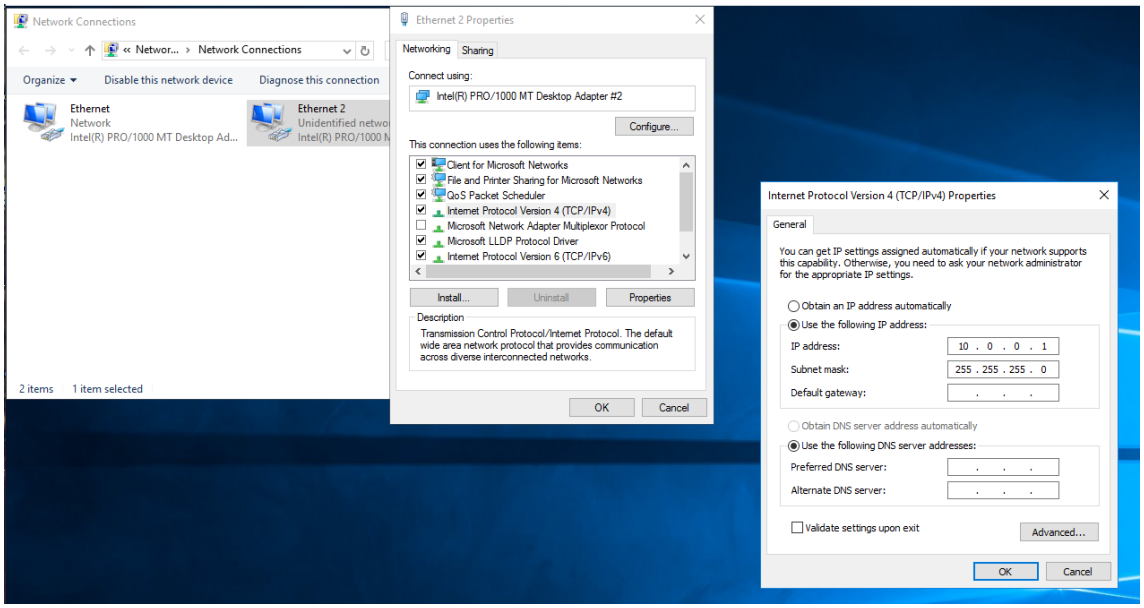
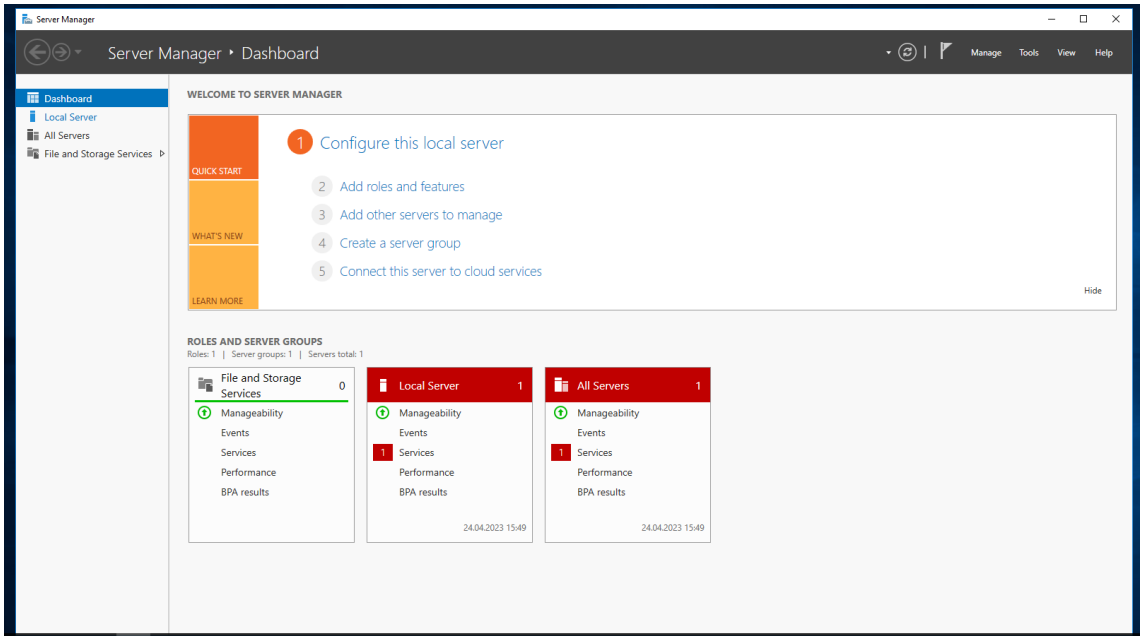
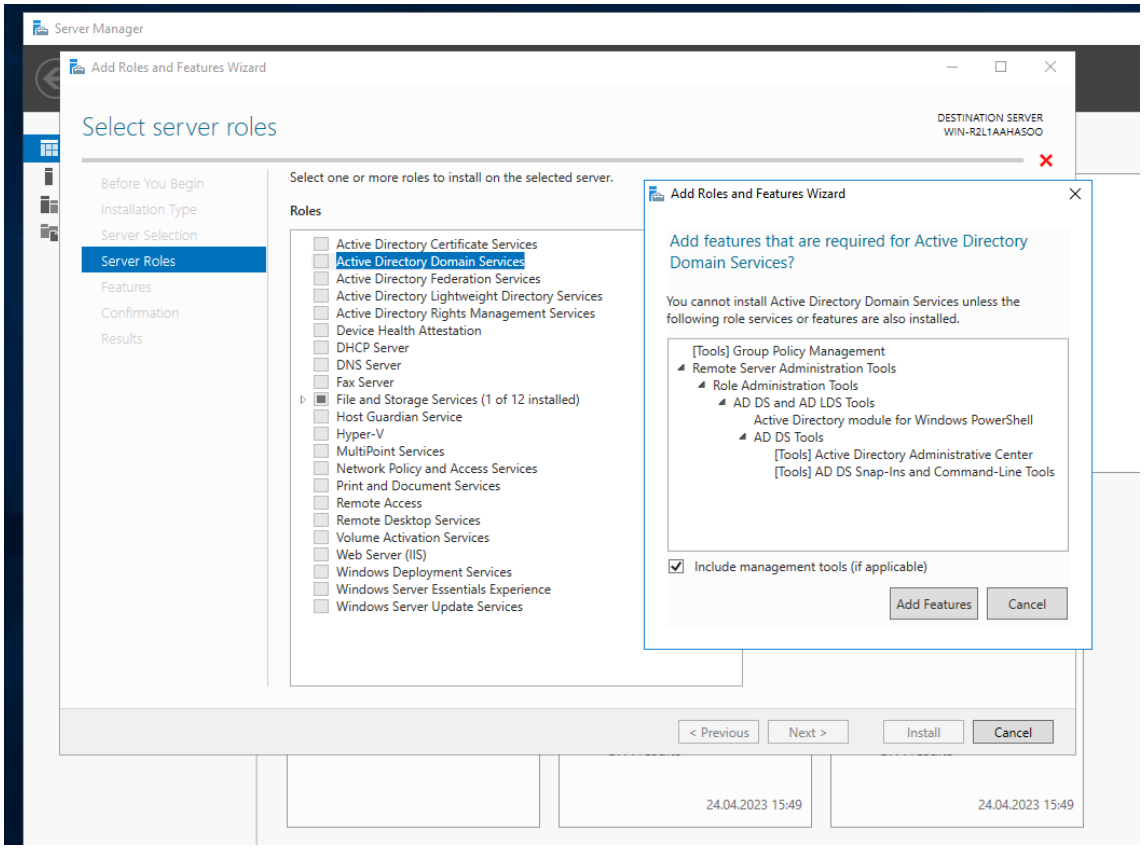
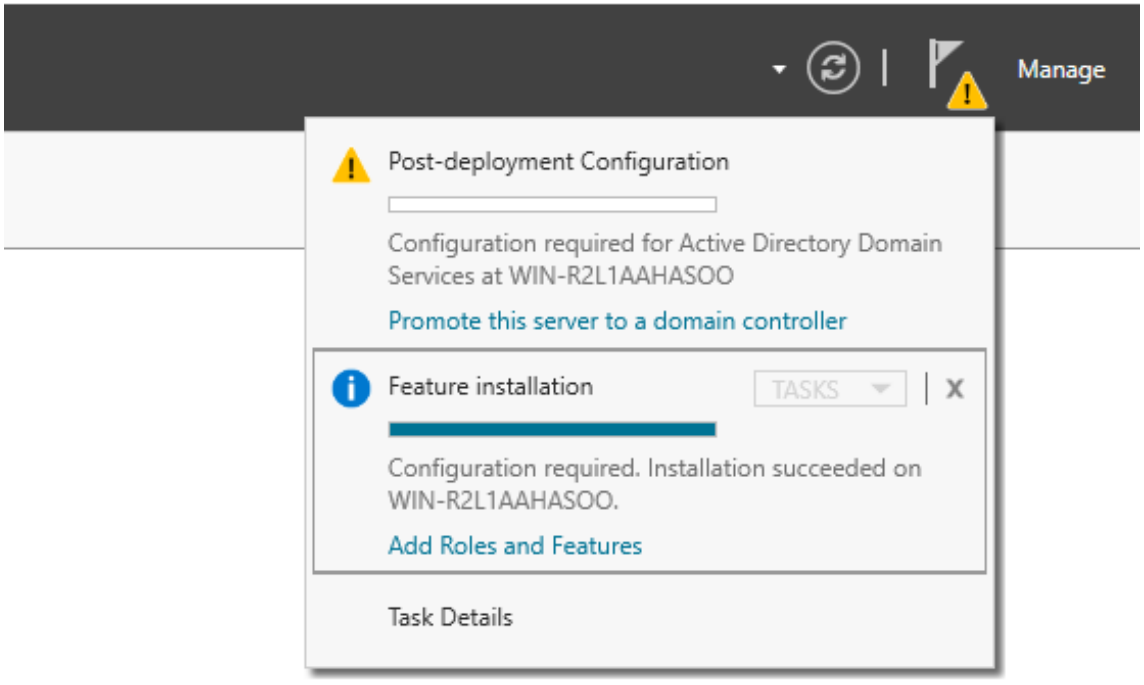
1 Adres IP

