

Міністерство освіти і науки України  
Національний технічний університет України “Київський політехнічний  
інститут імені Ігоря Сікорського”

Звіт

з лабораторної роботи №2 з дисципліни  
“Організація комп’ютерних мереж”

“ВСТАНОВЛЕННЯ ТА КОНФІГУРУВАННЯ СЕРВЕРА DNS”

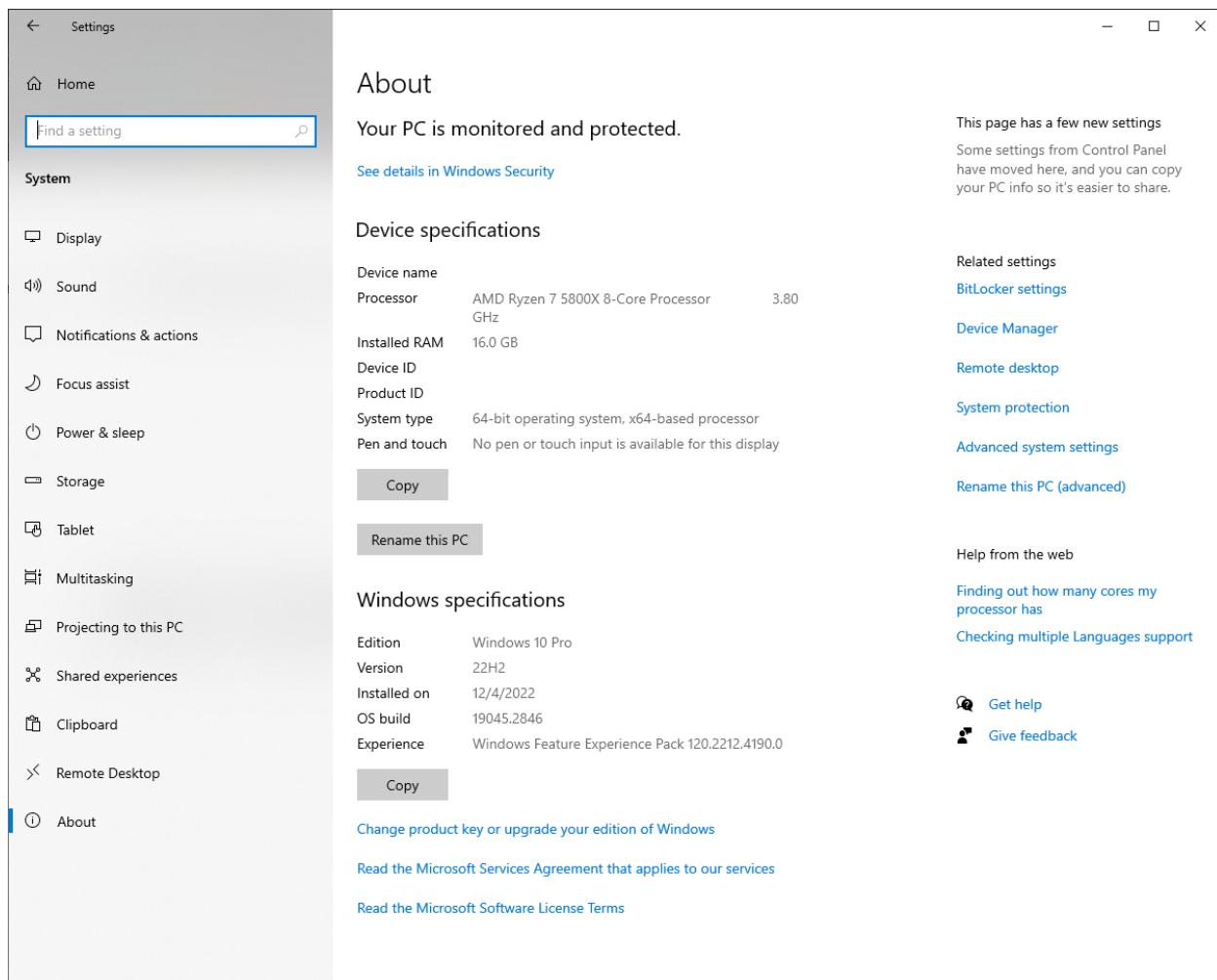
Виконав студент Флорчук Назарій Петрович

Перевірив викладач Катін Павло Юрійович

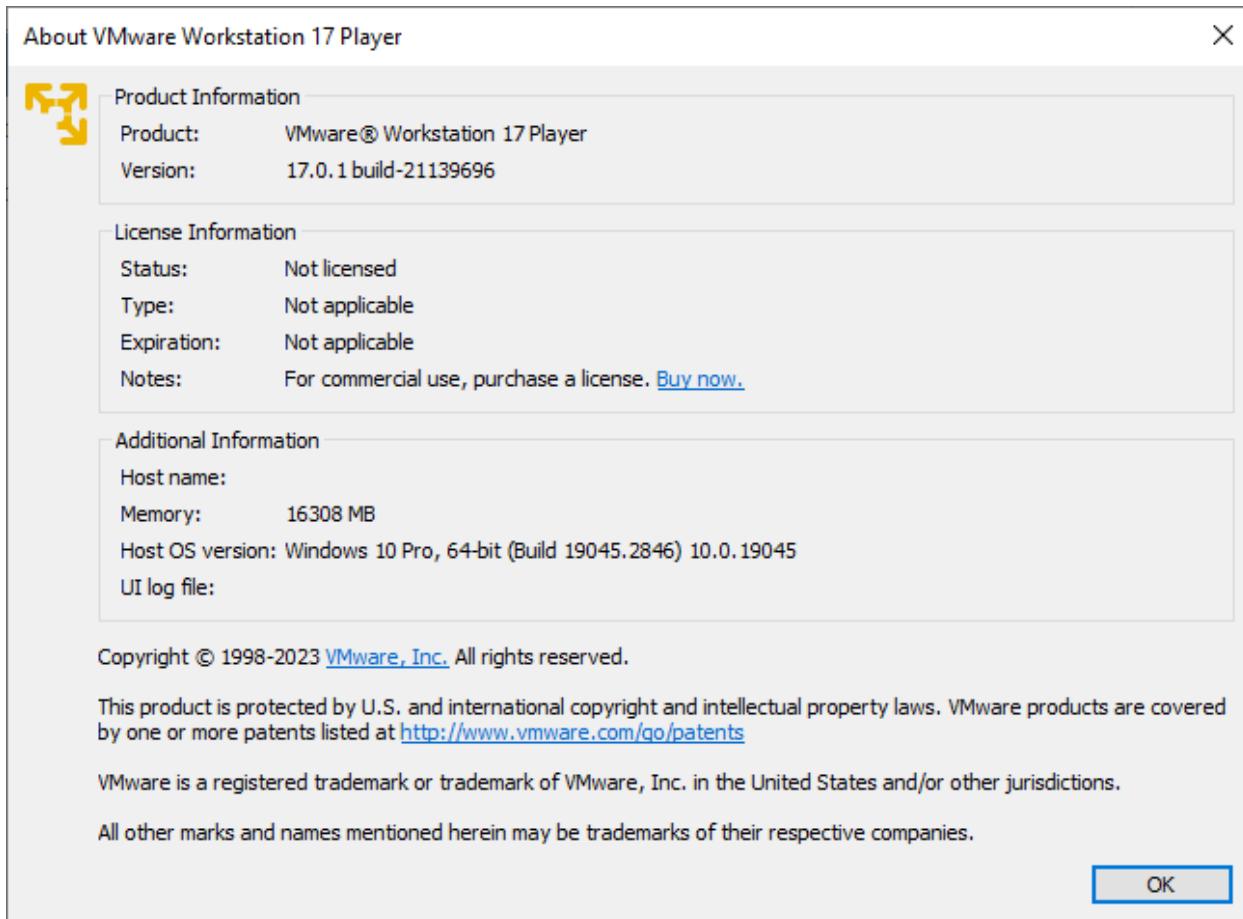
Мета роботи:

1. Встановити роль DNS сервера.
2. Налаштювати та конфігурувати зони прямого та зворотного перегляду DNS.
3. Конфігурувати запис SOA, NS. Створити записи вузлів та записи псевдонімів.
4. Налаштювати властивості прямого та умовного пересилання DNS запитів.
5. Налаштювати DNS суфікс на DNS клієнта.
6. Встановити роль сервера DNS на віртуальній машині Windows Server 2019 (Server) у режимі ядра.
7. Налаштювати передачу зон DNS між серверами.

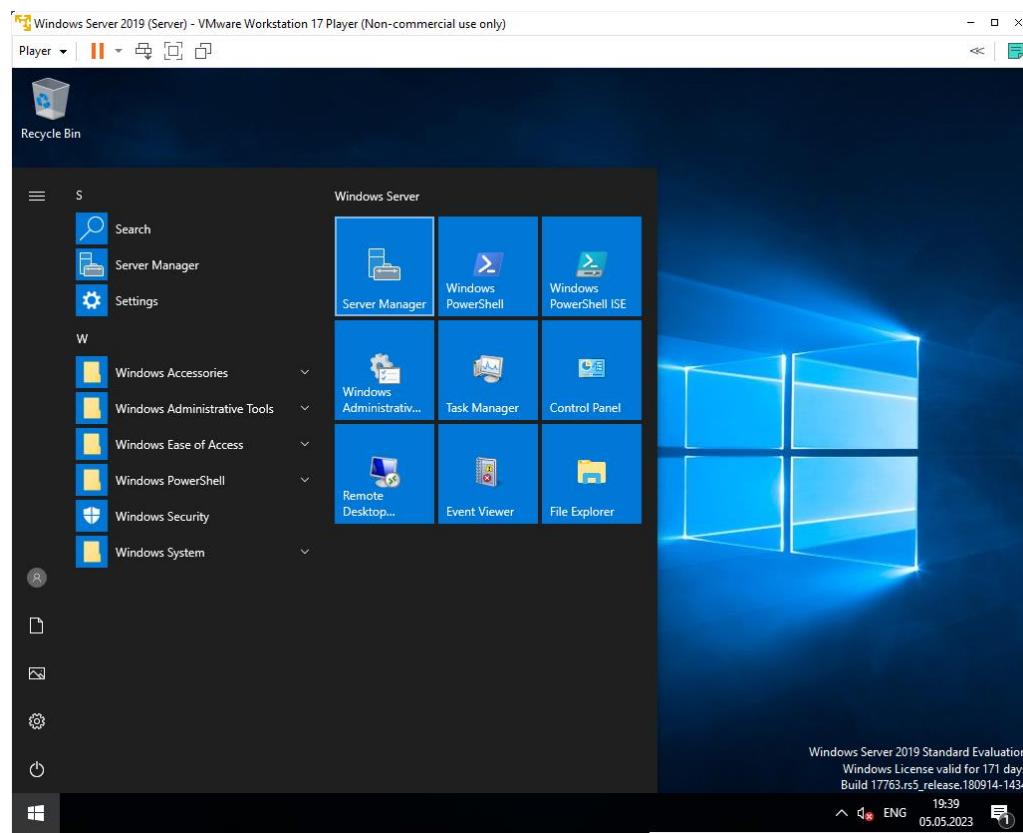
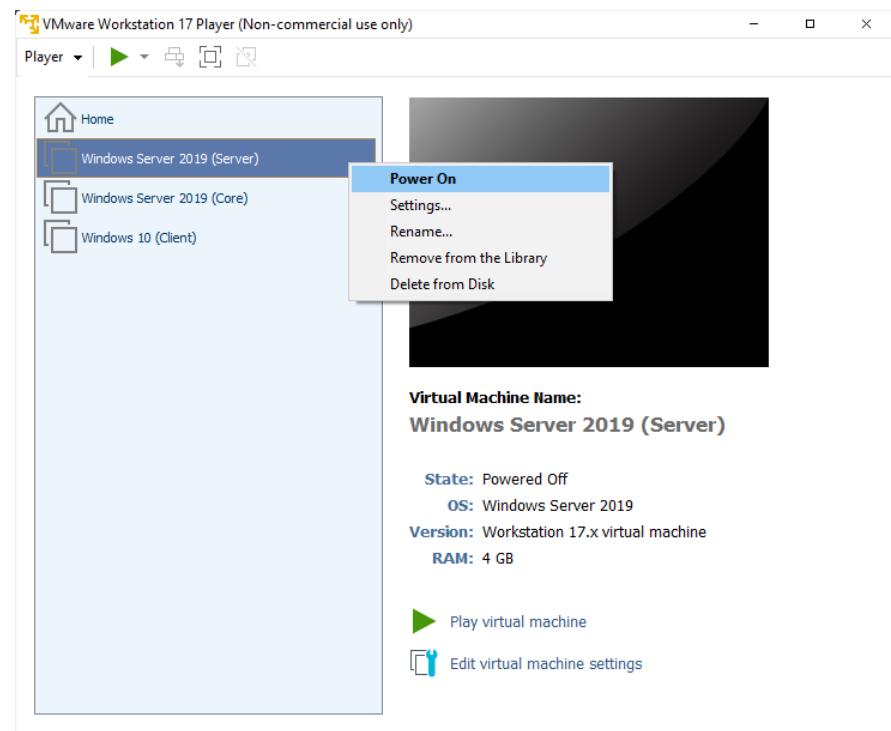
Виконання лабораторної роботи здійснюється на машині:

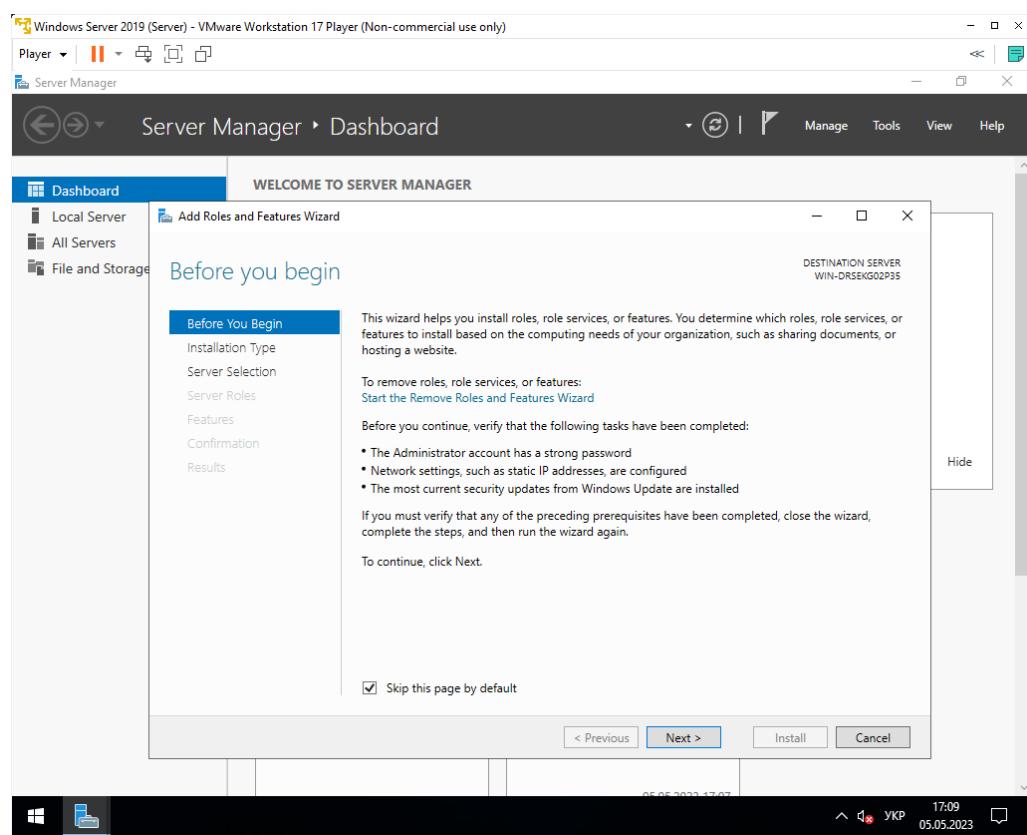
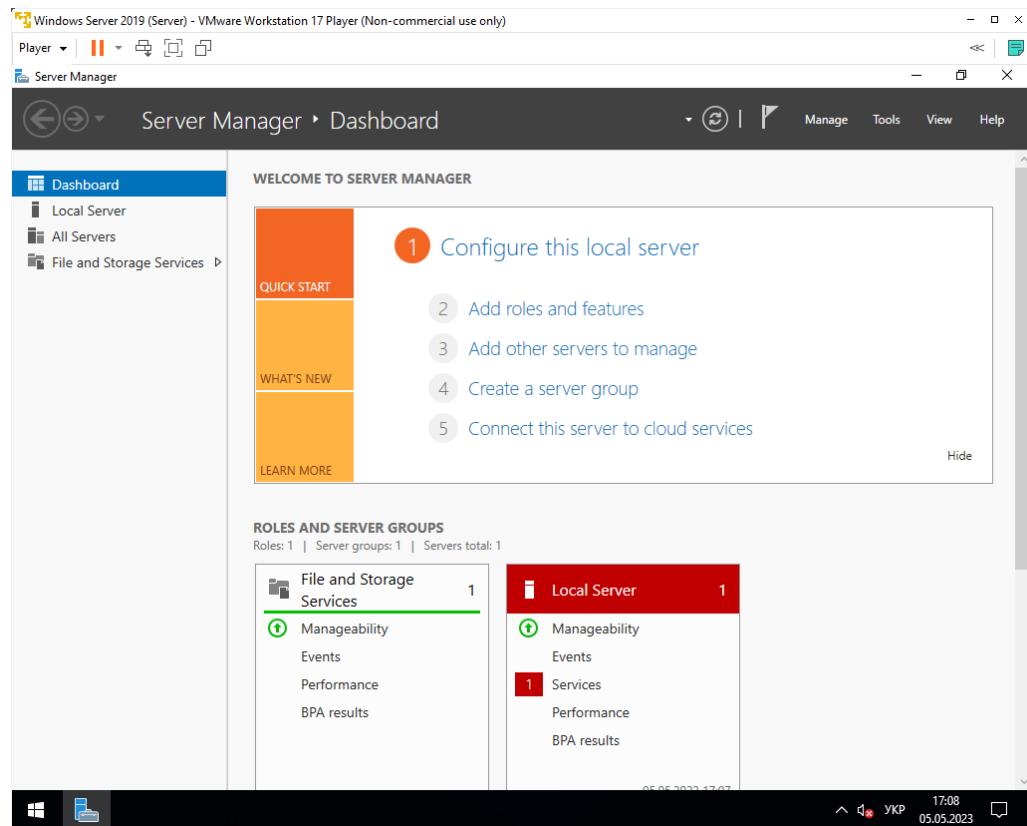


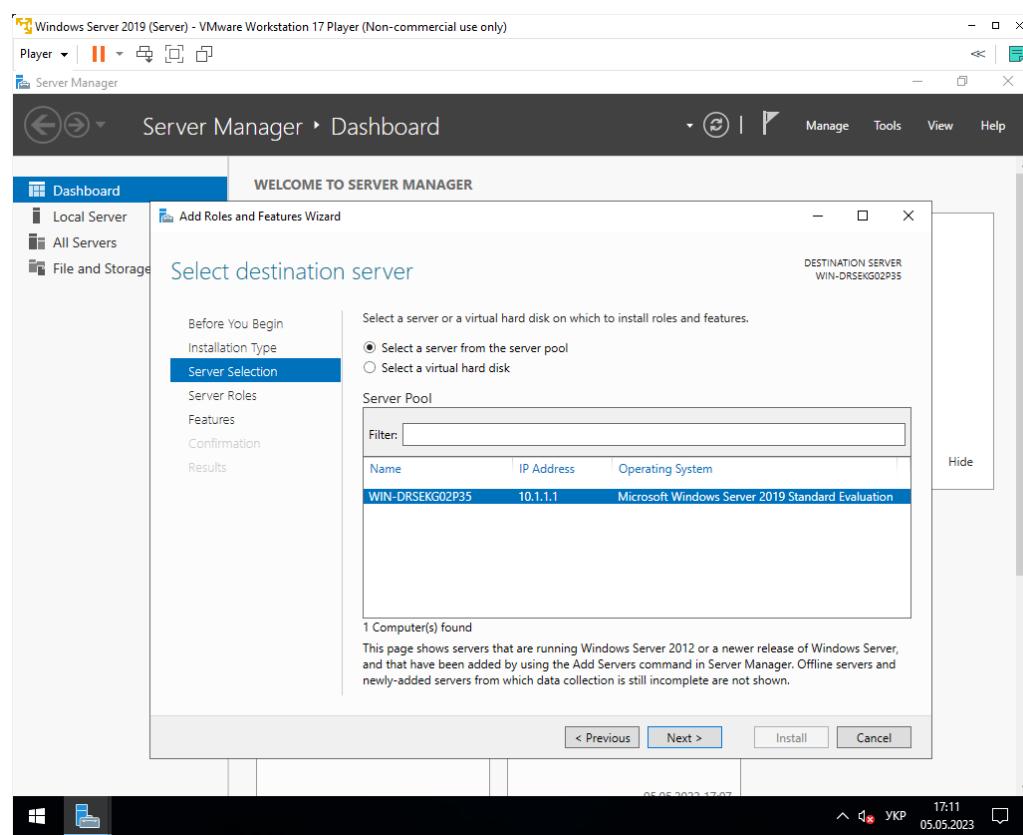
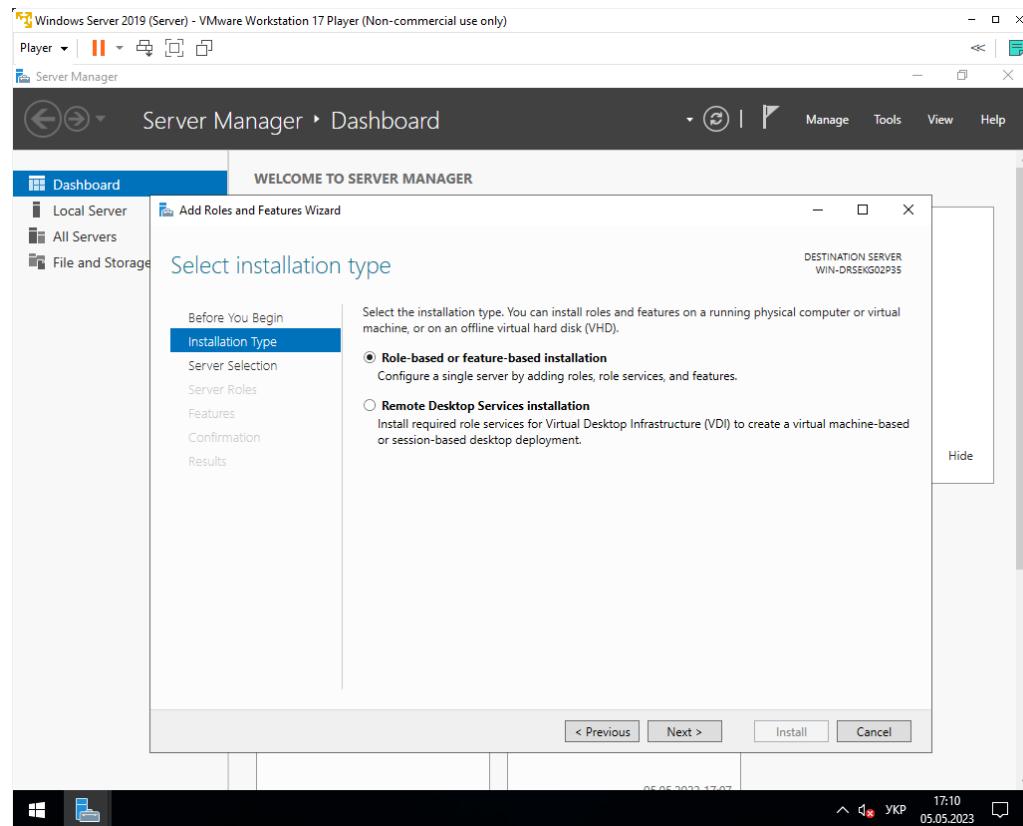
Версія VMware Workstation Player:

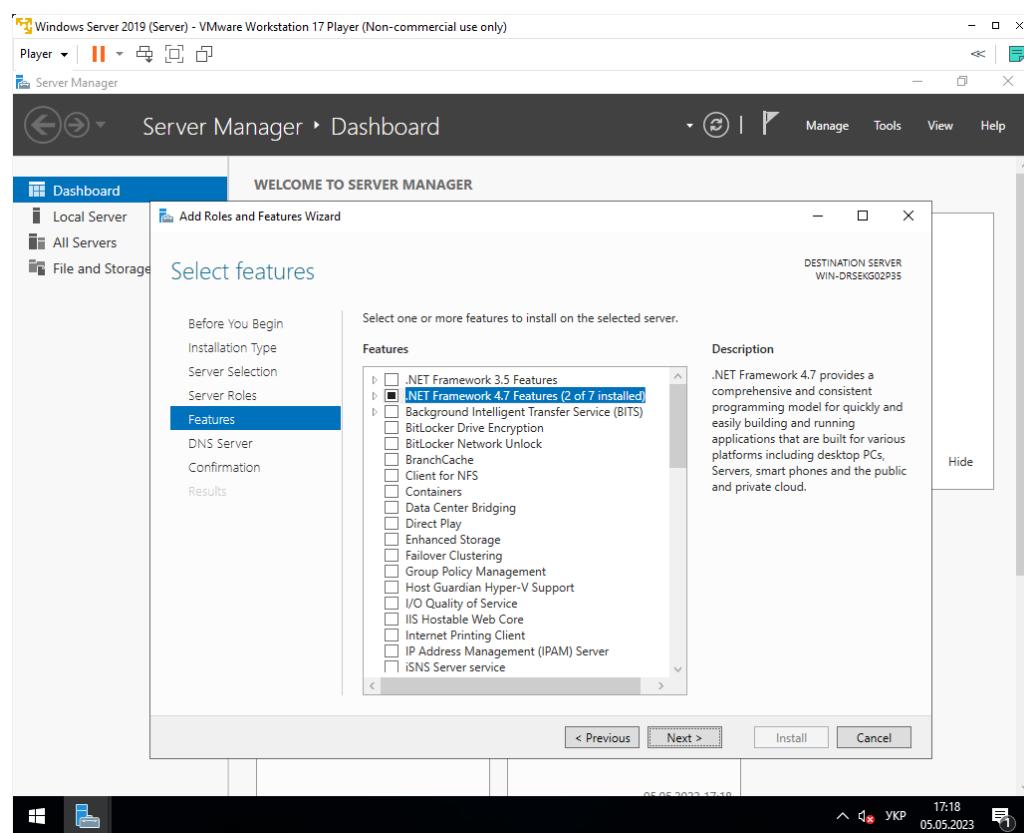
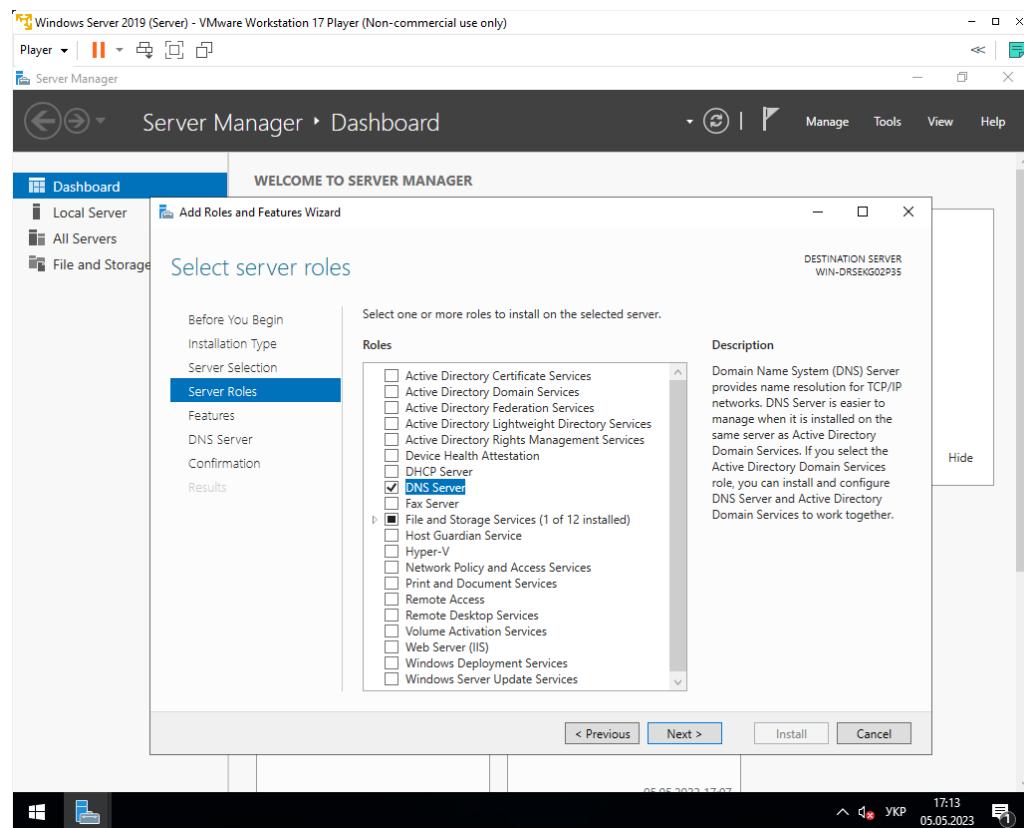


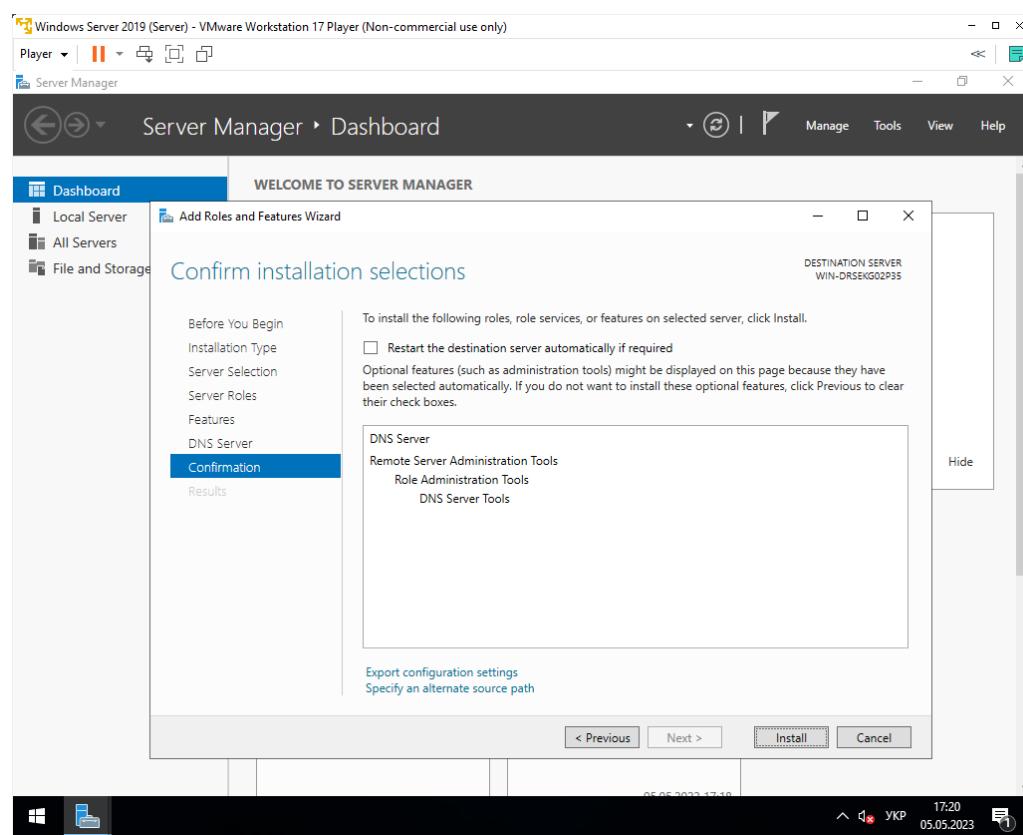
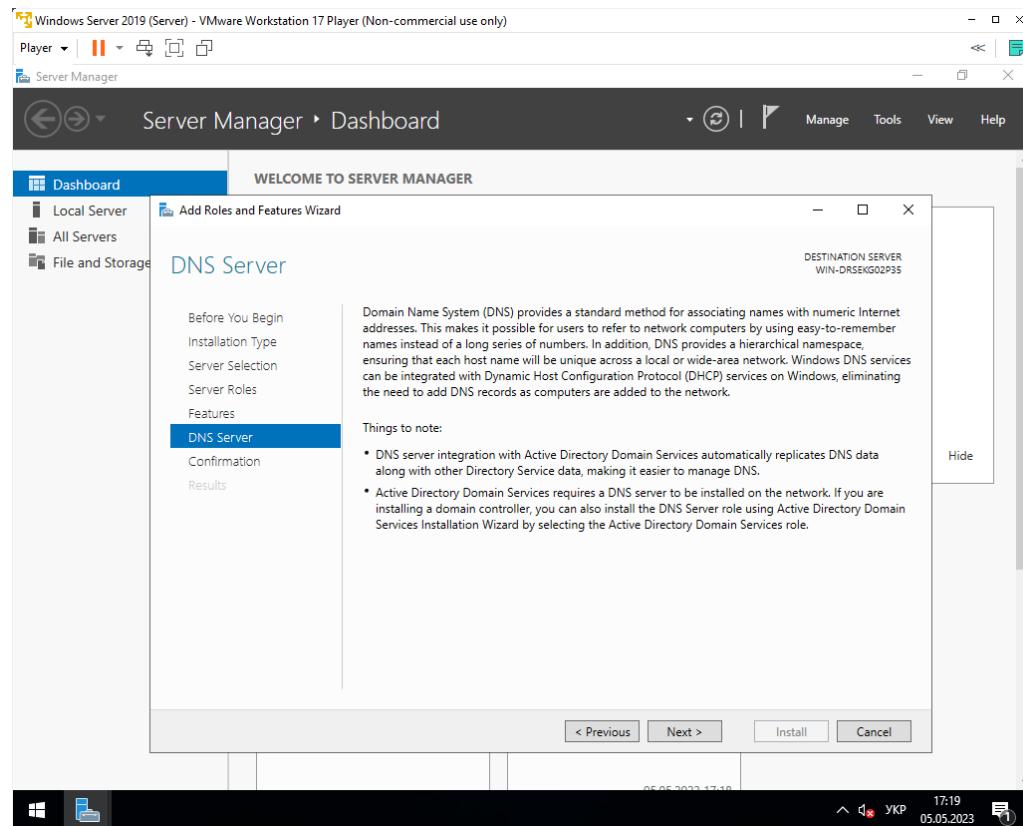
Починаю налаштування з віртуальної машини Windows Server 2019 (Server).

