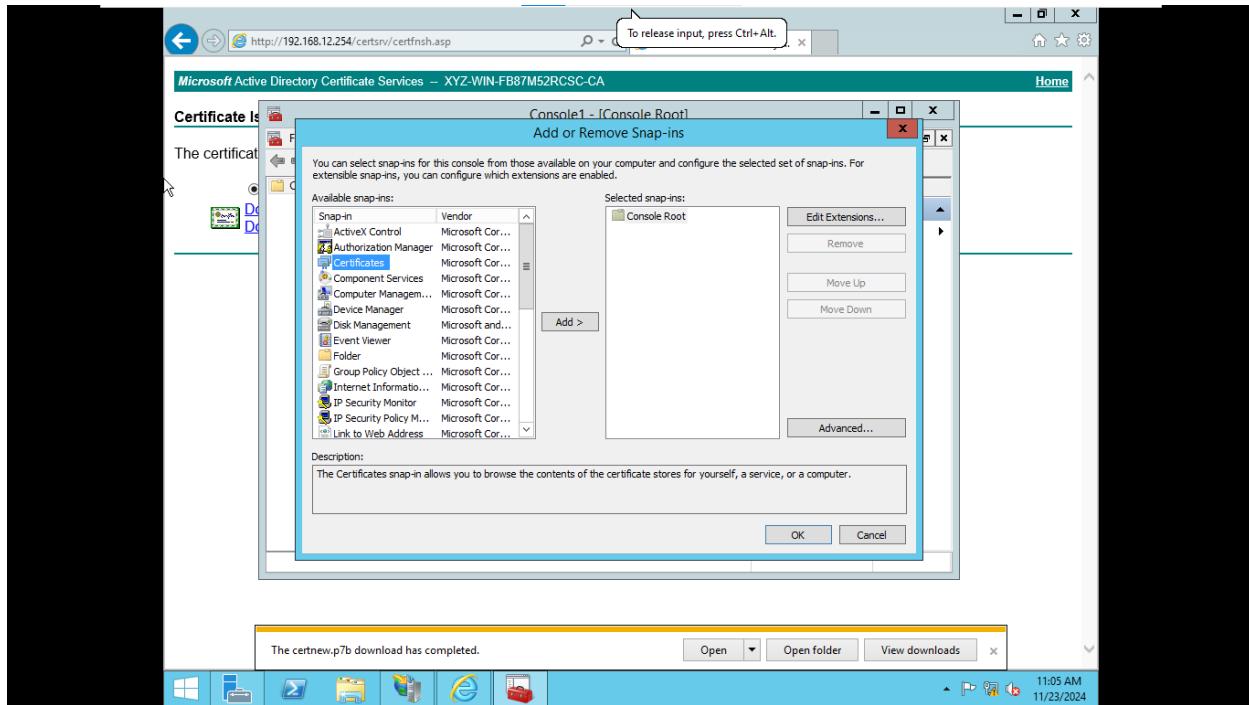
B5: Vào Run -> mmc



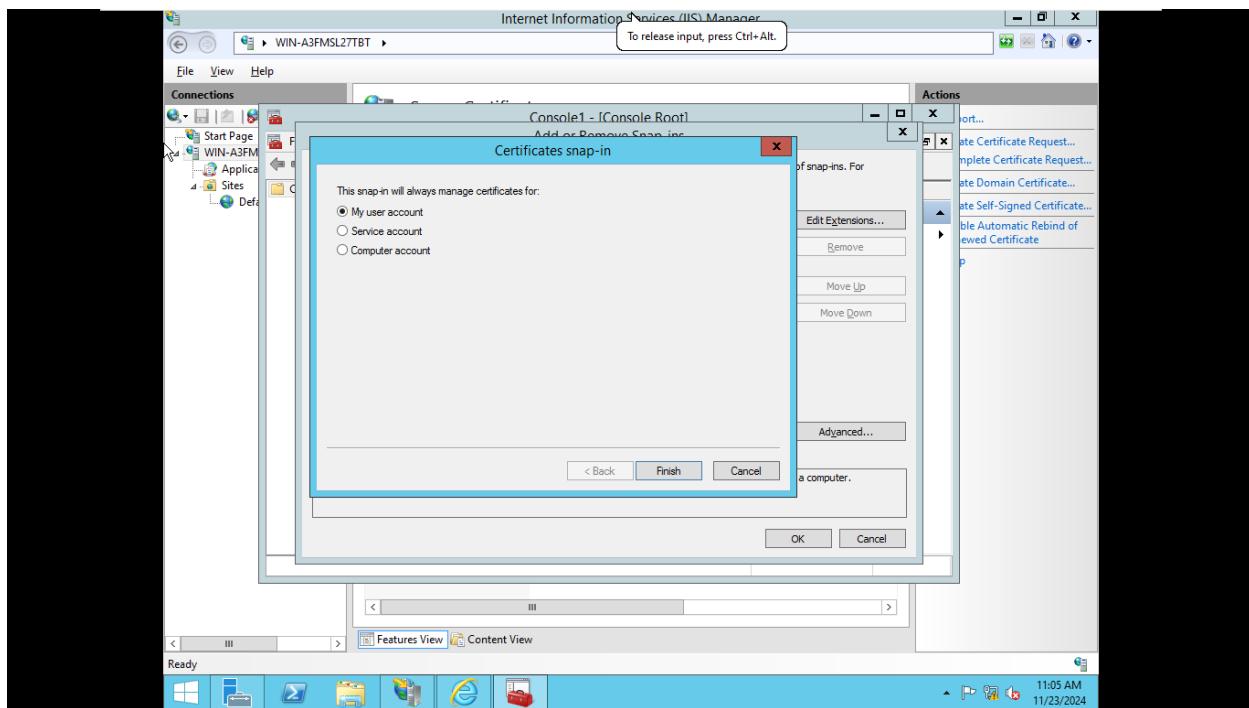
File -> Add/Remove Snap-in...