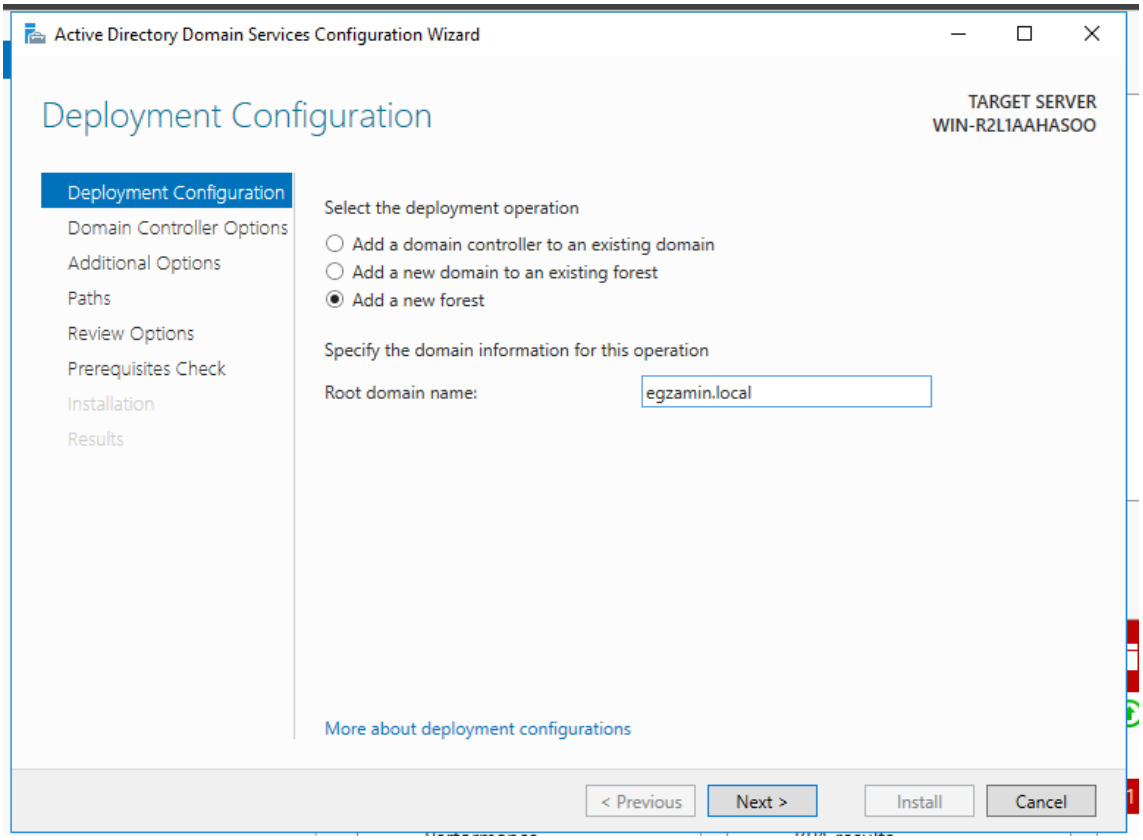


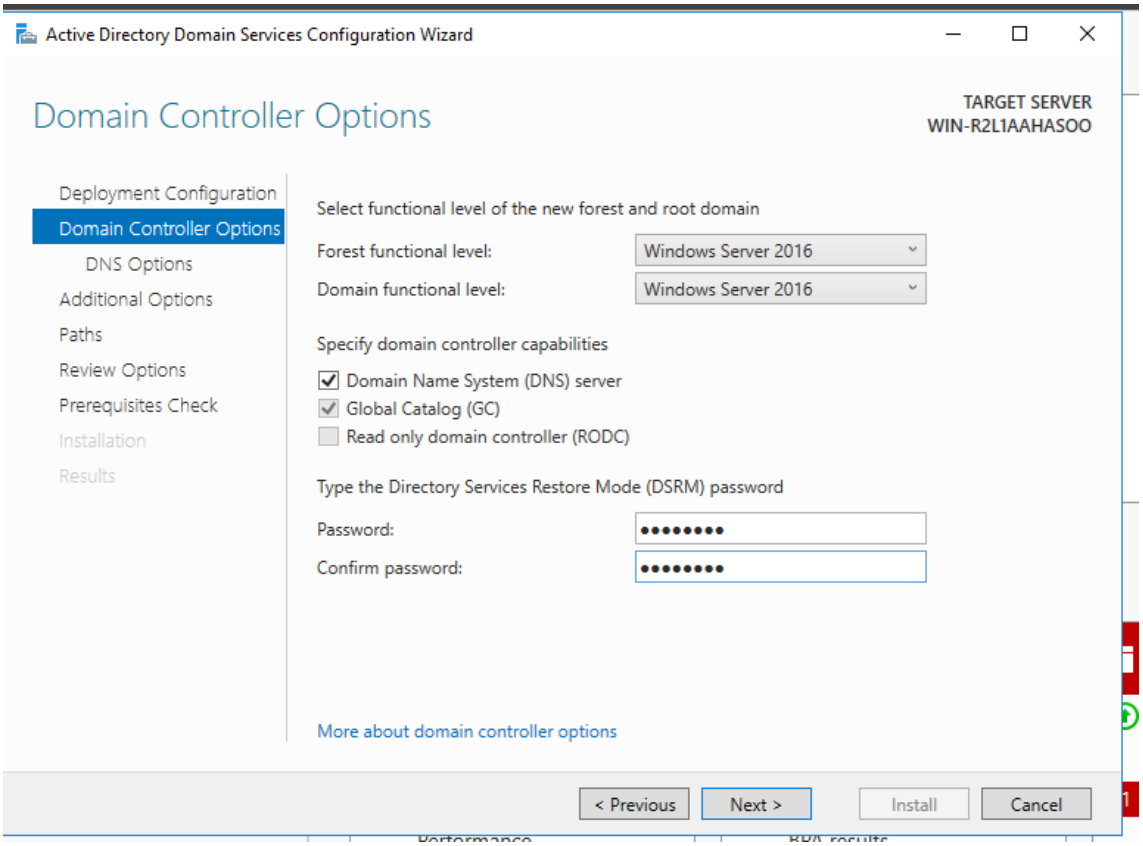
2 Domena Active Directory

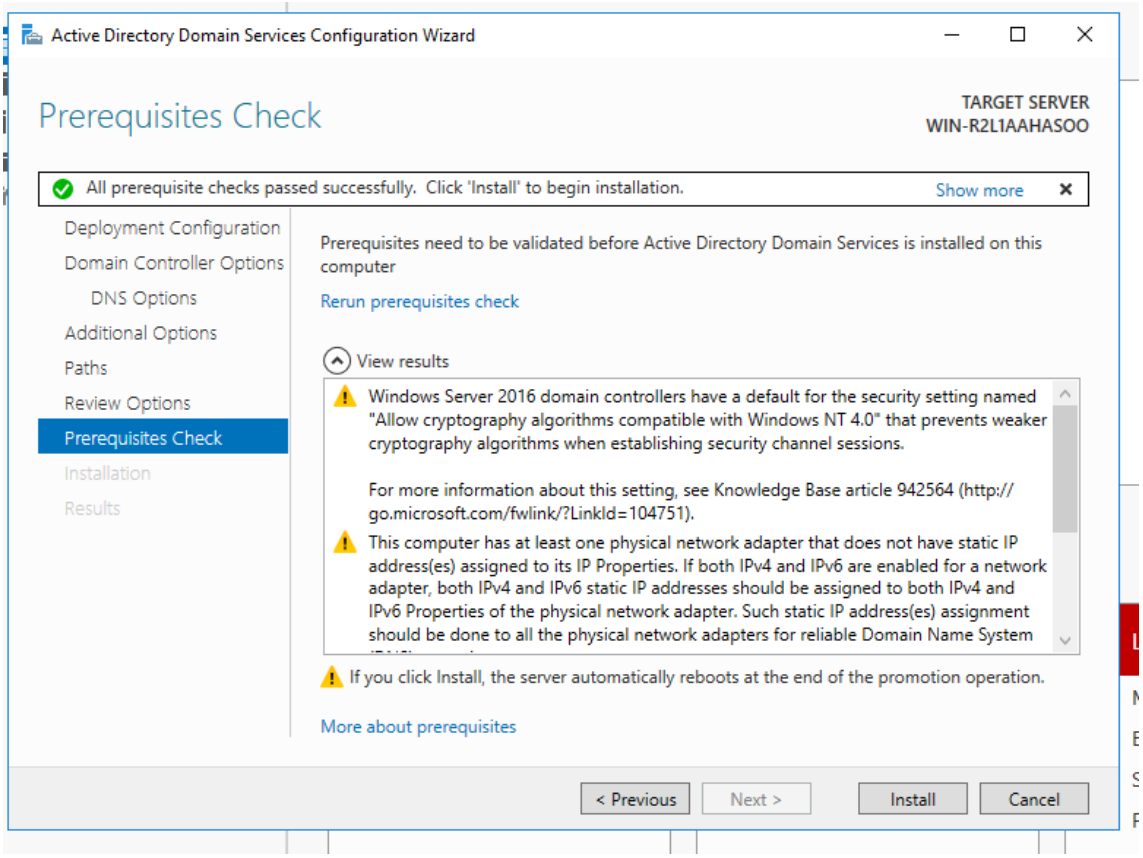



Server Manager
Add Roles and Features Wizard
Select server roles
DESTINATION SERVER
WIN-R2L1AAHASOO
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results
Select one or more roles to install on the selected server.
Roles
Active Directory Certificate Services
Active Directory Domain Services
Active Directory Federation Services
Active Directory Lightweight Directory Services
Active Directory Rights Management Services
Device Health Attestation
DHCP Server
DNS Server
Fax Server
File and Storage Services (1 of 12 installed)
Host Guardian Service
Hyper-V
MultiPoint Services
Network Policy and Access Services
Print and Document Services
Remote Access
Remote Desktop Services
Volume Activation Services
Web Server (IIS)
Windows Deployment Services
Windows Server Essentials Experience
Windows Server Update Services
Add Roles and Features Wizard
Add features that are required for Active Directory Domain Services?
You cannot install Active Directory Domain Services unless the following role services or features are also installed.
[Tools] Group Policy Management
Remote Server Administration Tools
Role Administration Tools
AD DS and AD LDS Tools
Active Directory module for Windows PowerShell
AD DS Tools
[Tools] Active Directory Administrative Center
[Tools] AD DS Snap-Ins and Command-Line Tools
Include management tools (if applicable)
Add Features
Cancel
< Previous
Next >
Install
Cancel
24.04.2023 15:49
24.04.2023 15:49