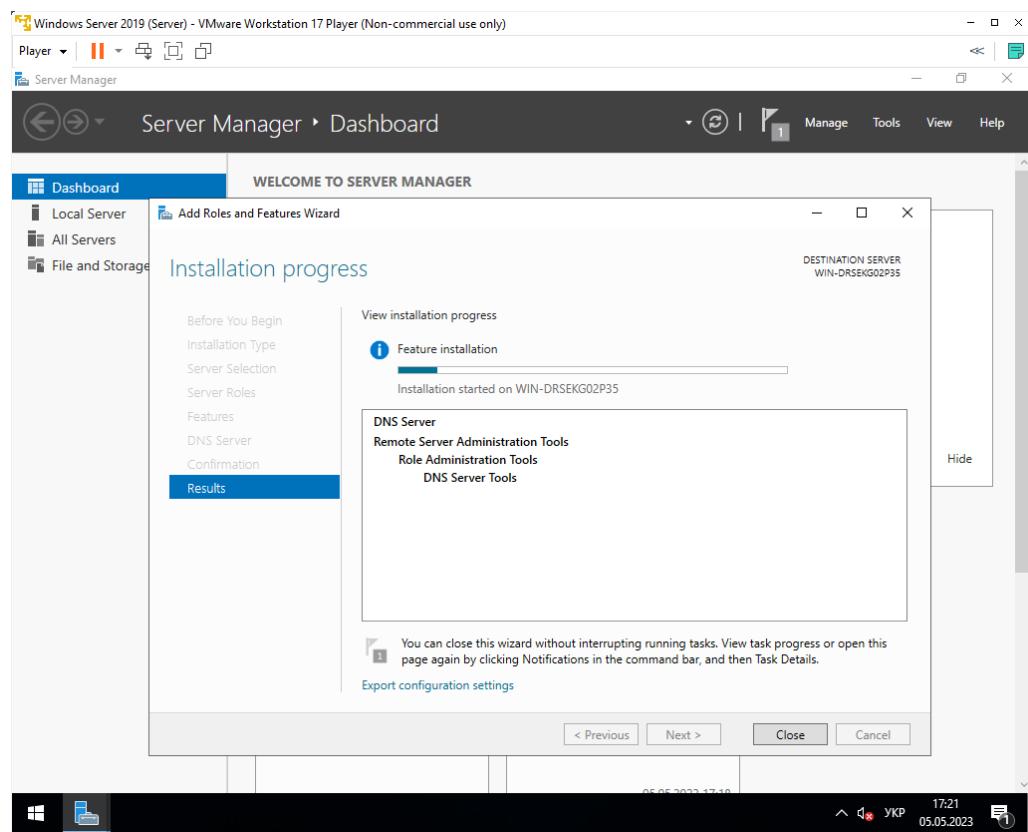
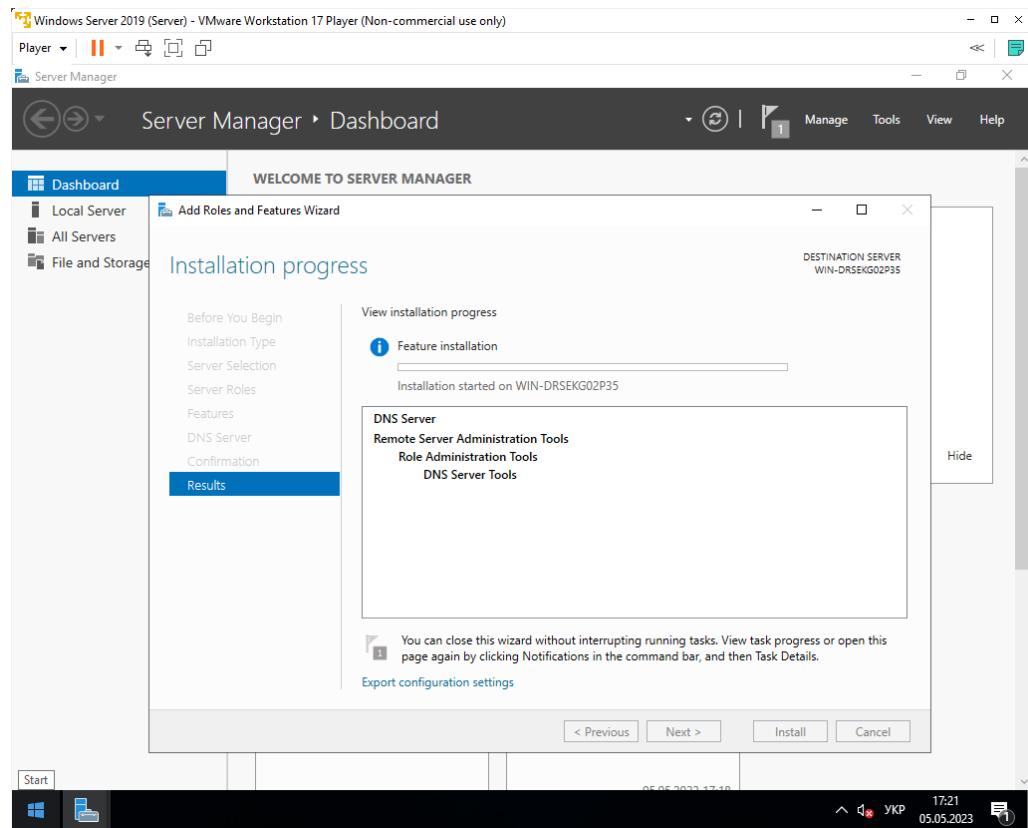


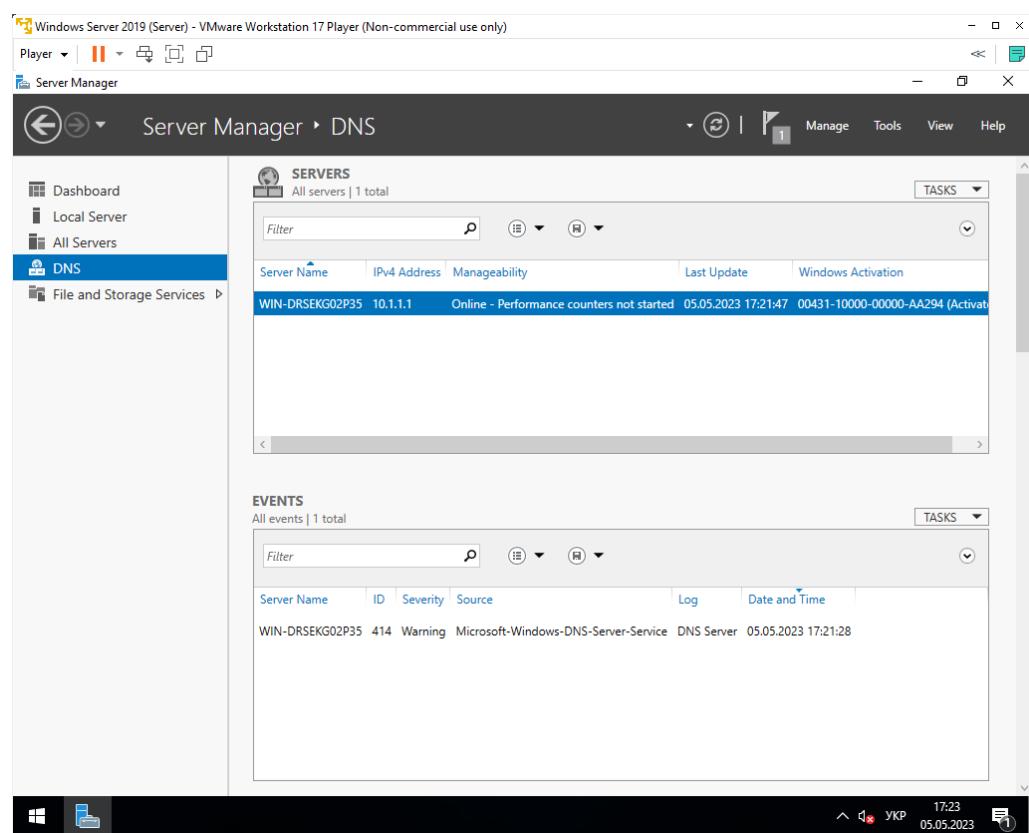
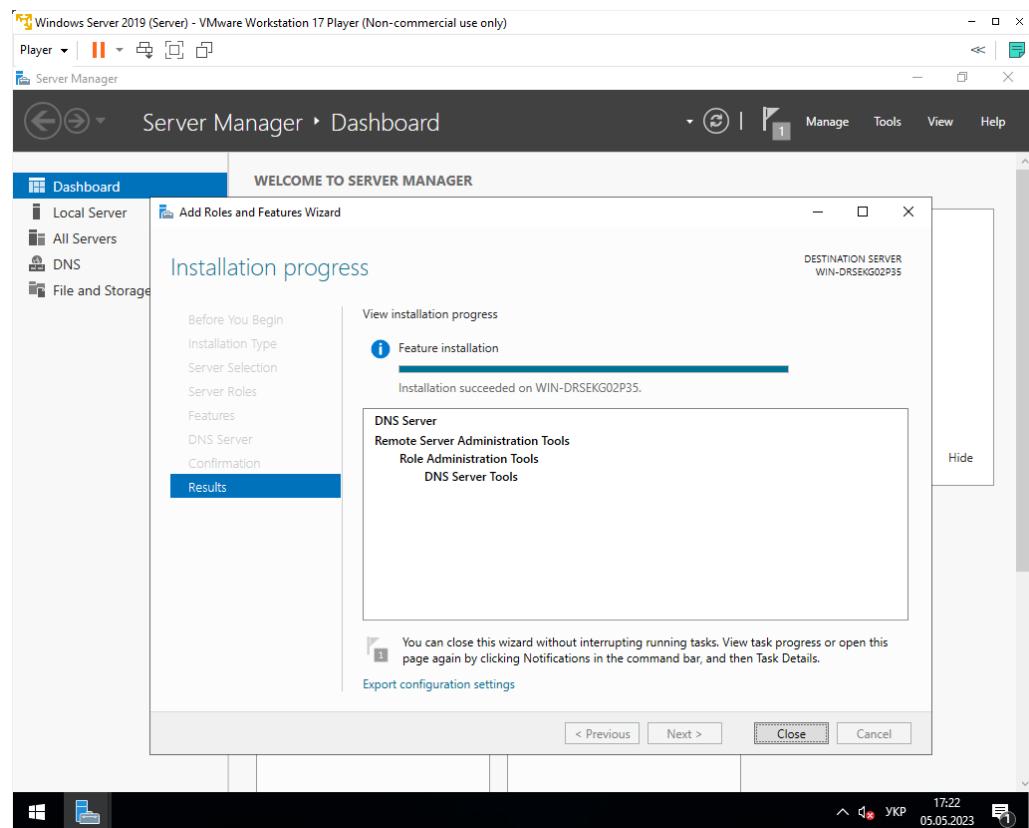


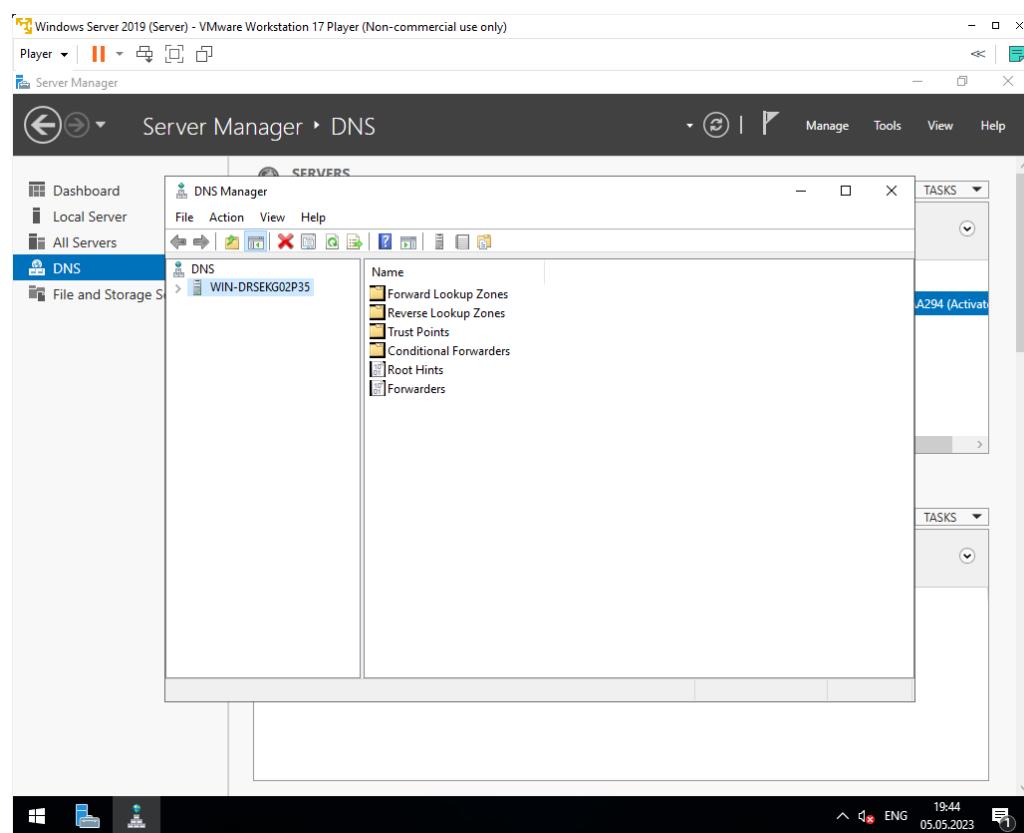
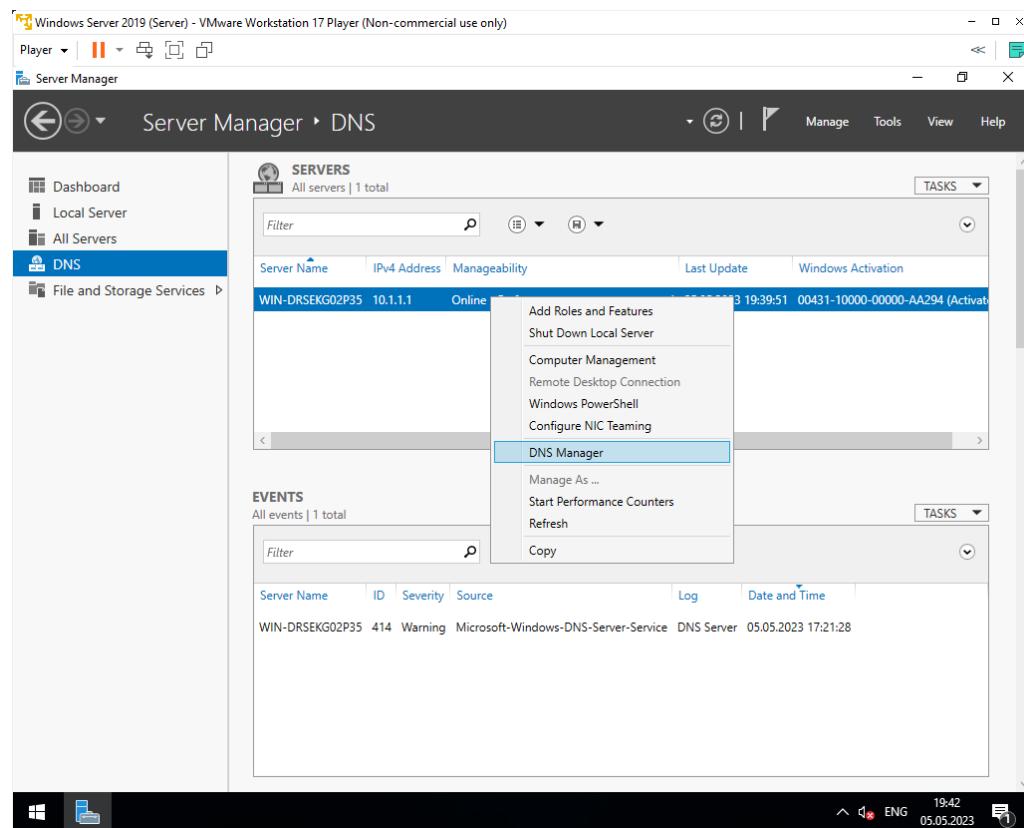


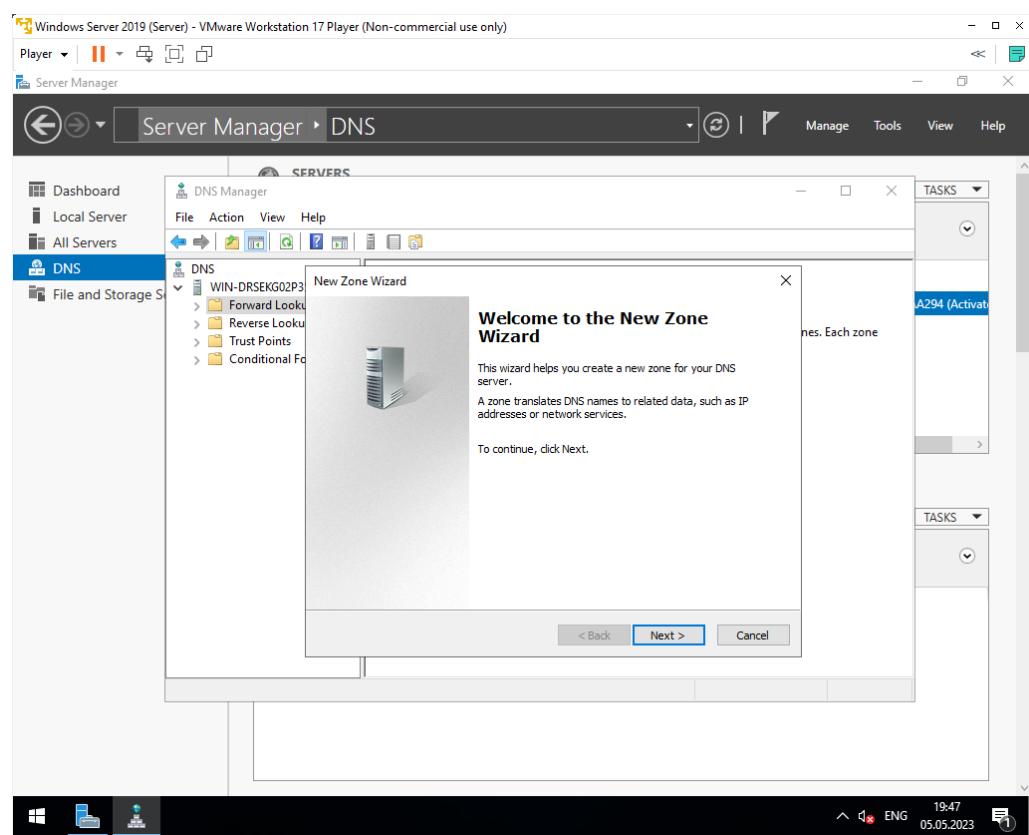
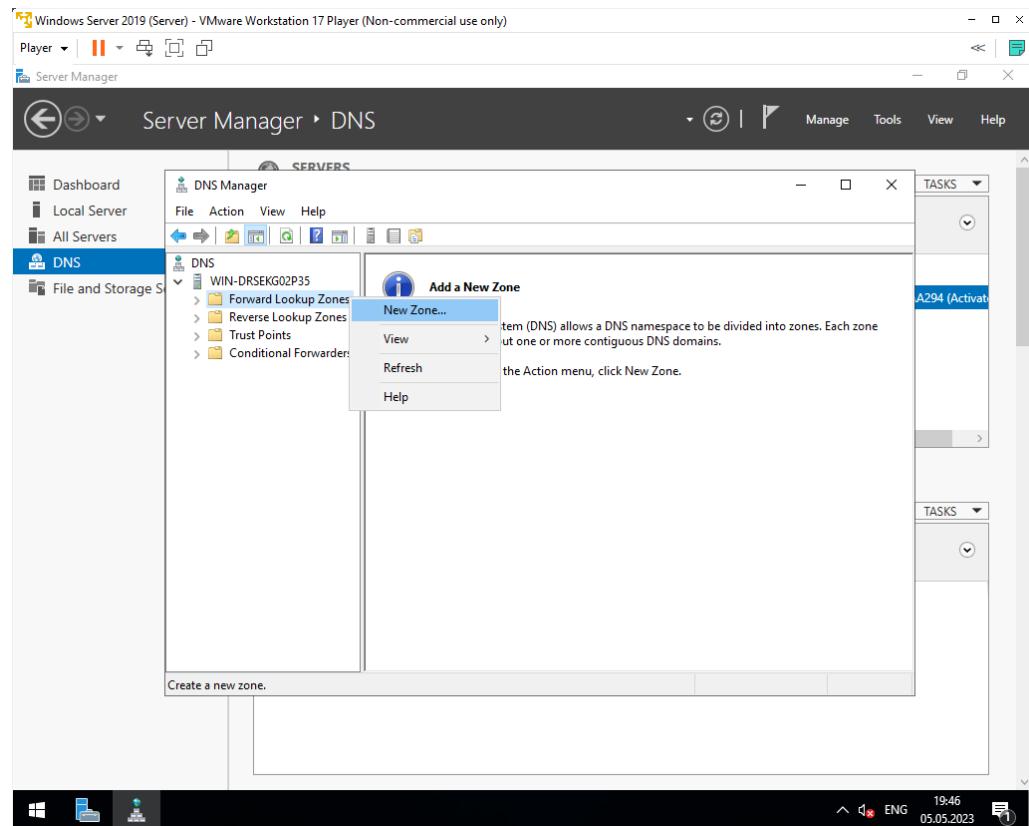


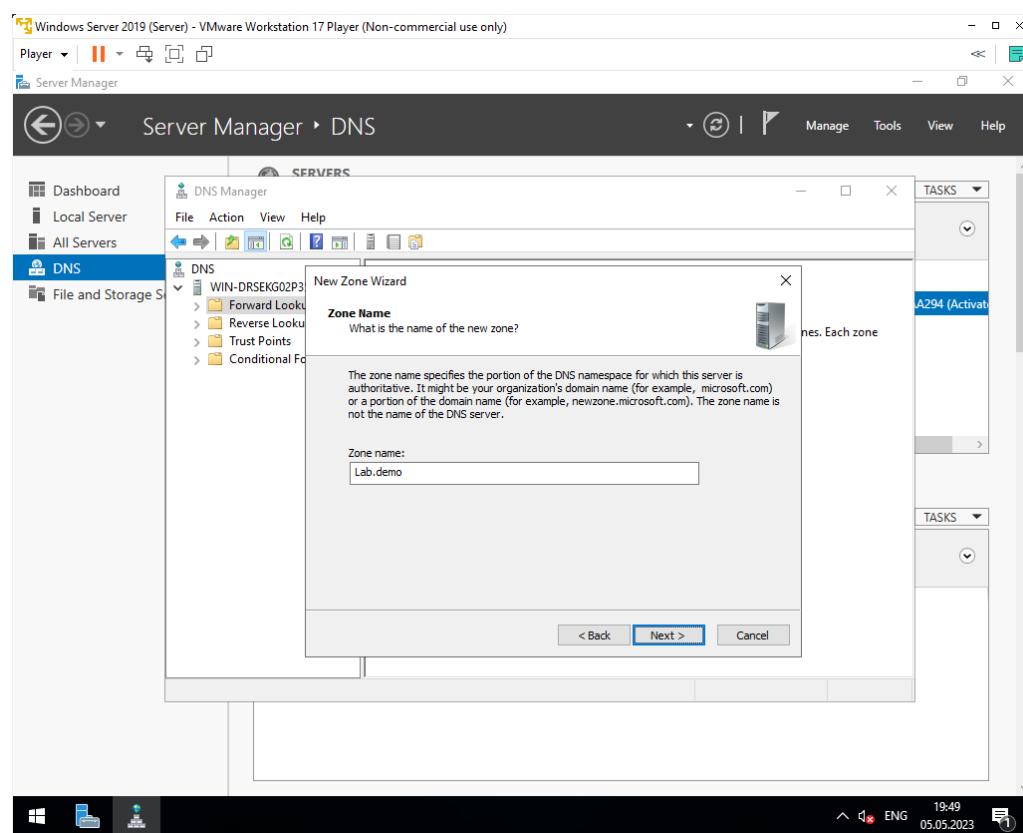
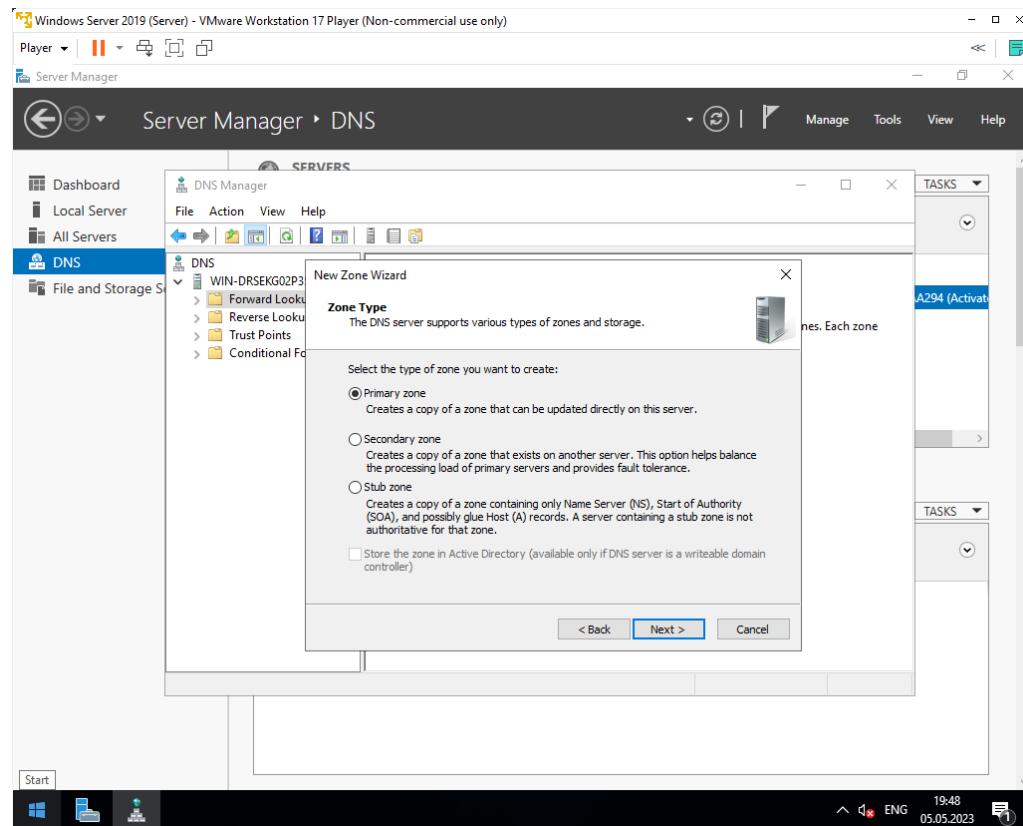


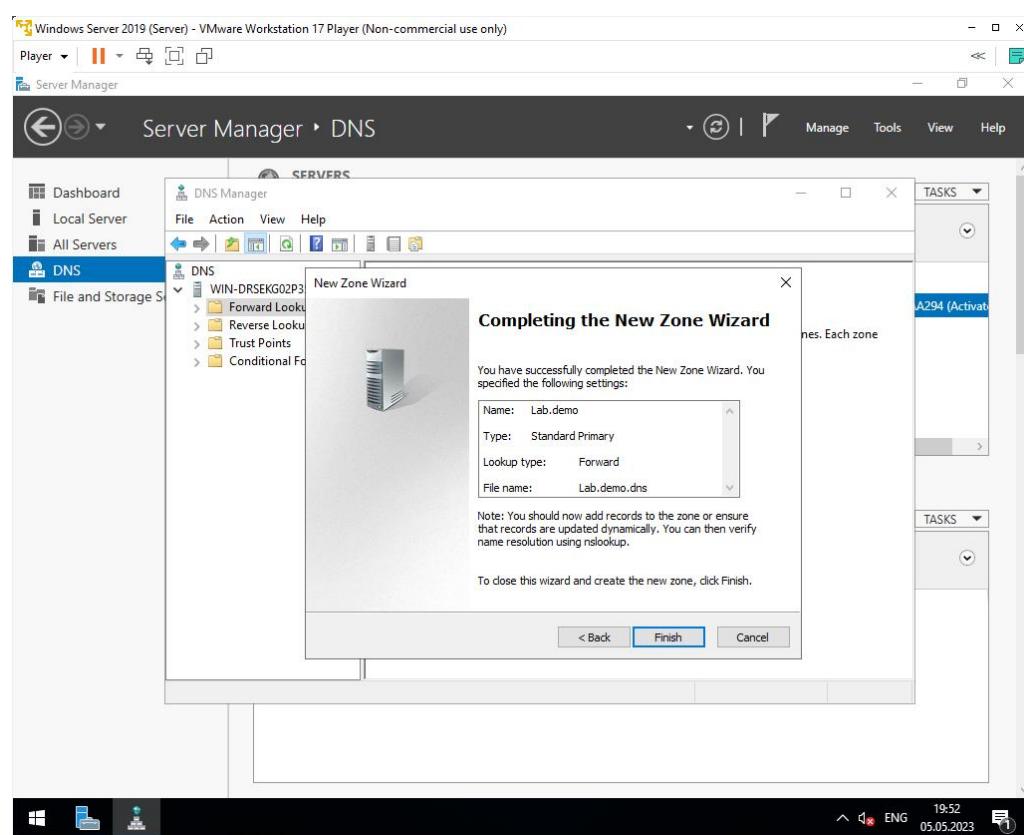
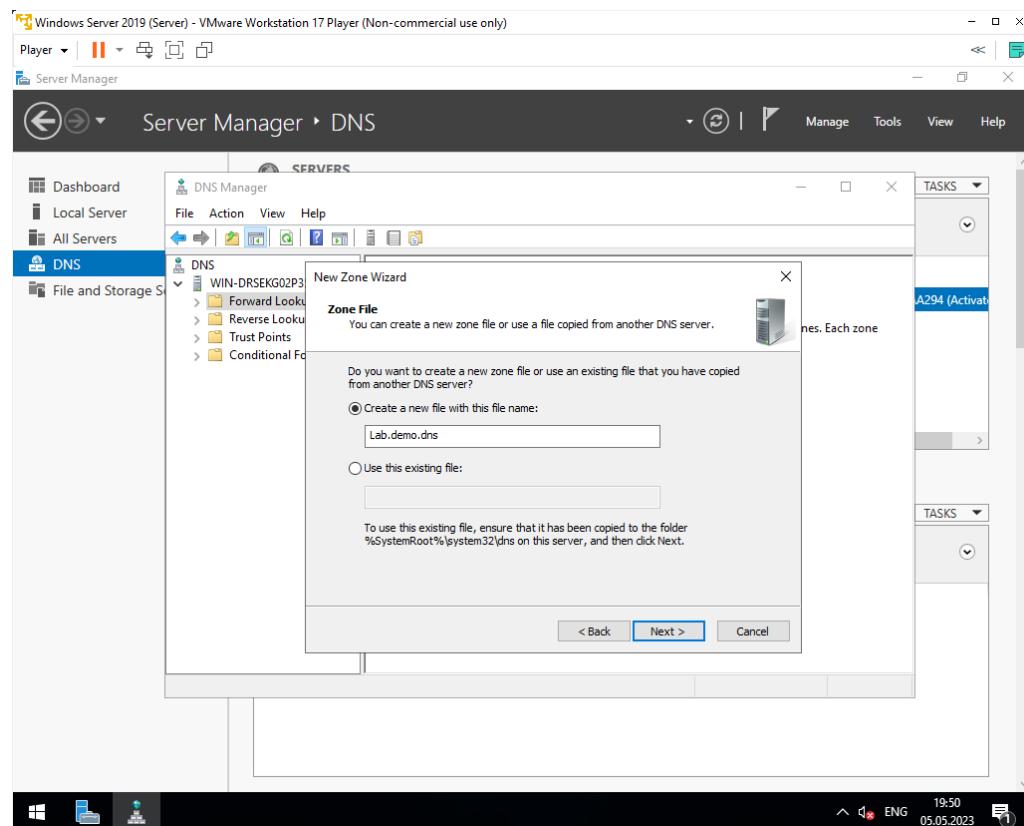


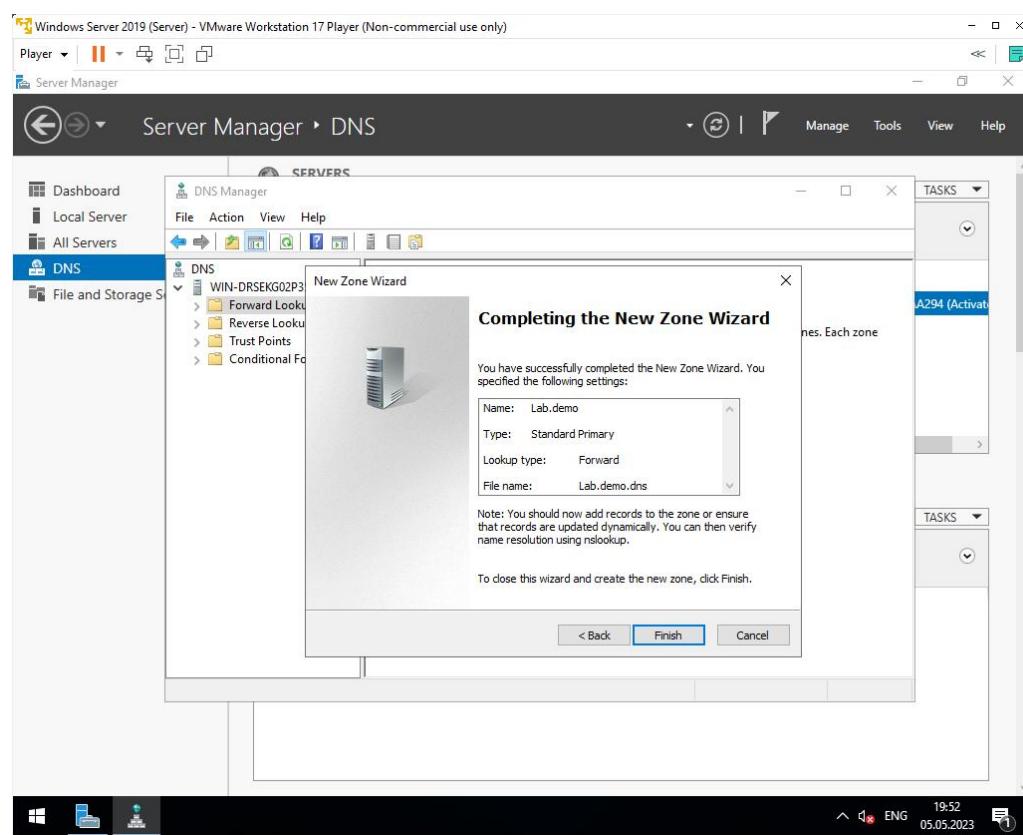
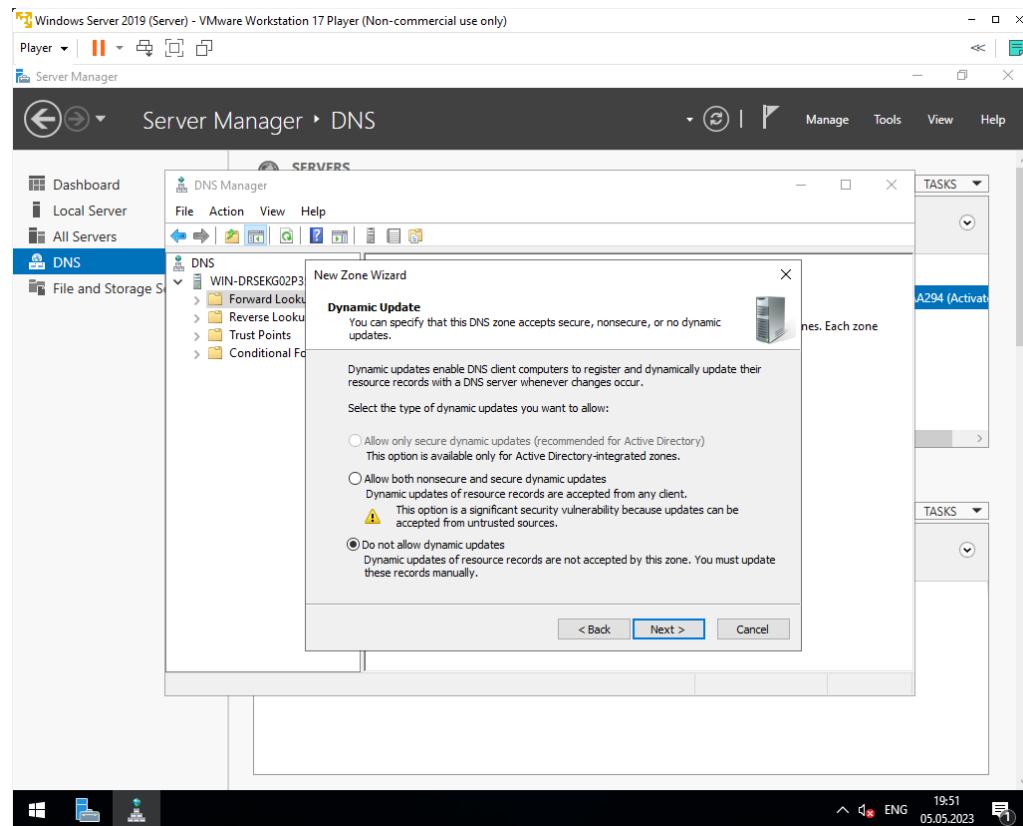


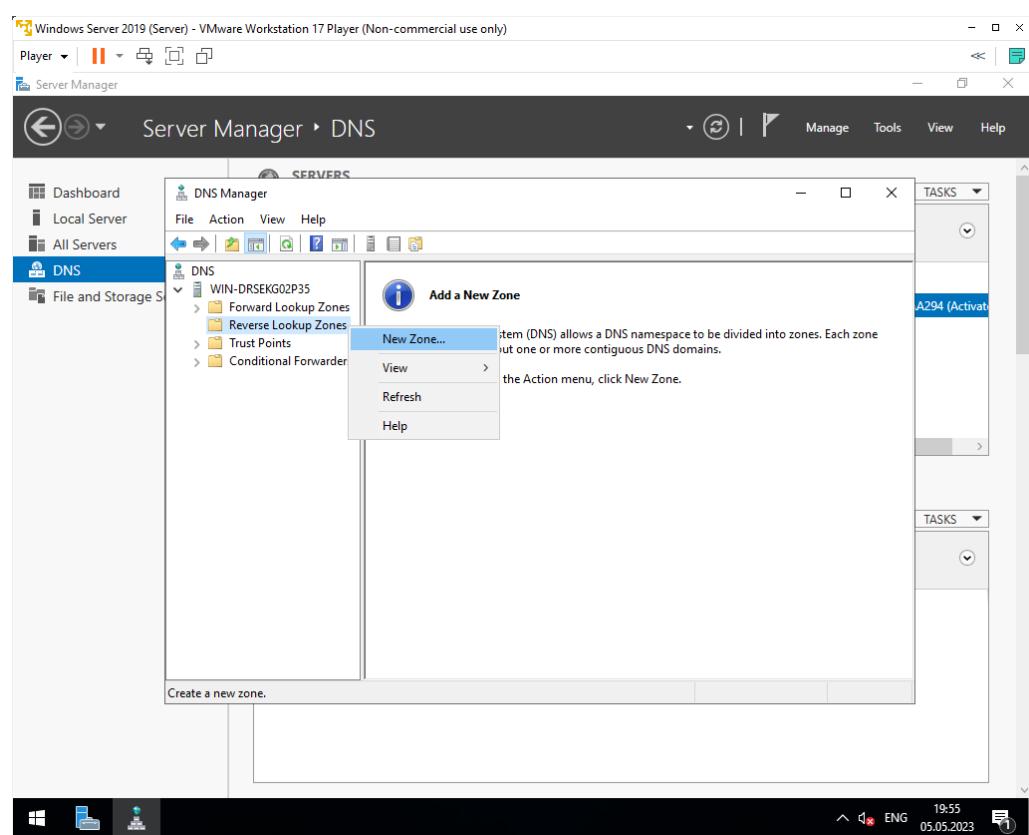
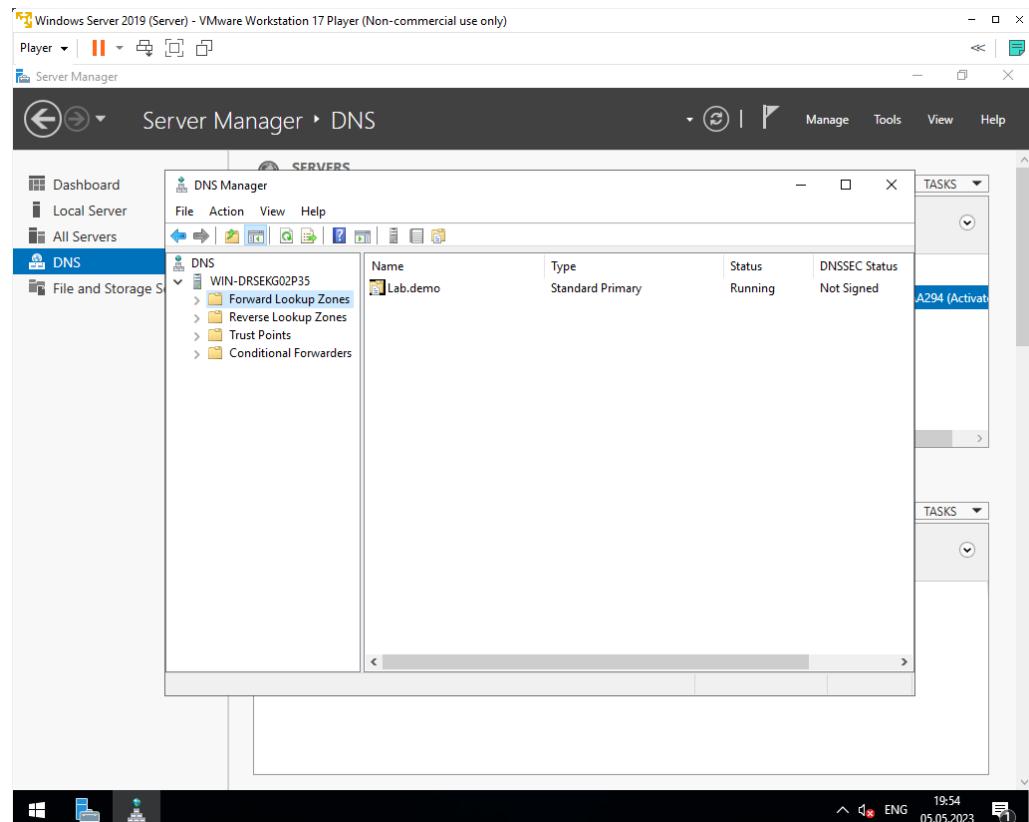