Chon Certificate -> Add

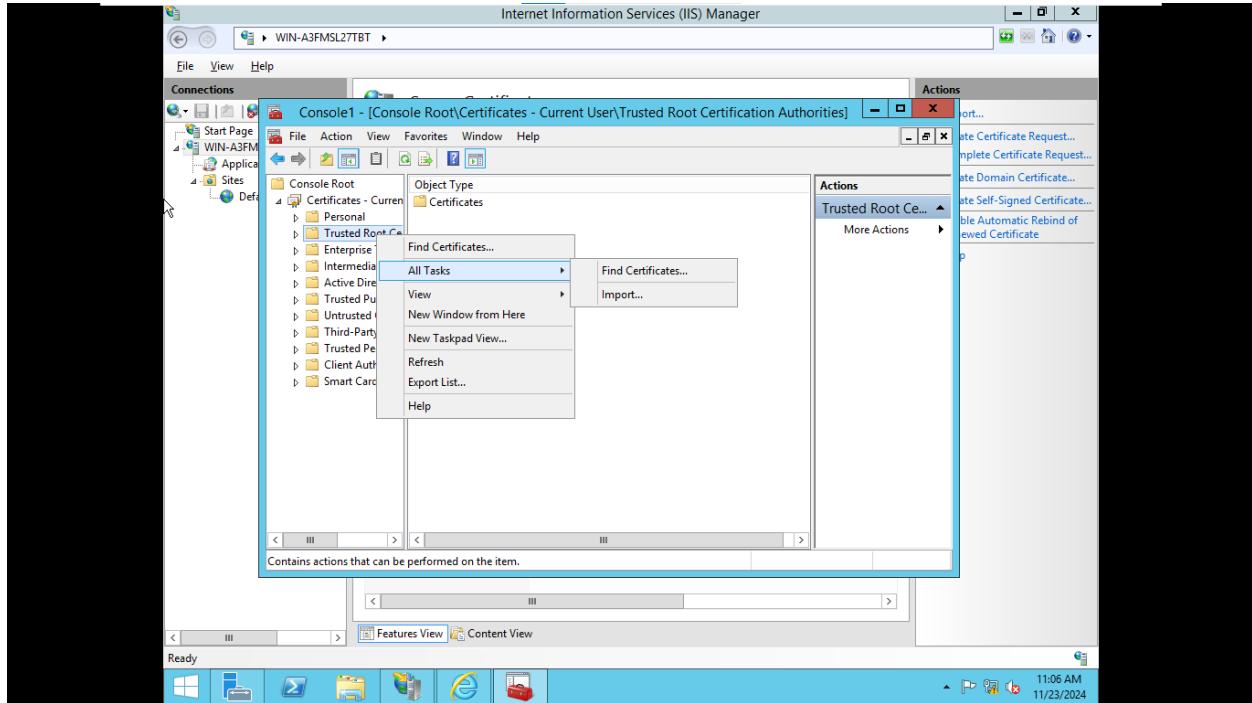


Chon My user account -> Finish.