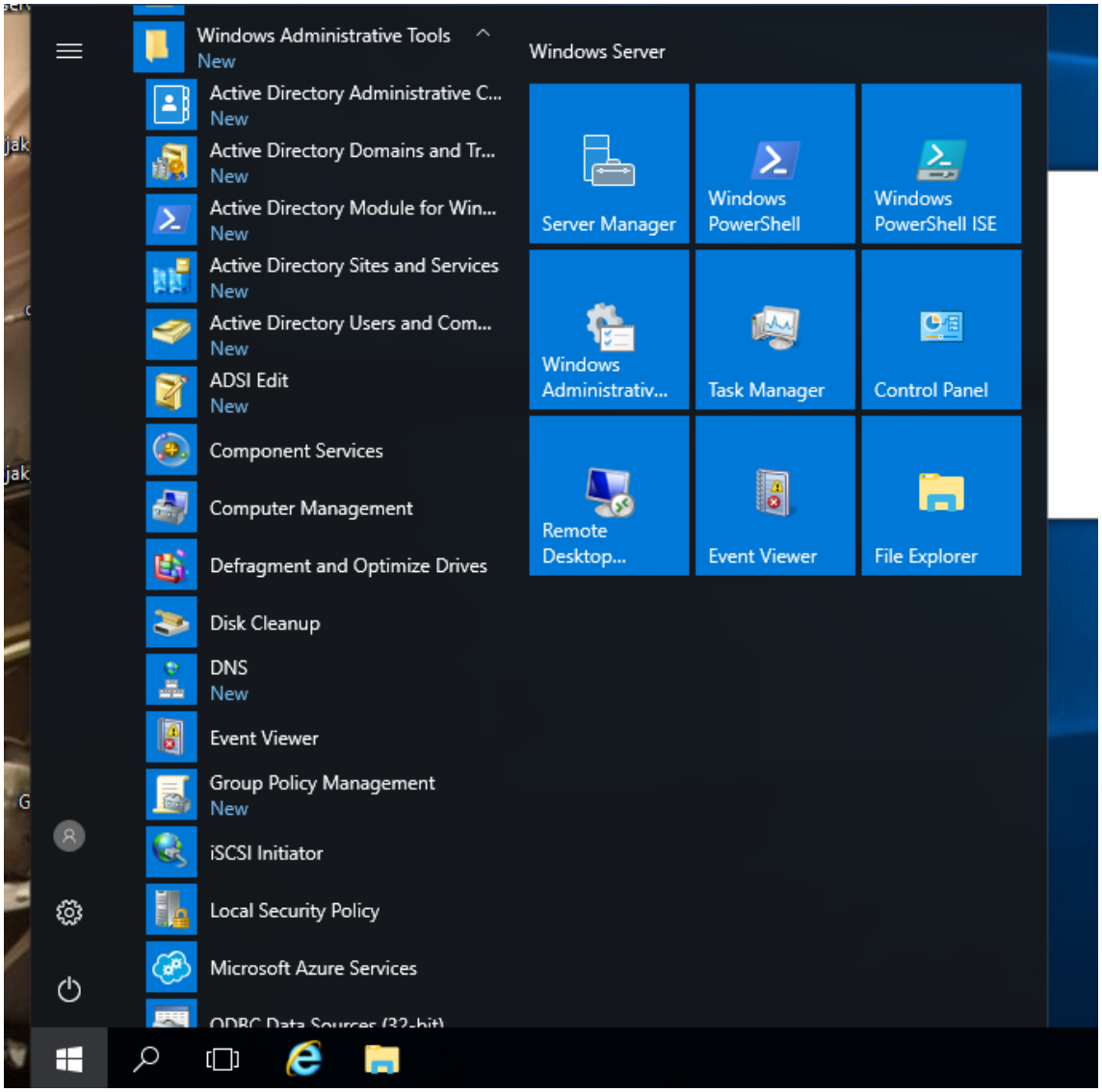

Manage
Post-deployment Configuration
Configuration required for Active Directory Domain Services at WIN-R2L1AAHASOO
Promote this server to a domain controller
Feature installation
TASKS
Configuration required. Installation succeeded on WIN-R2L1AAHASOO.
Add Roles and Features
Task Details


Active Directory Domain Services Configuration Wizard
Deployment Configuration
TARGET SERVER
WIN-R2L1AAHASOO
Deployment Configuration
Domain Controller Options
Additional Options
Paths
Review Options
Prerequisites Check
Installation
Results
Select the deployment operation
Add a domain controller to an existing domain
Add a new domain to an existing forest
Add a new forest
Specify the domain information for this operation
Root domain name:
egzamin.local
More about deployment configurations
< Previous
Next >
Install
Cancel

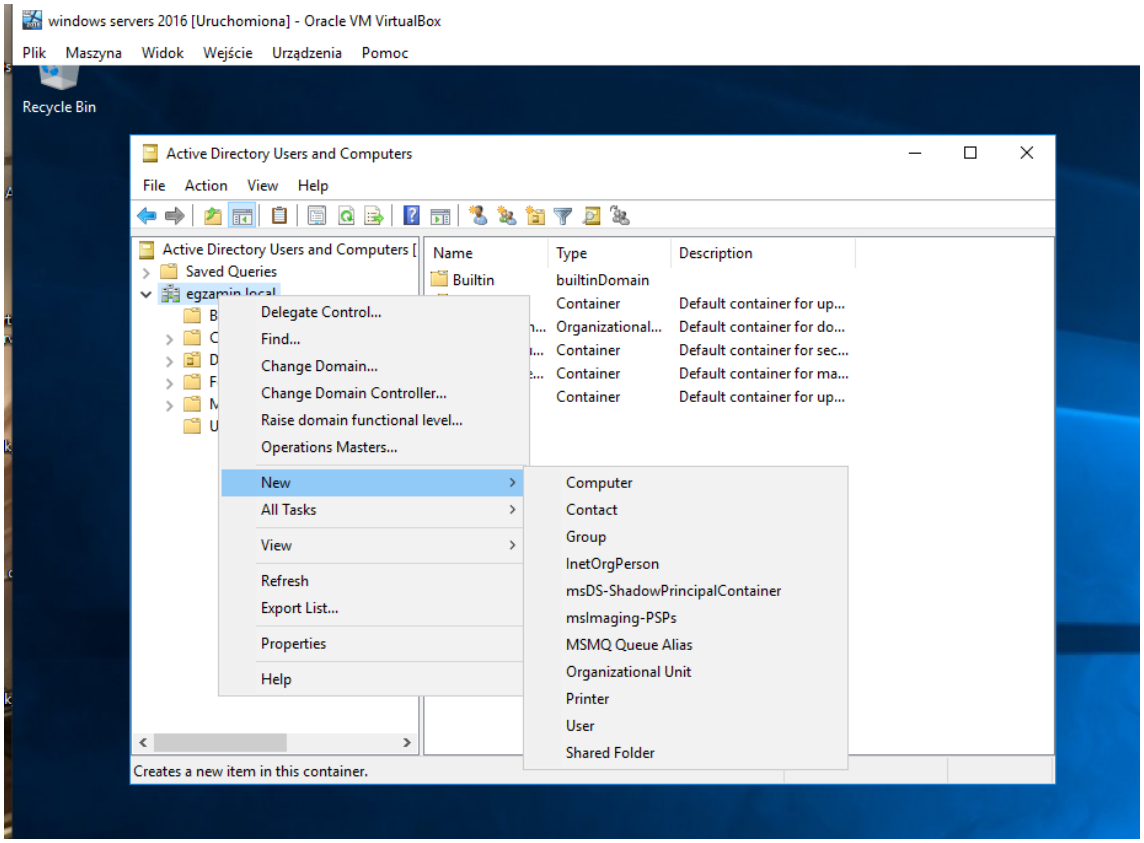

Active Directory Domain Services Configuration Wizard
Domain Controller Options
TARGET SERVER
WIN-R2L1AAHASOO
Deployment Configuration
Domain Controller Options
DNS Options
Additional Options
Paths
Review Options
Prerequisites Check
Installation
Results
Select functional level of the new forest and root domain
Forest functional level:
Windows Server 2016
Domain functional level:
Windows Server 2016
Specify domain controller capabilities
Domain Name System (DNS) server
Global Catalog (GC)
Read only domain controller (RODC)
Type the Directory Services Restore Mode (DSRM) password
Password:
Confirm password:
More about domain controller options
< Previous
Next >
Install
Cancel