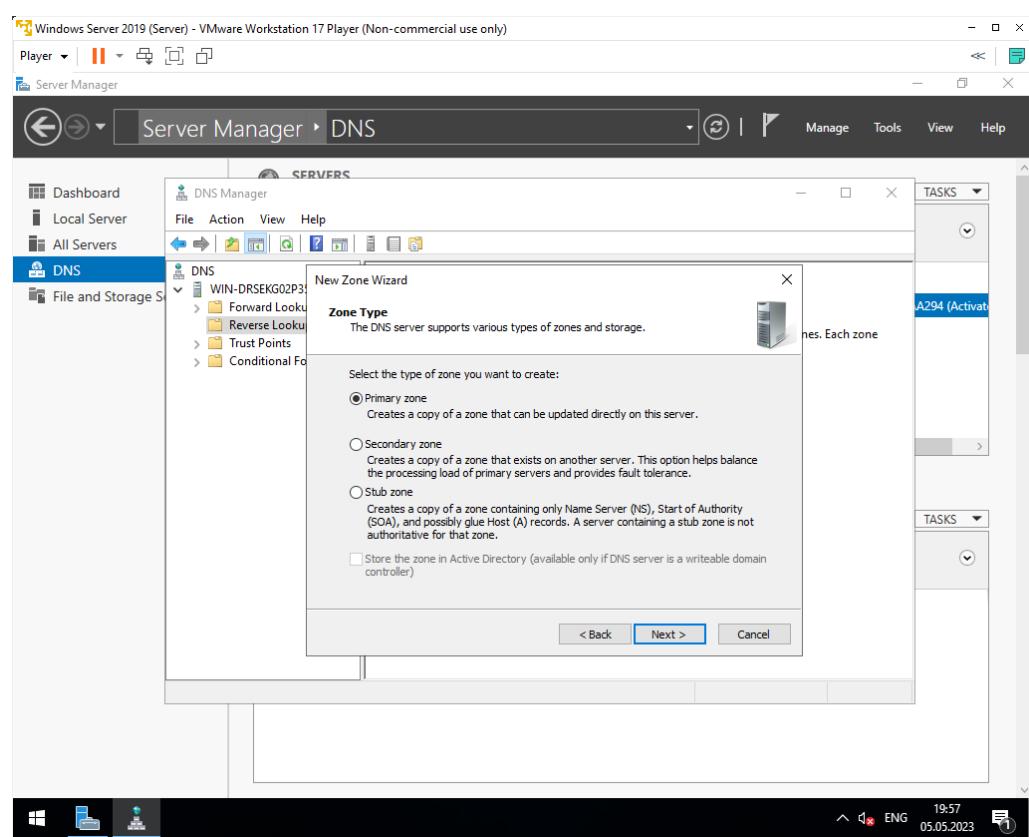
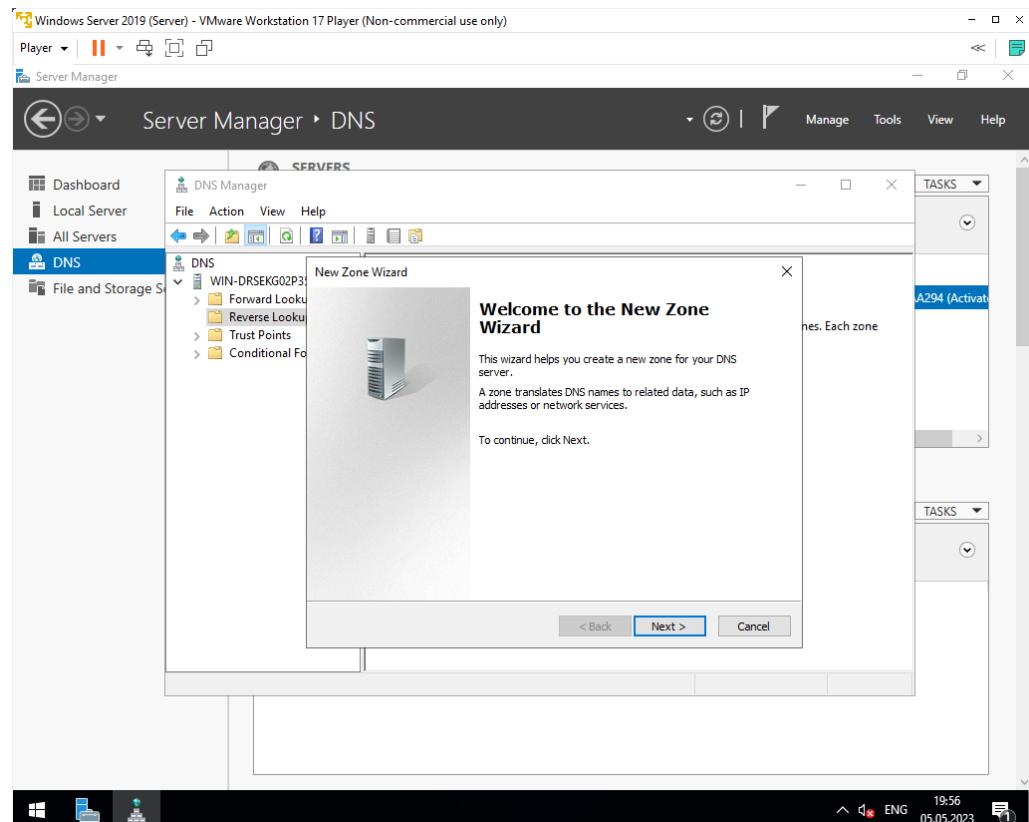


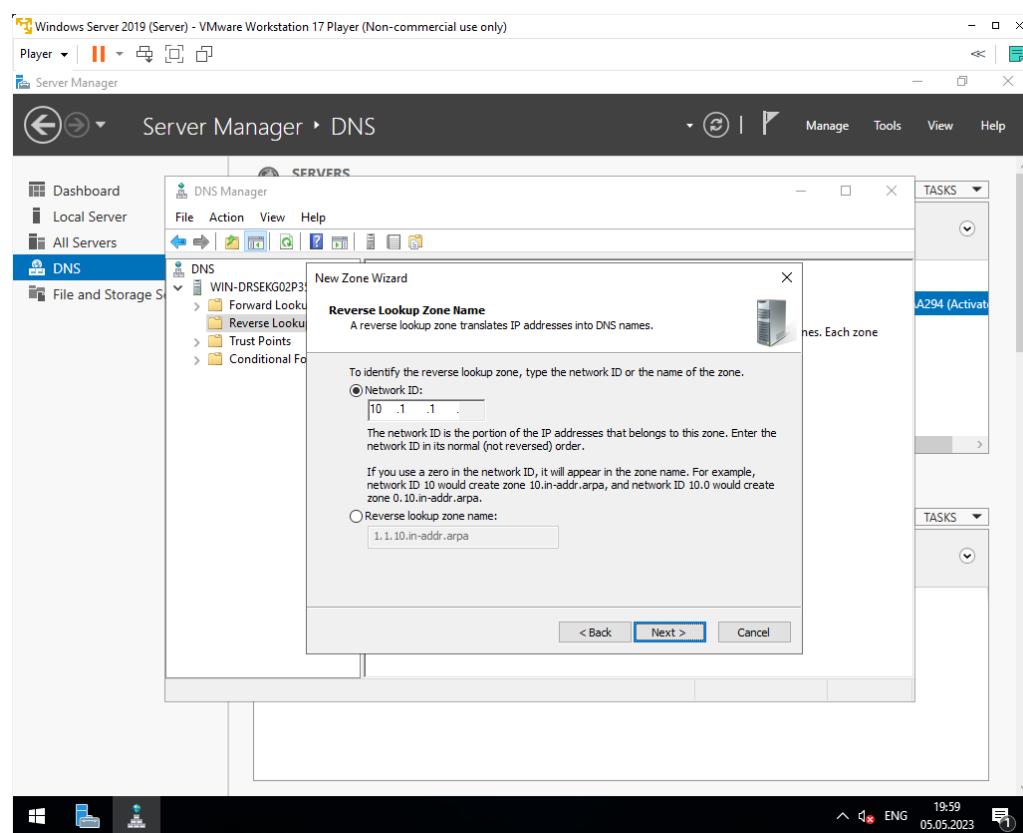
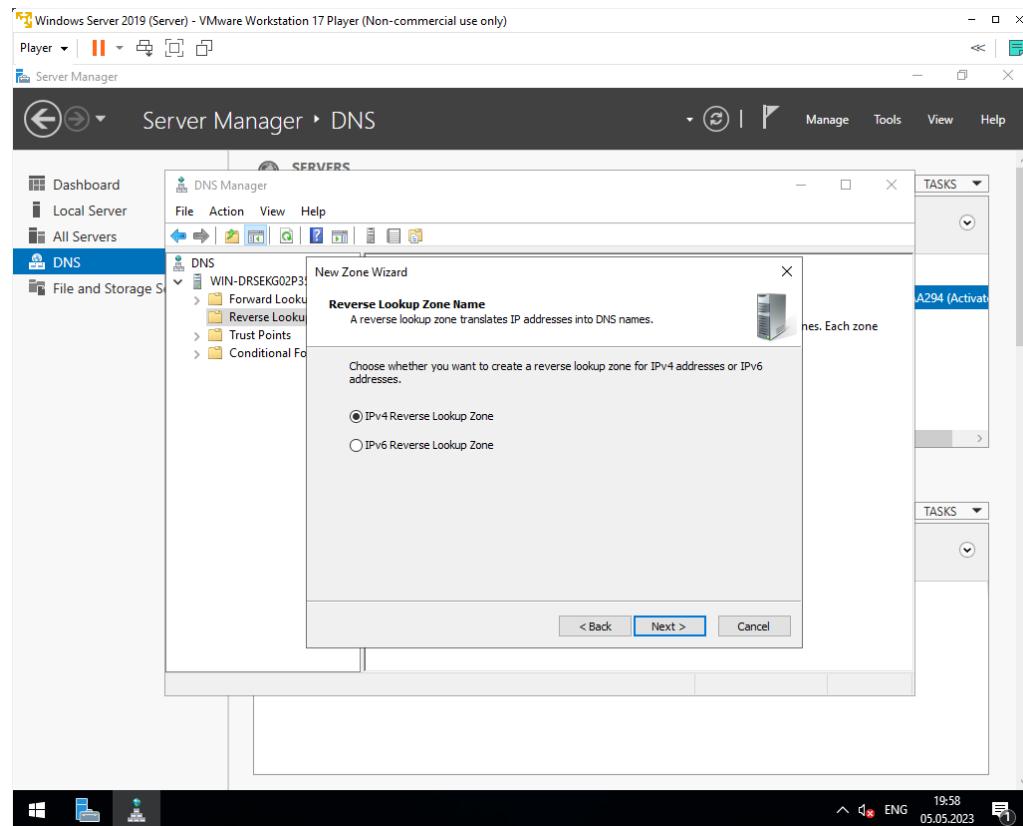


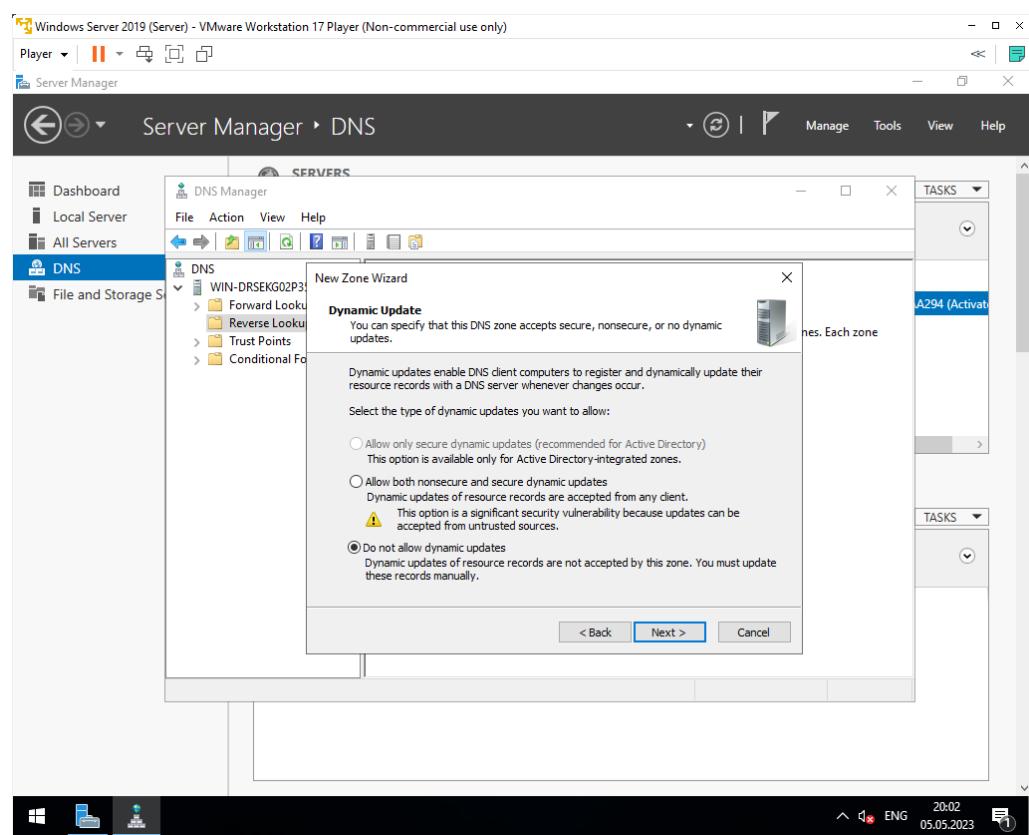
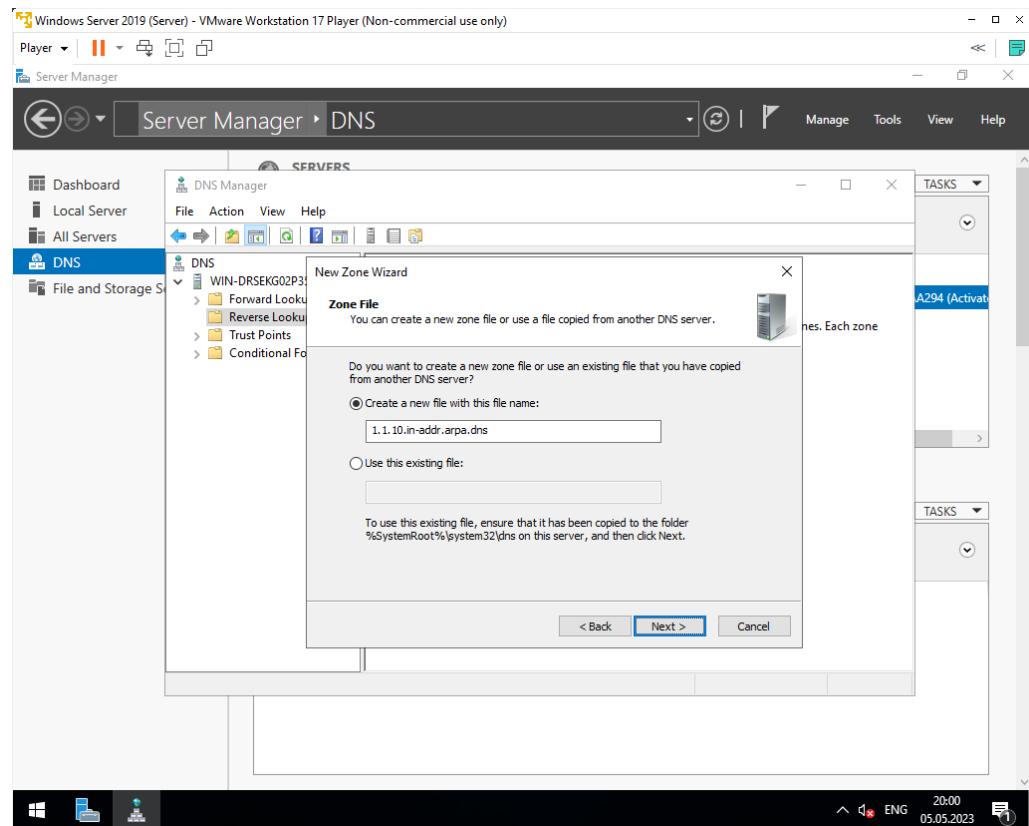


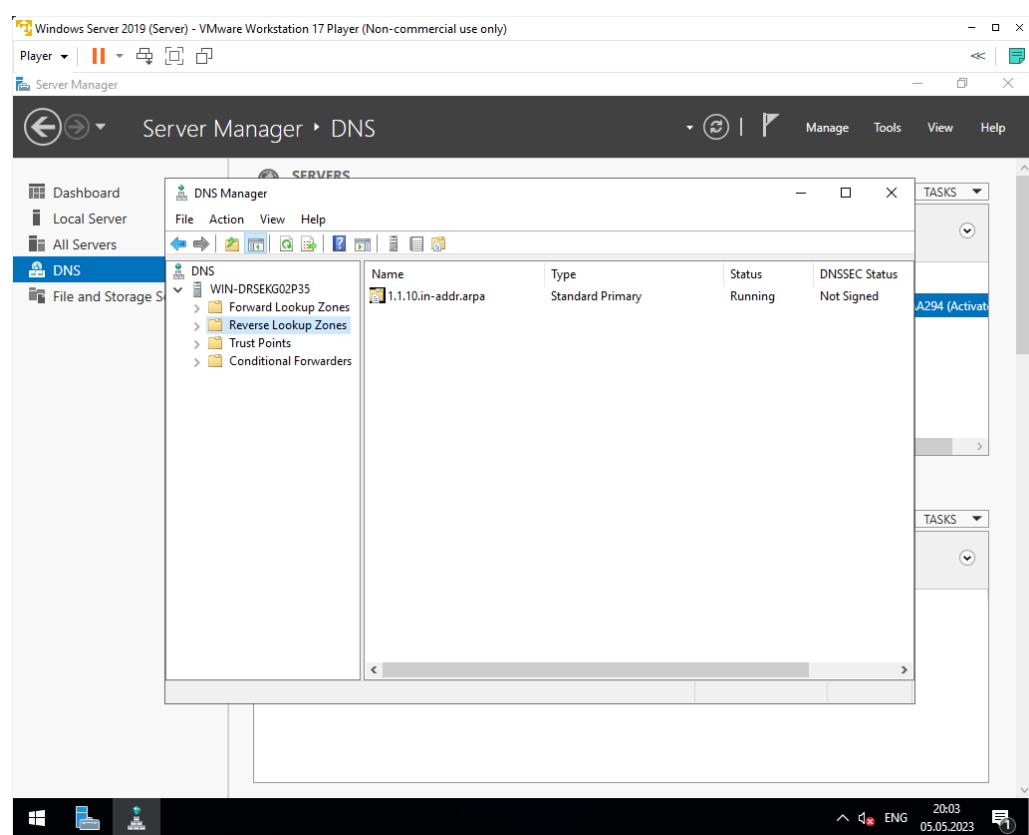
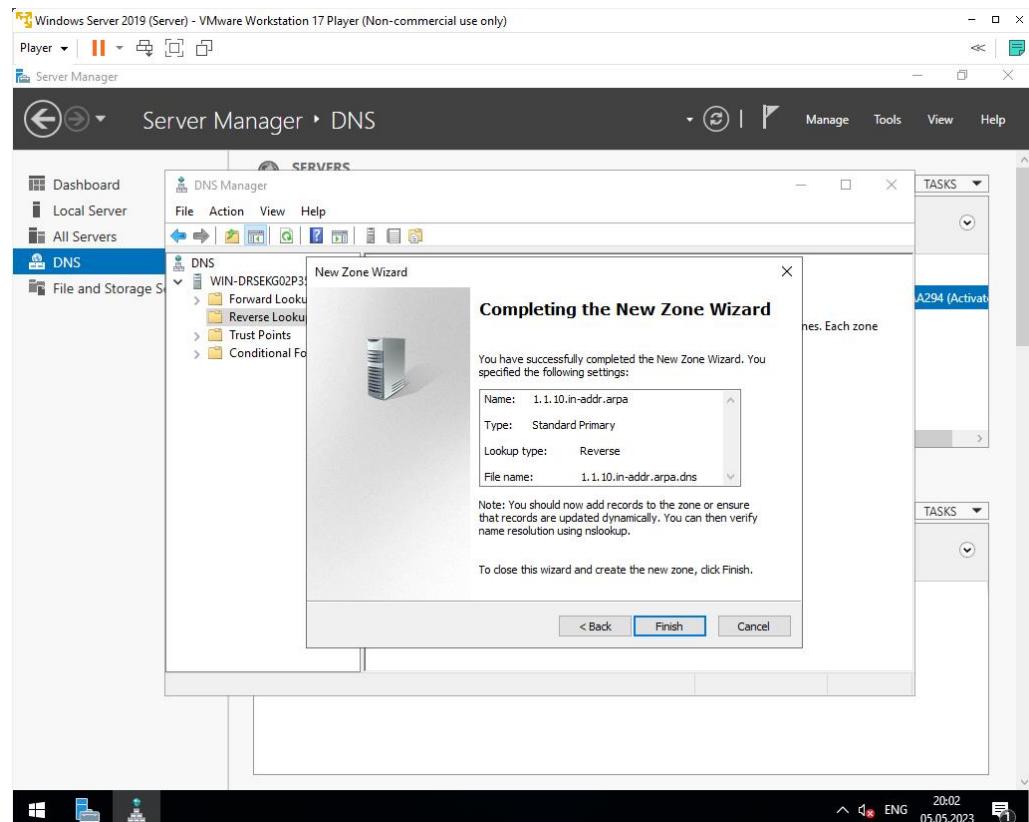




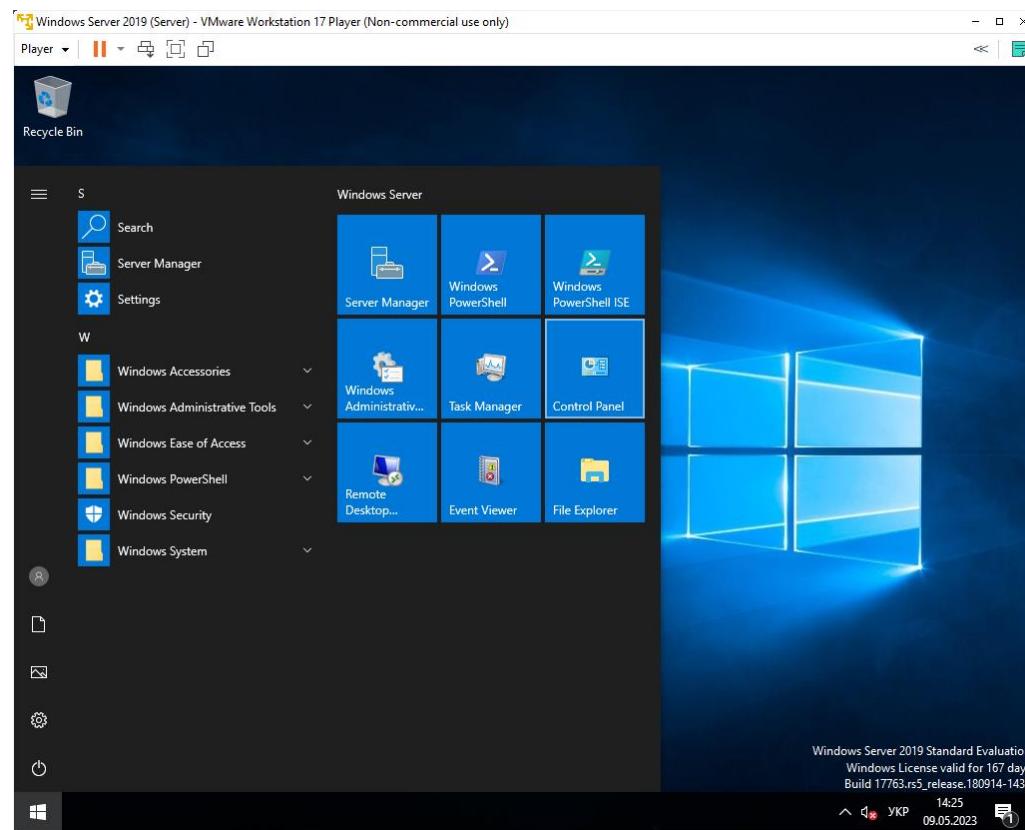


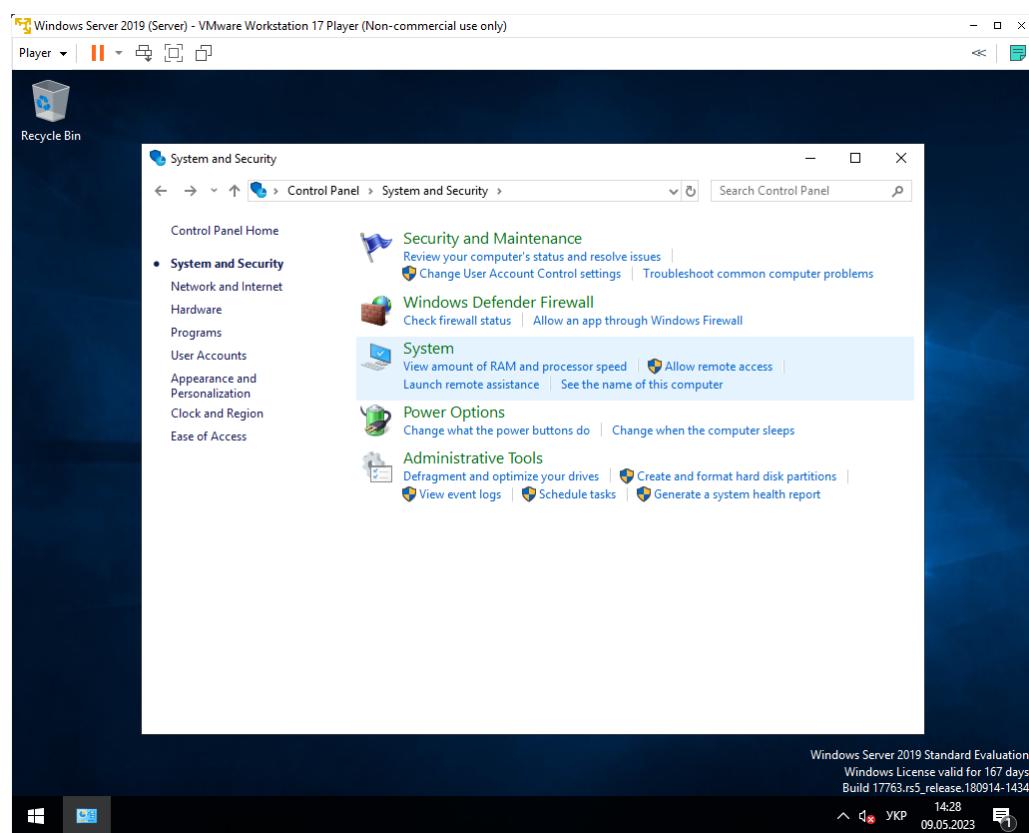
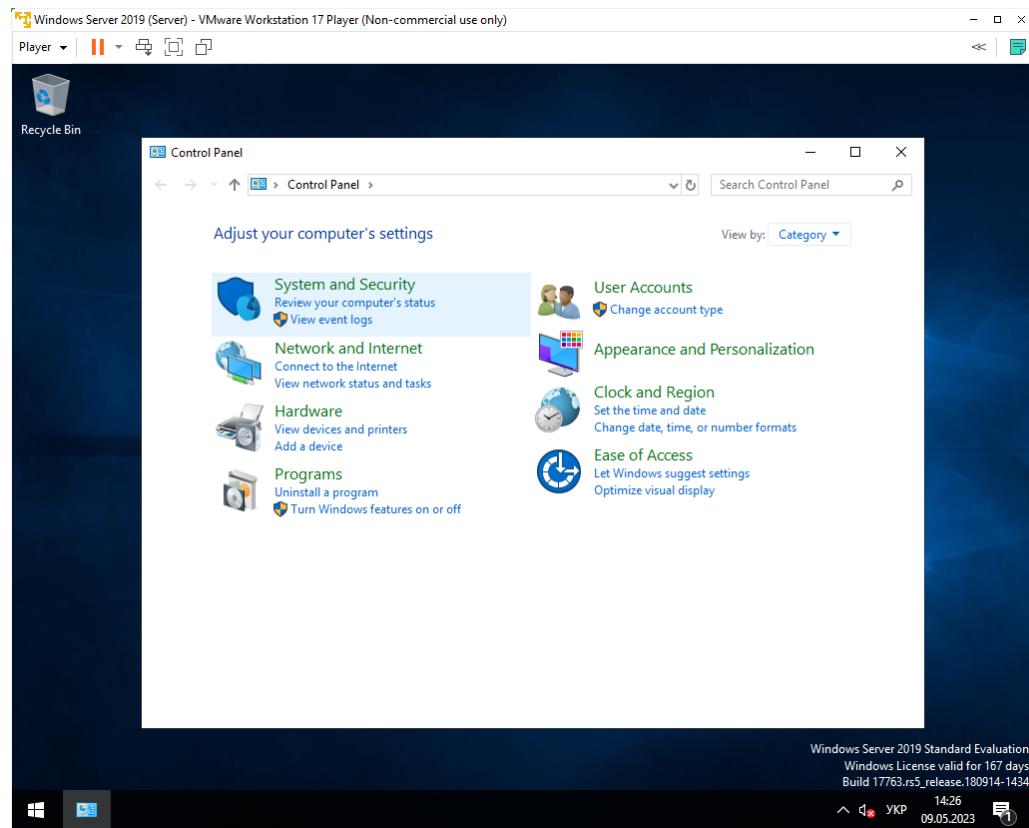


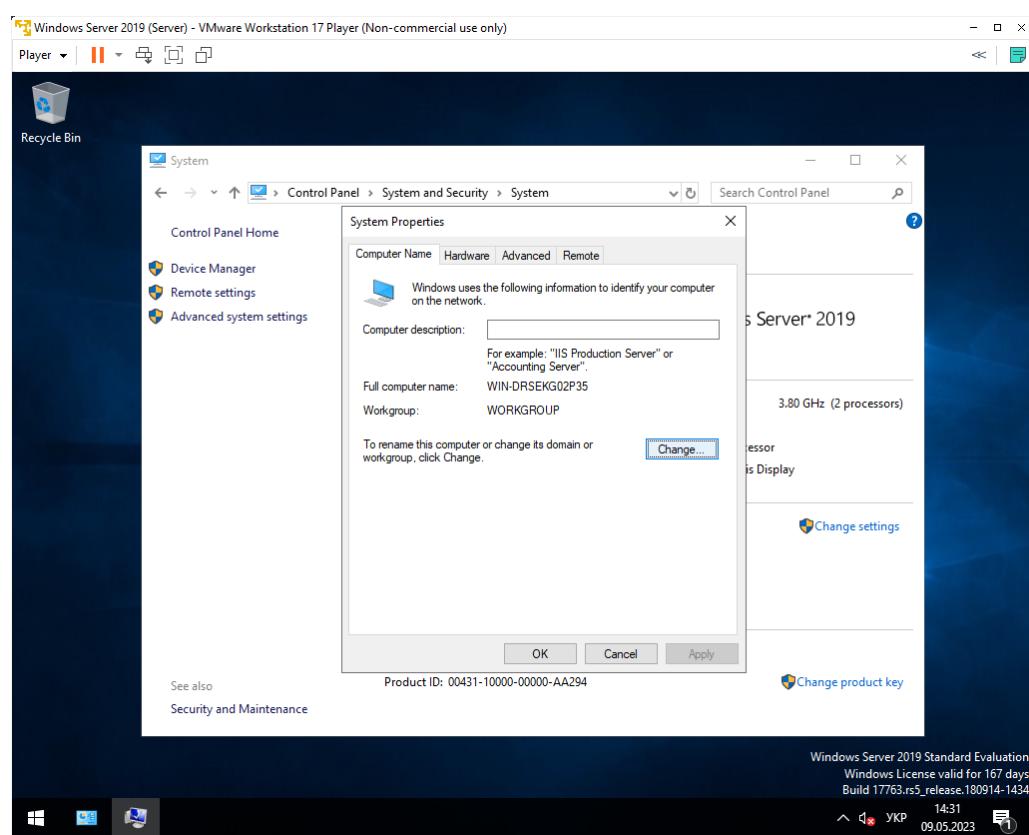
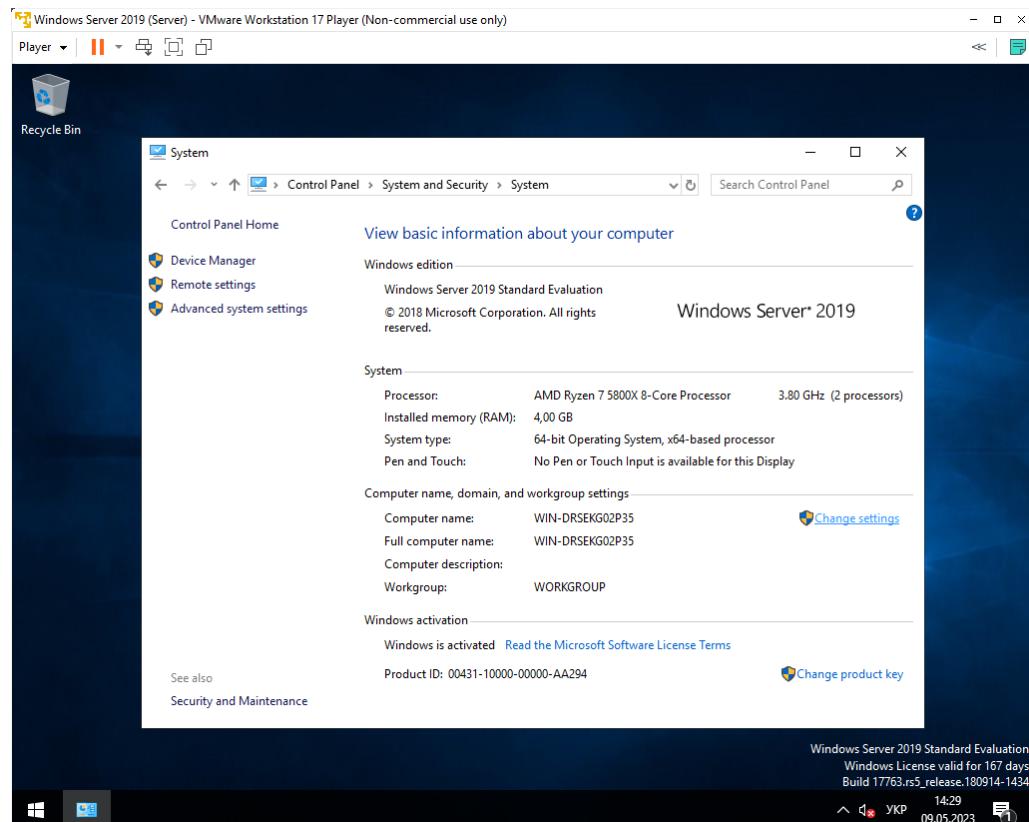