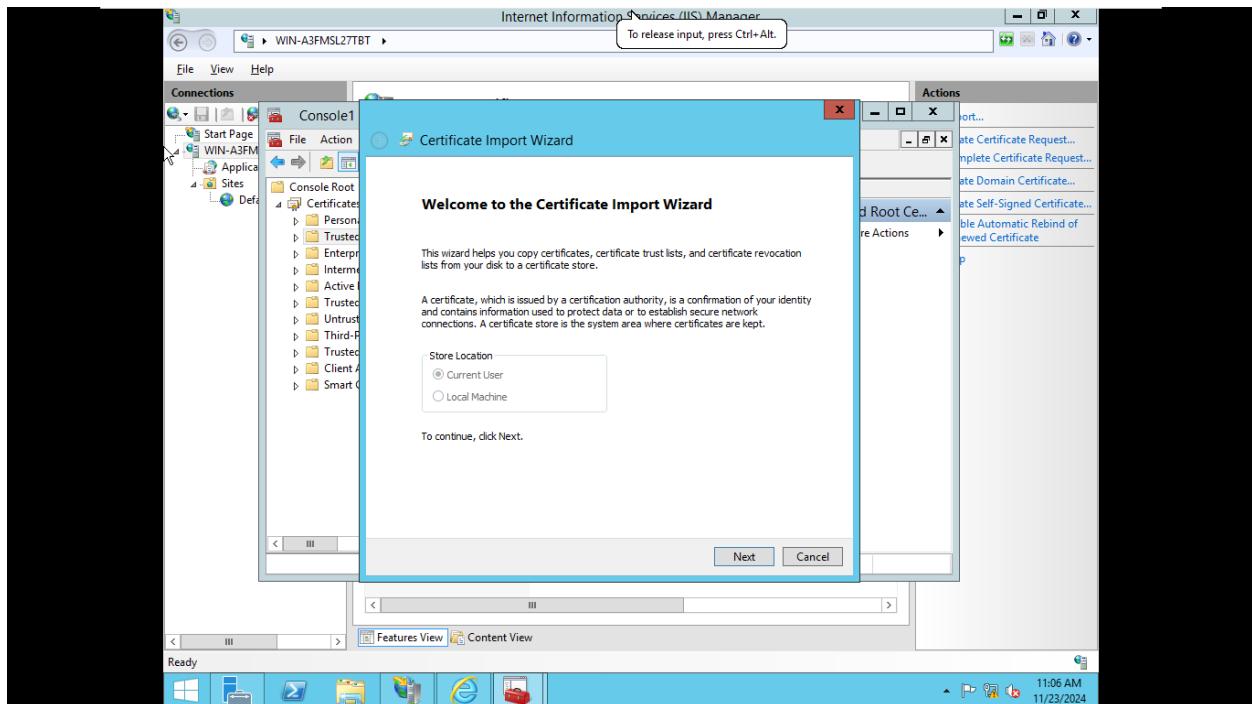


## Chọn Trust Root Certificate Authority

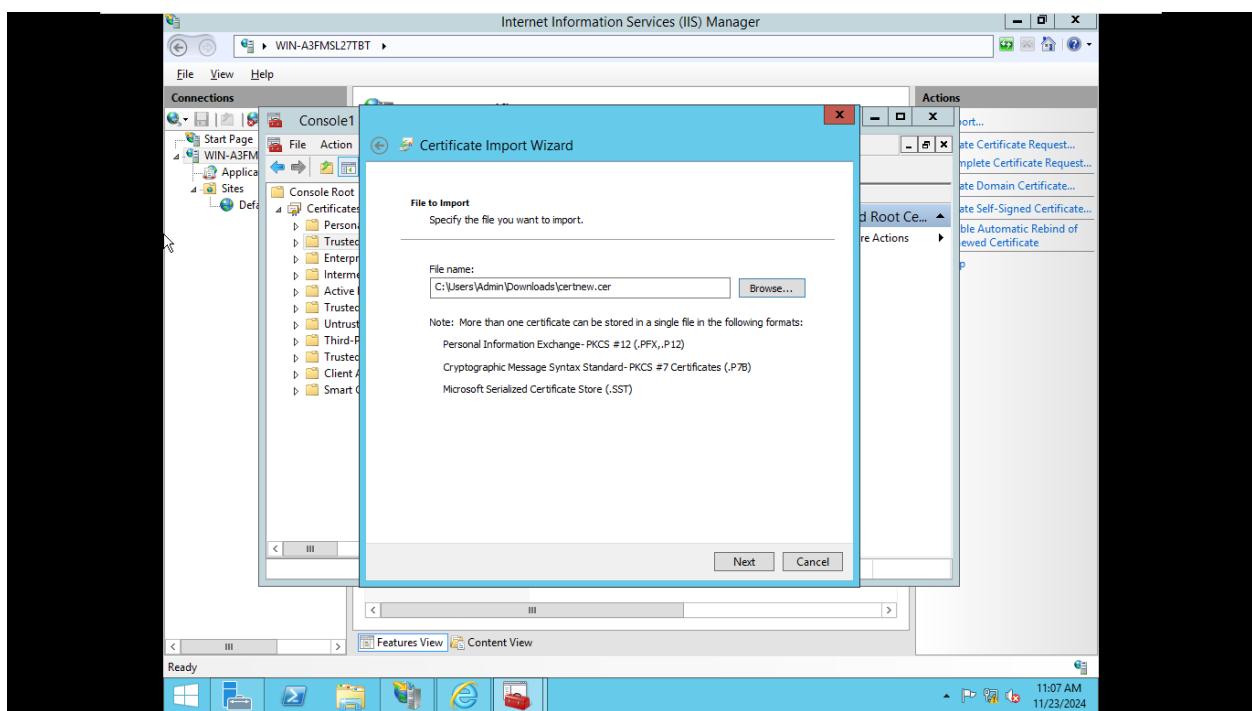
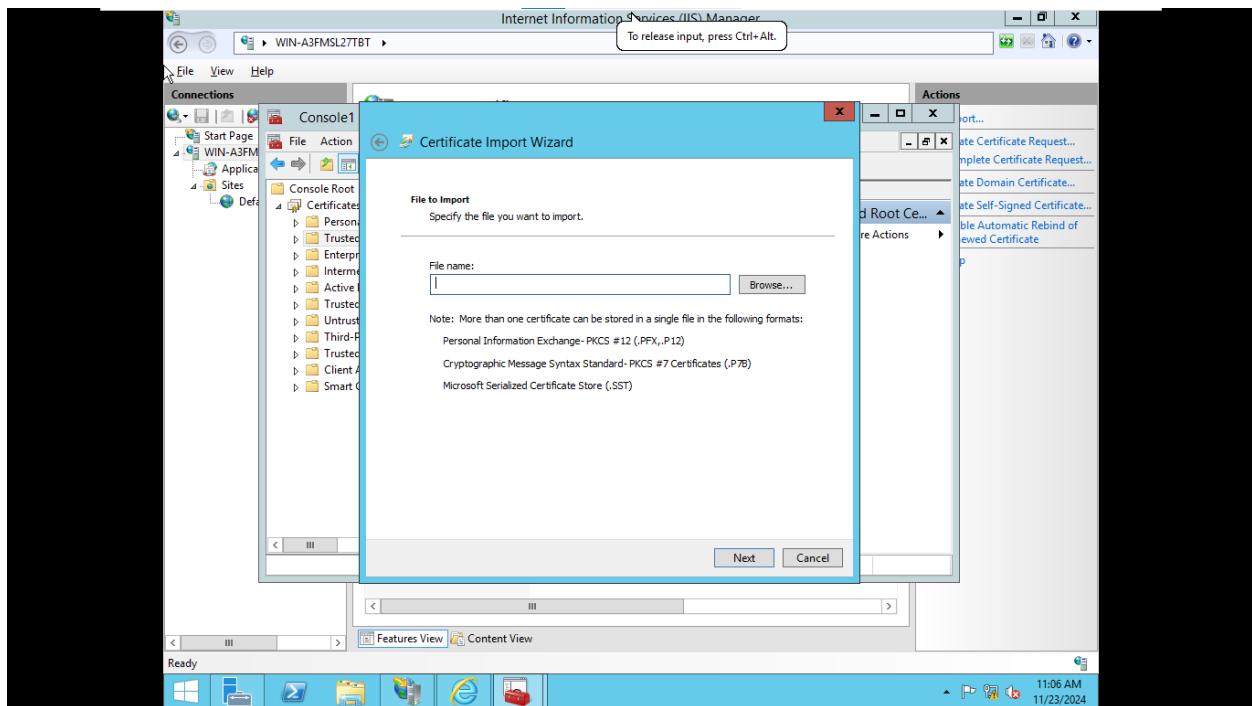
Right click -> All Tasks -> Import