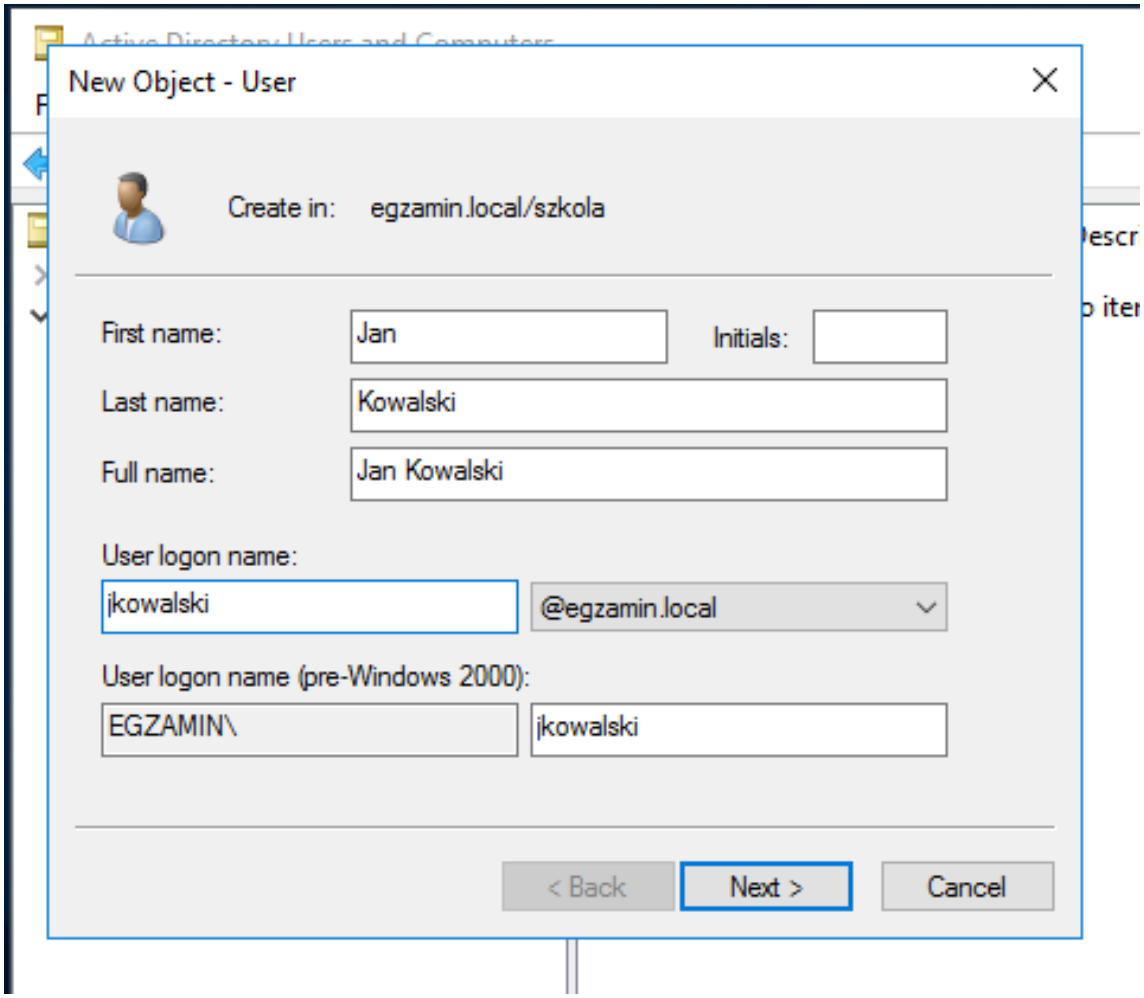

Active Directory Domain Services Configuration Wizard
Prerequisites Check
TARGET SERVER
WIN-R2L1AAHASOO
All prerequisite checks passed successfully. Click 'Install' to begin installation.
Show more
Deployment Configuration
Domain Controller Options
DNS Options
Additional Options
Paths
Review Options
Prerequisites Check
Installation
Results
Prerequisites need to be validated before Active Directory Domain Services is installed on this computer
Rerun prerequisites check
View results
Windows Server 2016 domain controllers have a default for the security setting named "Allow cryptography algorithms compatible with Windows NT 4.0" that prevents weaker cryptography algorithms when establishing security channel sessions.
For more information about this setting, see Knowledge Base article 942564 (http://go.microsoft.com/fwlink/?LinkId=104751).
This computer has at least one physical network adapter that does not have static IP address(es) assigned to its IP Properties. If both IPv4 and IPv6 are enabled for a network adapter, both IPv4 and IPv6 static IP addresses should be assigned to both IPv4 and IPv6 Properties of the physical network adapter. Such static IP address(es) assignment should be done to all the physical network adapters for reliable Domain Name System
If you click Install, the server automatically reboots at the end of the promotion operation.
More about prerequisites
< Previous
Next >
Install
Cancel

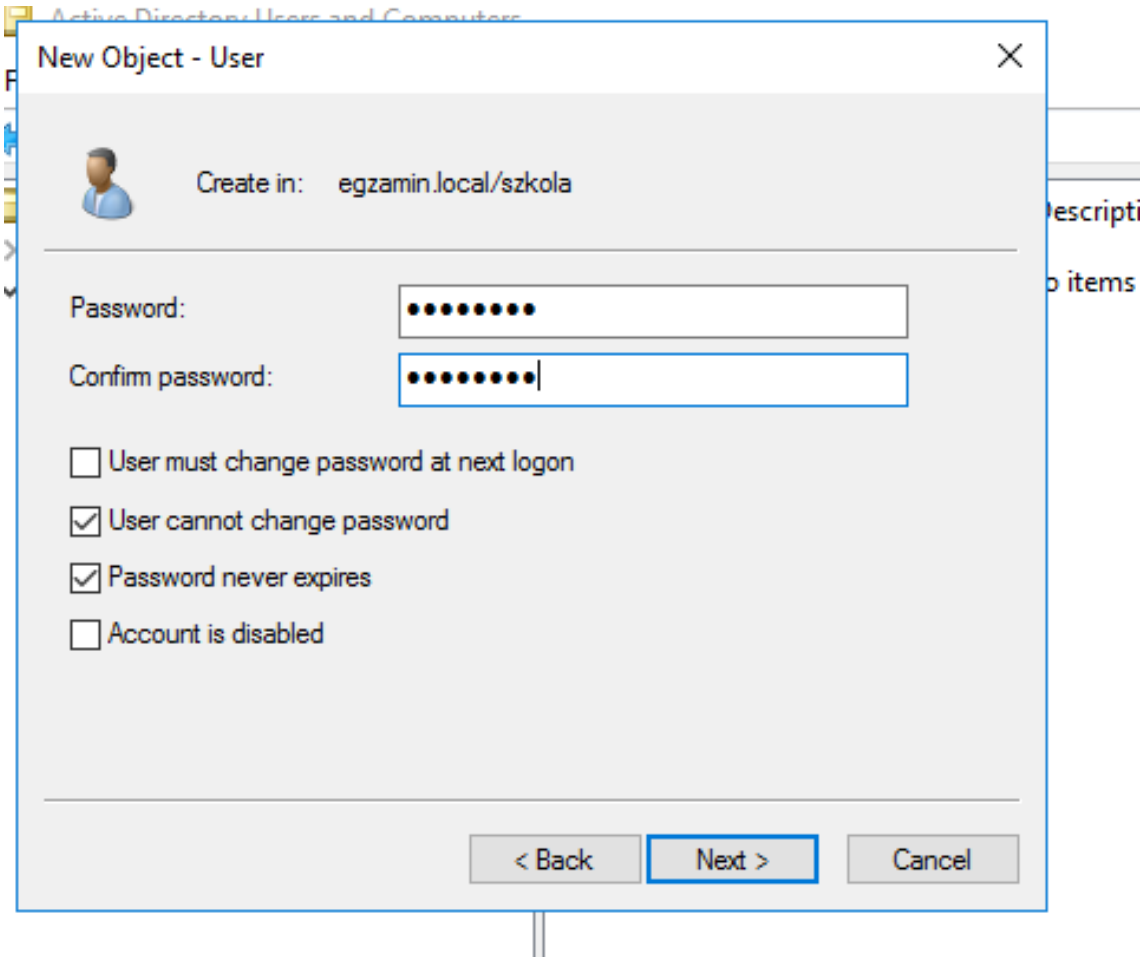
2.1 Jednostka organizacyjna, grupa, użytkownik