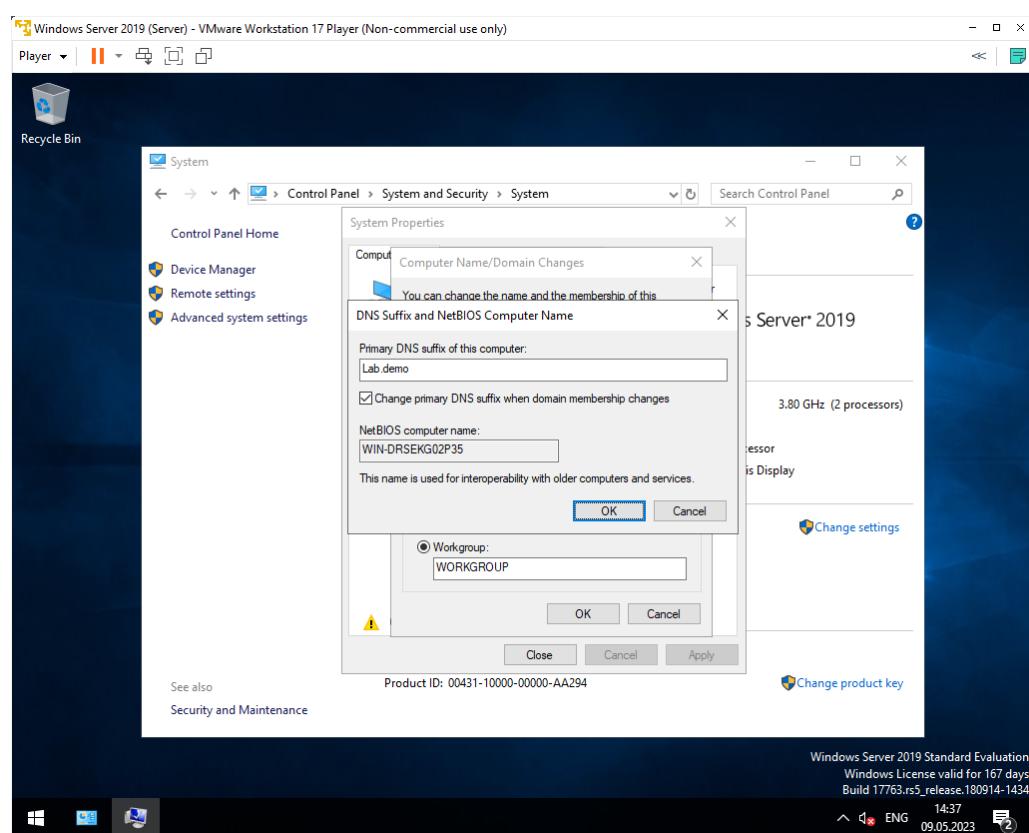
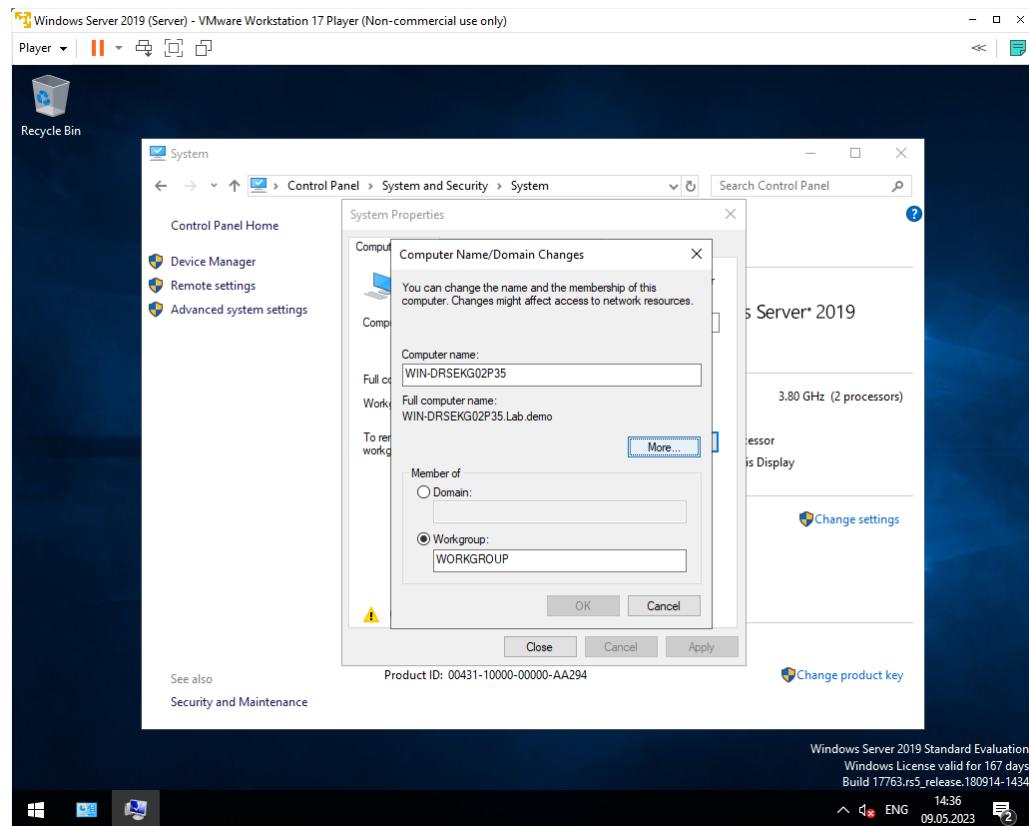


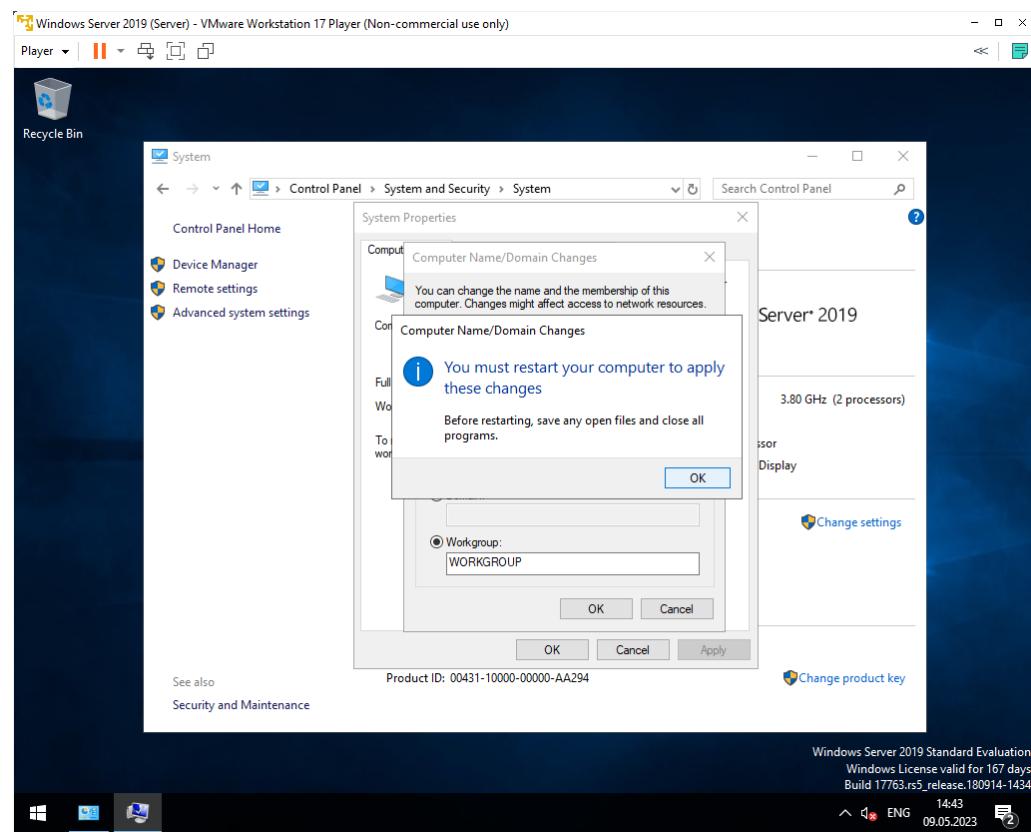
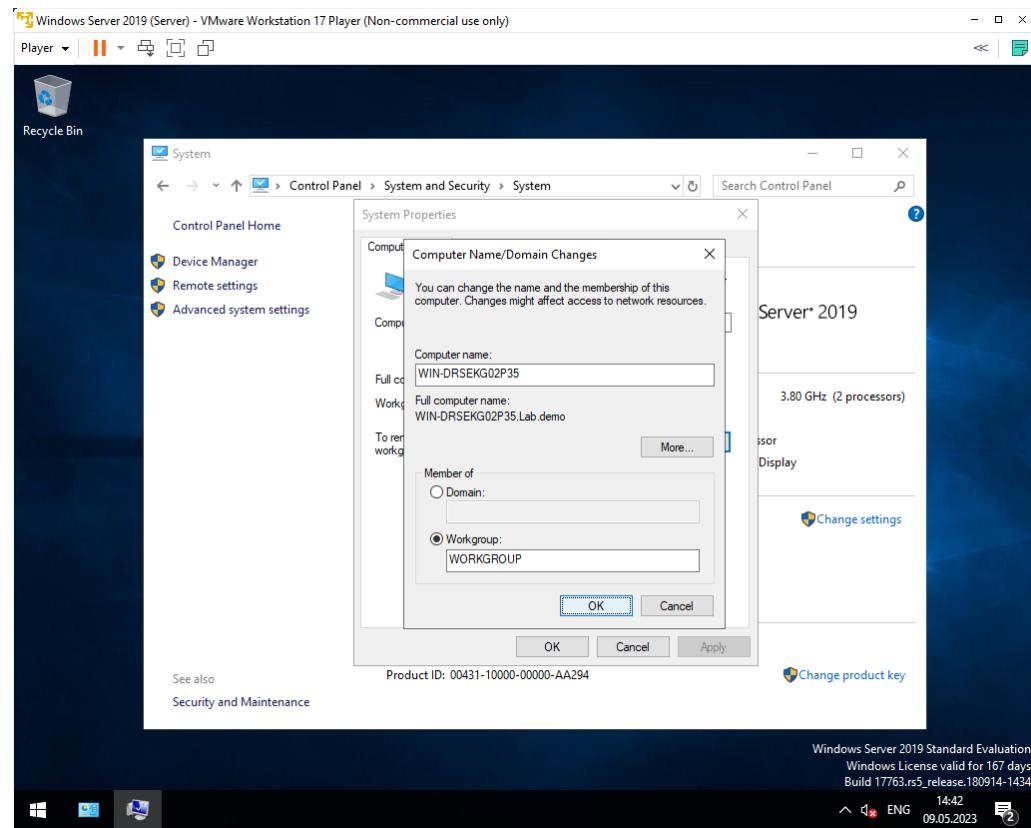
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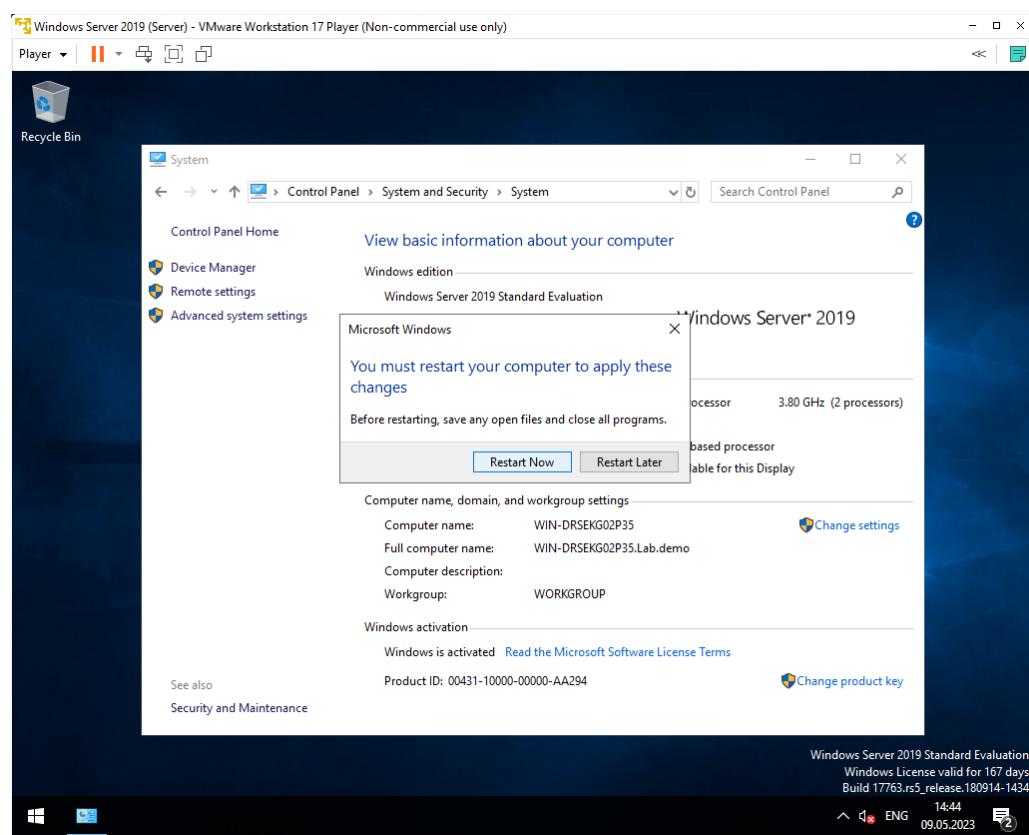
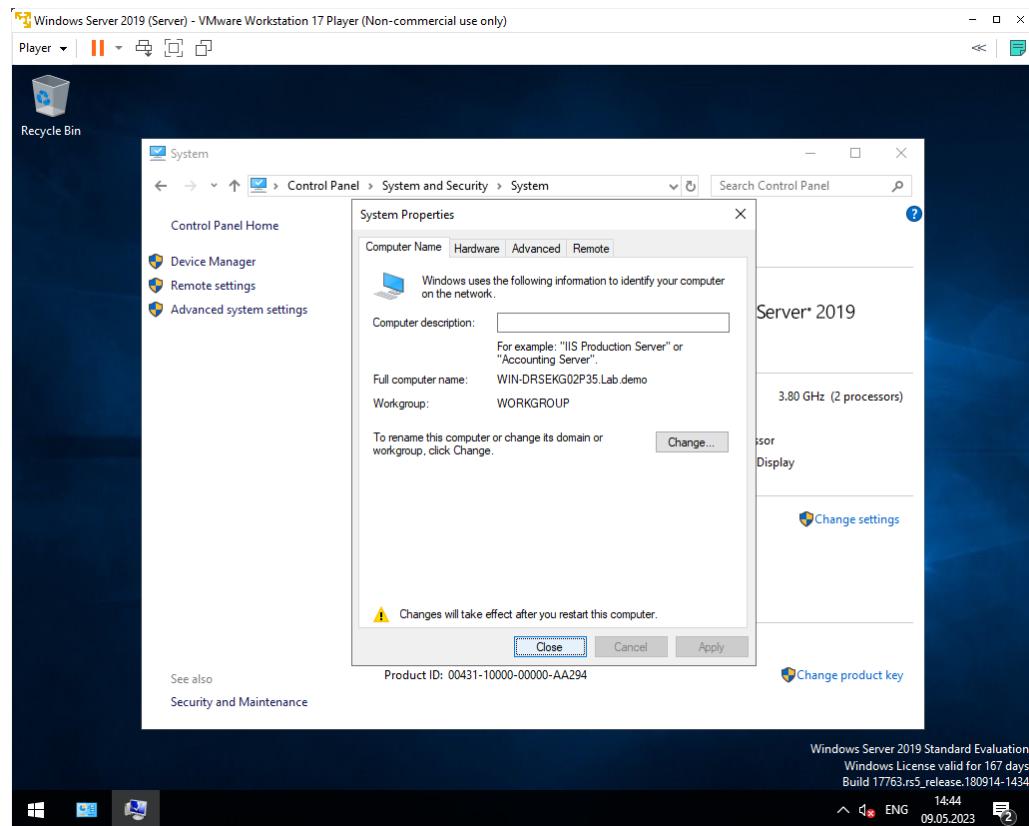


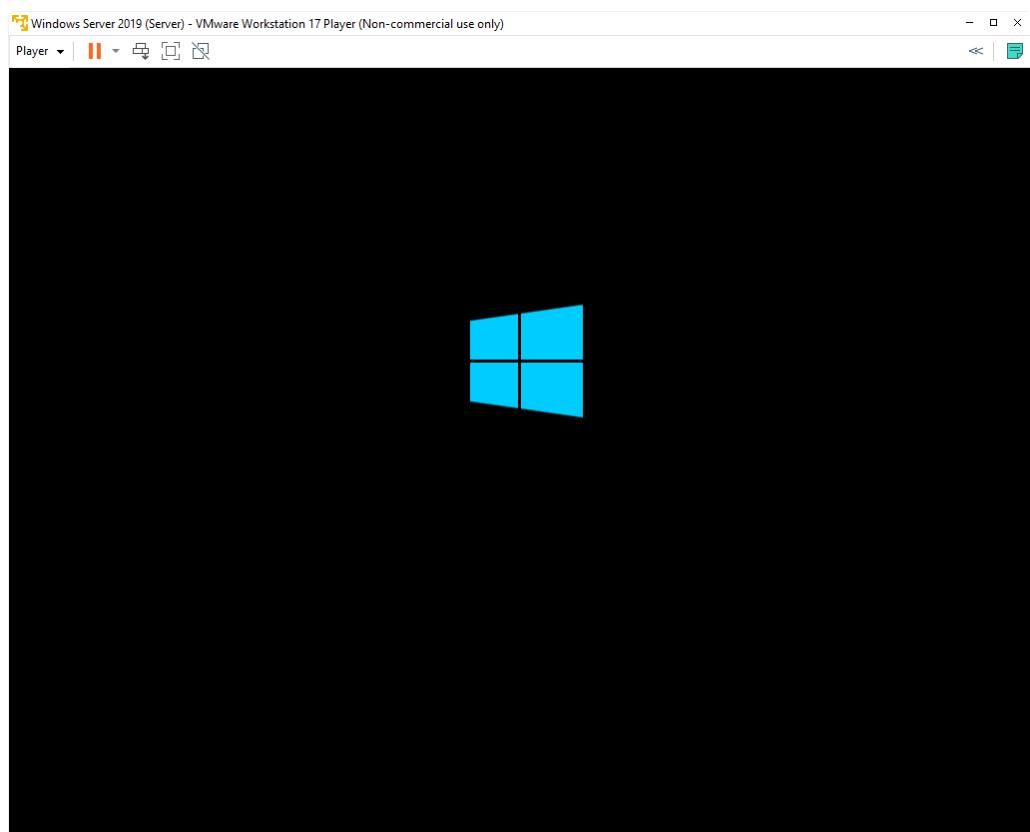
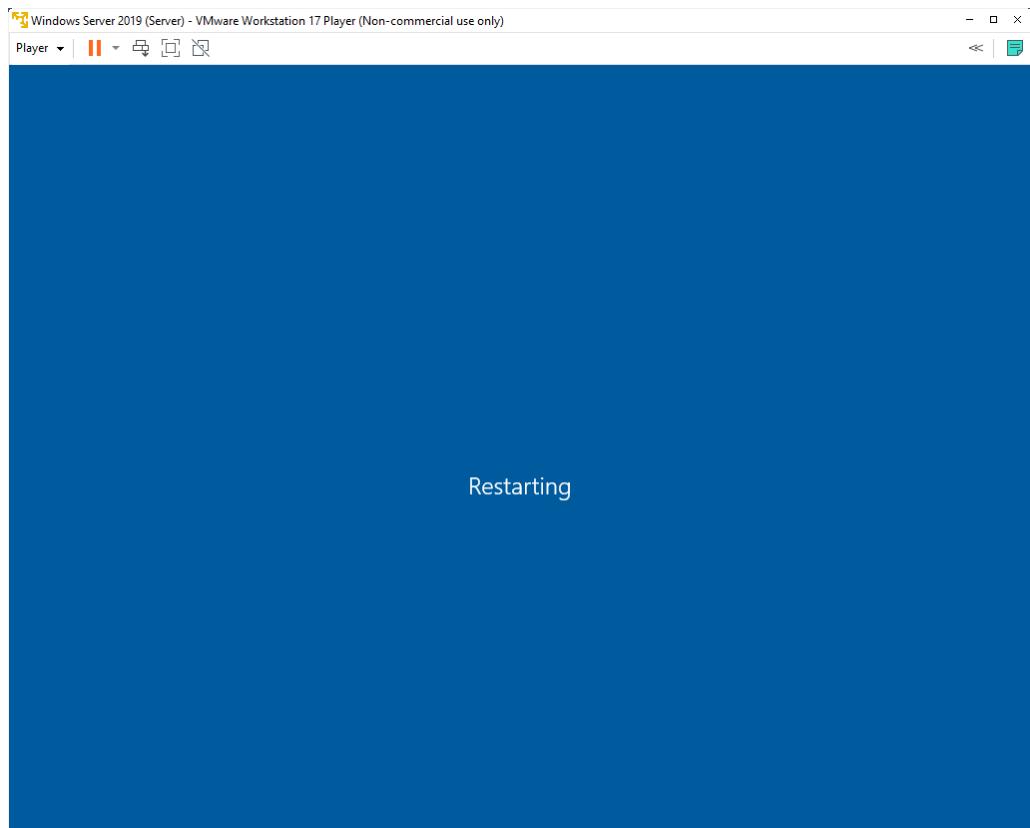


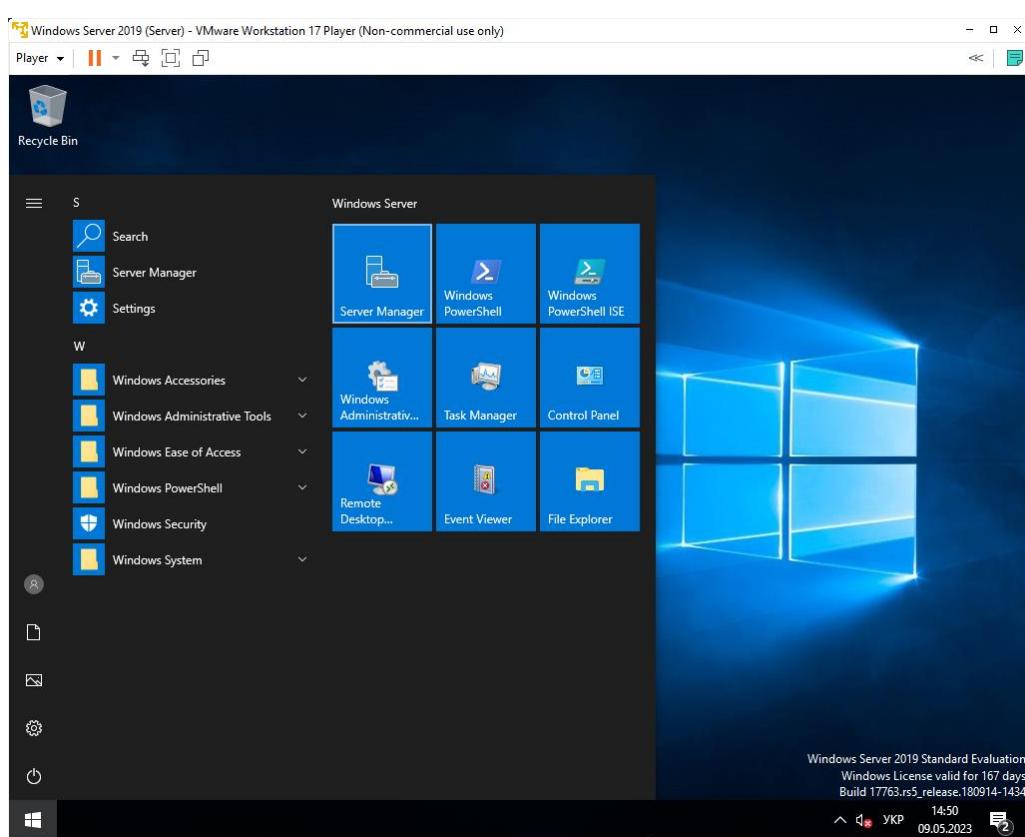
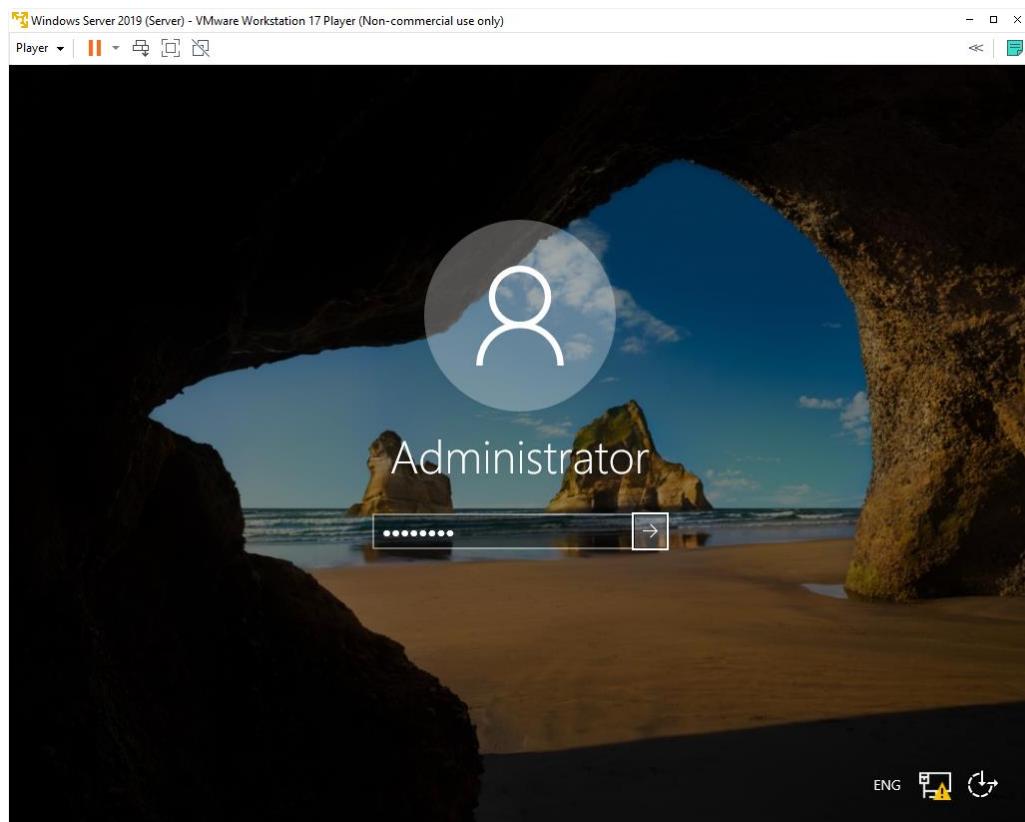


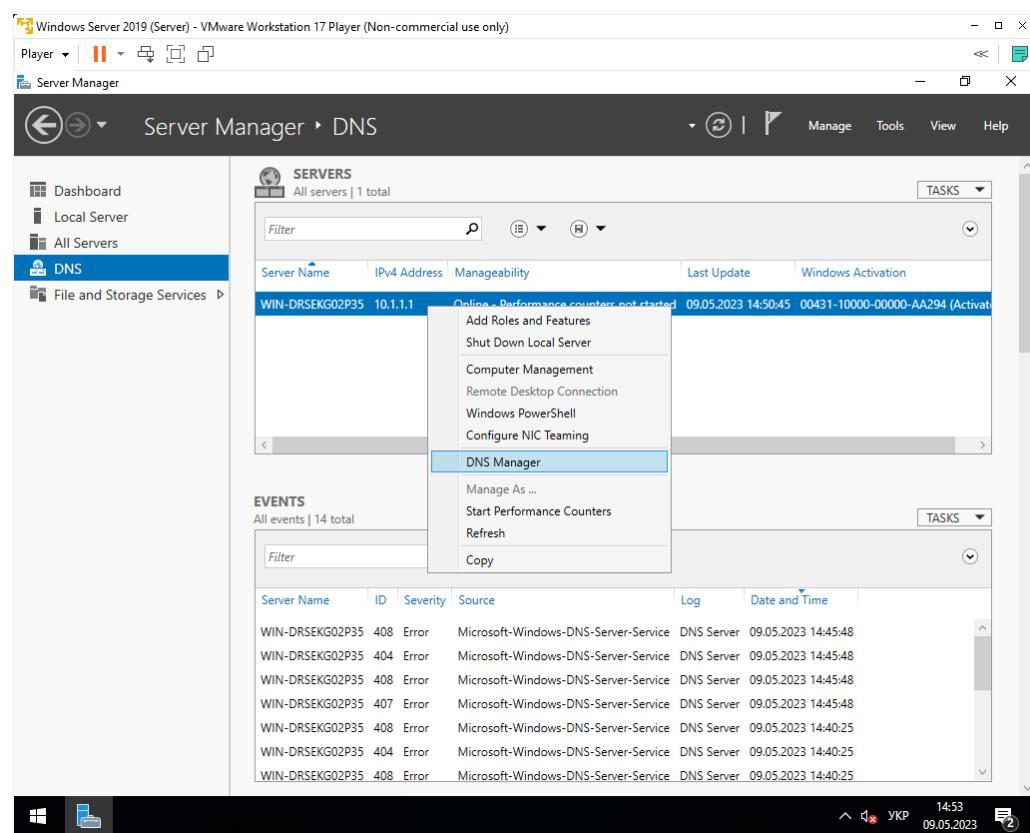
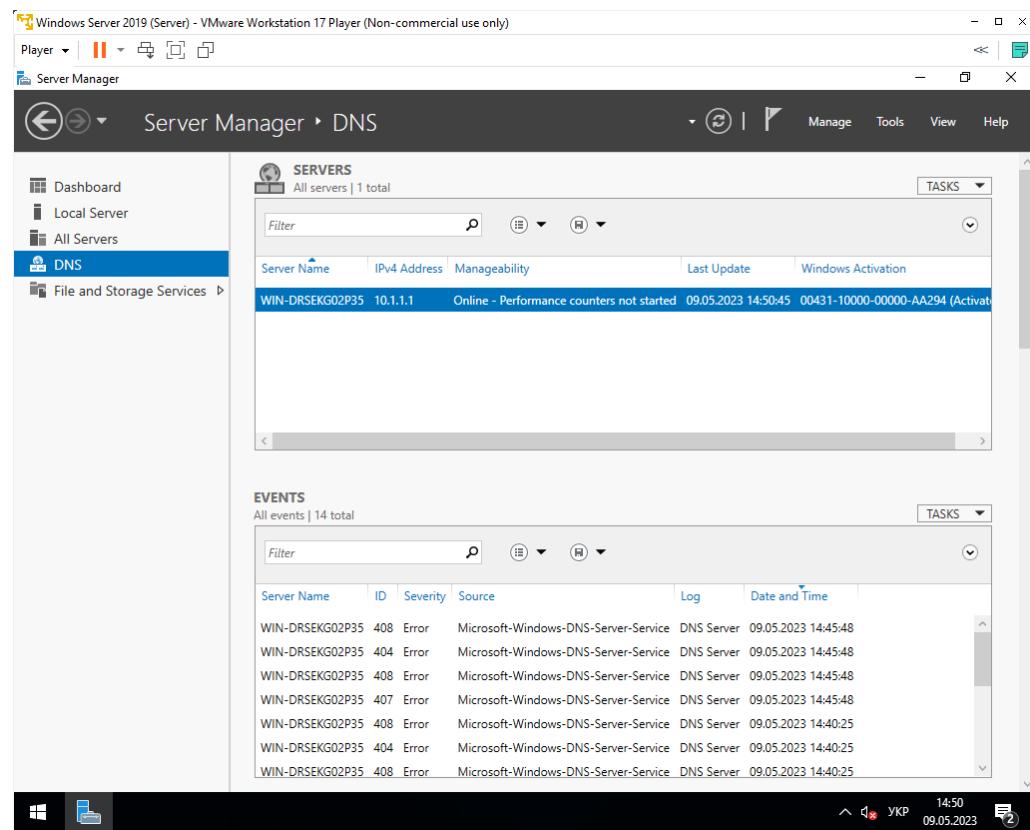


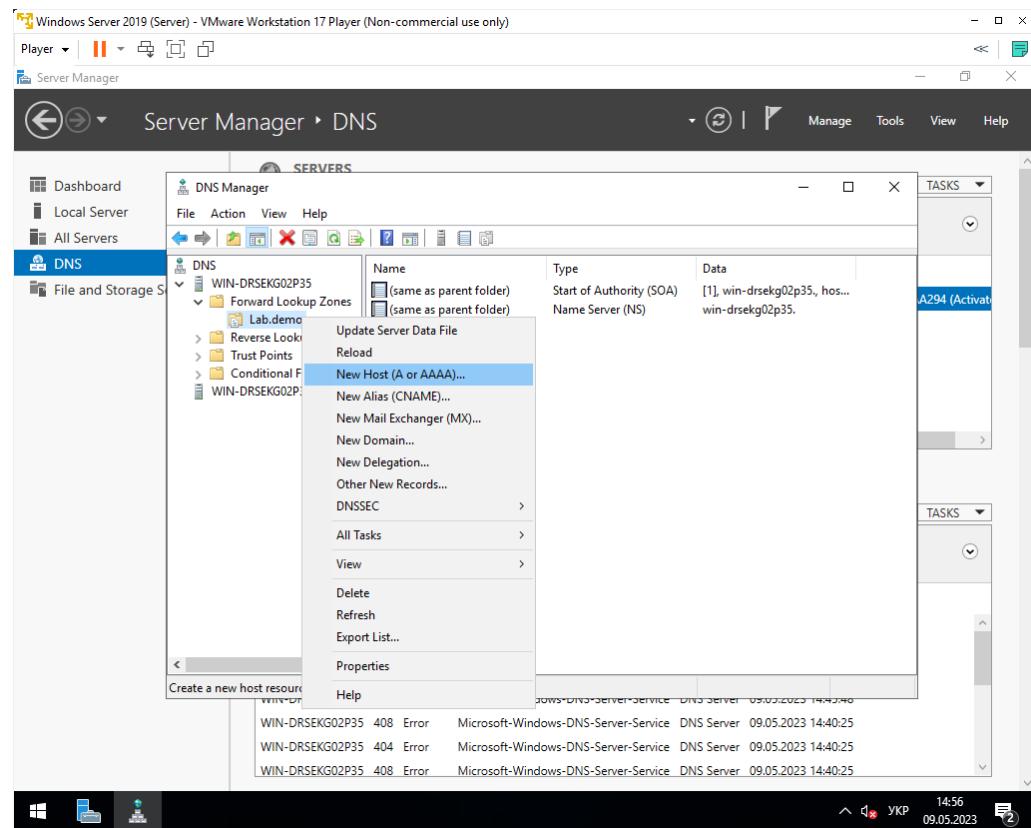
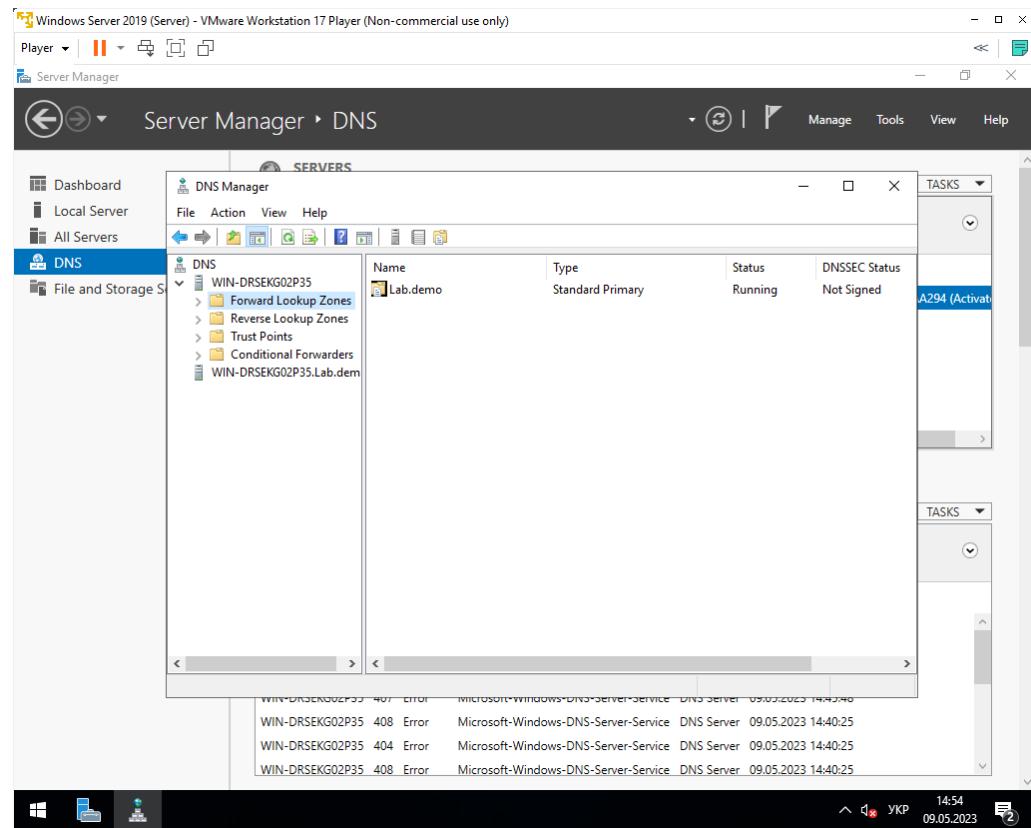


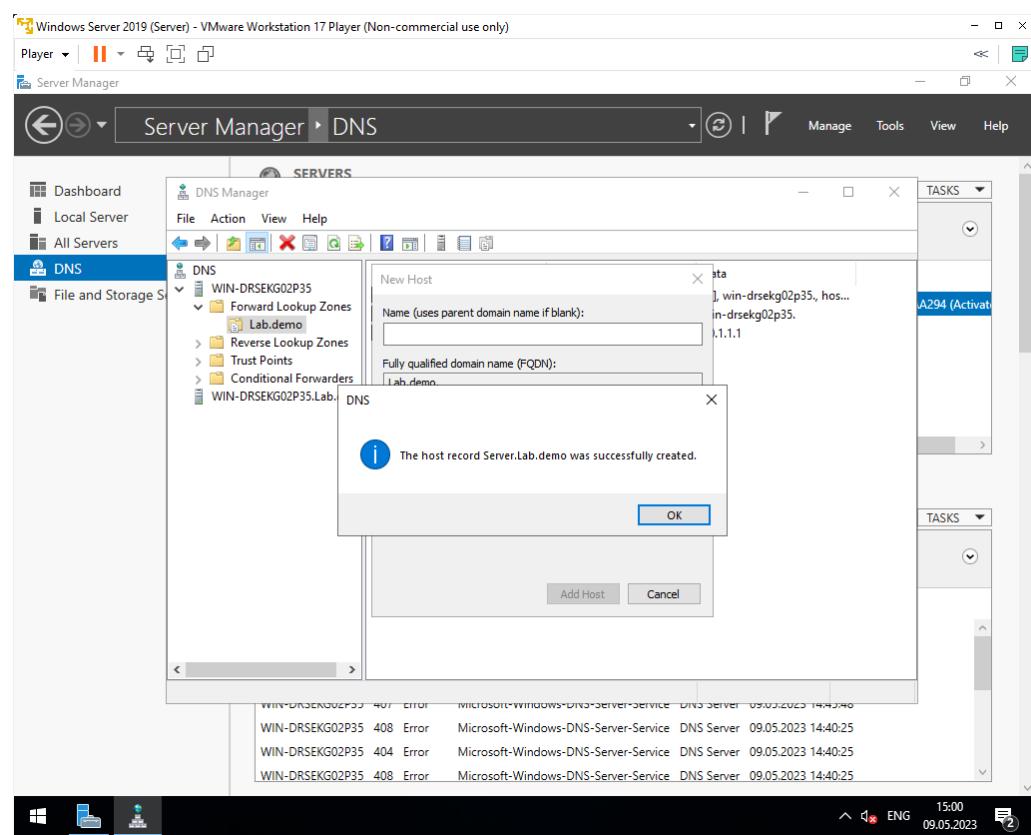
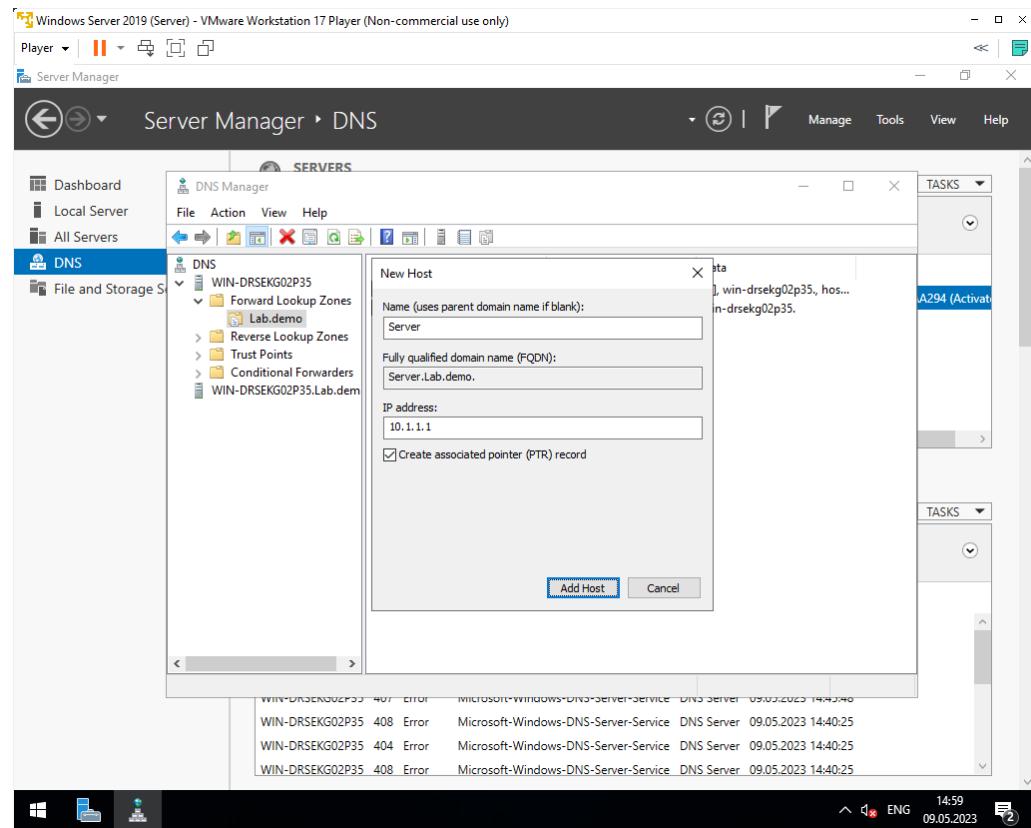