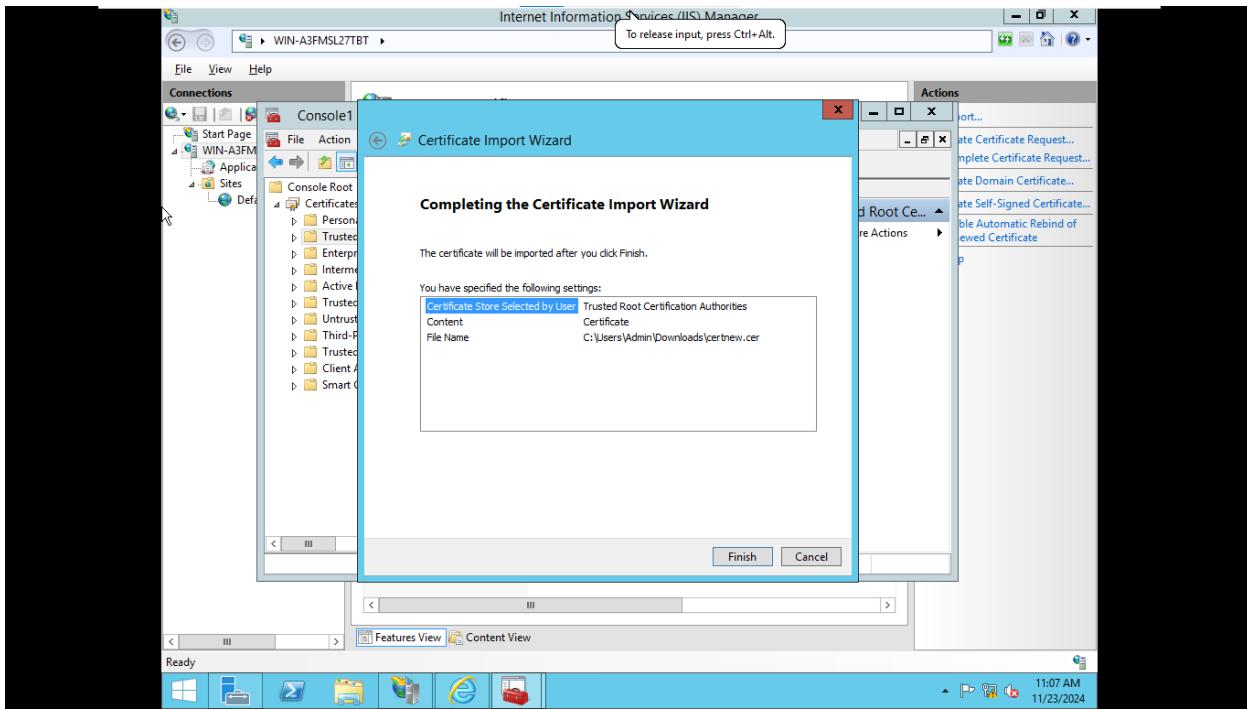


Nhấn Next

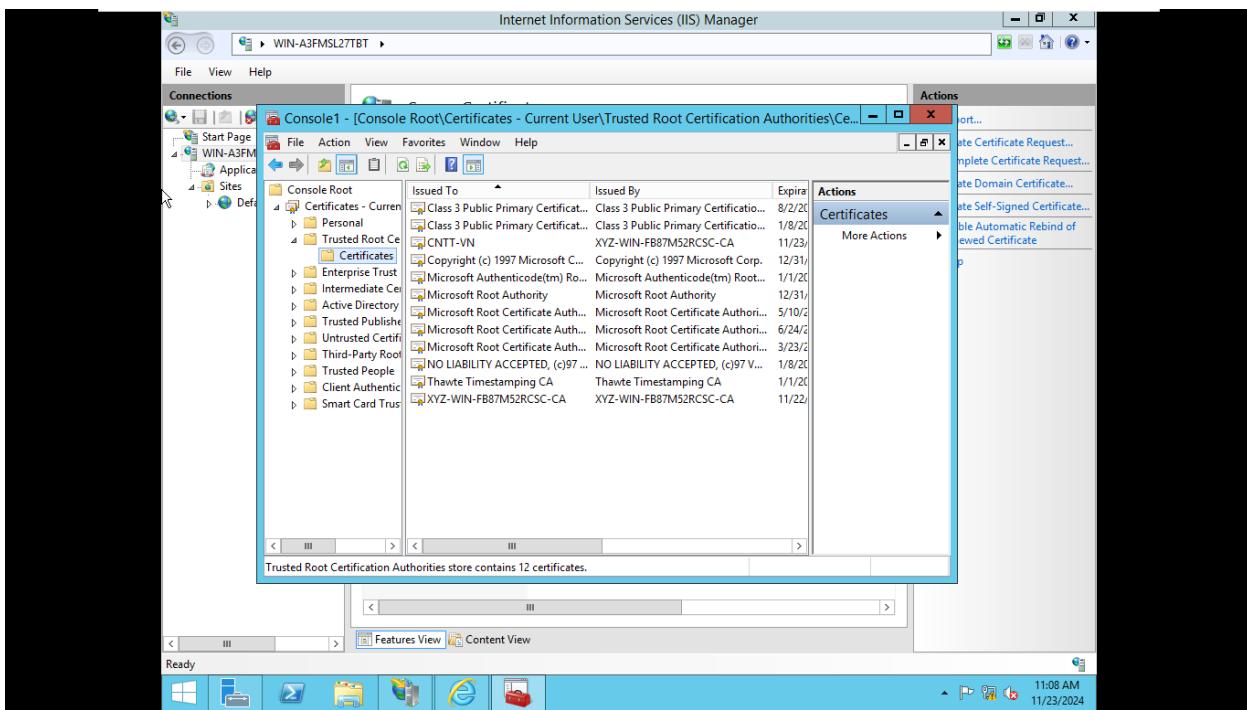


Nhấn vào Browse... -> Import 2 file đã download



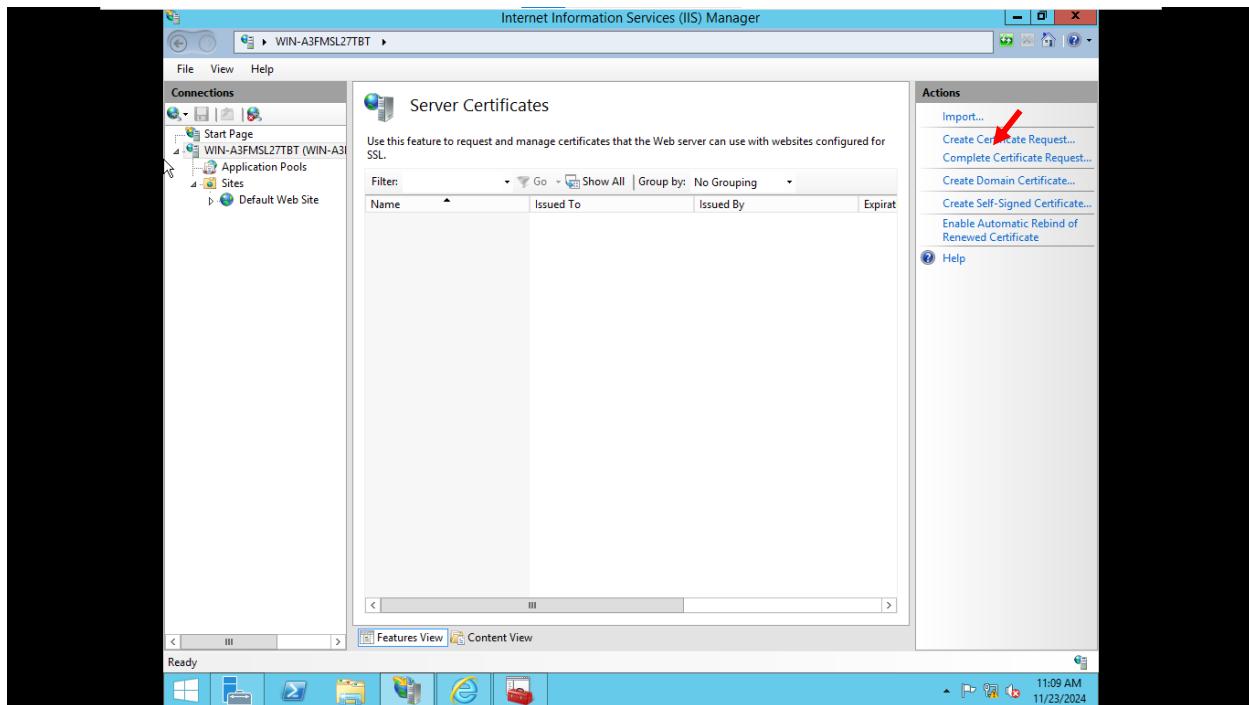


Kết quả:

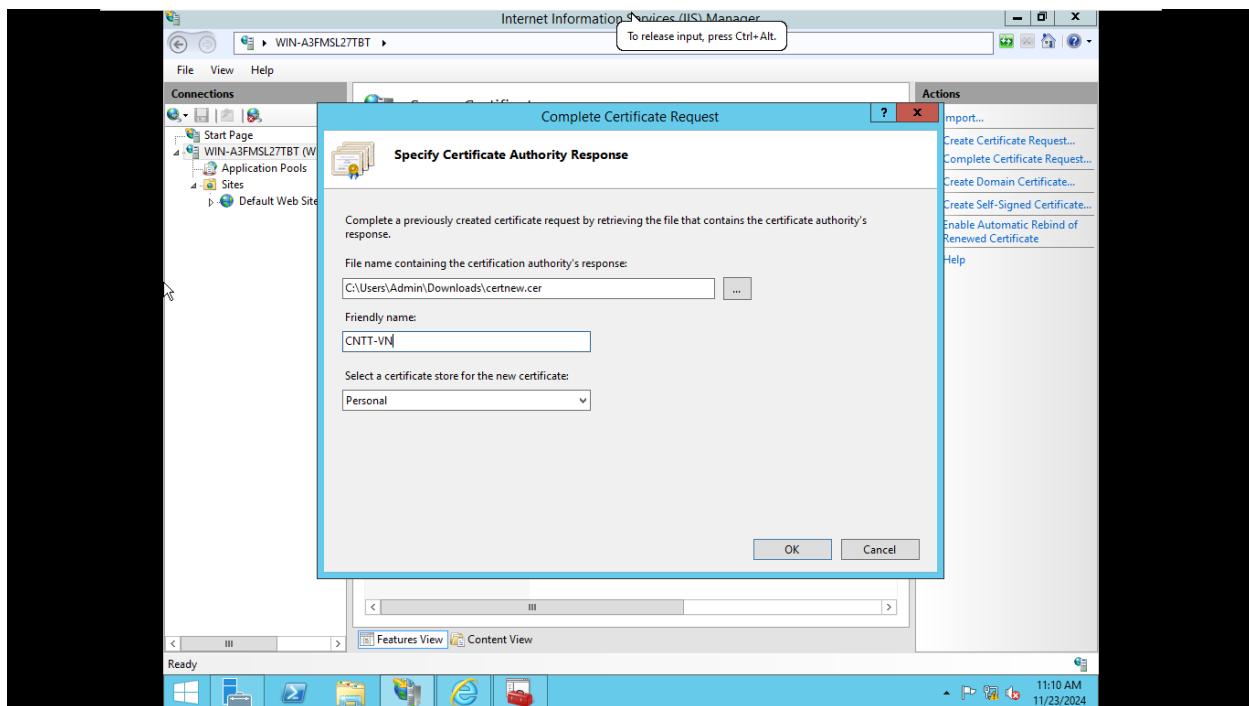


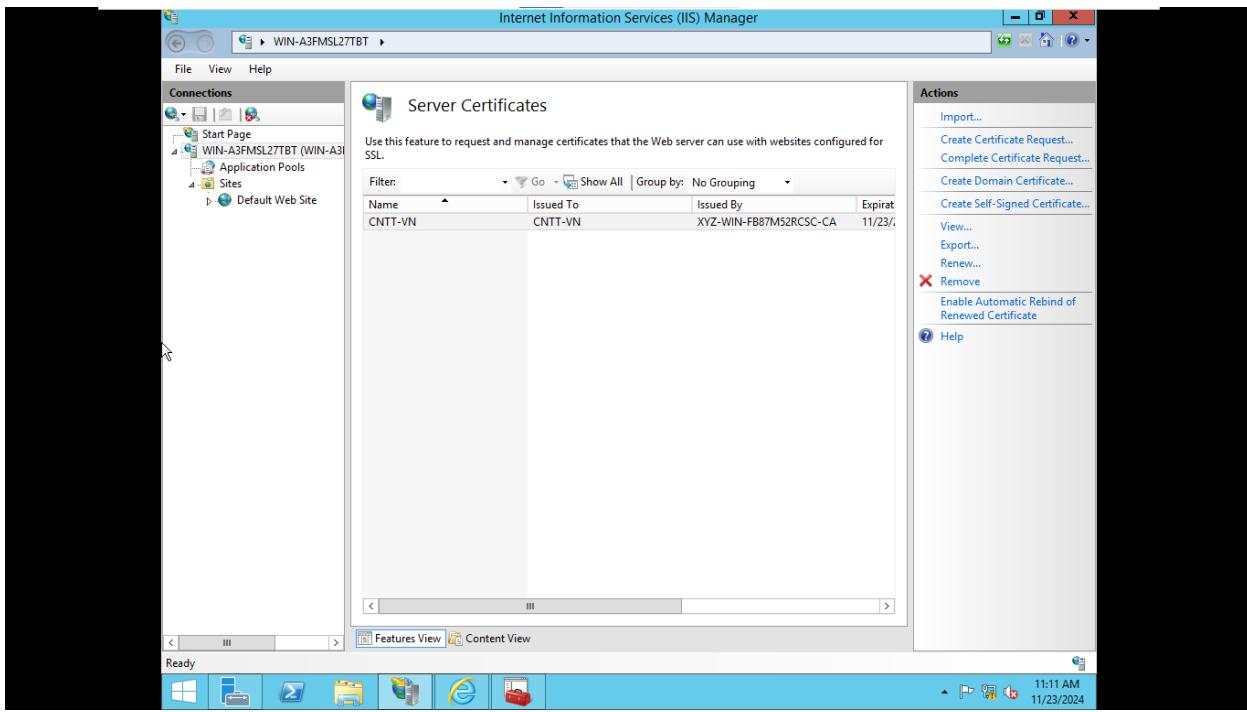
## B6: Tiếp theo, mở lại cửa sổ IIS

Nhấn Complete Certificate Request



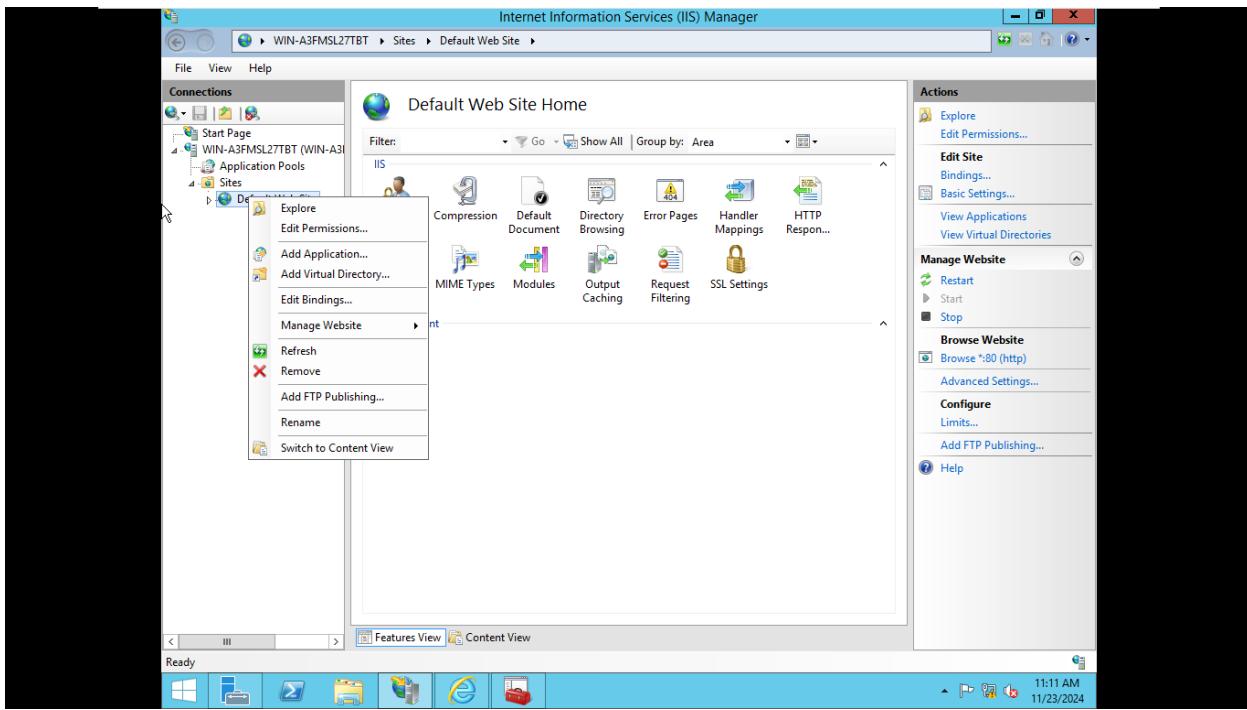
Nhấn ... và chọn file .cer -> Điền Friendly-name -> OK