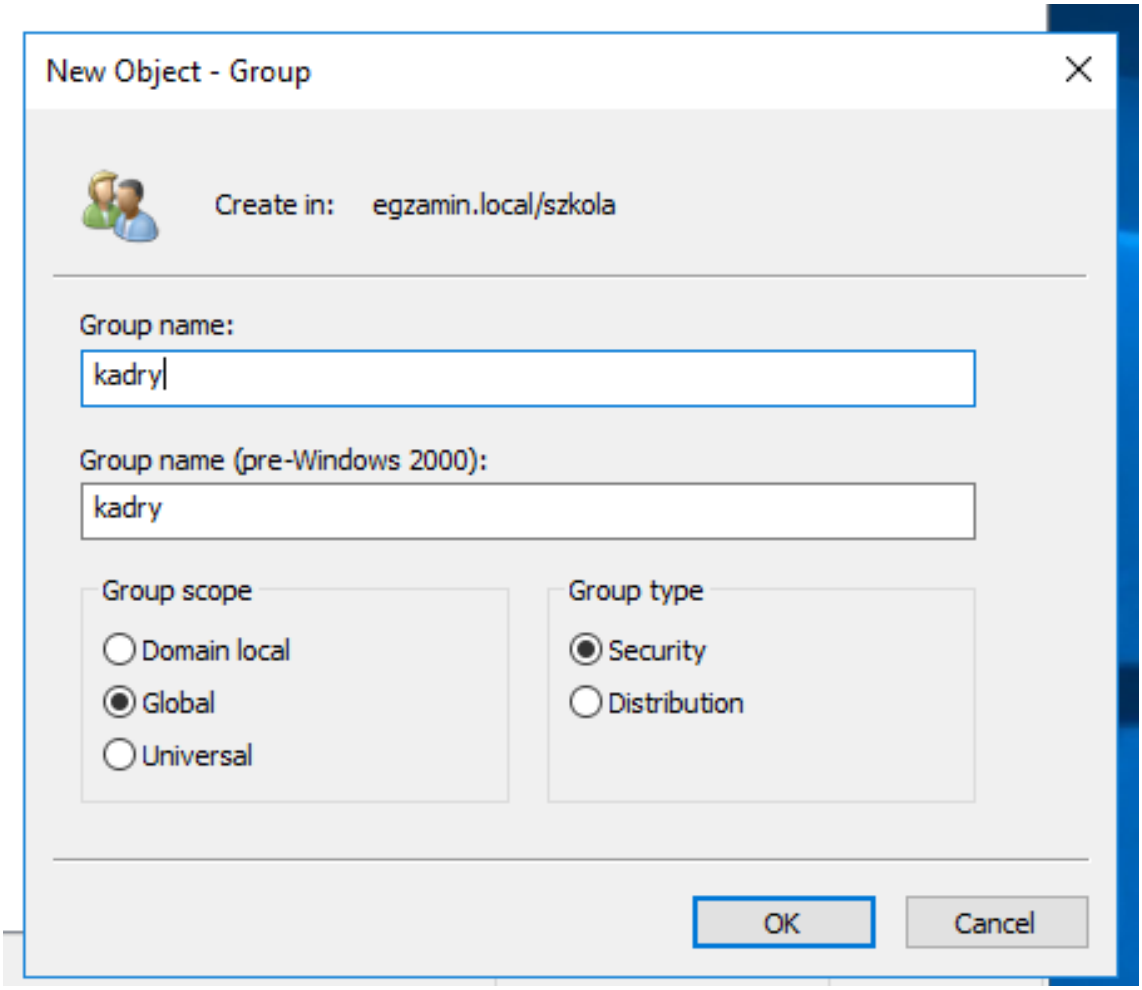


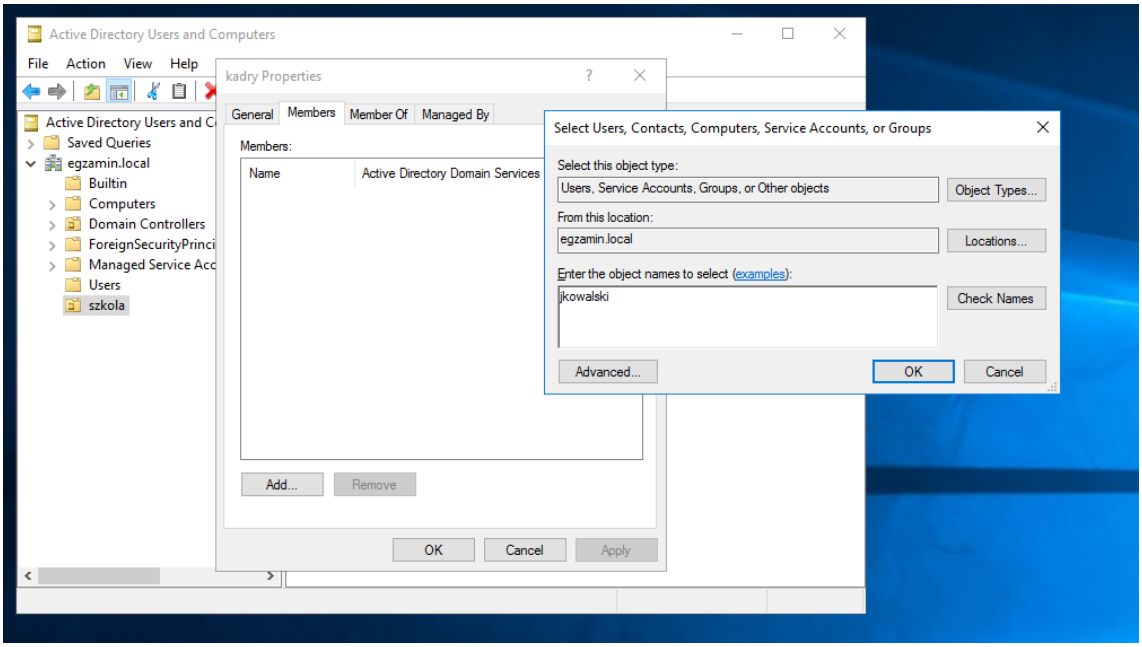
Najpierw zostanie utworzona jednostka organizacyjna (Organizational Unit), następnie użytkownik i grupa. Dalej użytkownik zostanie dodany do grupy.


windows servers 2016 [Uruchomiona] - Oracle VM VirtualBox
Plik Maszyna Widok Wejście Urządzenia Pomoc
Recycle Bin
Active Directory Users and Computers
File Action View Help
Active Directory Users and Computers [
Saved Queries
egzamin.local
Name Type Description
Builtin builtinDomain
Container Default container for up...
Organizational... Default container for do...
Container Default container for sec...
Container Default container for ma...
Container Default container for up...
Delegate Control...
Find...
Change Domain...
Change Domain Controller...
Raise domain functional level...
Operations Masters...
New
All Tasks
View
Refresh
Export List...
Properties
Help
Computer
Contact
Group
InetOrgPerson
msDS-ShadowPrincipalContainer
msImaging-PSPs
MSMQ Queue Alias
Organizational Unit
Printer
User
Shared Folder
Creates a new item in this container.


New Object - User
Create in: egzamin.local/szkola
First name:
Jan
Initials:
Last name:
Kowalski
Full name:
Jan Kowalski
User logon name:
jkowalski
@egzamin.local
User logon name (pre-Windows 2000):
EGZAMIN\
jkowalski
< Back
Next >
Cancel

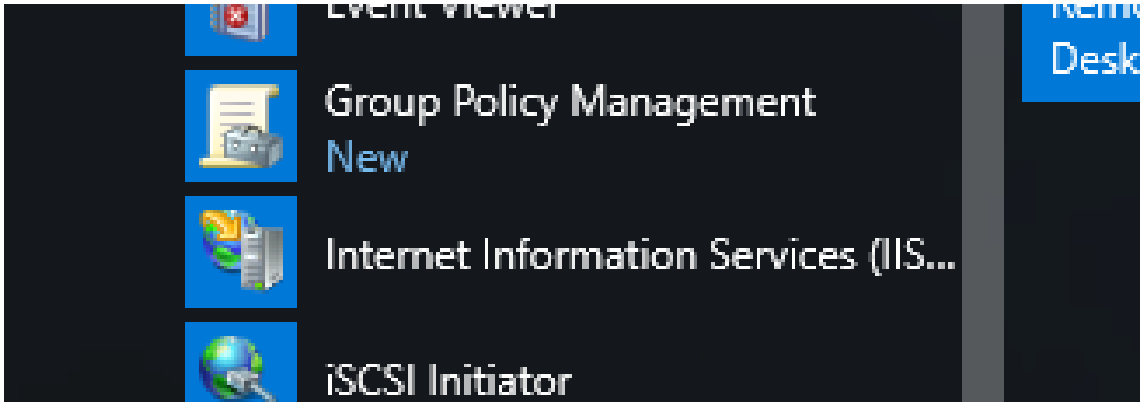

New Object - User
Create in: egzamin.local/szkola
Password:
Confirm password:
User must change password at next logon
User cannot change password
Password never expires
Account is disabled
< Back
Next >
Cancel


New Object - Group
Create in: egzamin.local/szkola
Group name:
kadry
Group name (pre-Windows 2000):
kadry
Group scope
Domain local
Global
Universal
Group type
Security
Distribution
OK
Cancel

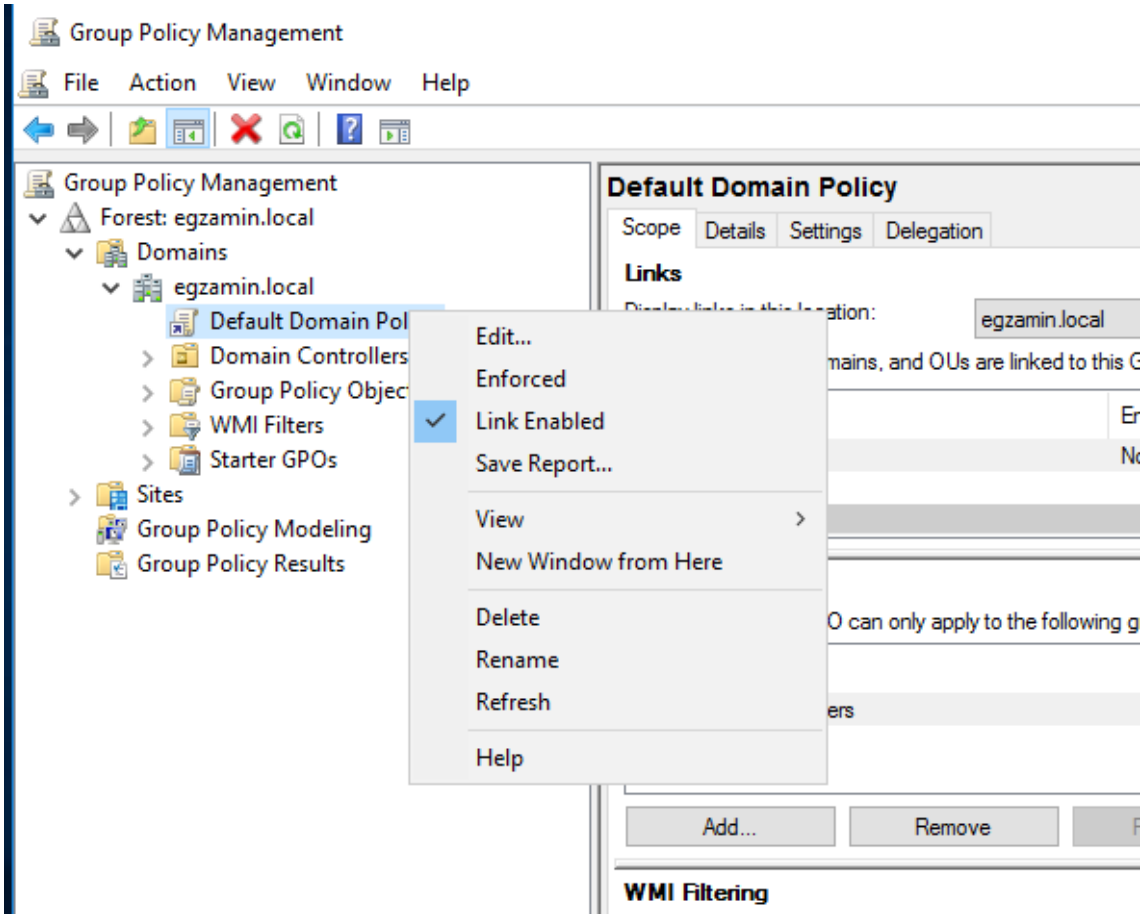

Active Directory Users and Computers
File Action View Help
Active Directory Users and C
Saved Queries
egzamin.local
Builtin
Computers
Domain Controllers
ForeignSecurityPrinci
Managed Service Acc
Users
szkola
kadry Properties
General Members Member Of Managed By
Members:
Name
Active Directory Domain Services
Add...
Remove
OK
Cancel
Apply
Select Users, Contacts, Computers, Service Accounts, or Groups
Select this object type:
Users, Service Accounts, Groups, or Other objects
Object Types...
From this location:
egzamin.local
Locations...
Enter the object names to select (examples):
jkowalski
Check Names
Advanced...
OK
Cancel