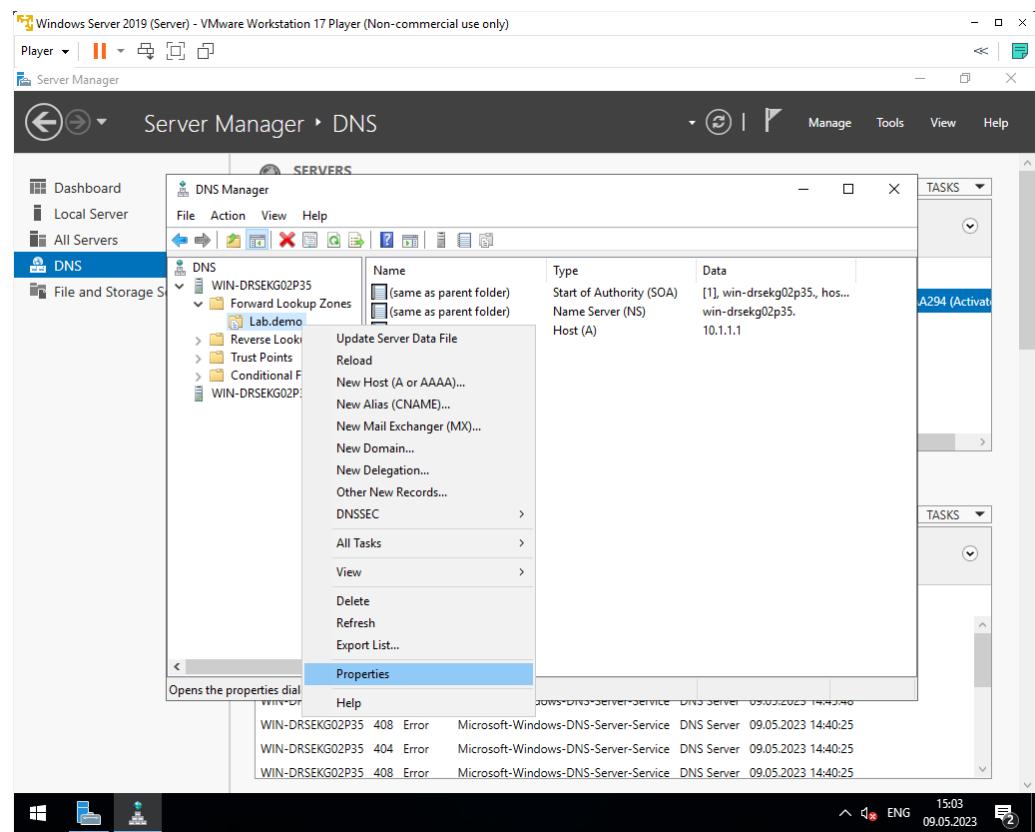
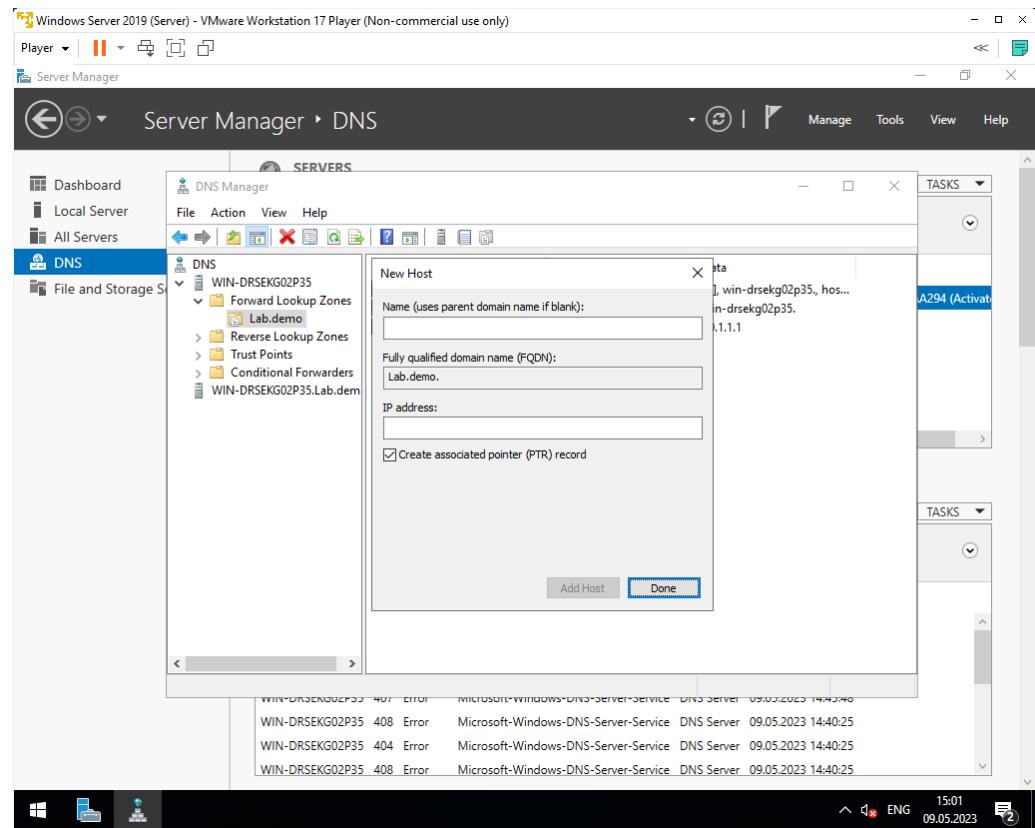


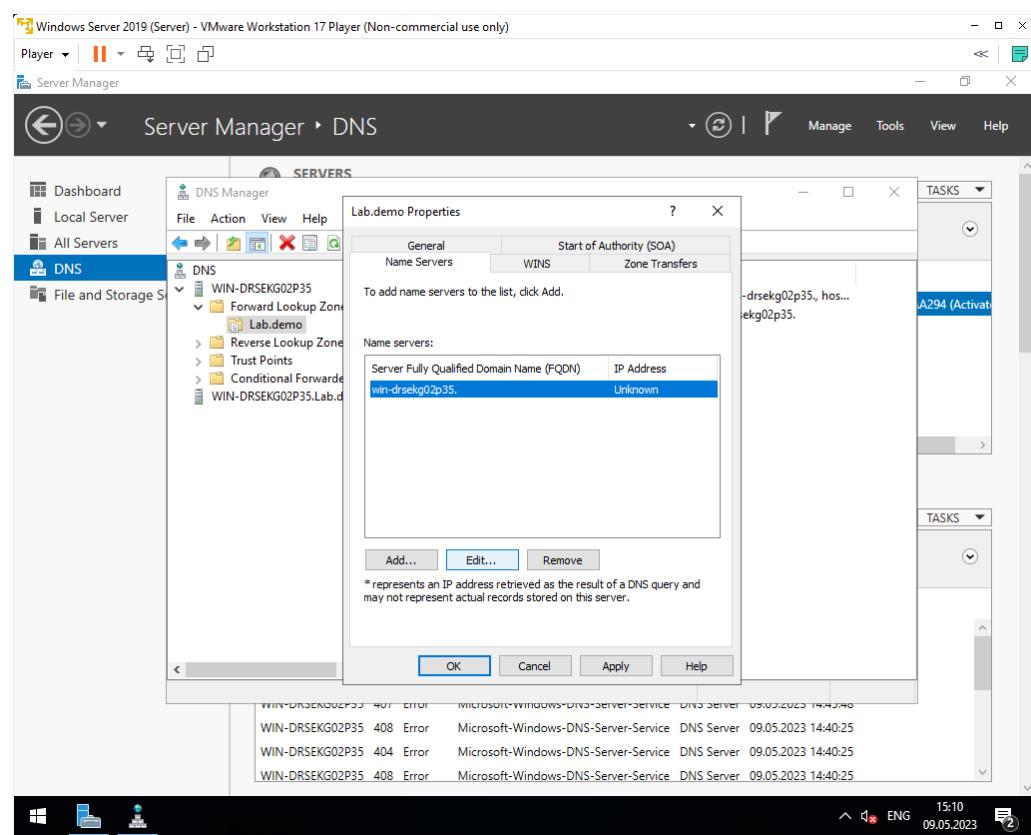
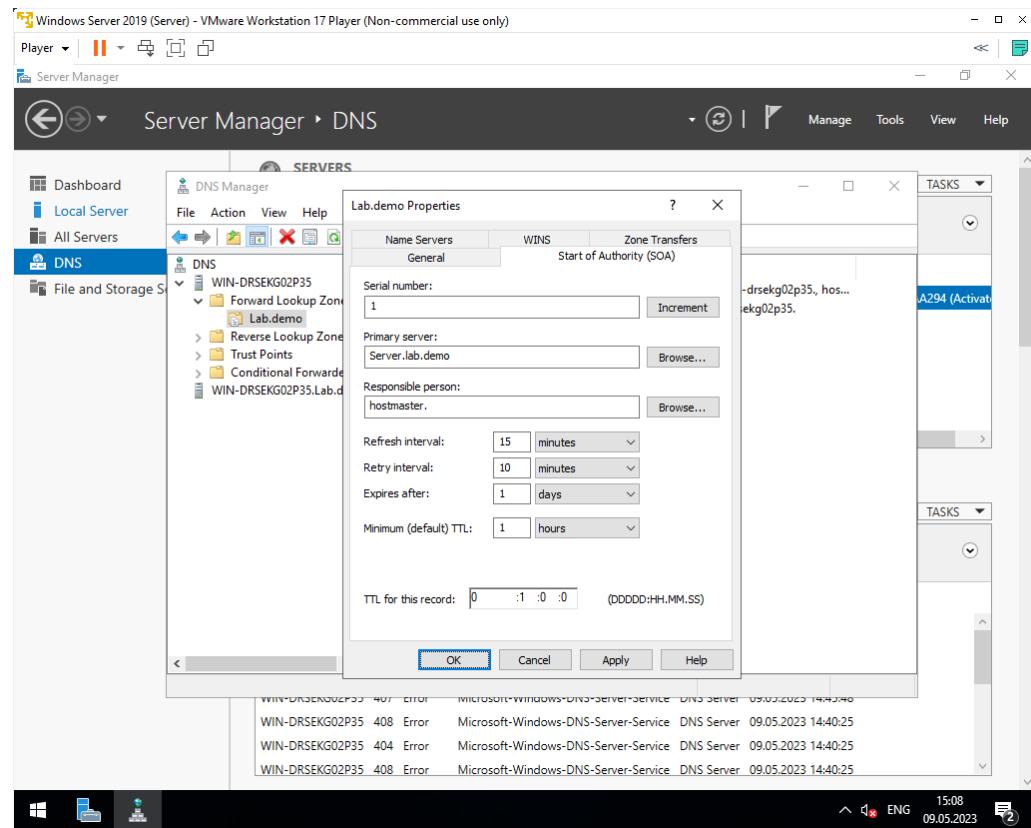


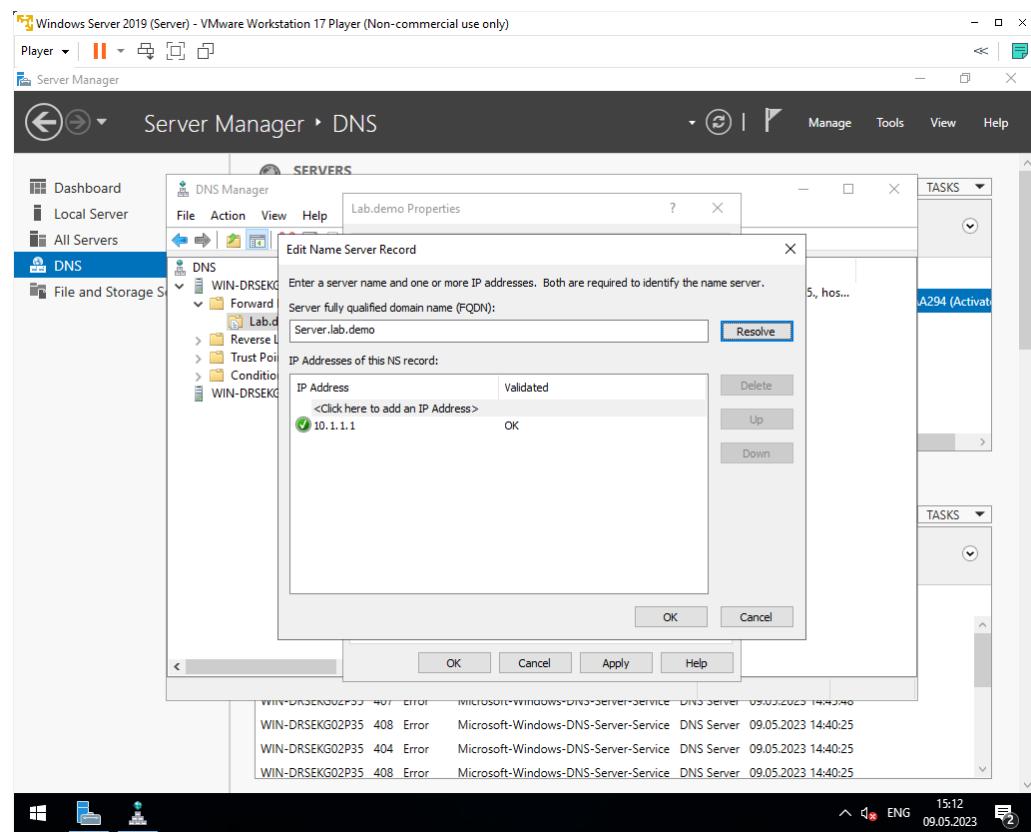
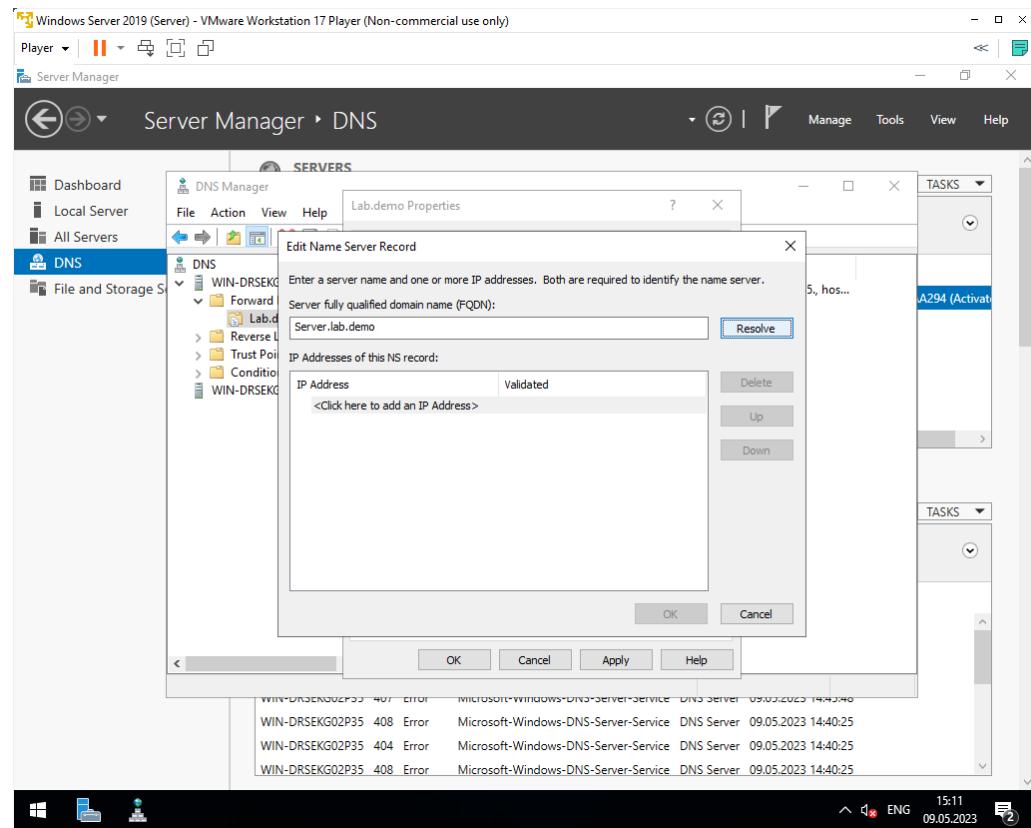


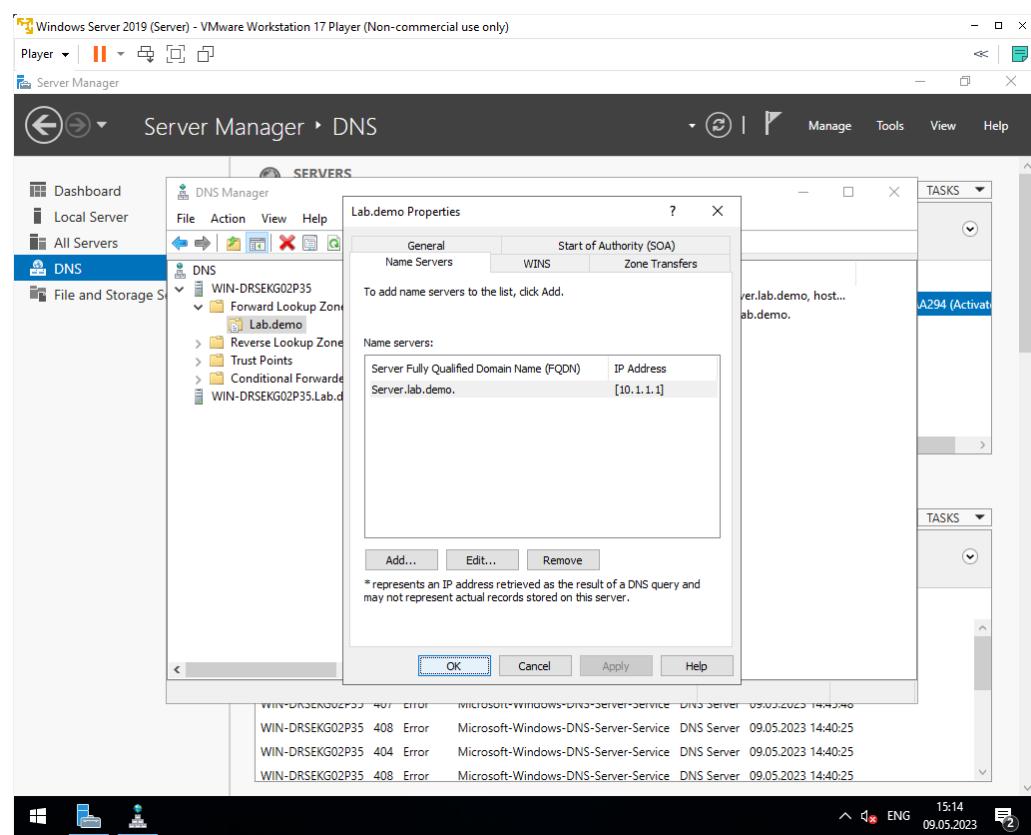
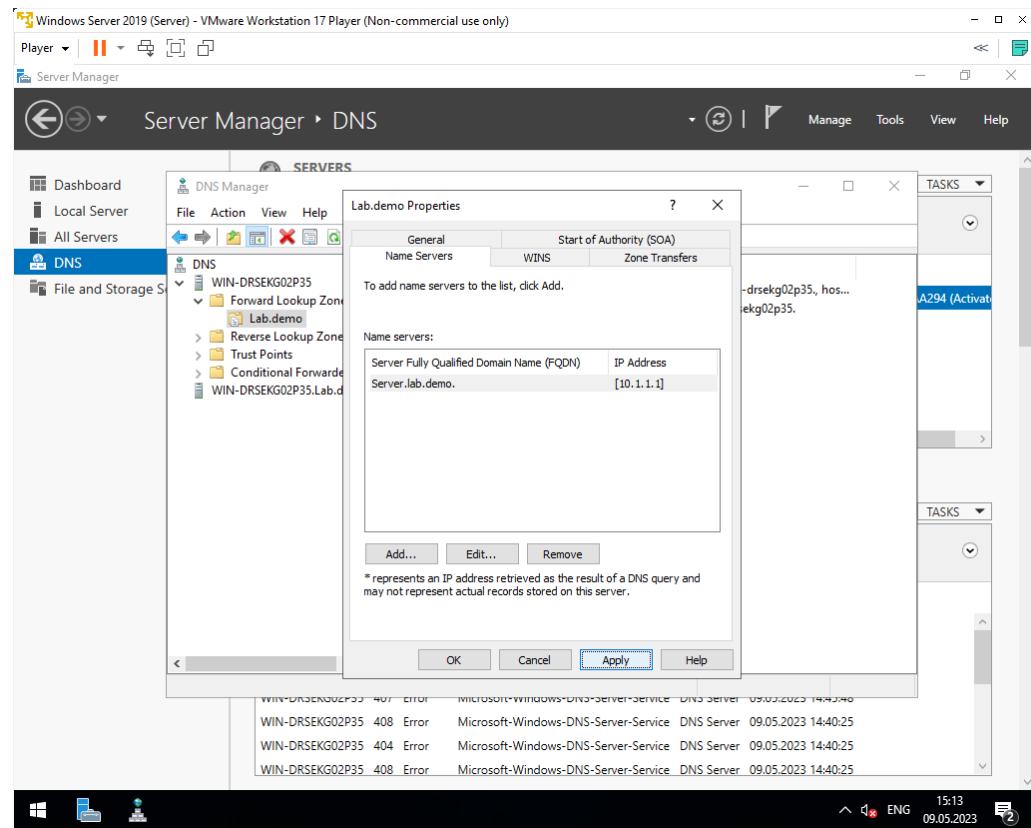


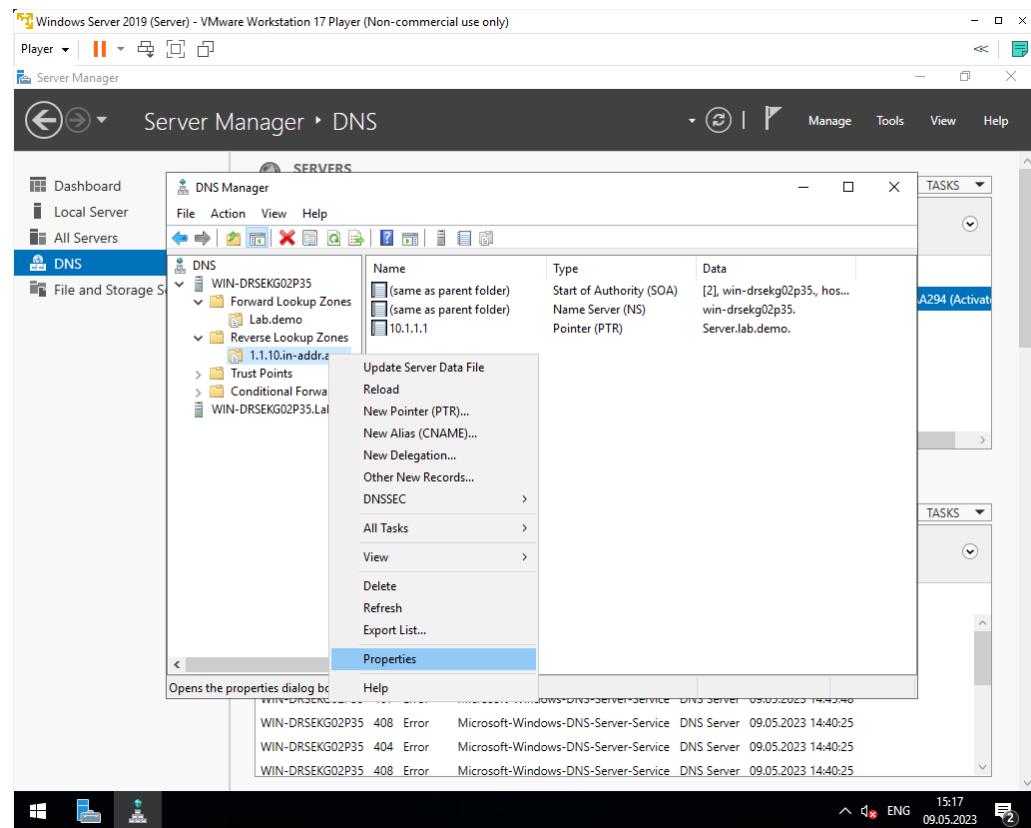
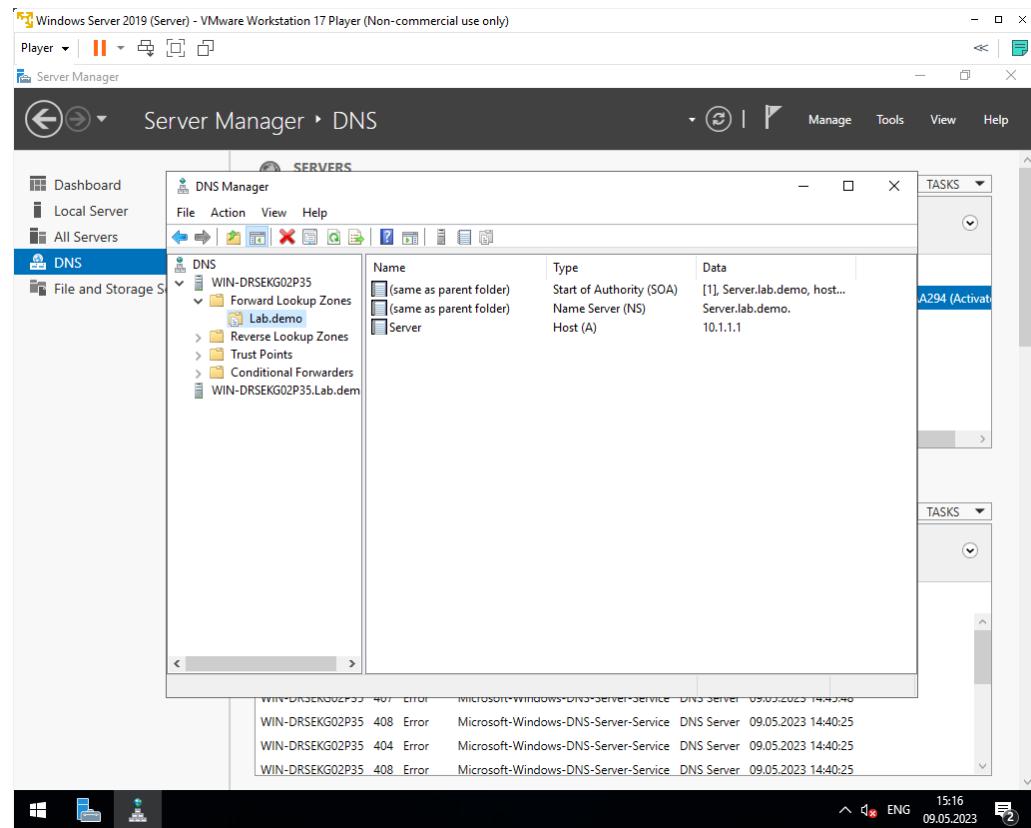


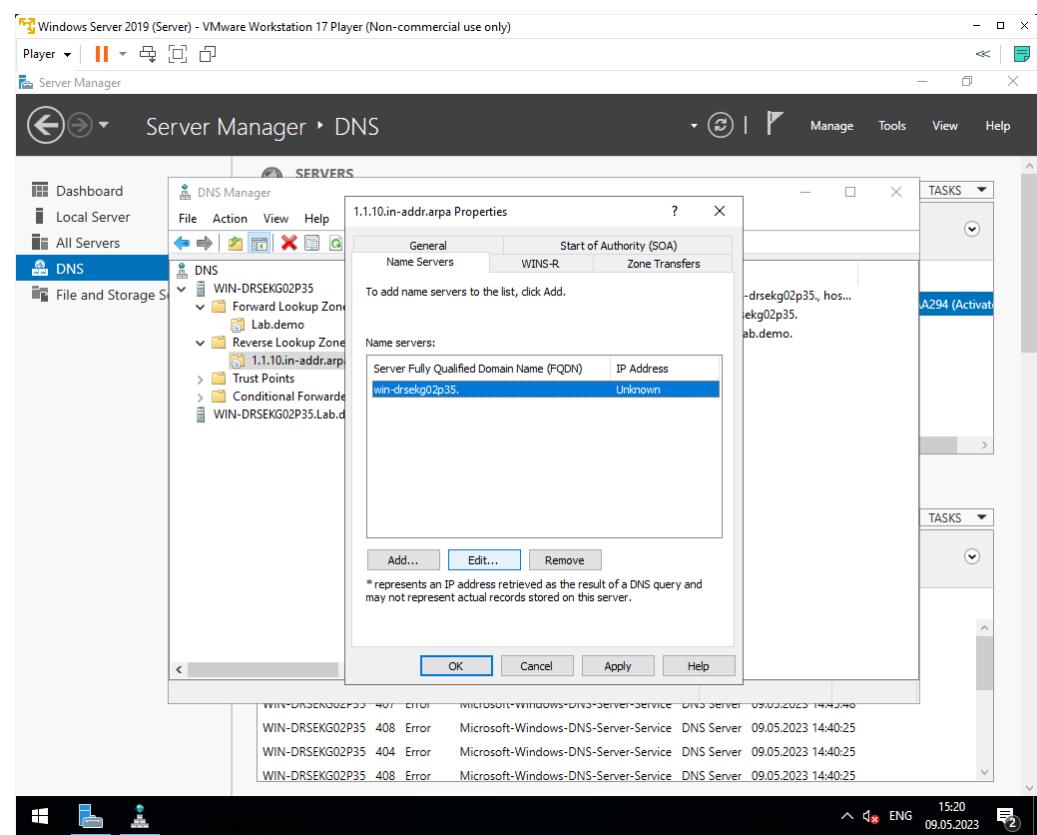
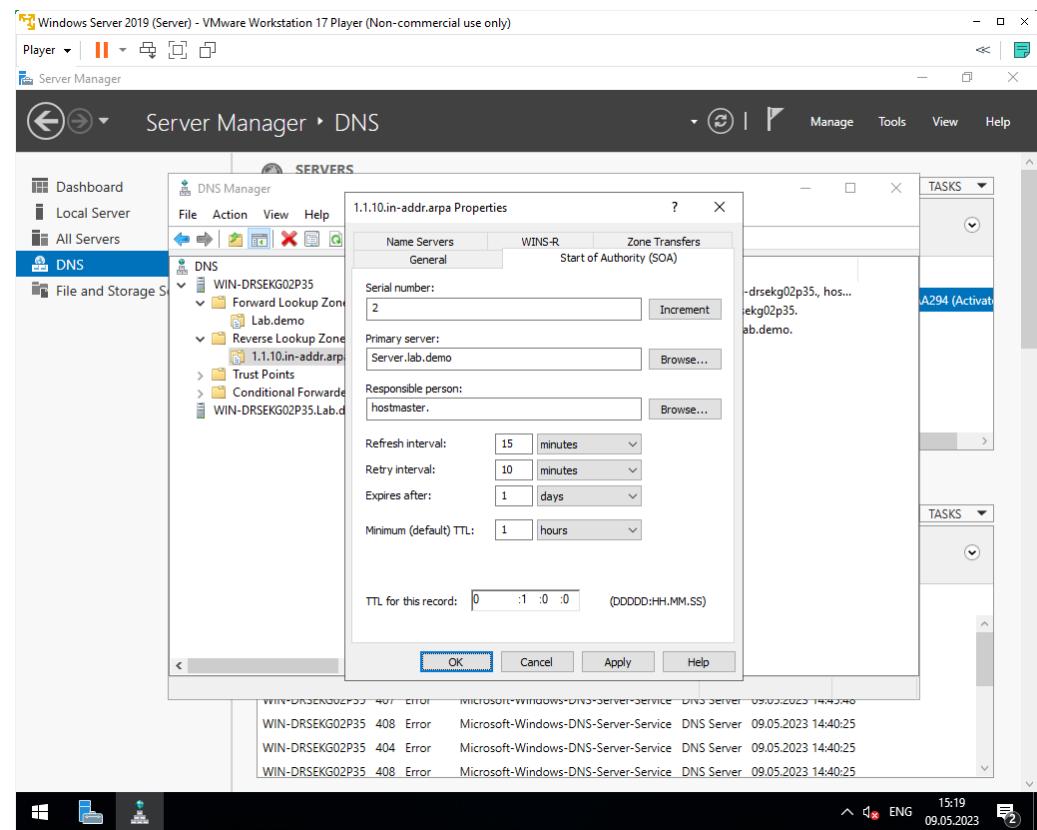


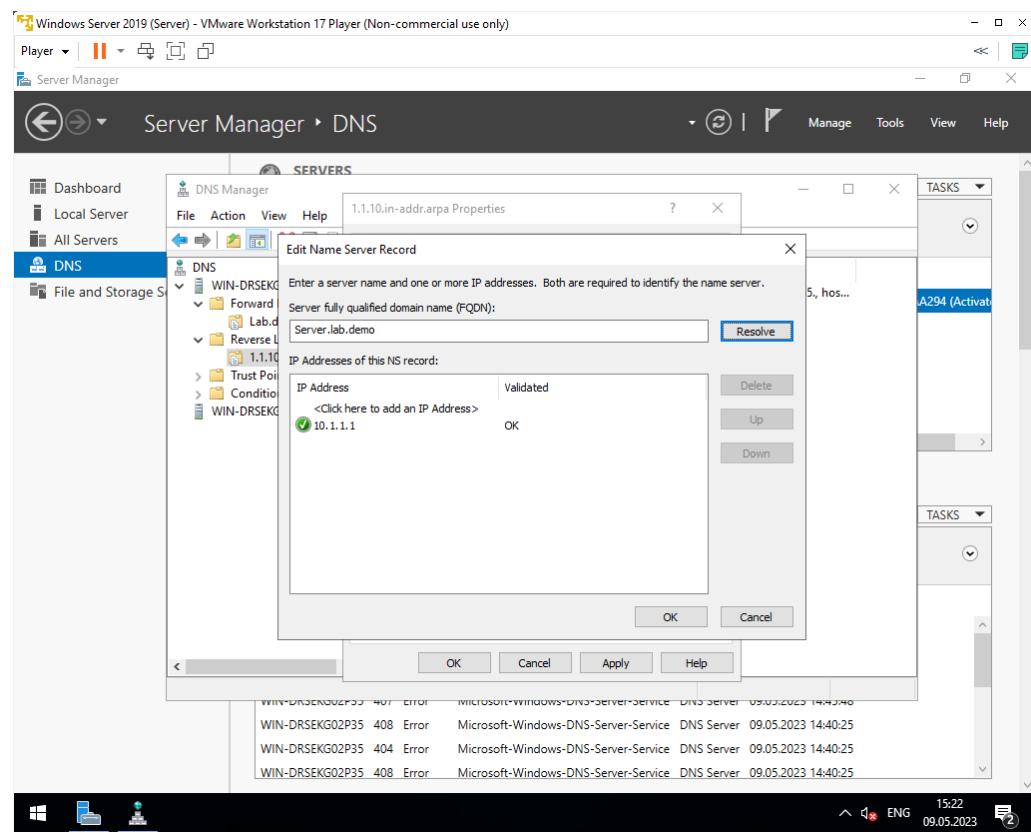
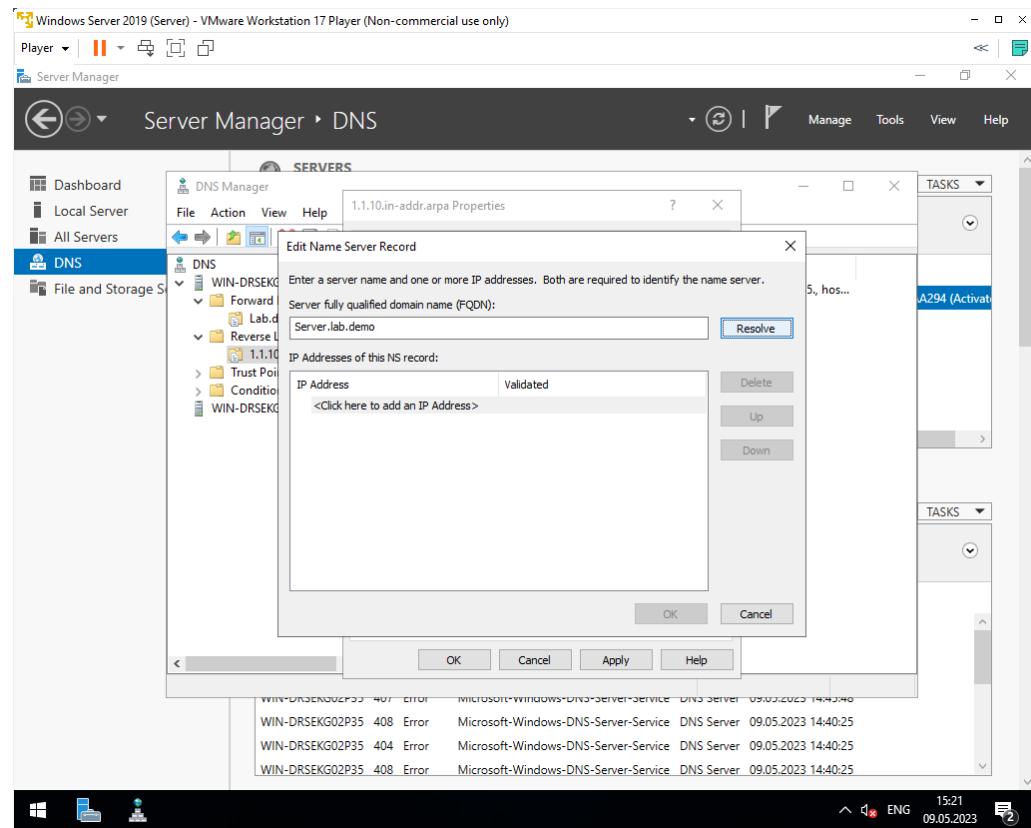