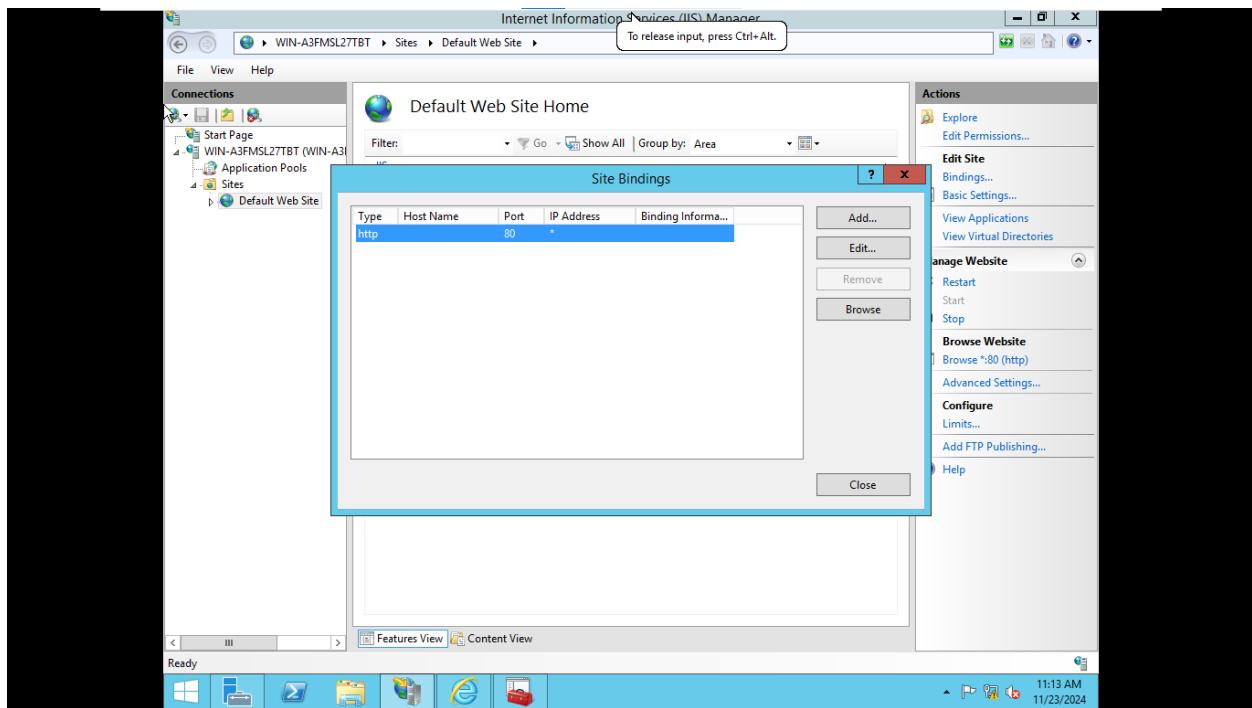


## B7: Cấu hình Web server sử dụng SSL

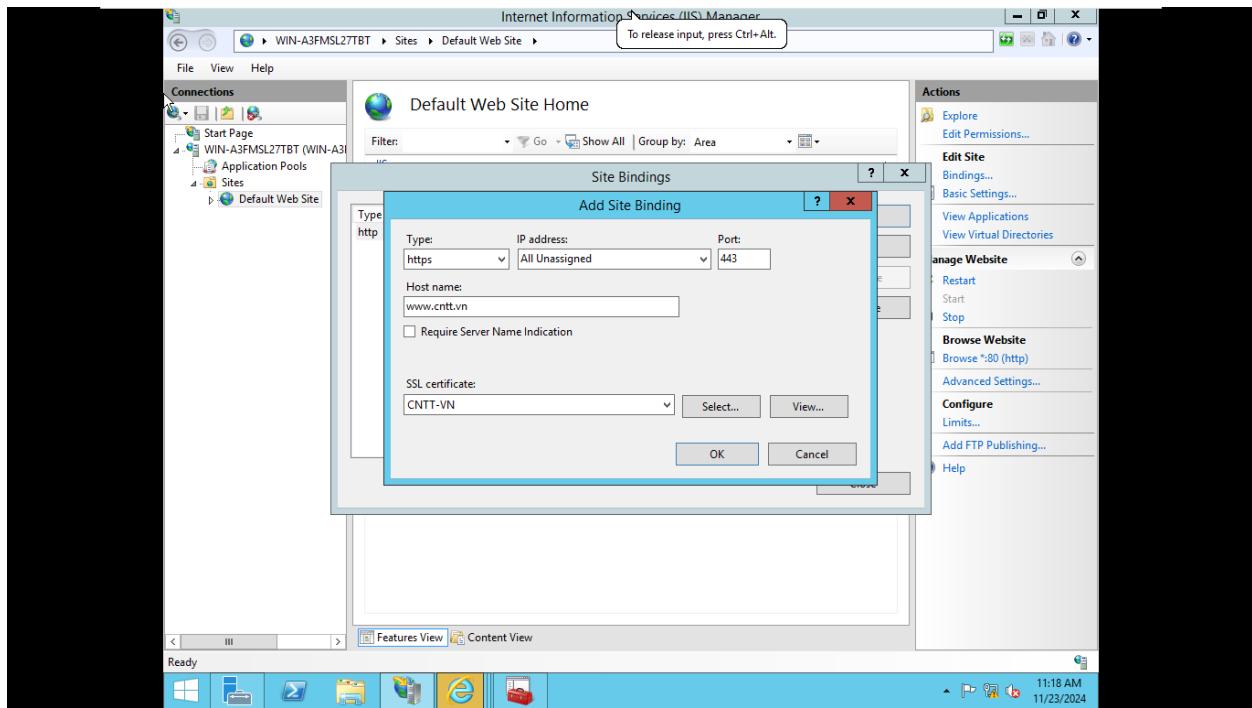
Mở rộng Sites -> Right click vào Default Web Site -> Chọn Edit Bindings...