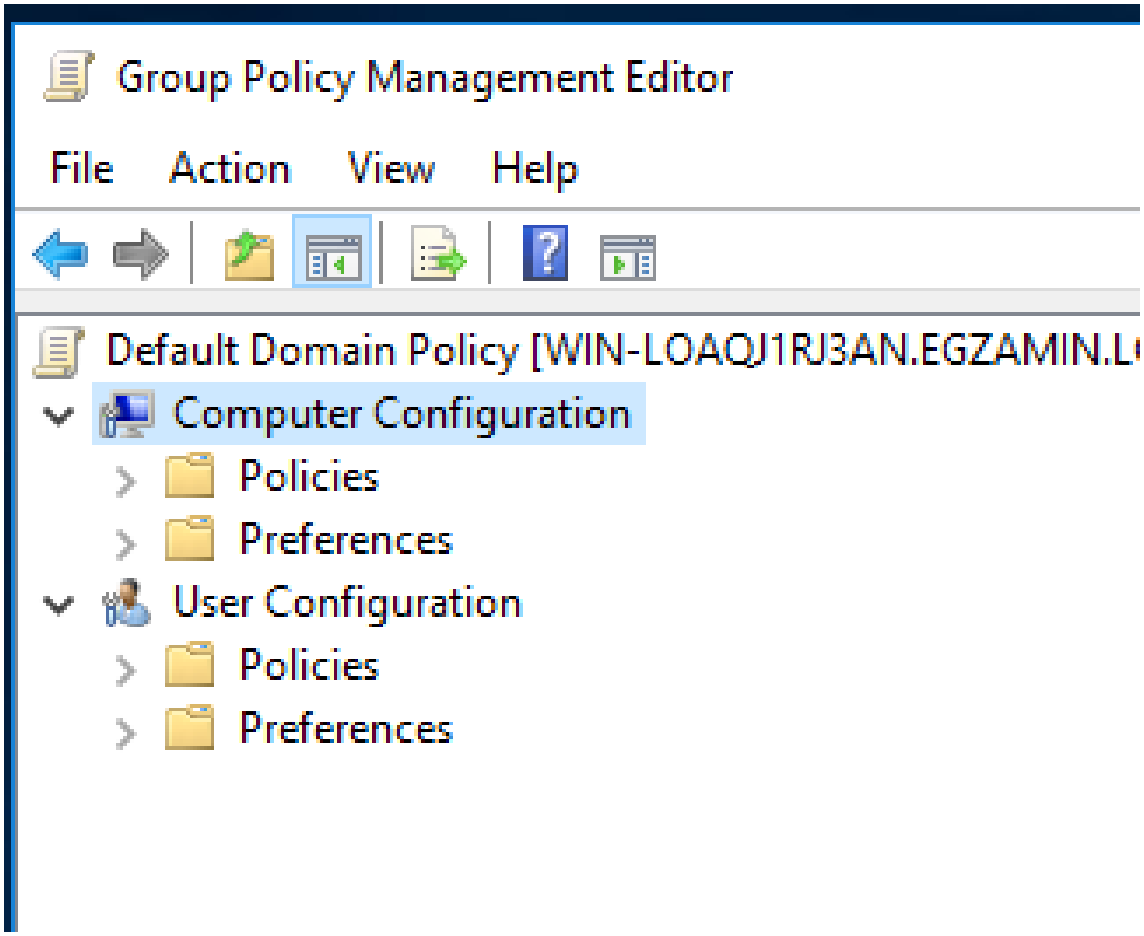
2.2 Zasady grupy - Group Policy Management

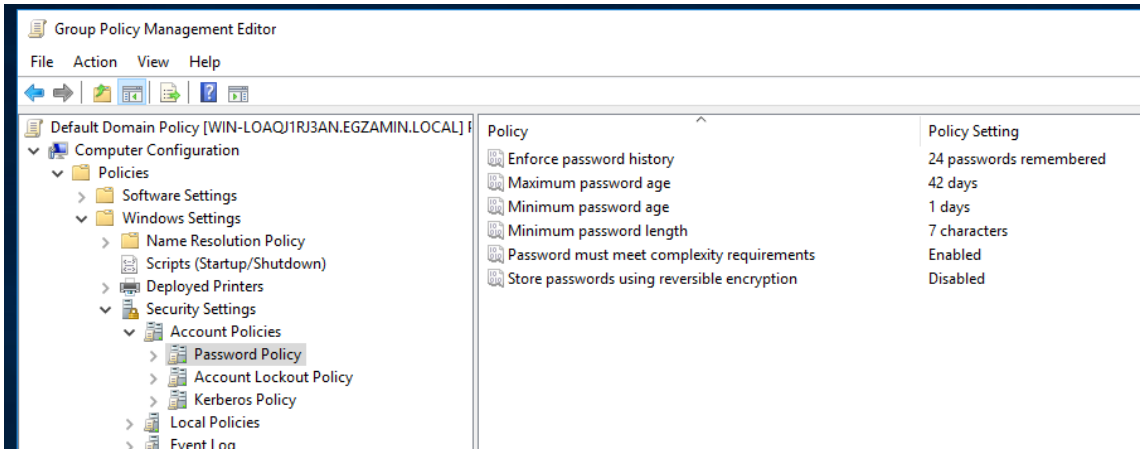
Zasady grupy pozwalają tak jak nazwa wskazuje na regulowania różnorodnych uprawnień dla użytkowników korzystających z domeny. W tym przykładzie pokazano jak wyłączyć wymagania dotyczące złożoności hasła w domenie.

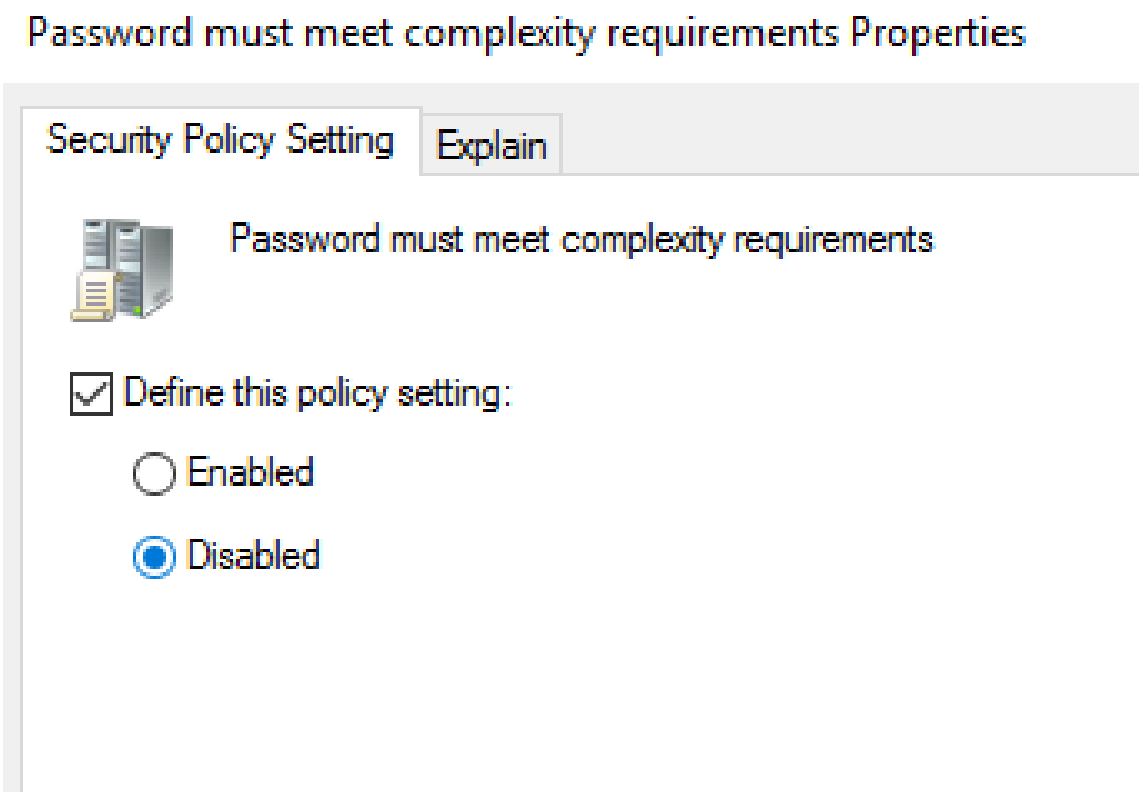


Należy edytować domyślne zasady dla domeny.



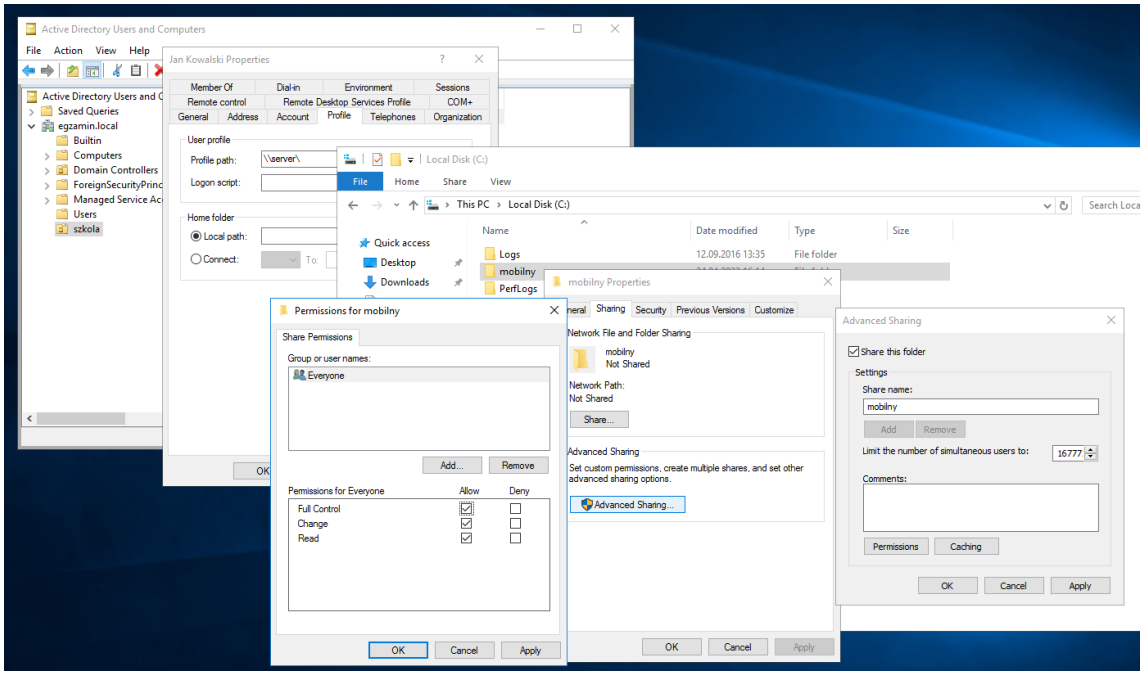

Group Policy Management Editor
File Action View Help
Default Domain Policy [WIN-LOAQJ1RJ3AN.EGZAMIN.L
Computer Configuration
Policies
Preferences
User Configuration
Policies
Preferences