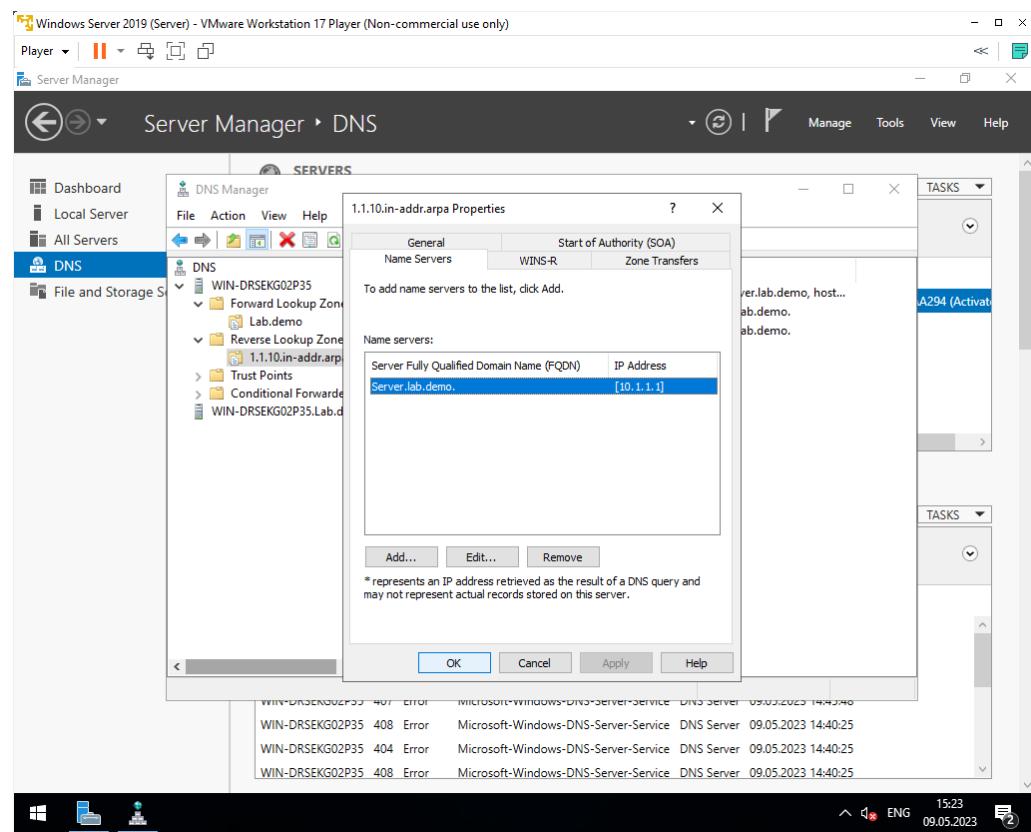
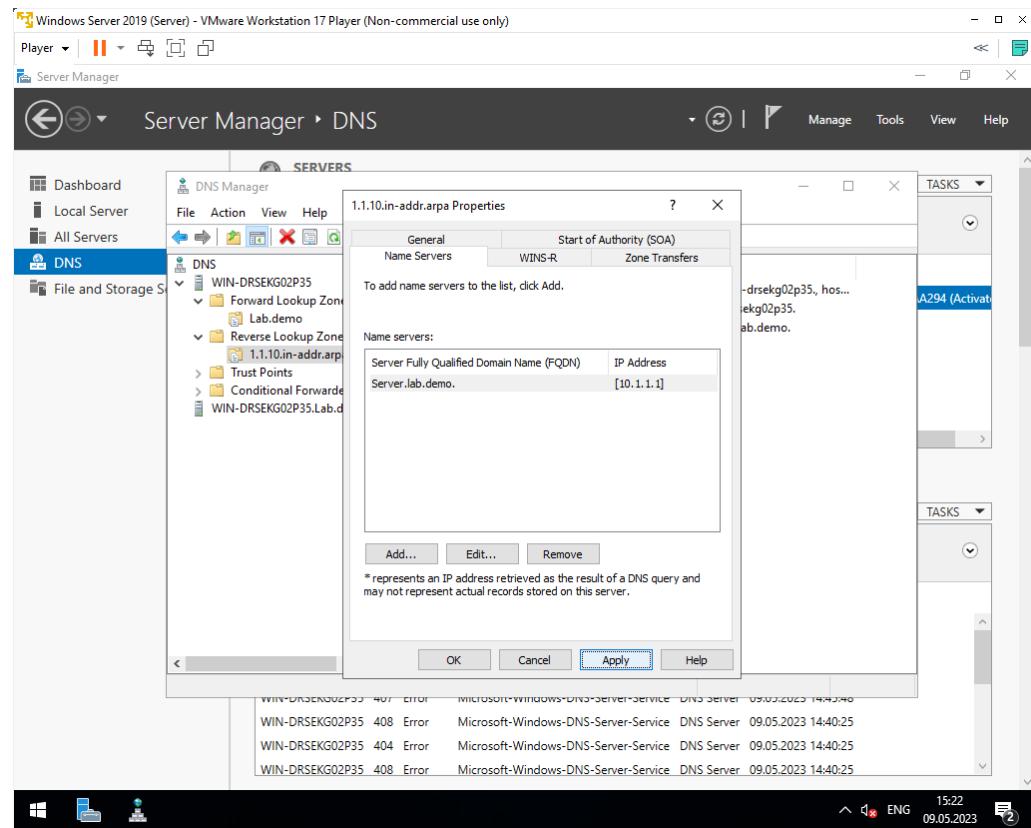


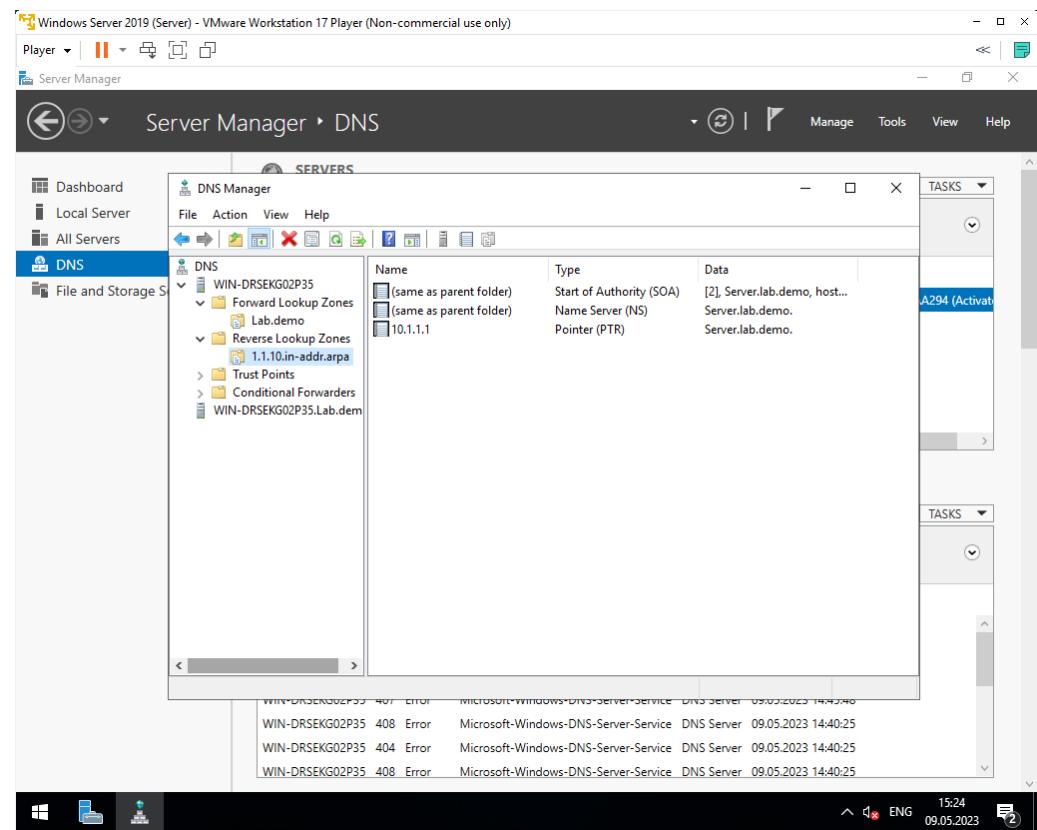




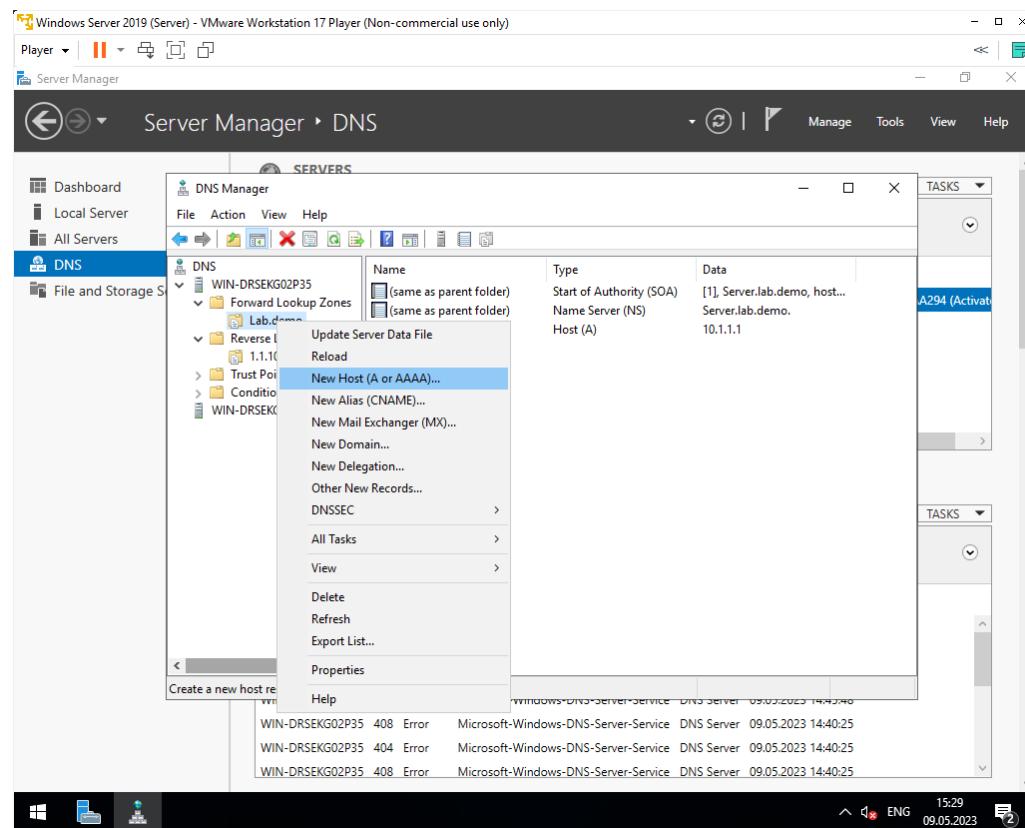


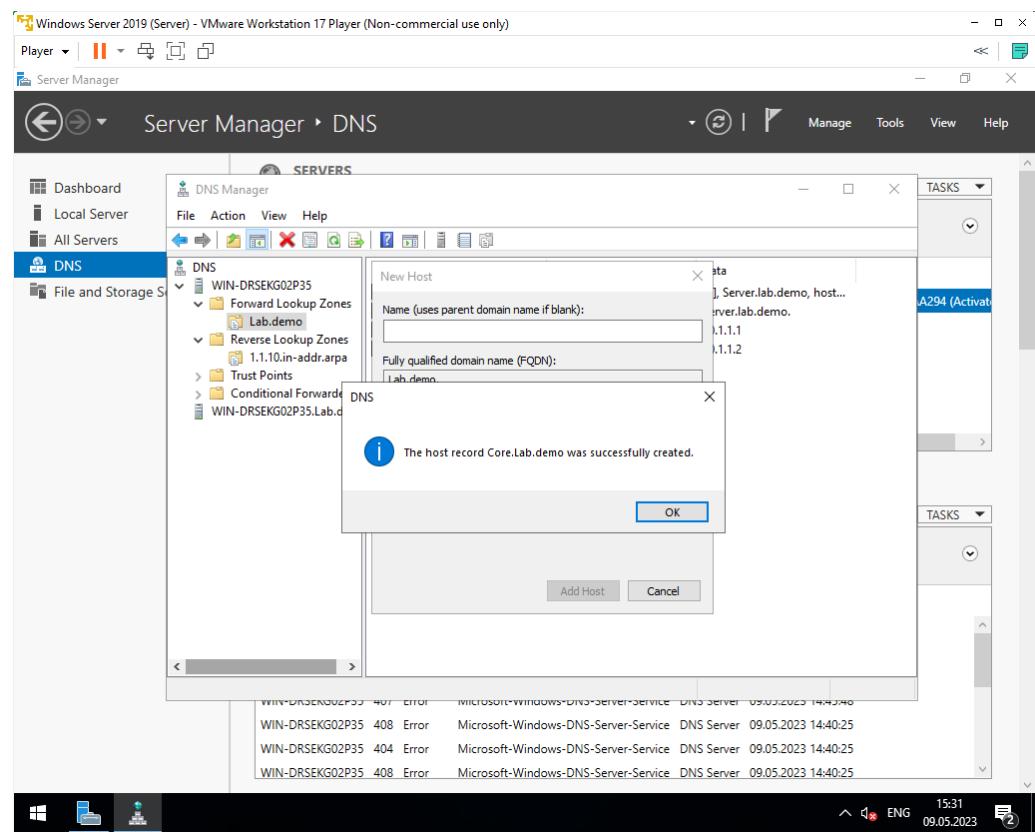
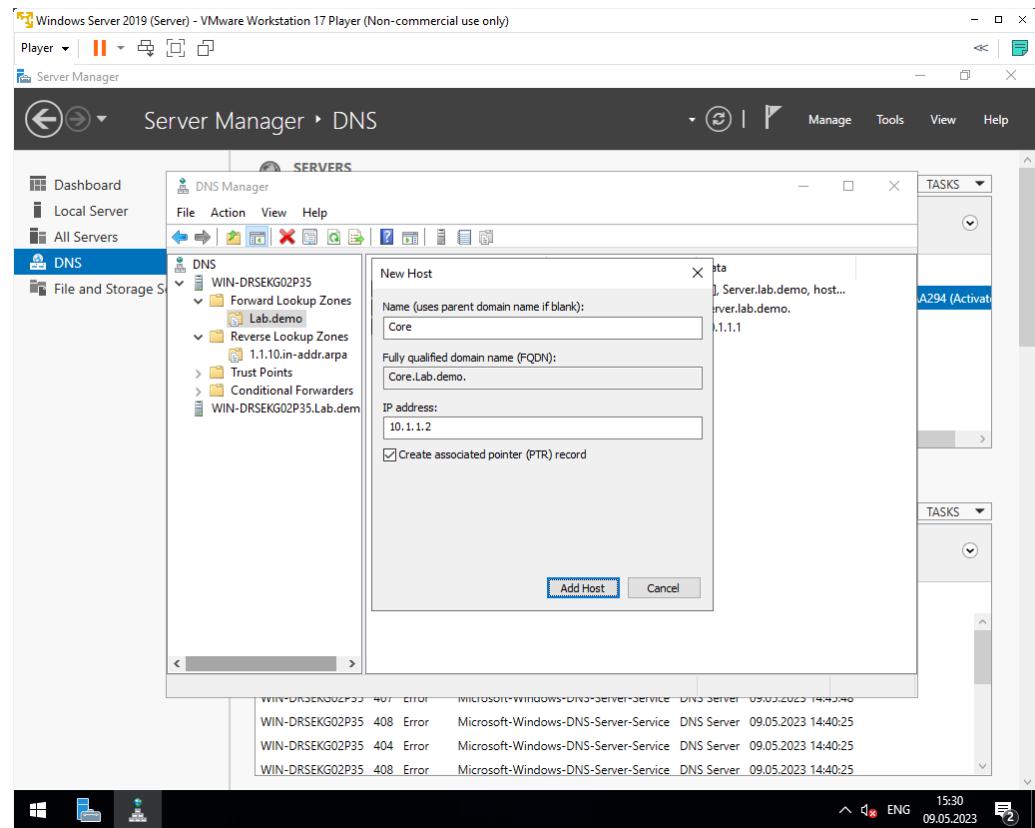


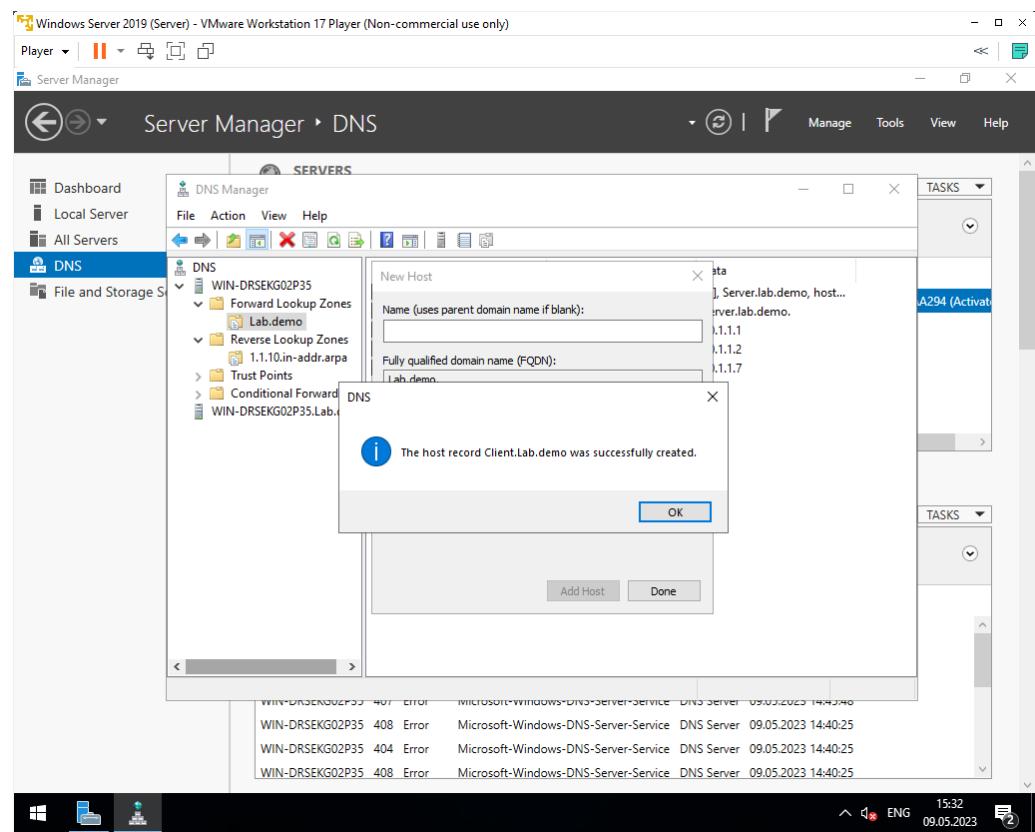
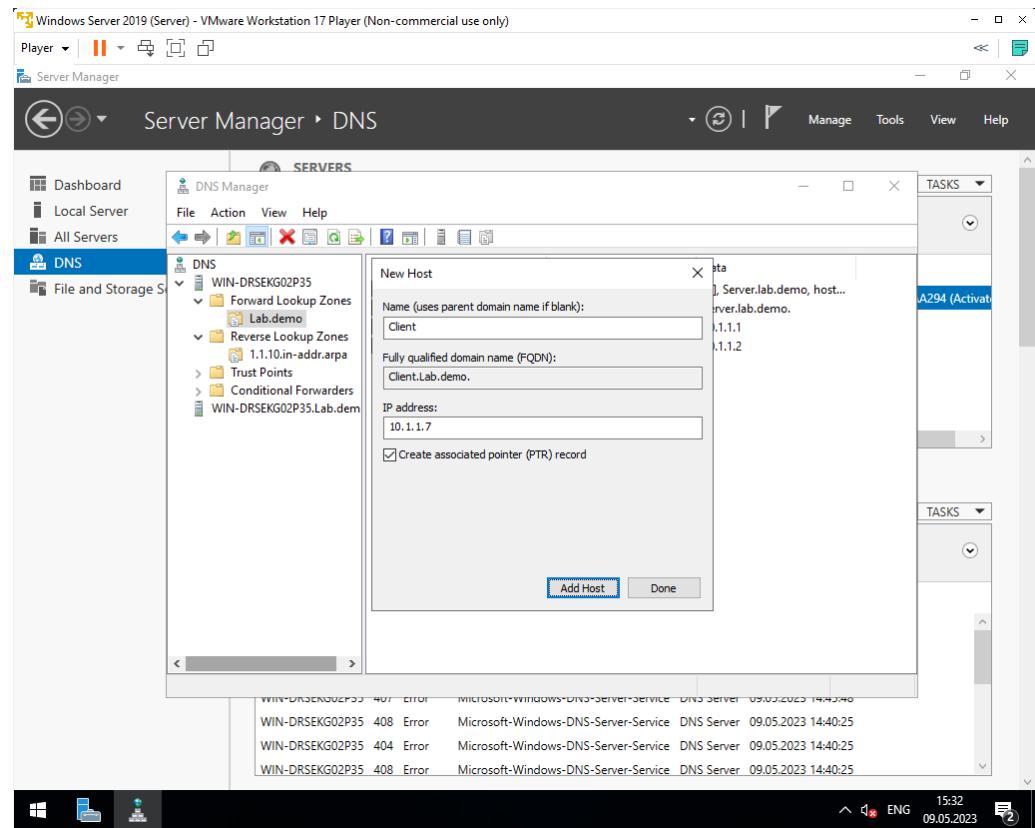


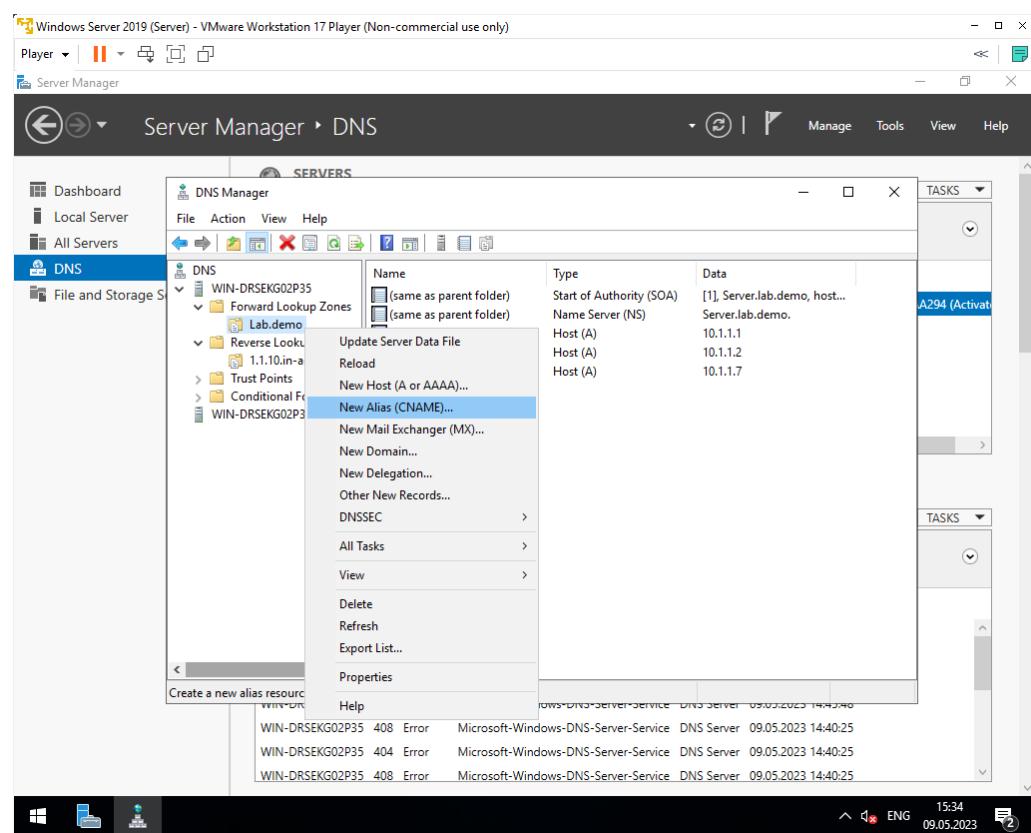
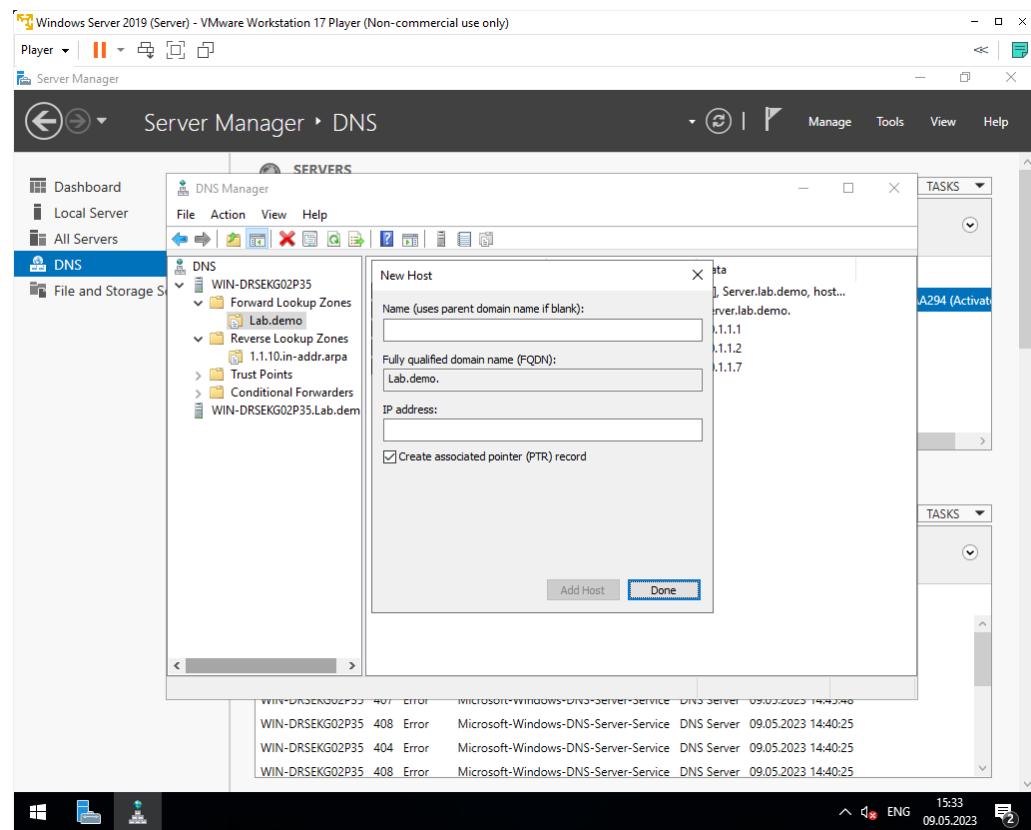


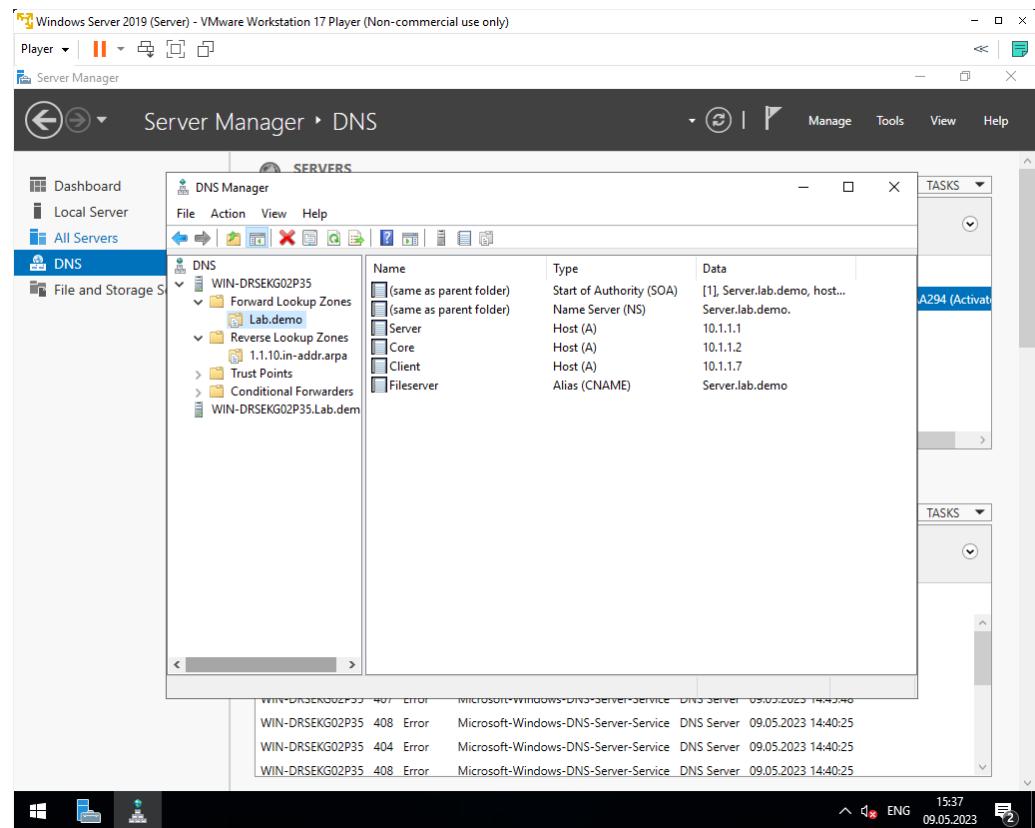
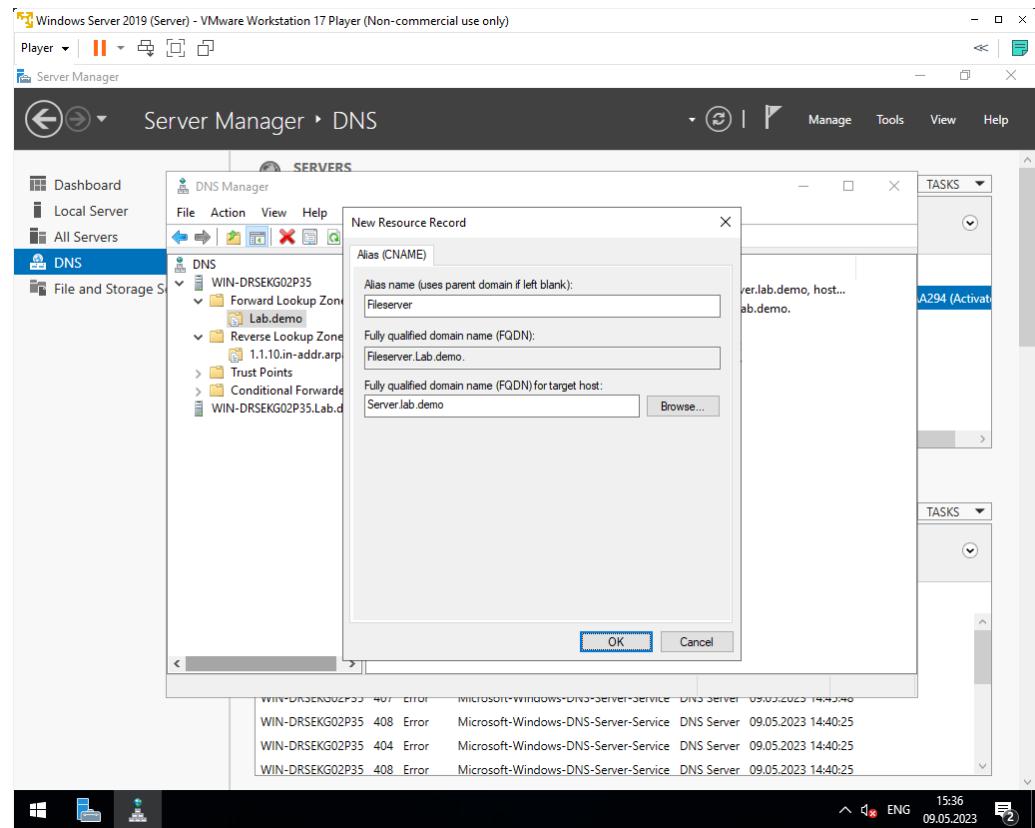
## Створення записів DNS.