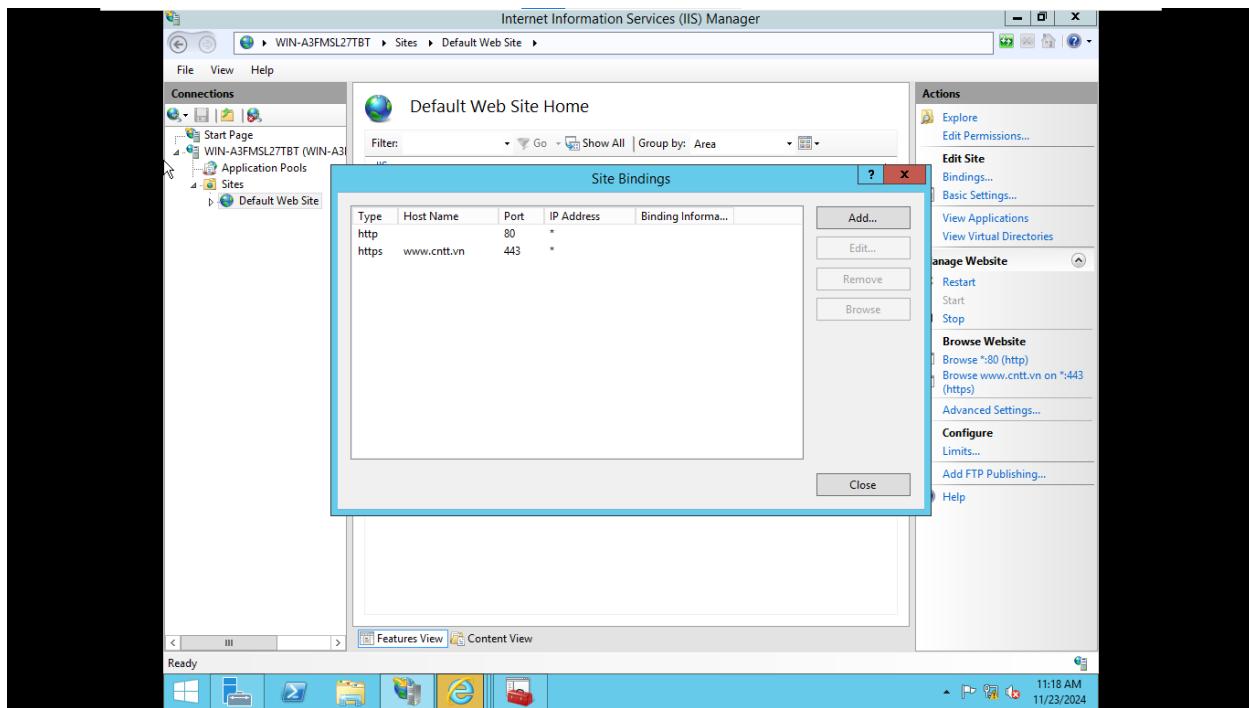
## Nhấn Add



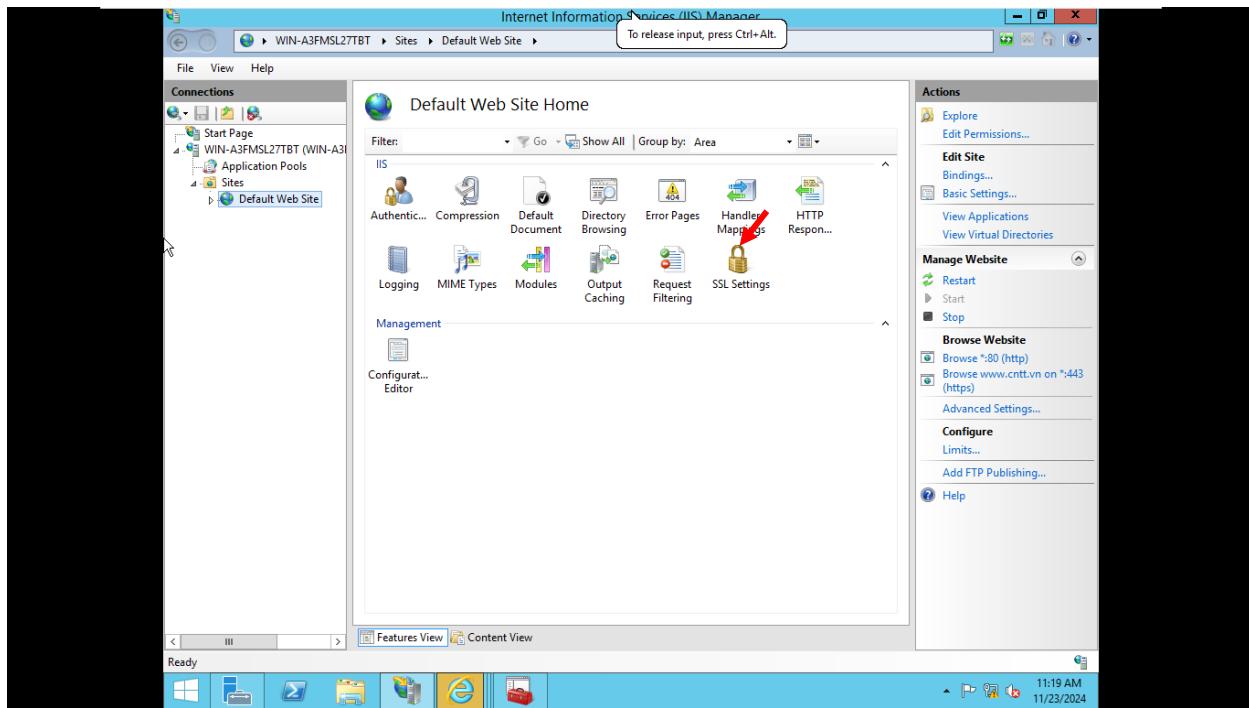
Type: chọn https, Port: nhập 443, Host Name: Nhập [www.cntt.vn](https://www.cntt.vn), SSL certificate chọn CNTT-VN -> OK