Group Policy Management Editor
File Action View Help
Default Domain Policy [WIN-LOAQJ1RJ3AN.EGZAMIN.LOCAL]
Computer Configuration
Policies
Software Settings
Windows Settings
Name Resolution Policy
Scripts (Startup/Shutdown)
Deployed Printers
Security Settings
Account Policies
Password Policy
Account Lockout Policy
Kerberos Policy
Local Policies
Policy
Policy Setting
Enforce password history
24 passwords remembered
Maximum password age
42 days
Minimum password age
1 days
Minimum password length
7 characters
Password must meet complexity requirements
Enabled
Store passwords using reversible encryption
Disabled

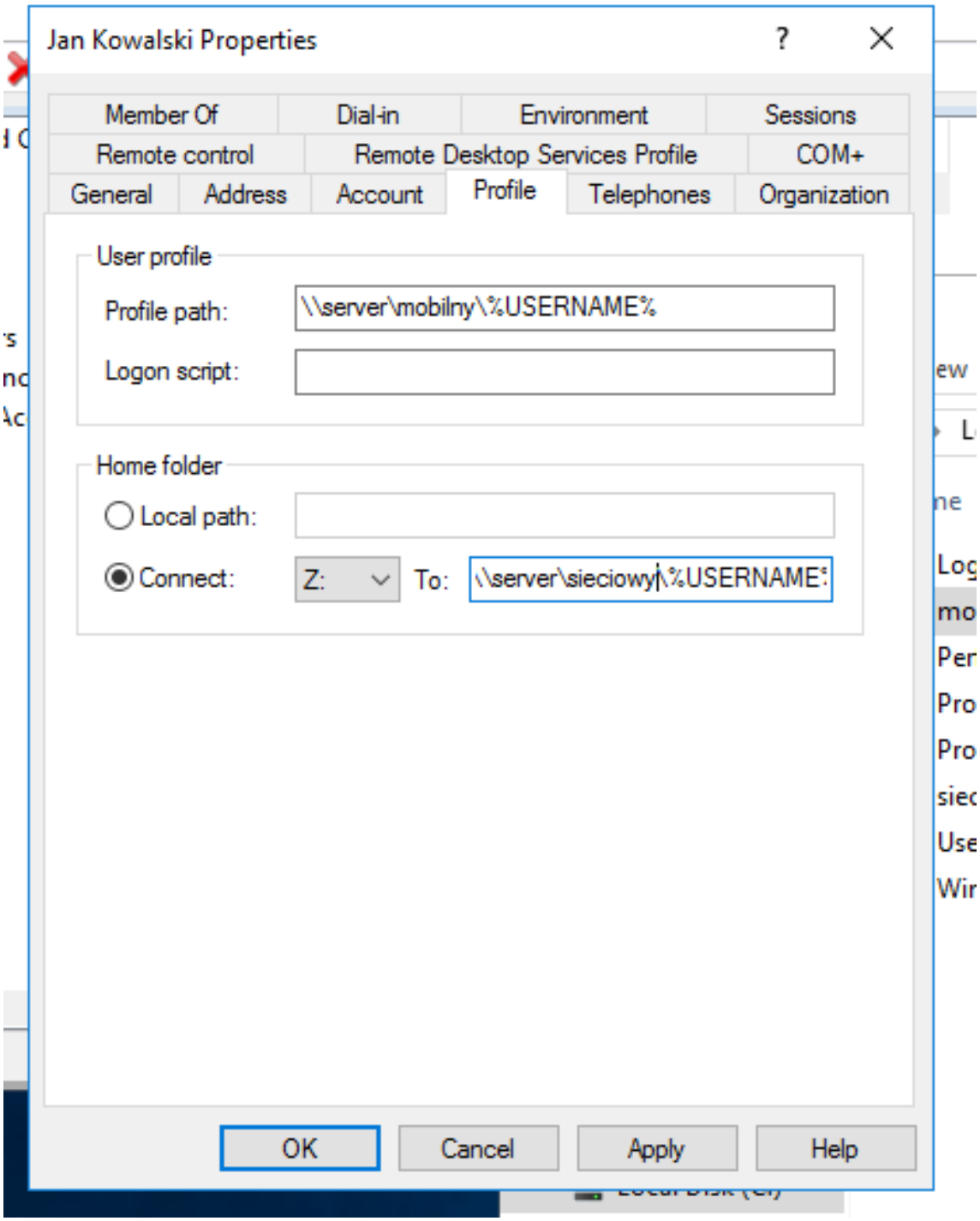


2.3 Profil mobilny i folder sieciowy

Profil mobilny pozwala na automatyczne przenoszenie zawartości folderów osobistych użytkownika (np. Pulpit, Dokumenty) przy logowaniu na inne komputery. Folder sieciowy to lokalizacja sieciowa dostępna dla użytkownika po za logowaniu i dostępna w oknie Komputer. Należy utworzyć dwa foldery i udostępnić je w sieci jak pokazano poniżej. Zamiast nazwy "server"należy wpisać rzeczywistą nazwę serwera.

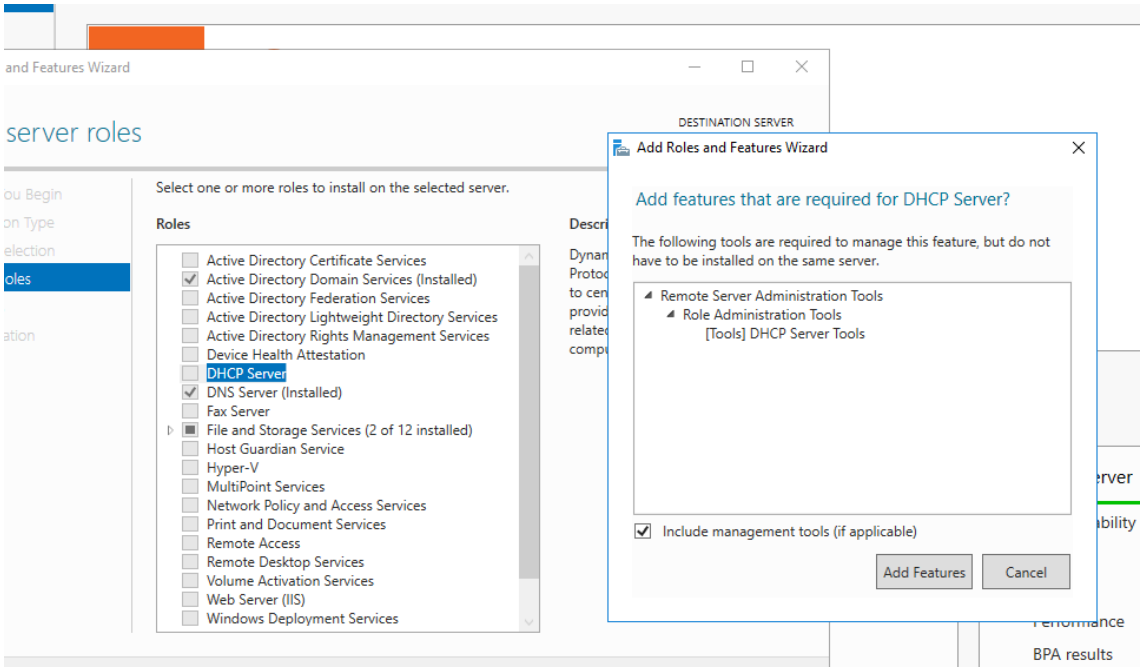


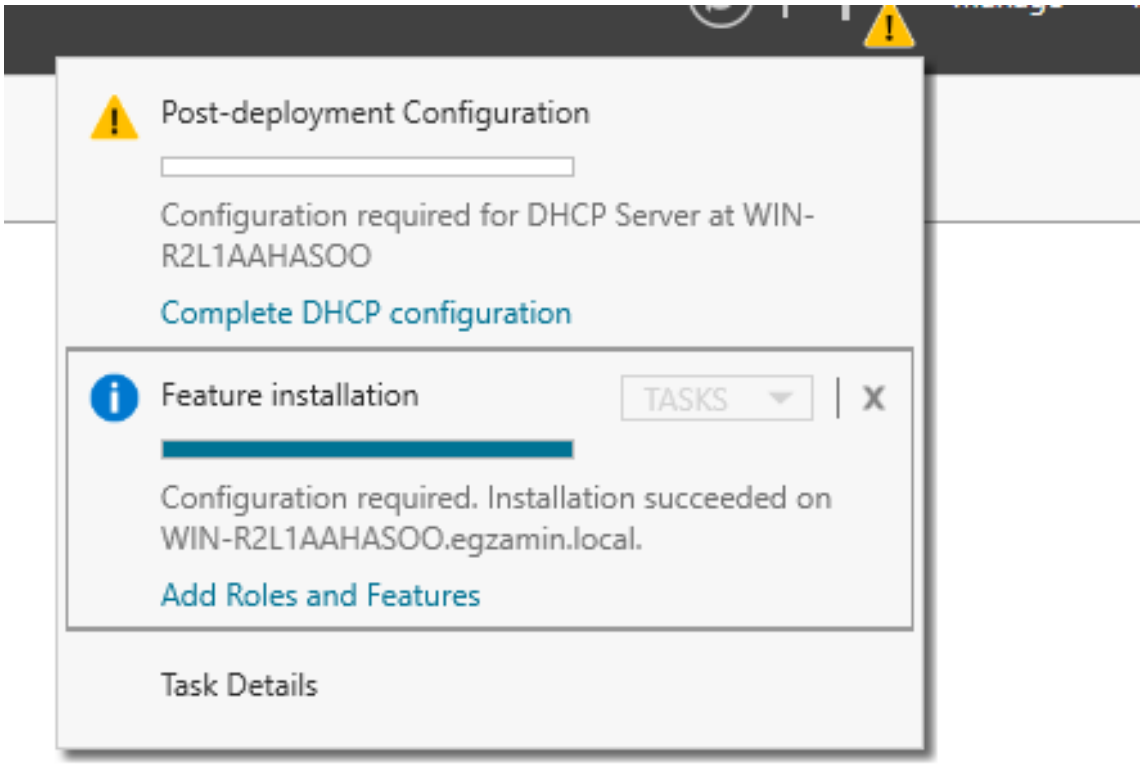
Słowo %USERNAME% pozwala na automatyczną podmianę nazwy użytkownika przy kopiowaniu konta.