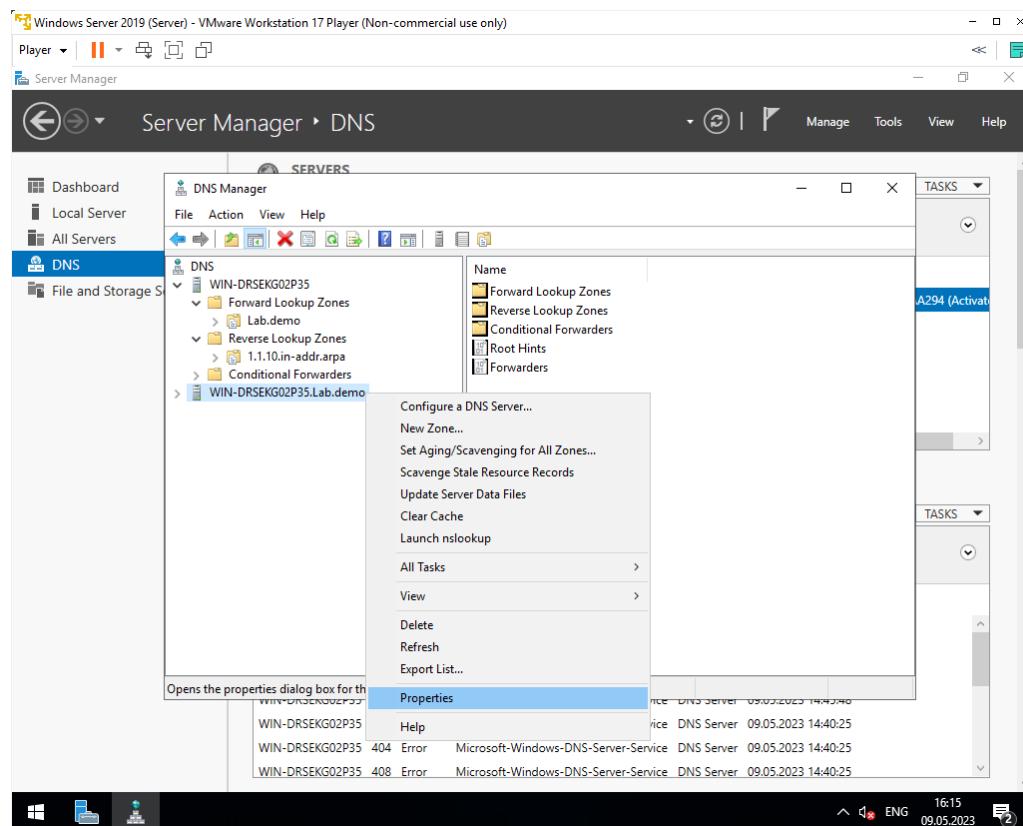


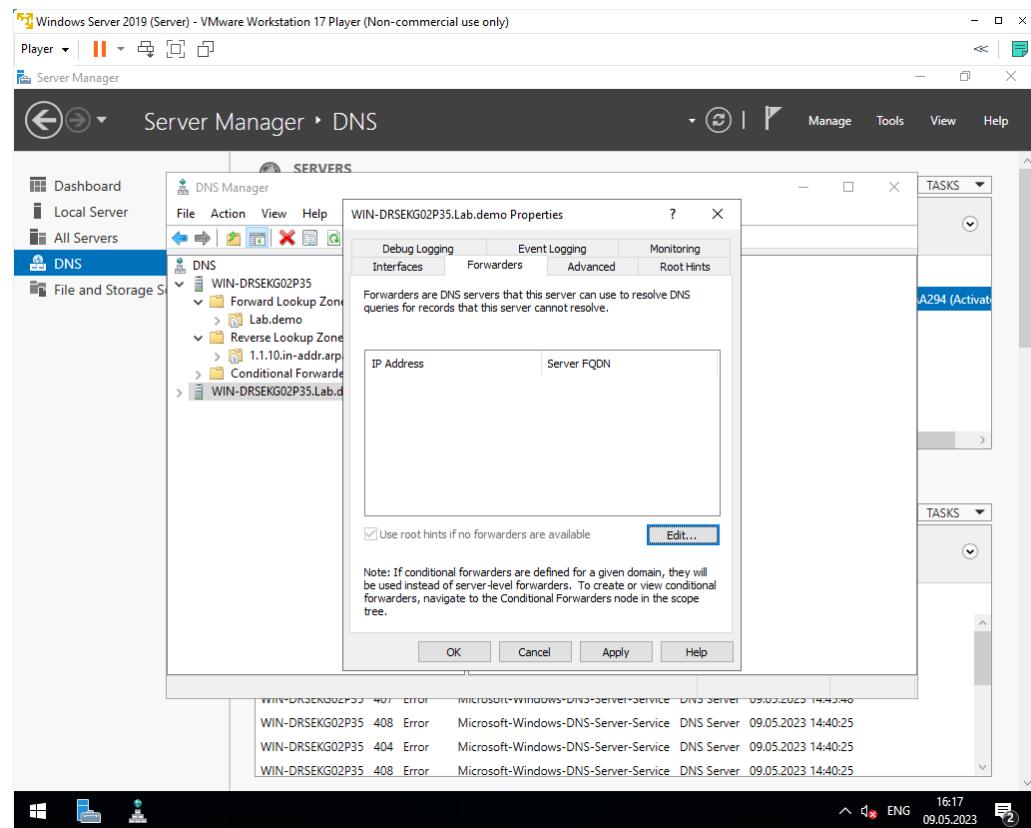
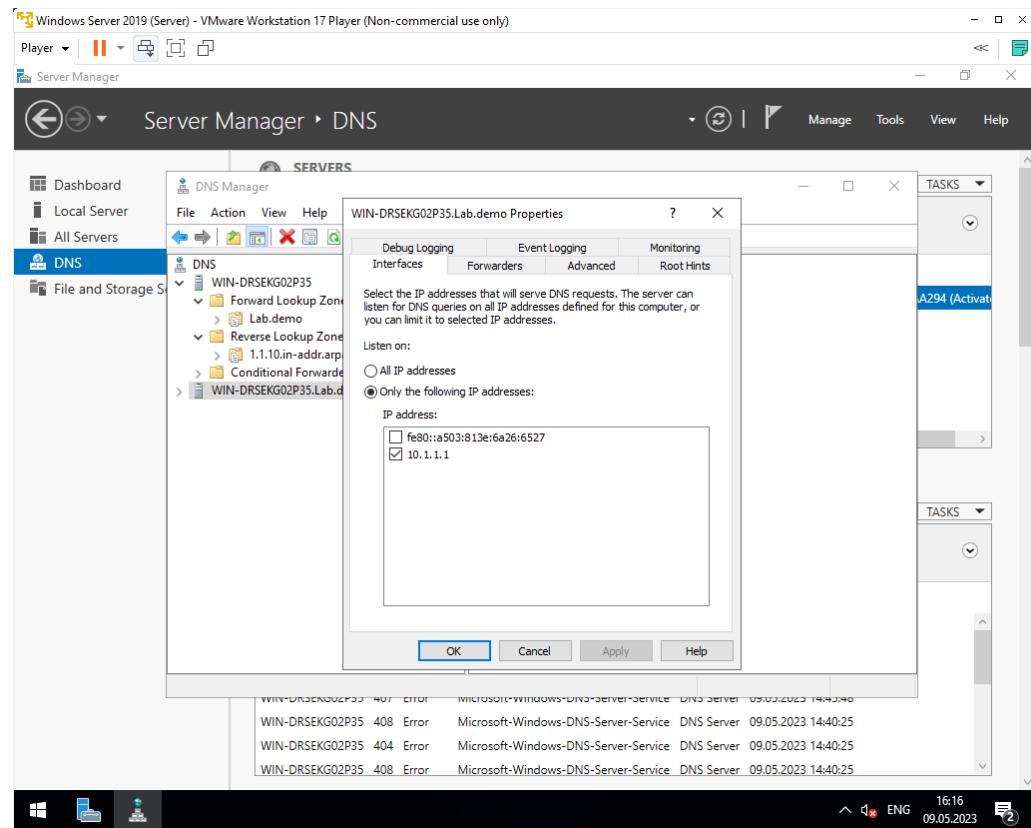


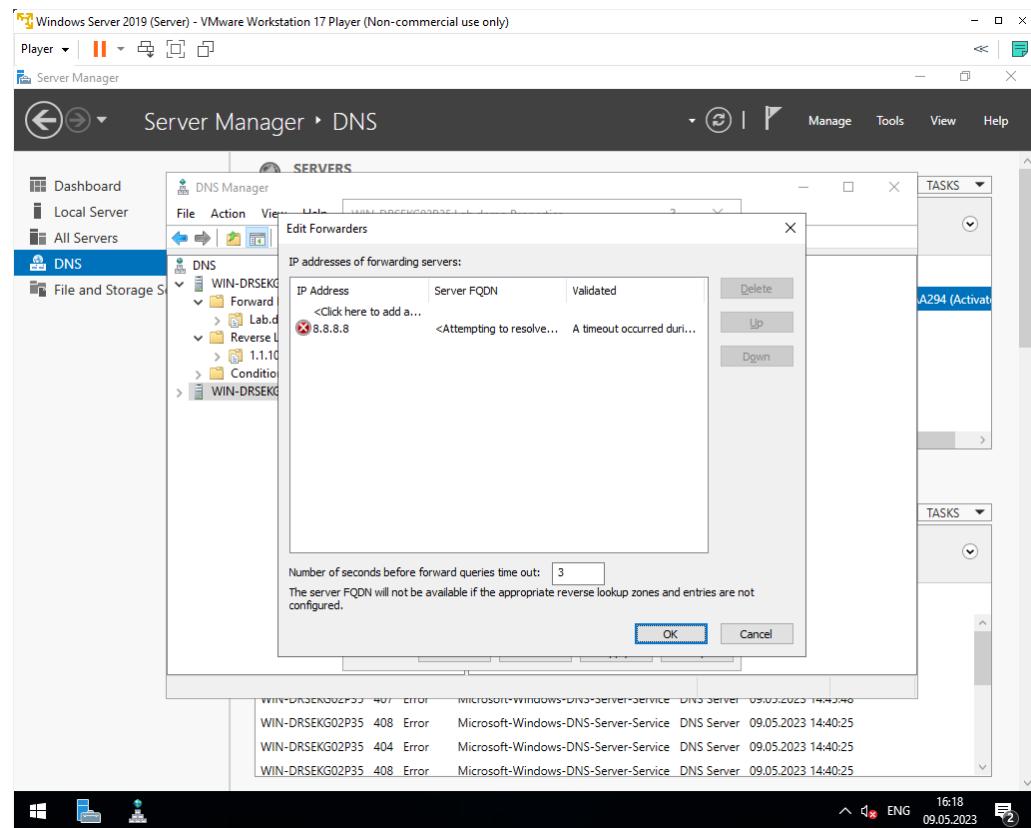
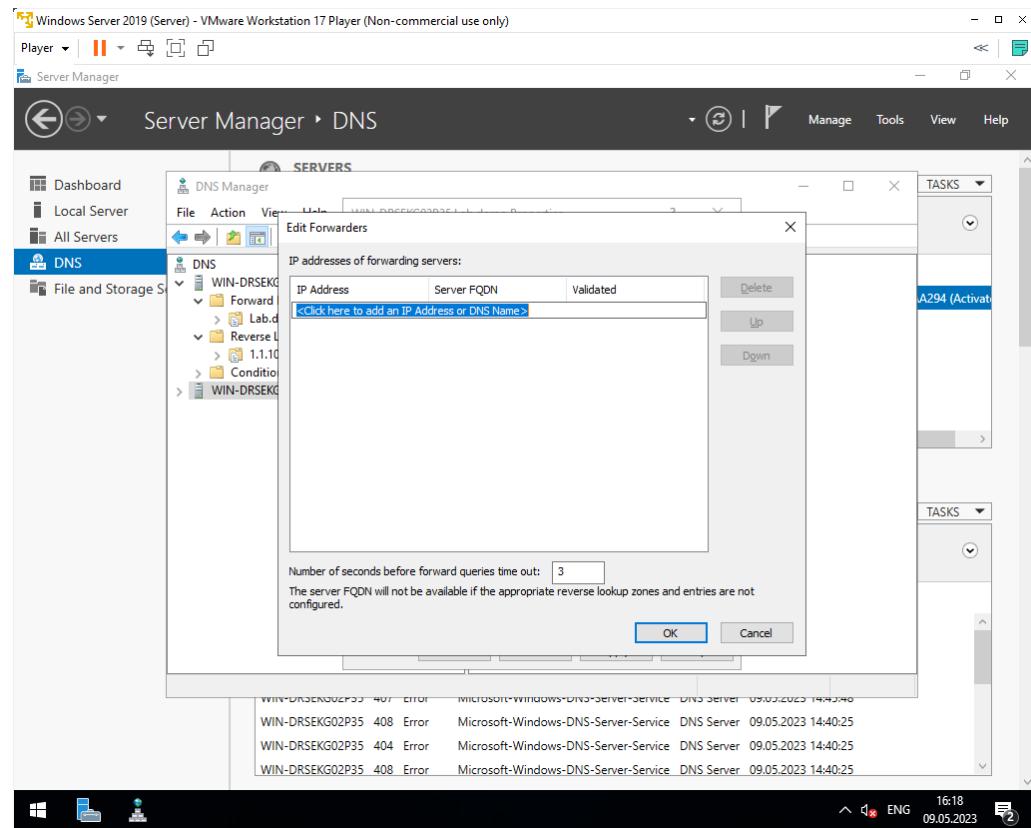


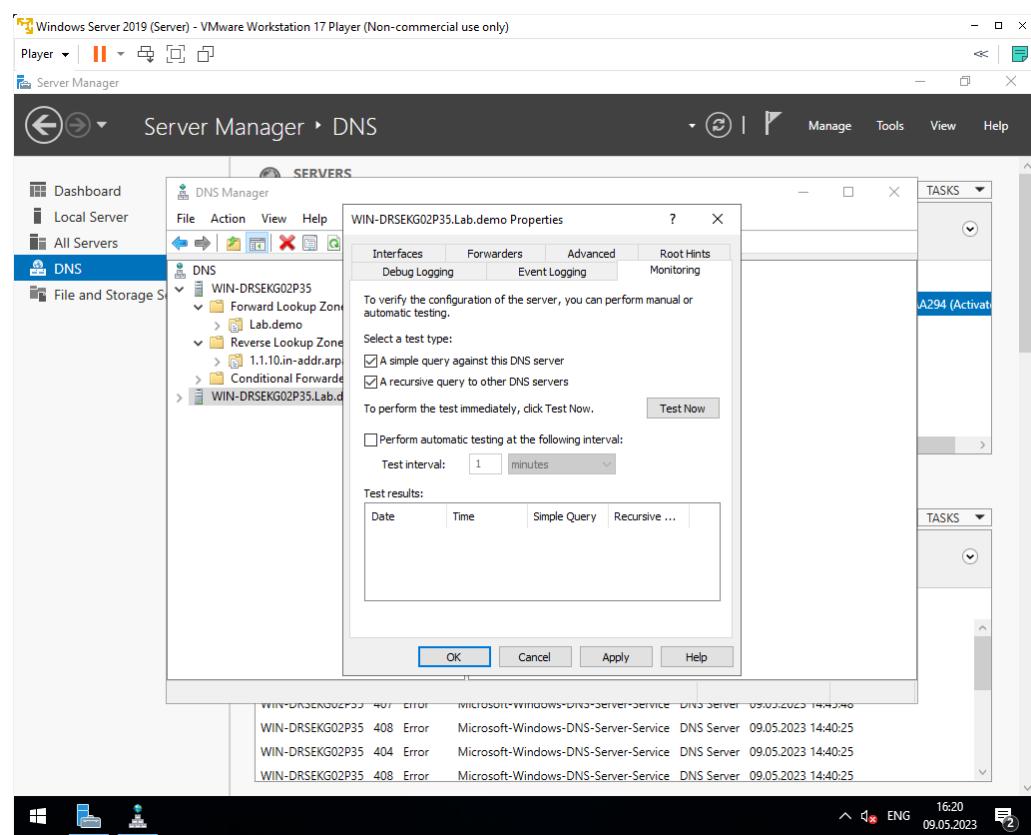
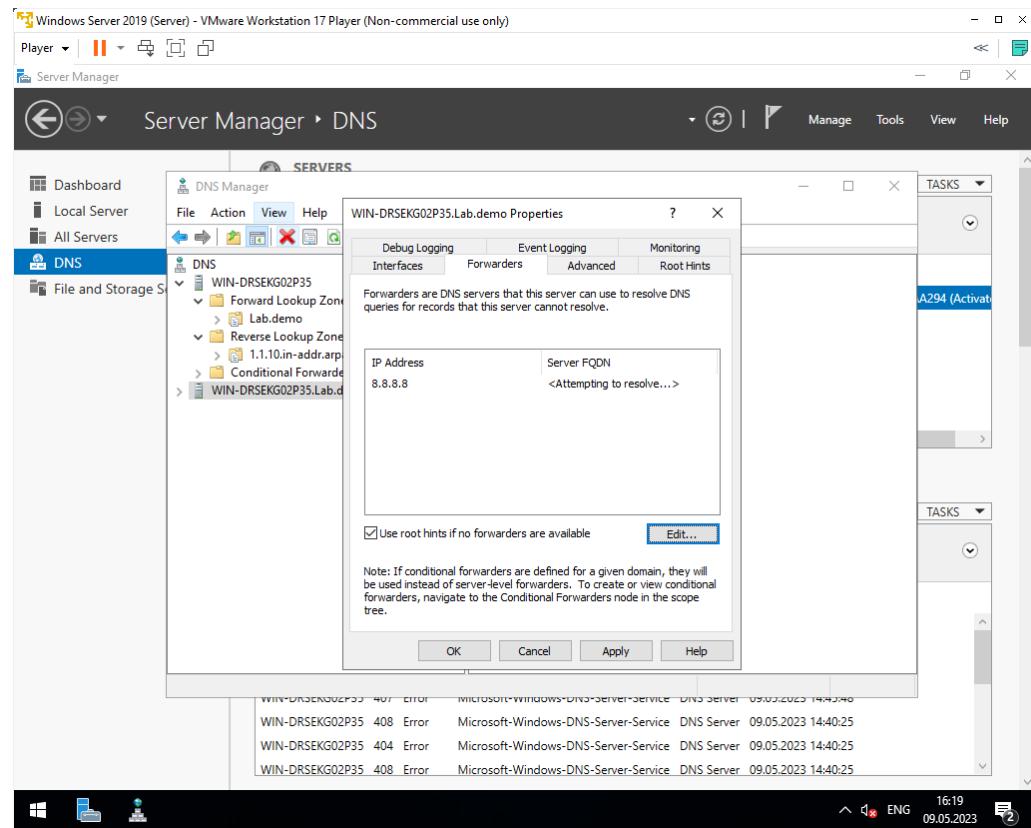


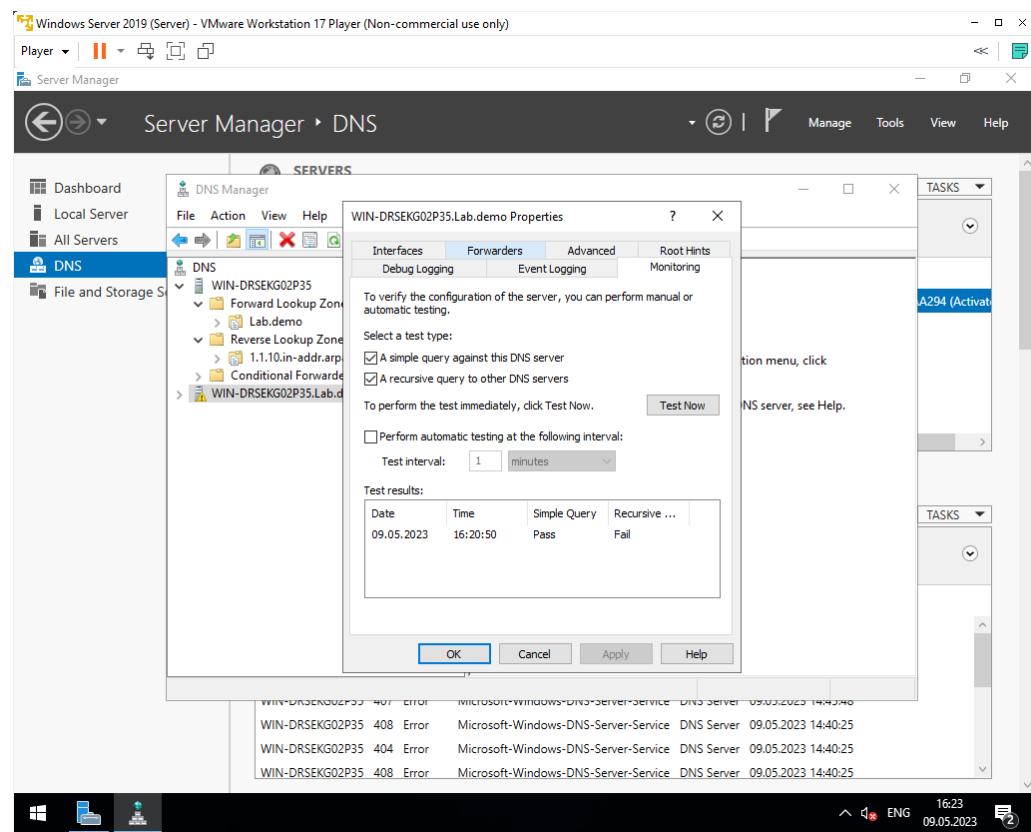
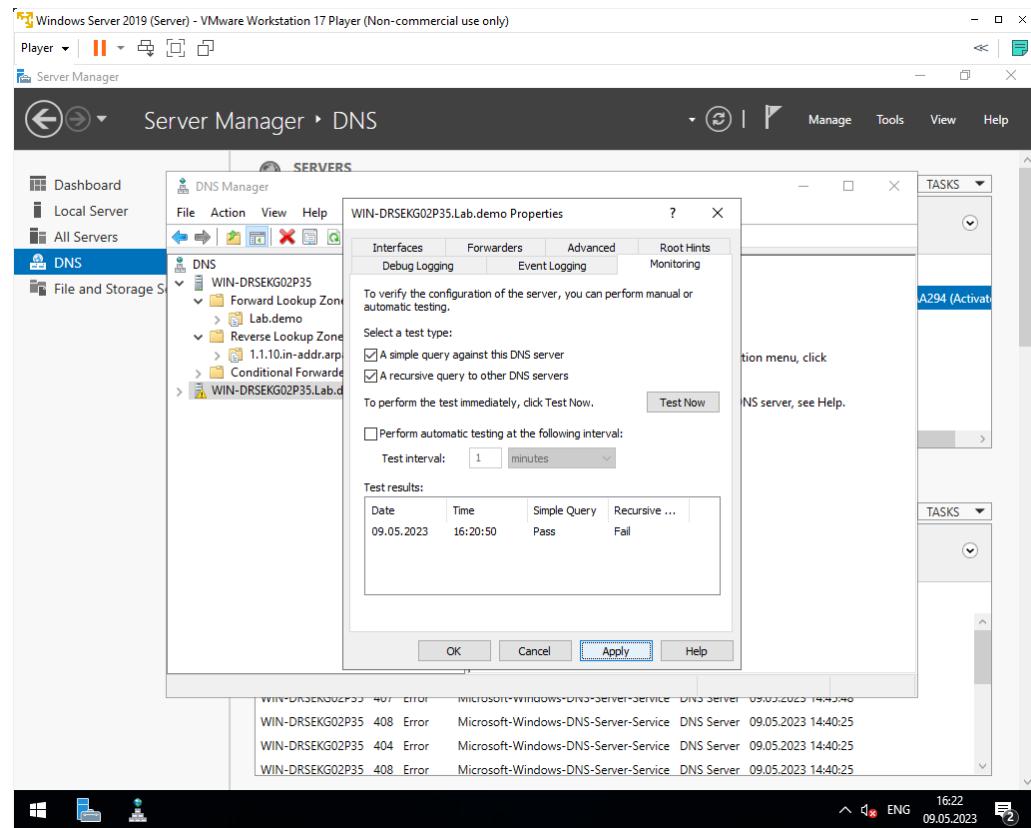
## Налаштування властивостей сервера DNS. Використання серверів пересилання.

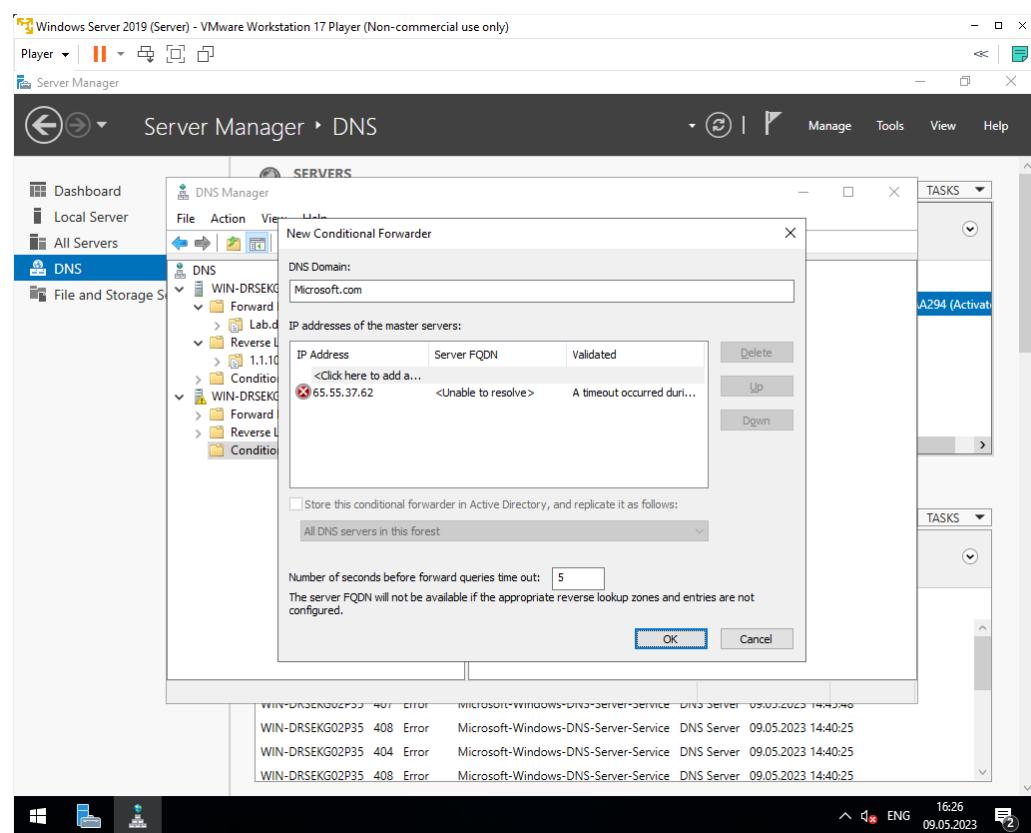
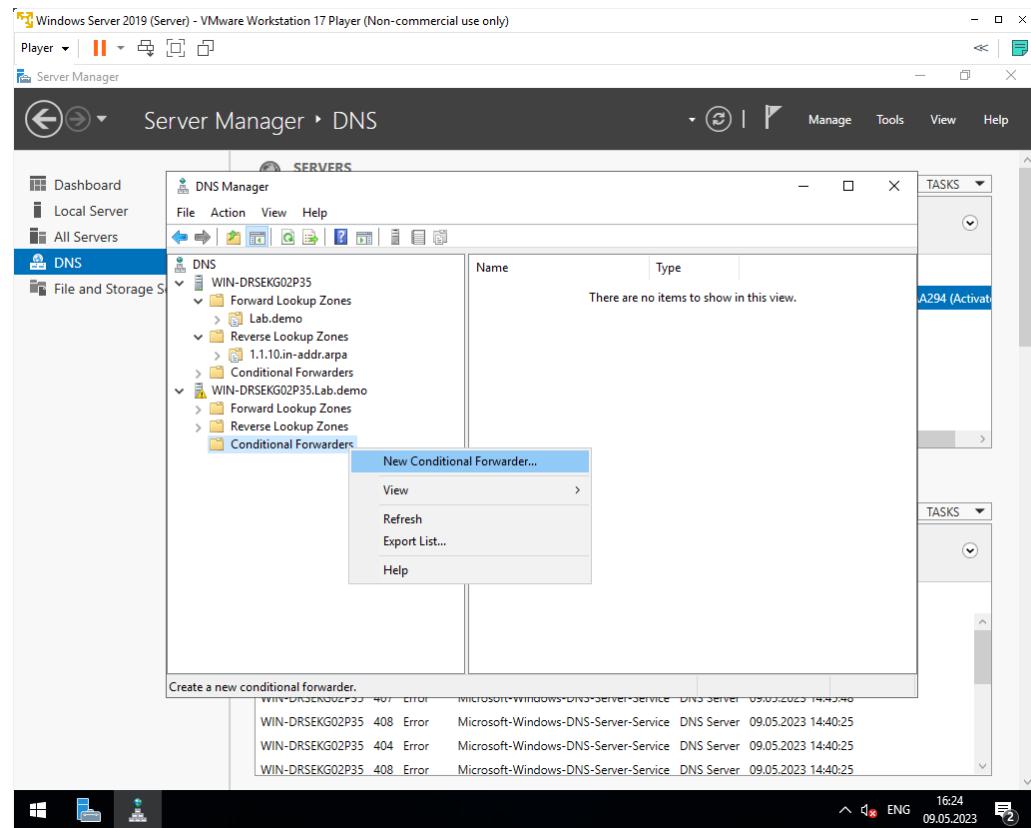