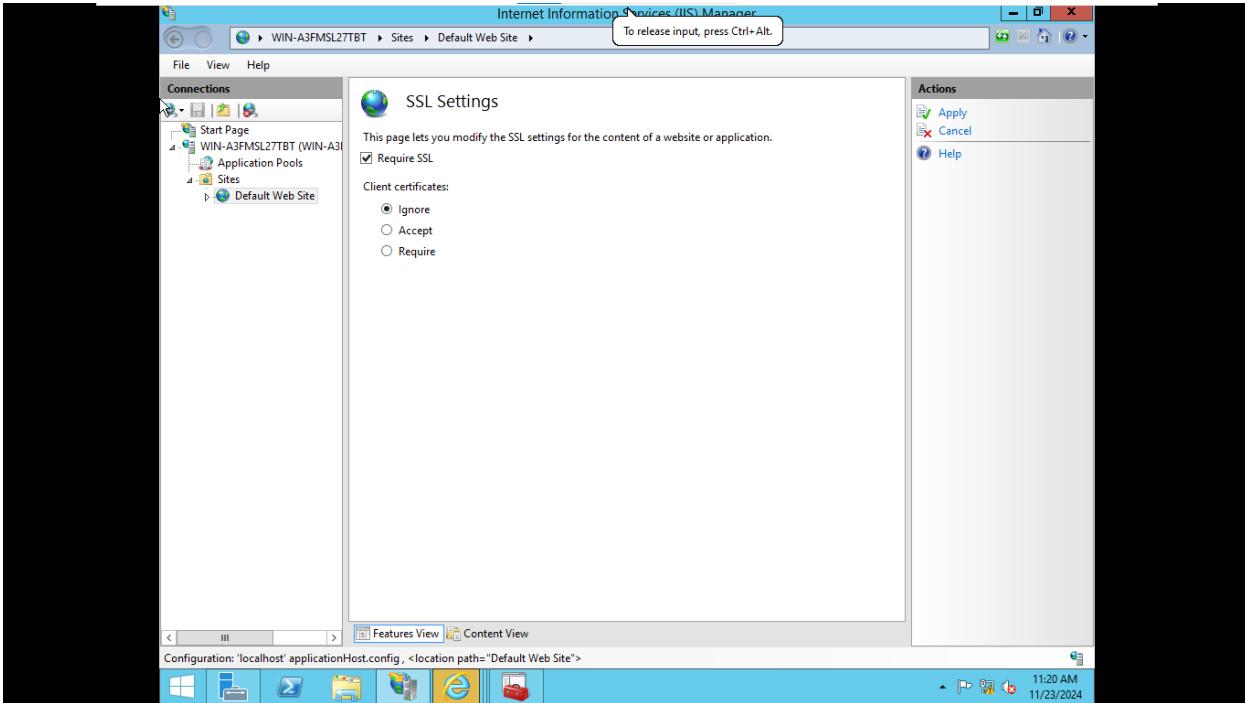
## Nhấn Close



## Chọn SSL Settings



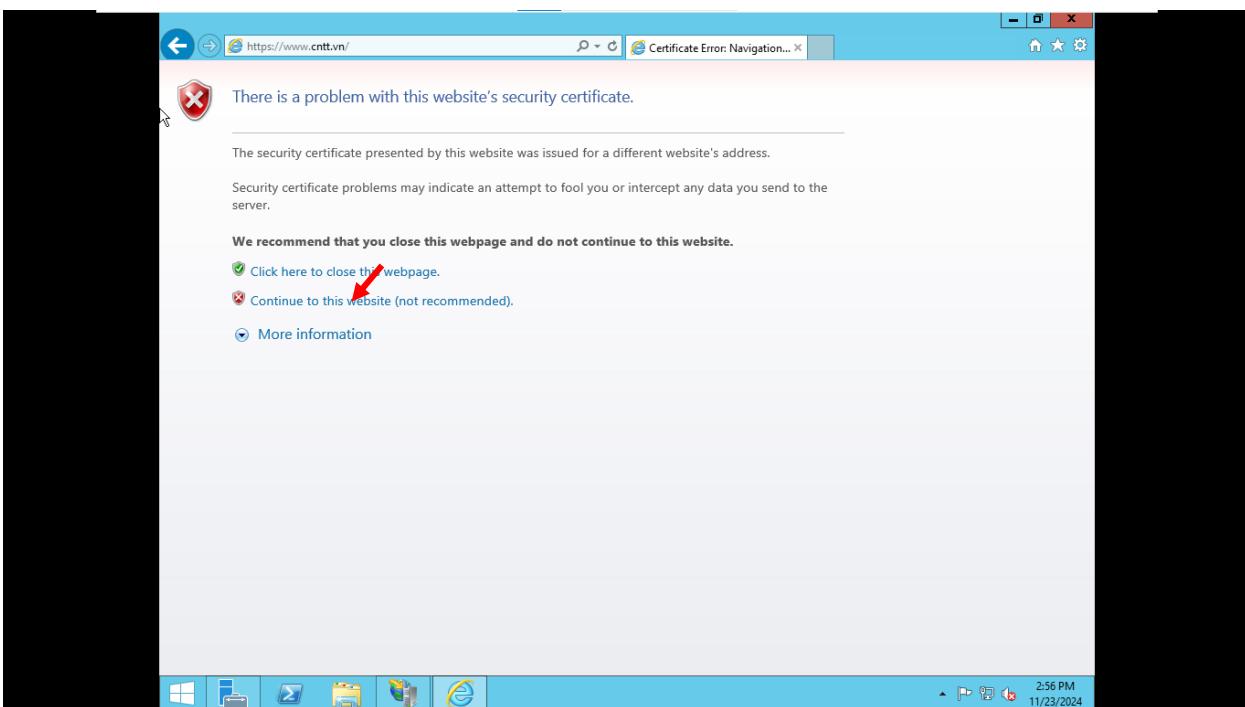
Tick Require SSL -> Apply



Kiểm tra kết quả sau khi cấu hình trên CA Server và Web Server:

Truy cập trang web: <https://www.cntt.vn>

Nhấn Continue to this website (not recommended)



Nhấn Certificate error để xem thông tin