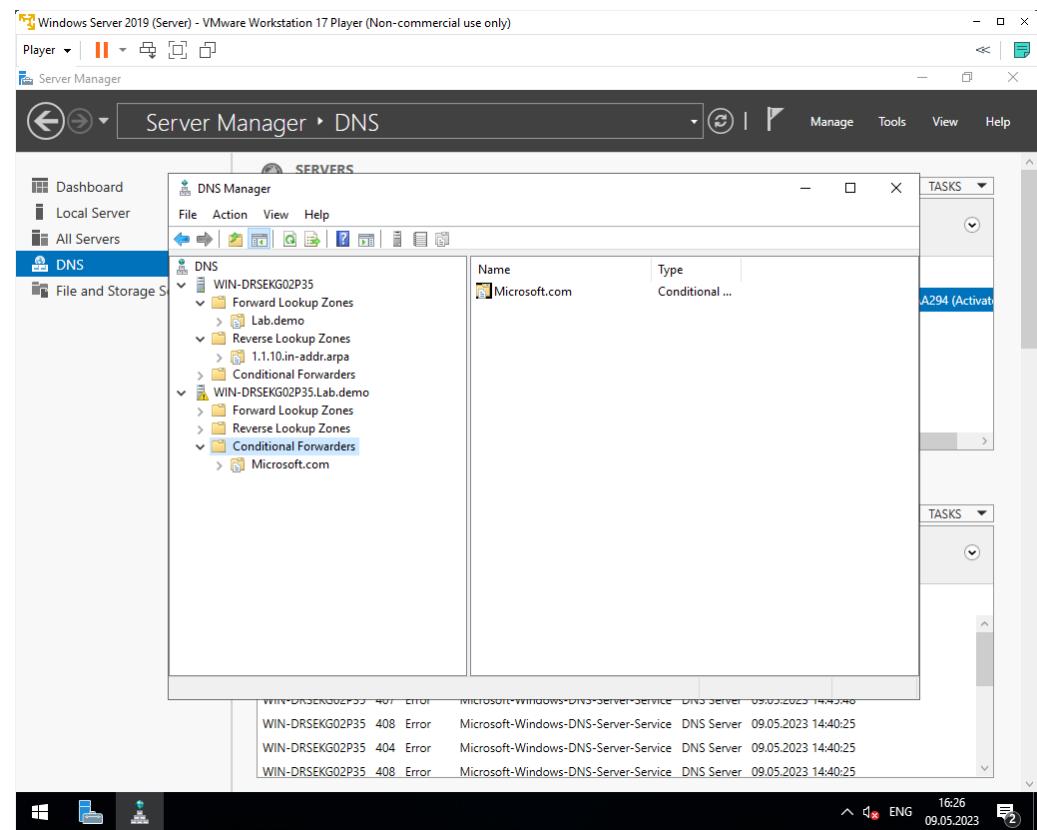




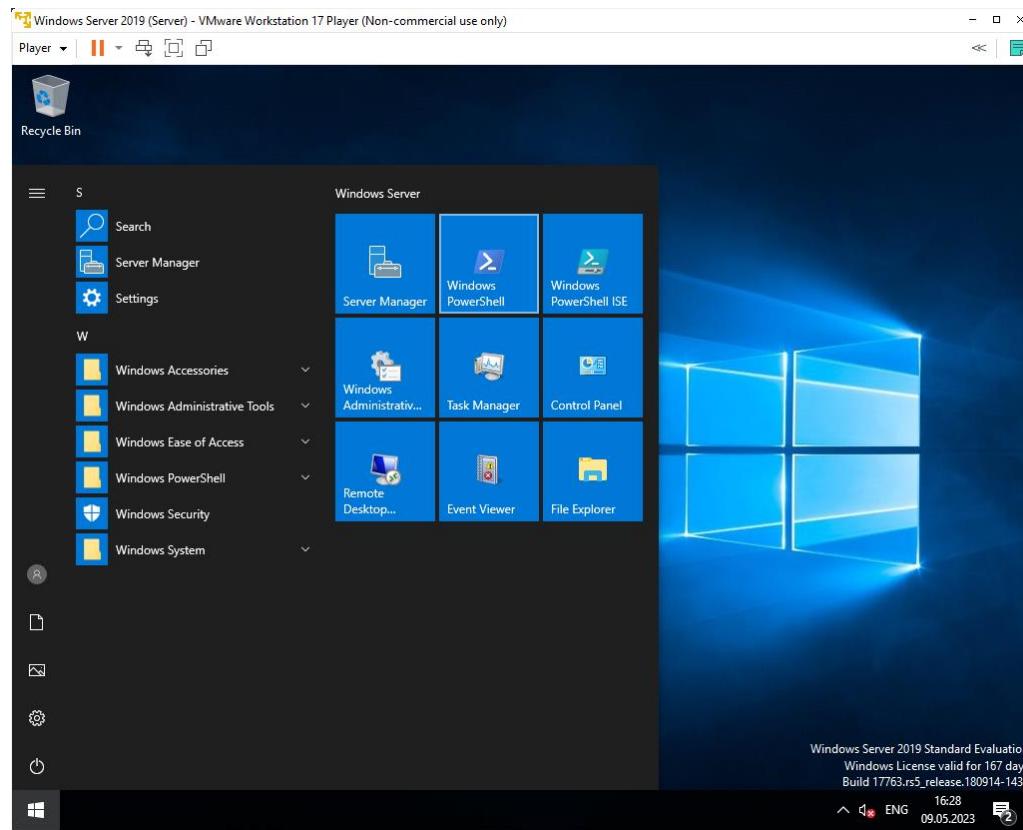








## Перевірка роботи DNS сервера на віртуальній машині Windows Server 2019 (Server).



```
Windows Server 2019 (Server) - VMware Workstation 17 Player (Non-commercial use only)
Player |  |||  □  □  □  □  □
Administrator: Windows PowerShell
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

PS C:\Users\Administrator>
```

```
Windows Server 2019 (Server) - VMware Workstation 17 Player (Non-commercial use only)
Player |  |||  □  □  □  □  □
Administrator: Windows PowerShell
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

PS C:\Users\Administrator> nslookup Server
Server:  Server.lab.demo
Address: 10.1.1.1

Name:  Server.lab.demo
Address: 10.1.1.1

PS C:\Users\Administrator> nslookup Client
Server:  Server.lab.demo
Address: 10.1.1.1

Name:  Client.lab.demo
Address: 10.1.1.7

PS C:\Users\Administrator> nslookup Core
Server:  Server.lab.demo
Address: 10.1.1.1

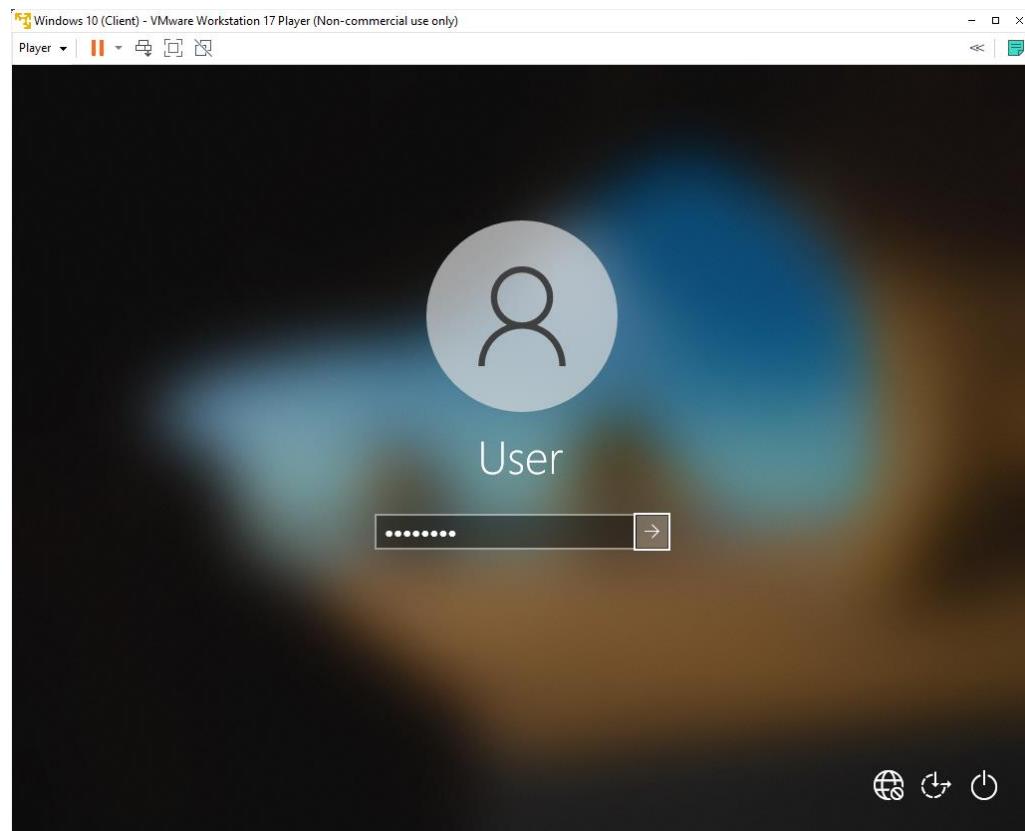
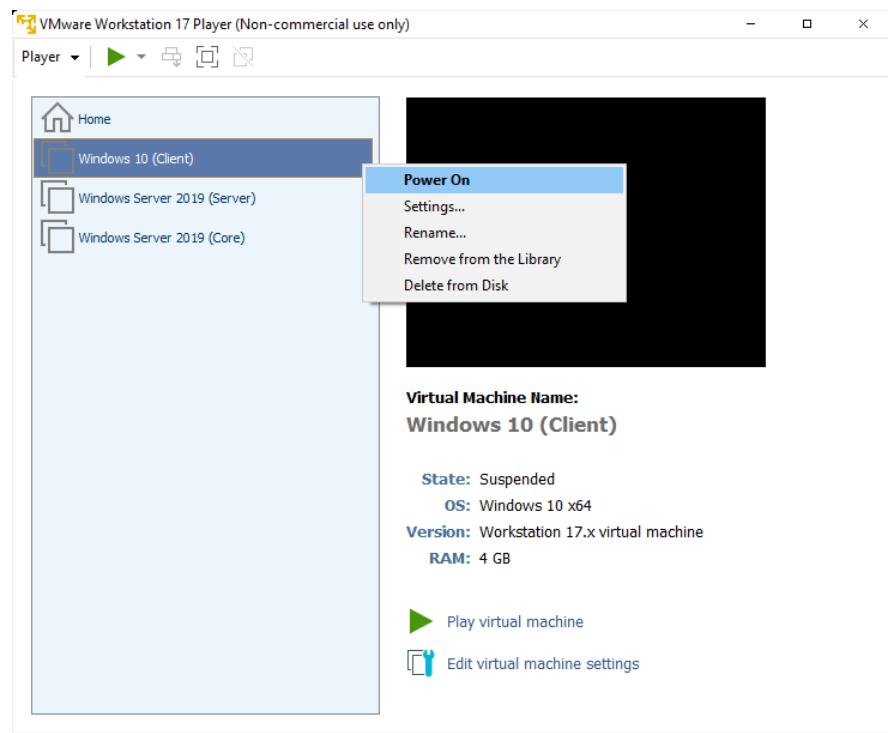
Name:  Core.lab.demo
Address: 10.1.1.2

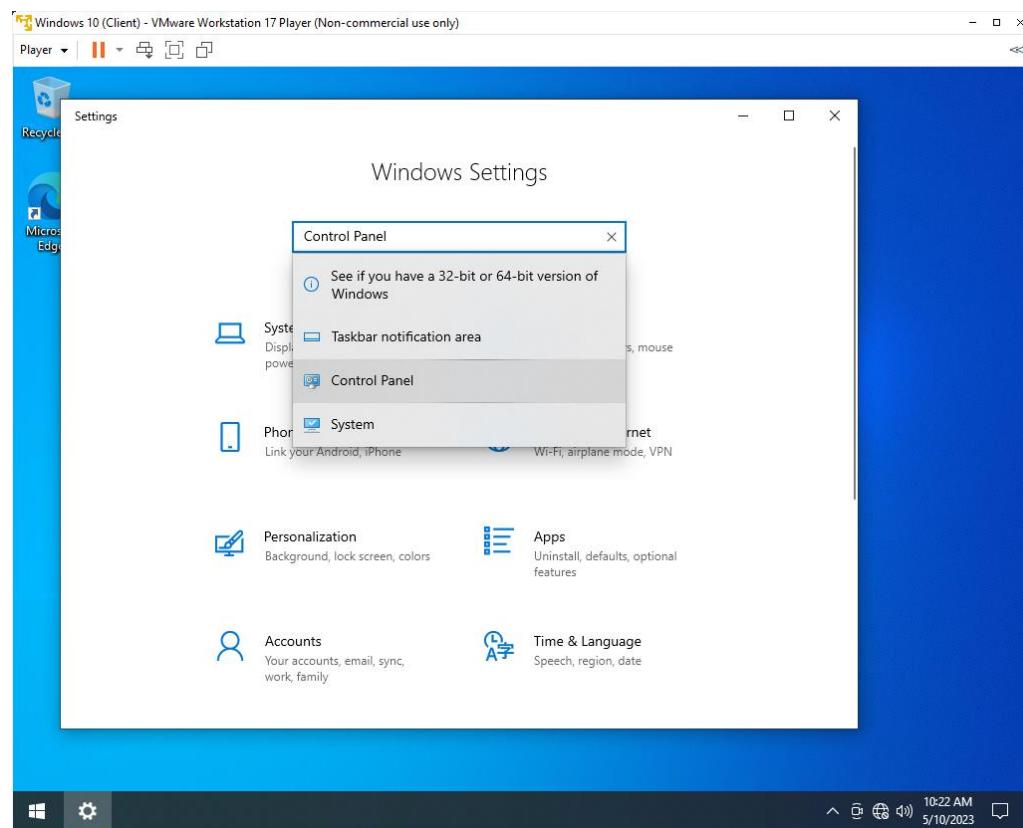
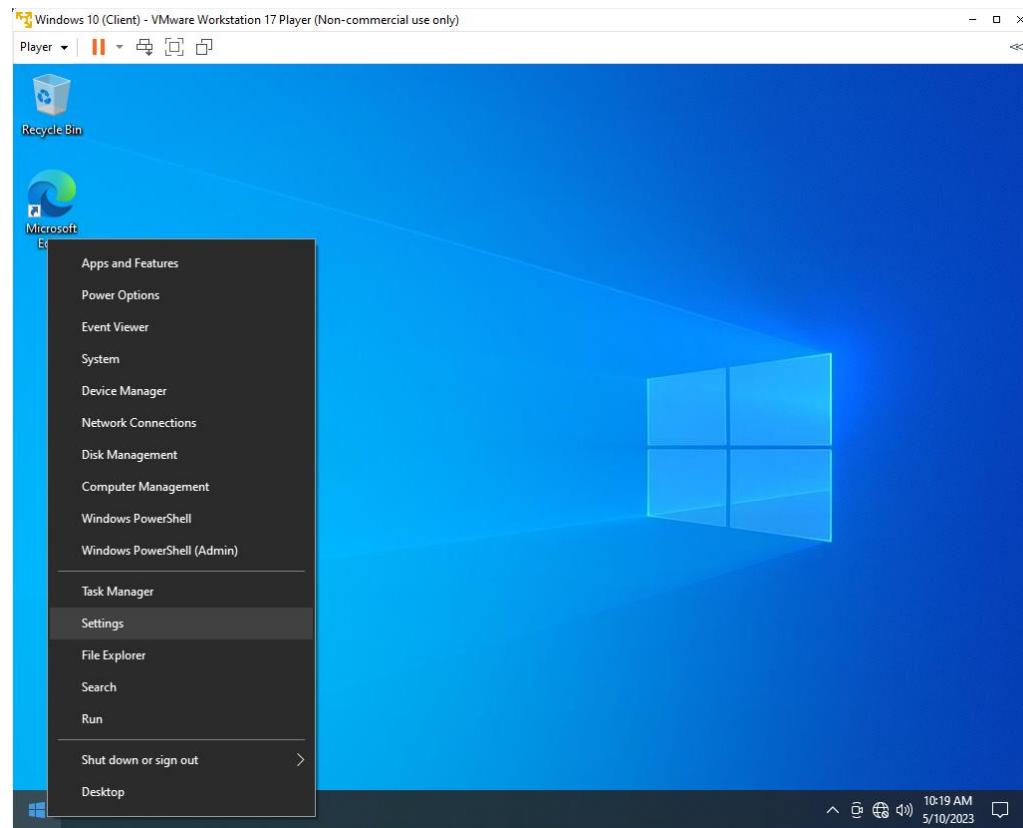
PS C:\Users\Administrator> nslookup Fileserver
Server:  Server.lab.demo
Address: 10.1.1.1

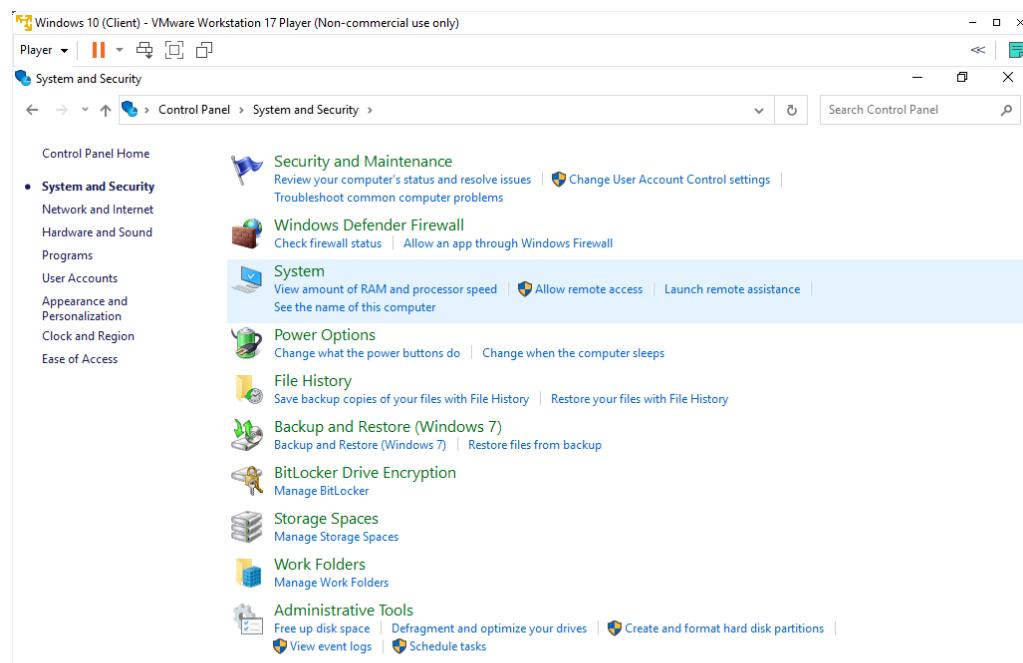
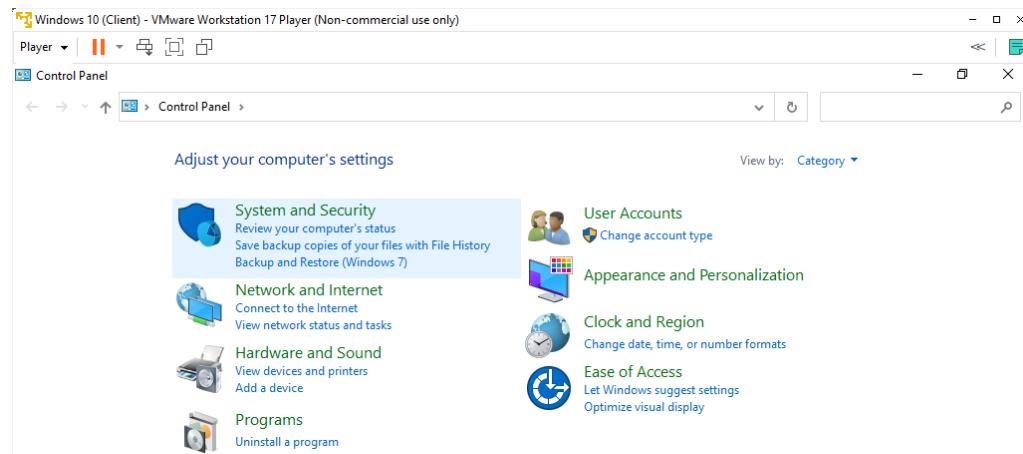
Name:  Server.lab.demo
Address: 10.1.1.1
Aliases: Fileserver.lab.demo

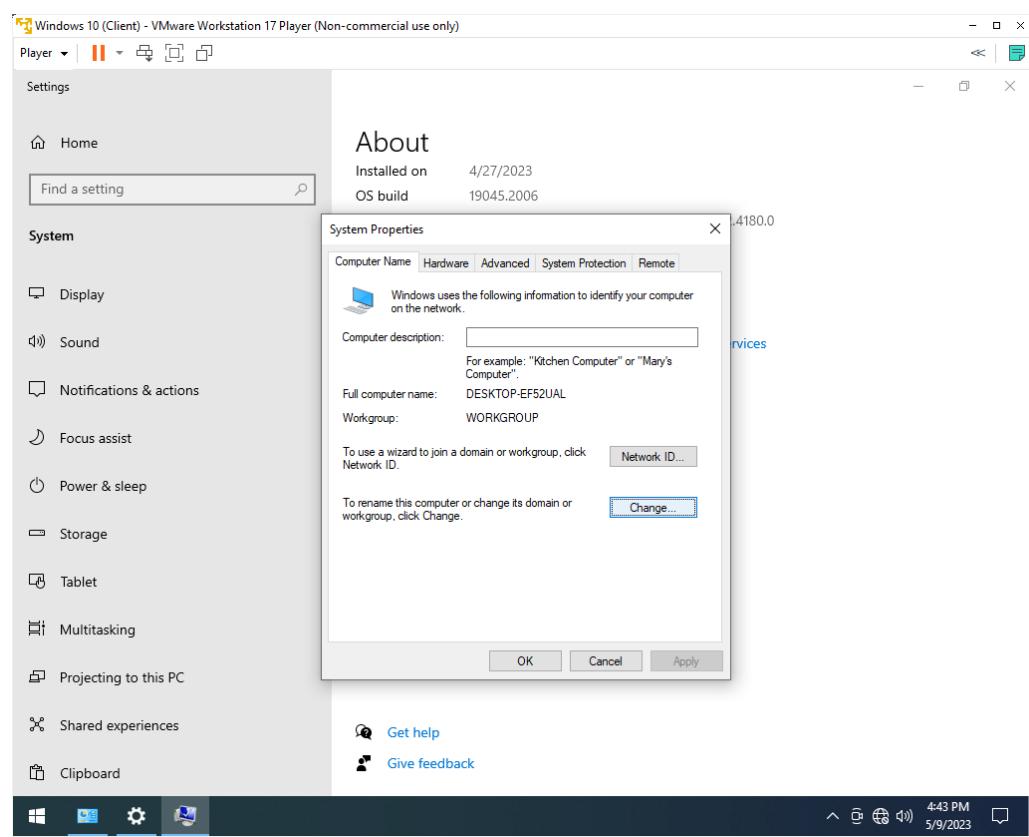
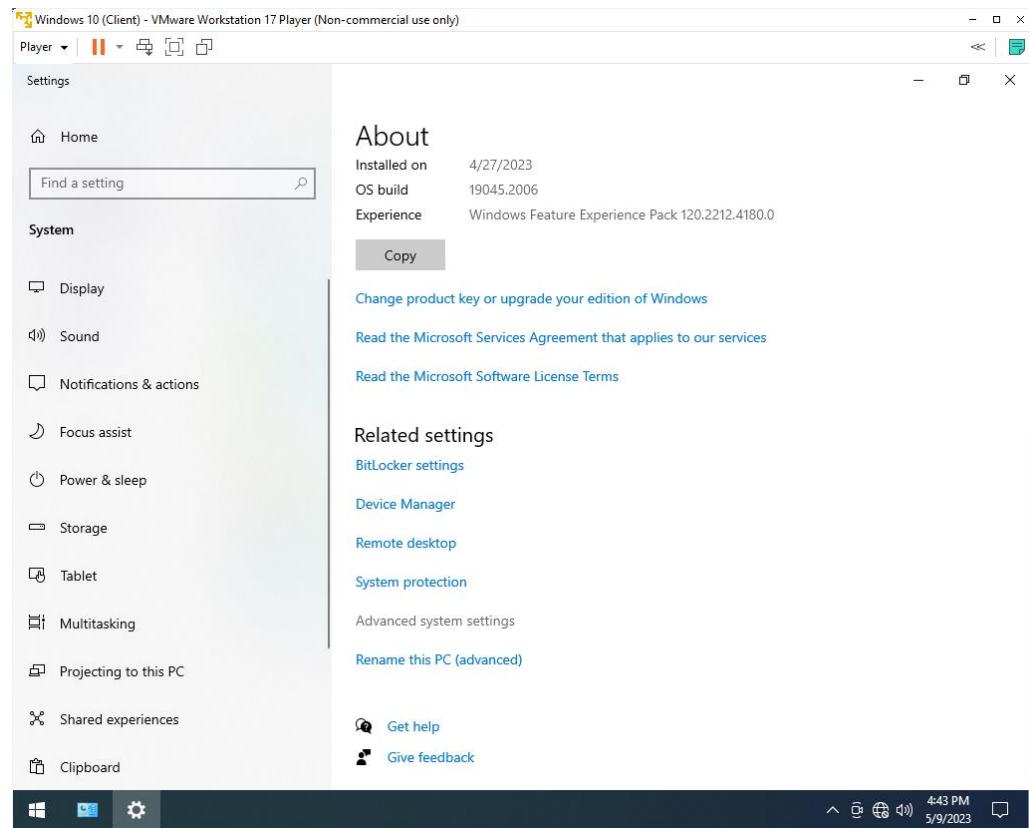
PS C:\Users\Administrator>
```

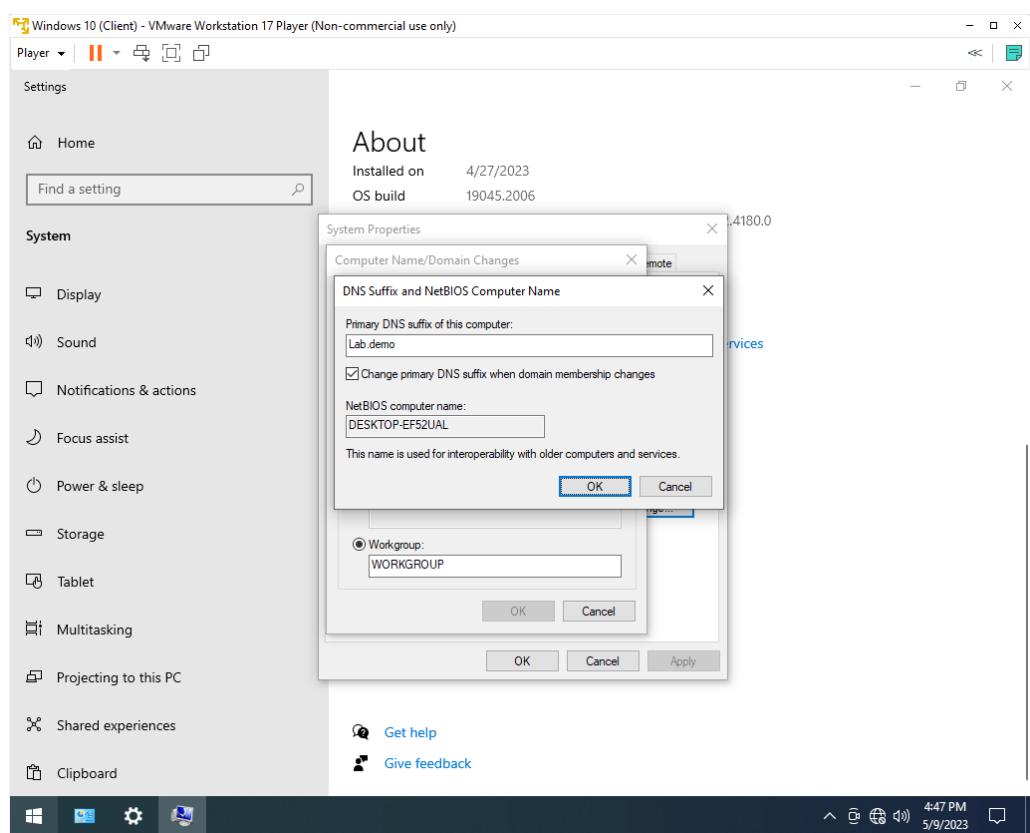
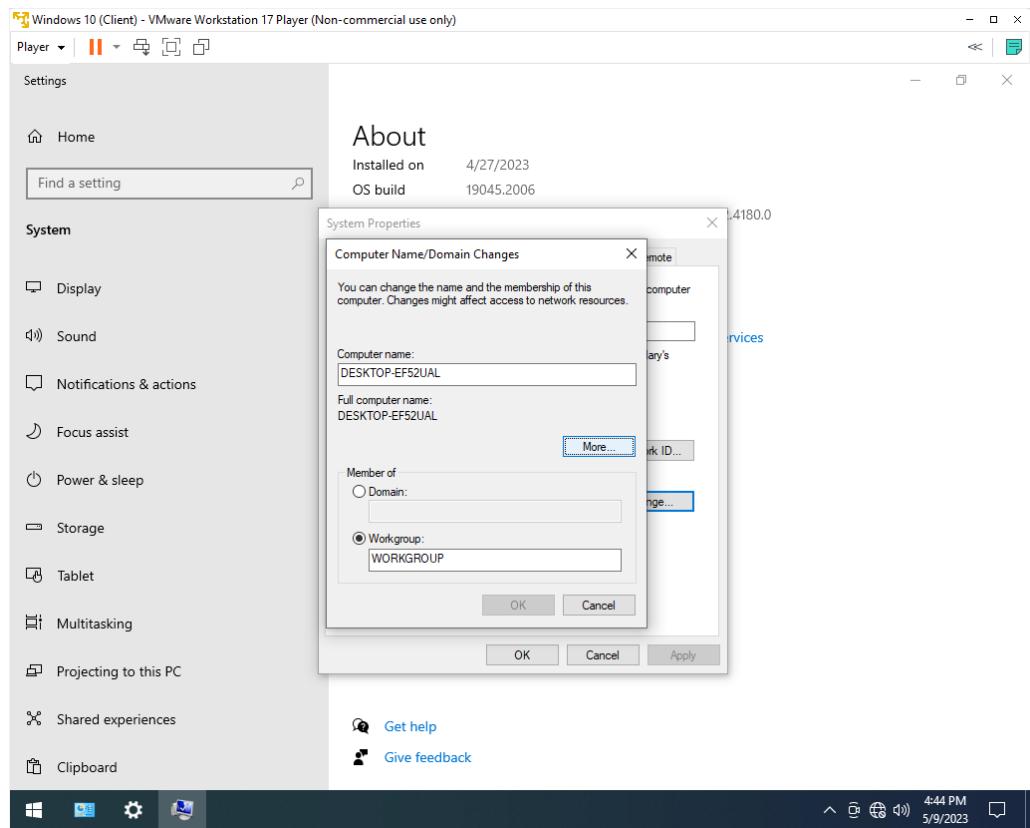
## Встановлення основного суфікса DNS для віртуальної машини Windows 10 (Client).

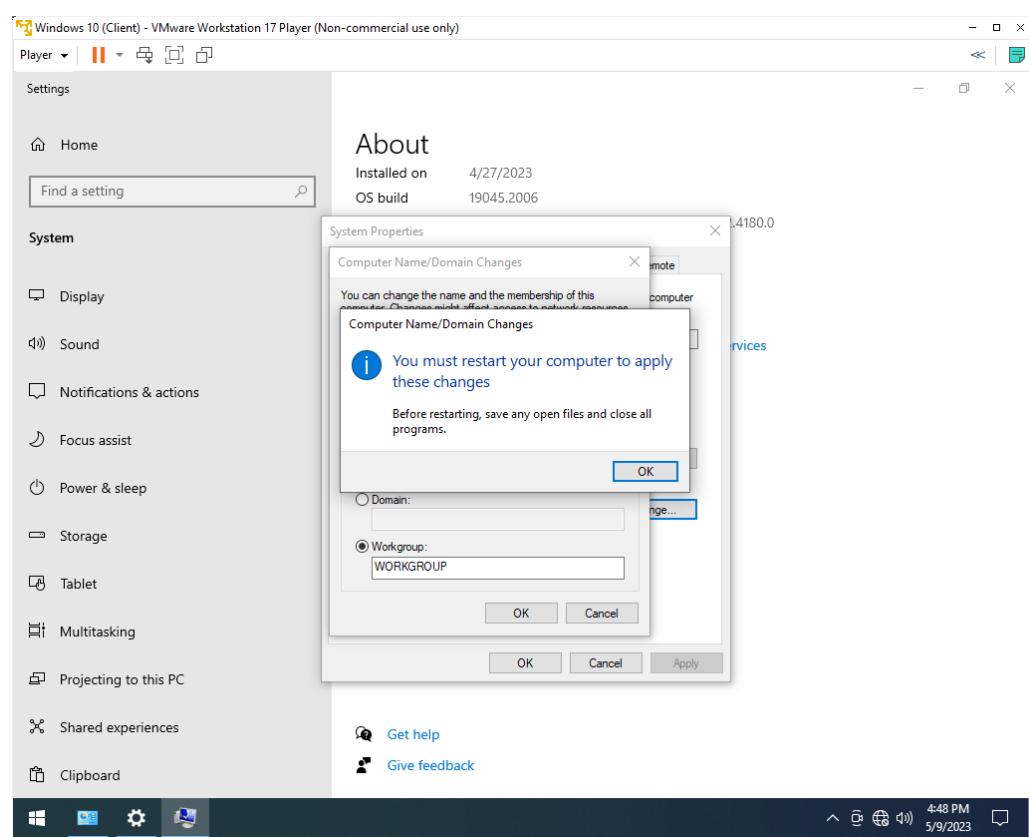
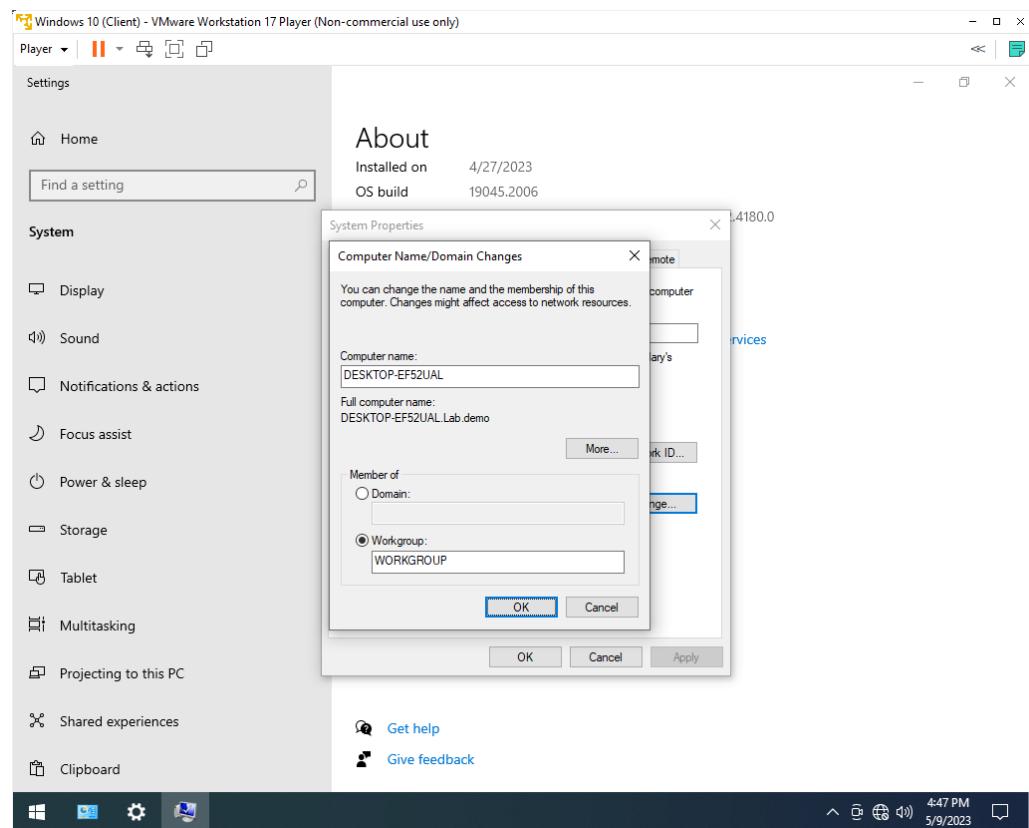


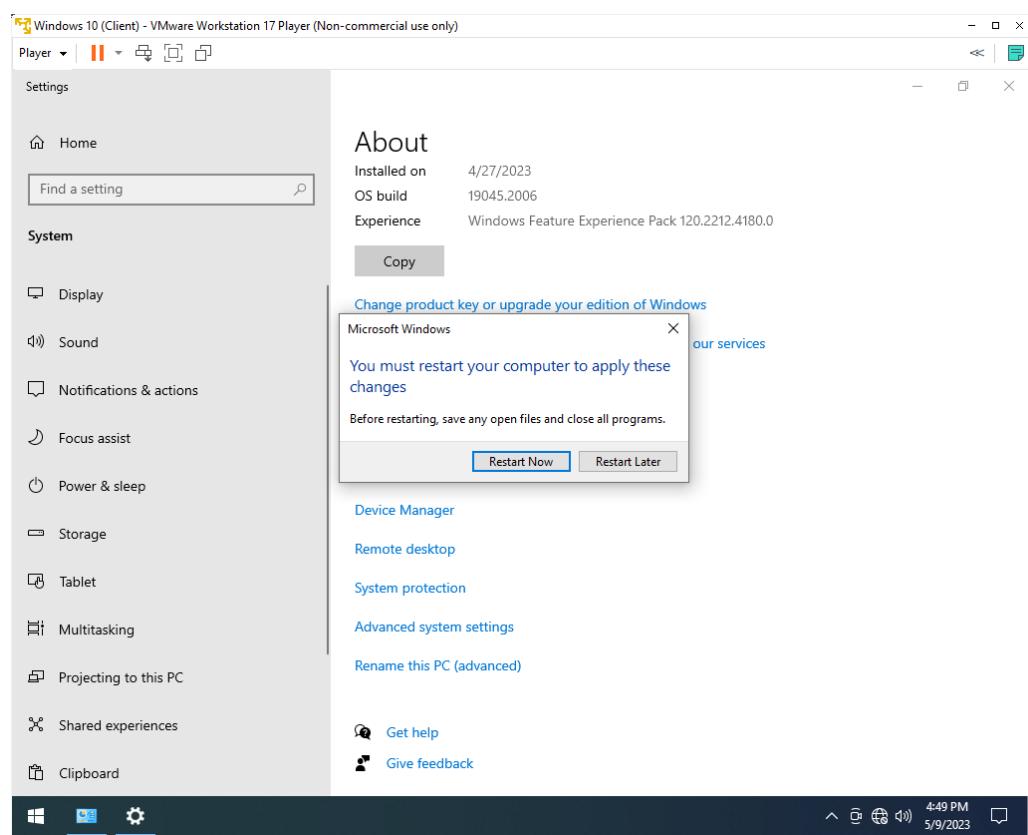
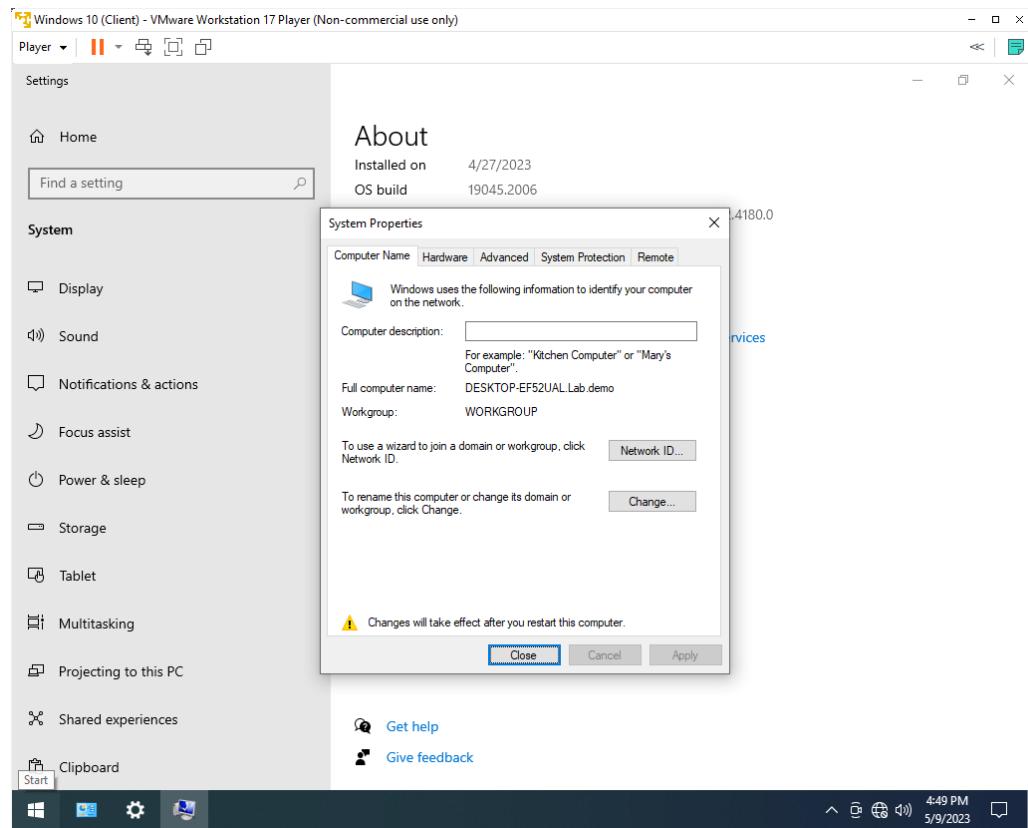


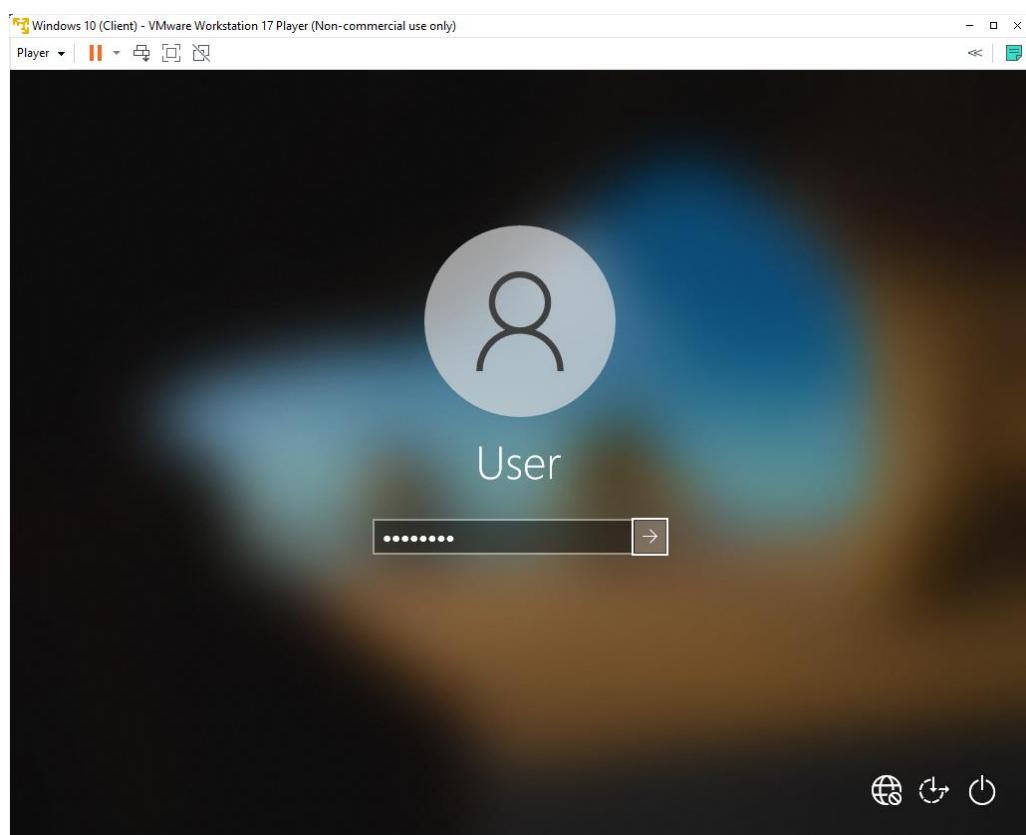
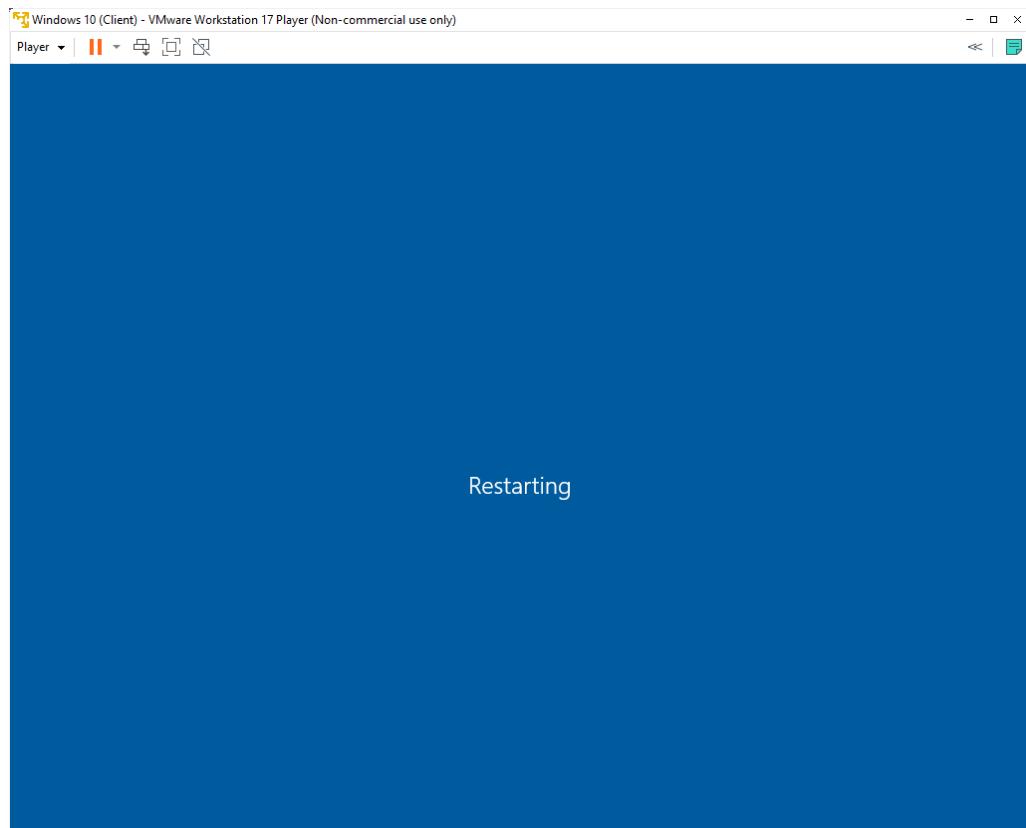


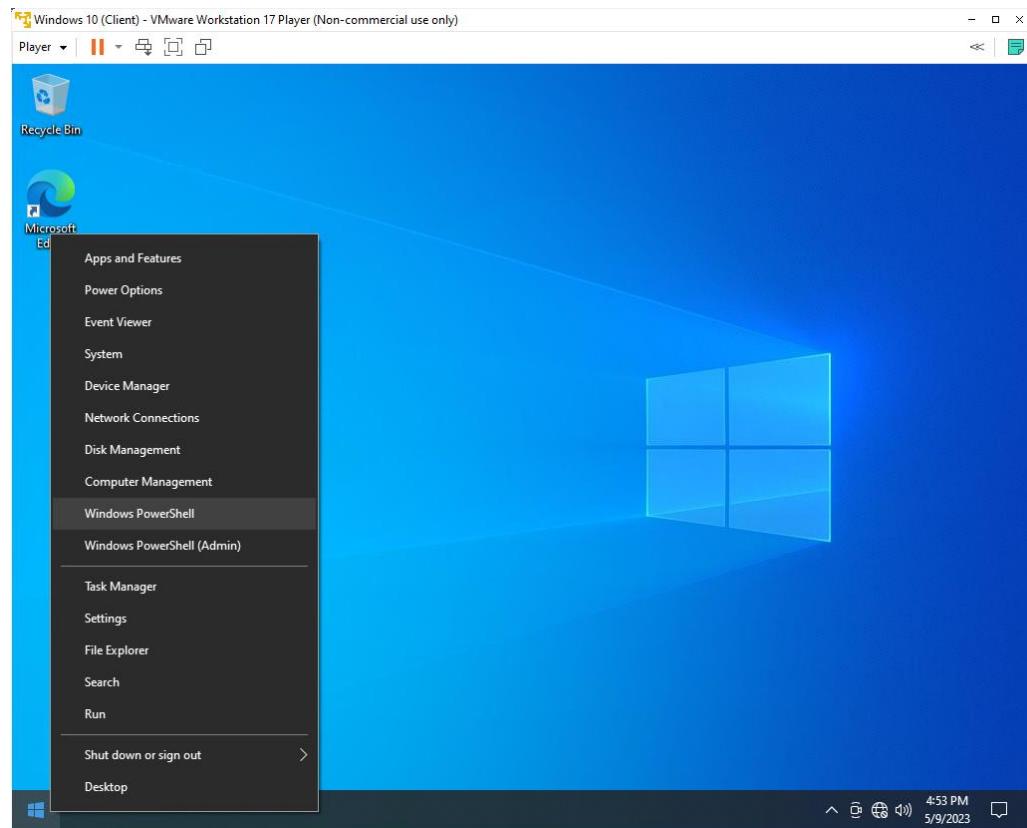












```
Windows 10 (Client) - VMware Workstation 17 Player (Non-commercial use only)
Player | ||| | X
Windows PowerShell
Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\User>
```

A screenshot of a Windows PowerShell window titled "Windows PowerShell". The window displays the standard PowerShell welcome message and the PS prompt. The window has a dark theme. The taskbar at the bottom shows the Start button, File Explorer, Task View, and Taskbar icons. The system tray shows the date and time as 5/9/2023 4:54 PM.

Windows 10 (Client) - VMware Workstation 17 Player (Non-commercial use only)

Player | Windows PowerShell

```
Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\User> nslookup Server
Server: Server.lab.demo
Address: 10.1.1.1

Name: Server.lab.demo
Address: 10.1.1.1

PS C:\Users\User> nslookup Client
Server: Server.lab.demo
Address: 10.1.1.1

Name: Client.lab.demo
Address: 10.1.1.7

PS C:\Users\User> nslookup Core
Server: Server.lab.demo
Address: 10.1.1.1

Name: Core.lab.demo
Address: 10.1.1.2

PS C:\Users\User> nslookup Fileserver
Server: Server.lab.demo
Address: 10.1.1.1

Name: Server.lab.demo
Address: 10.1.1.1
Aliases: Fileserver.lab.demo

PS C:\Users\User>
```

Windows Taskbar: 4:58 PM 5/9/2023