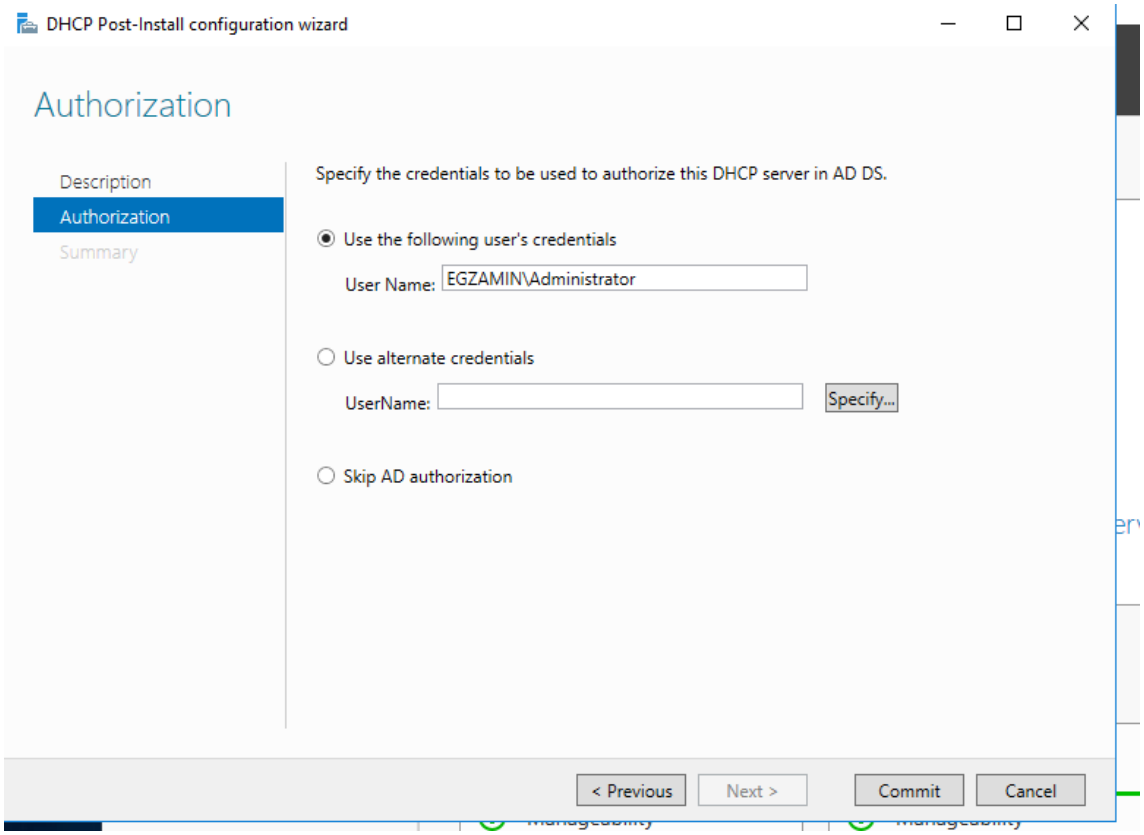


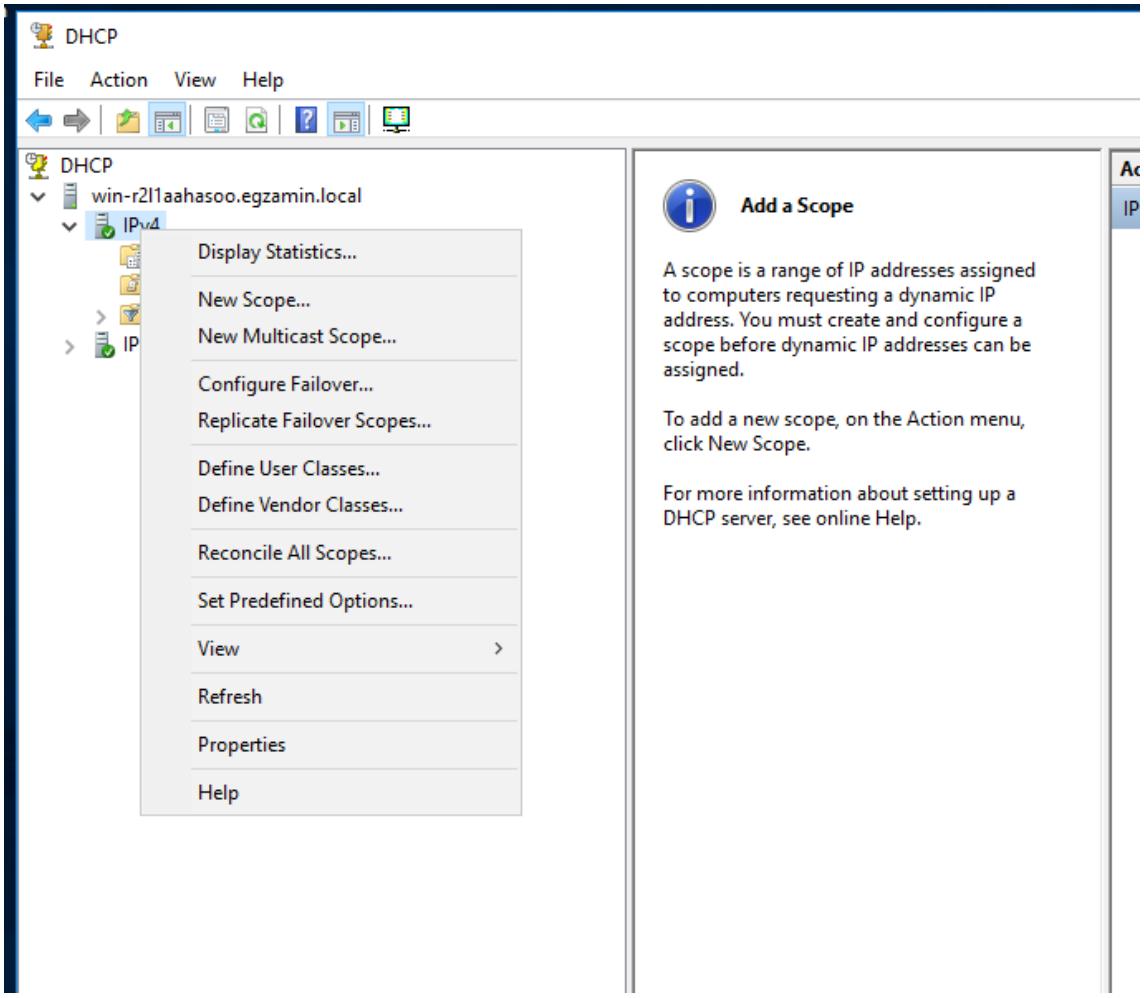
3 DHCP

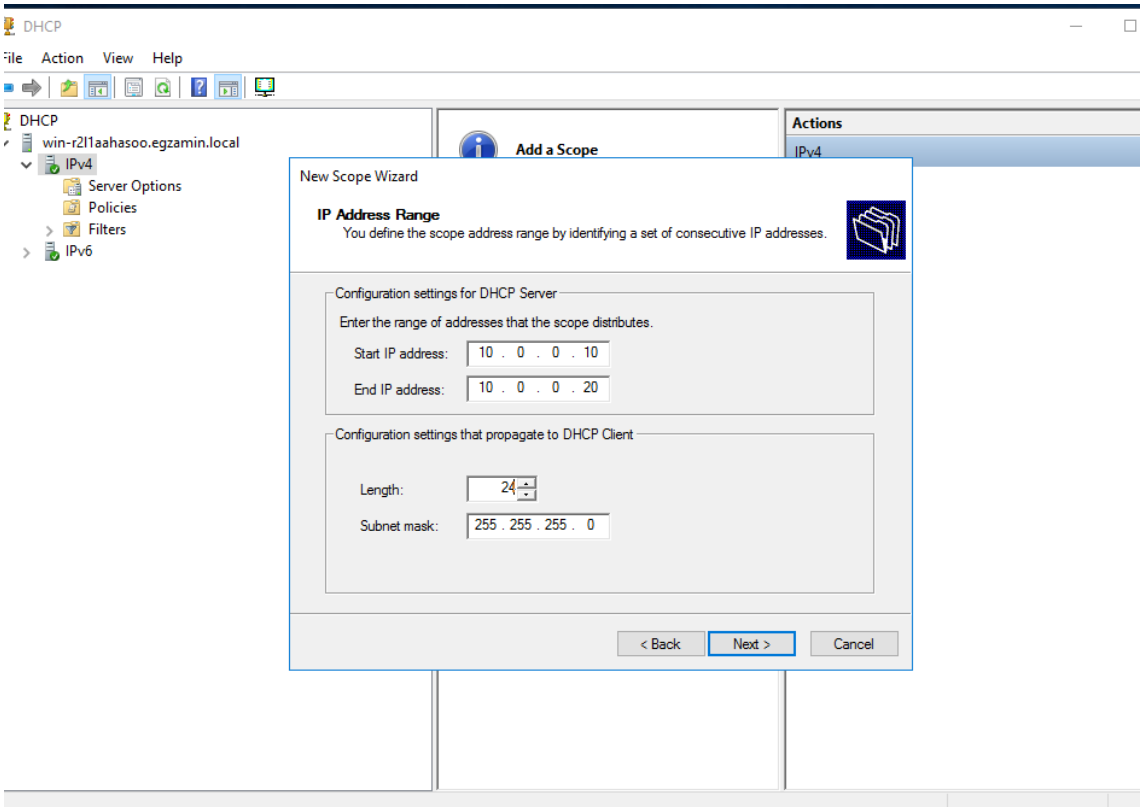
DHCP umożliwia dynamiczne przydzielanie adresów IP komputerom w sieci lokalnej.

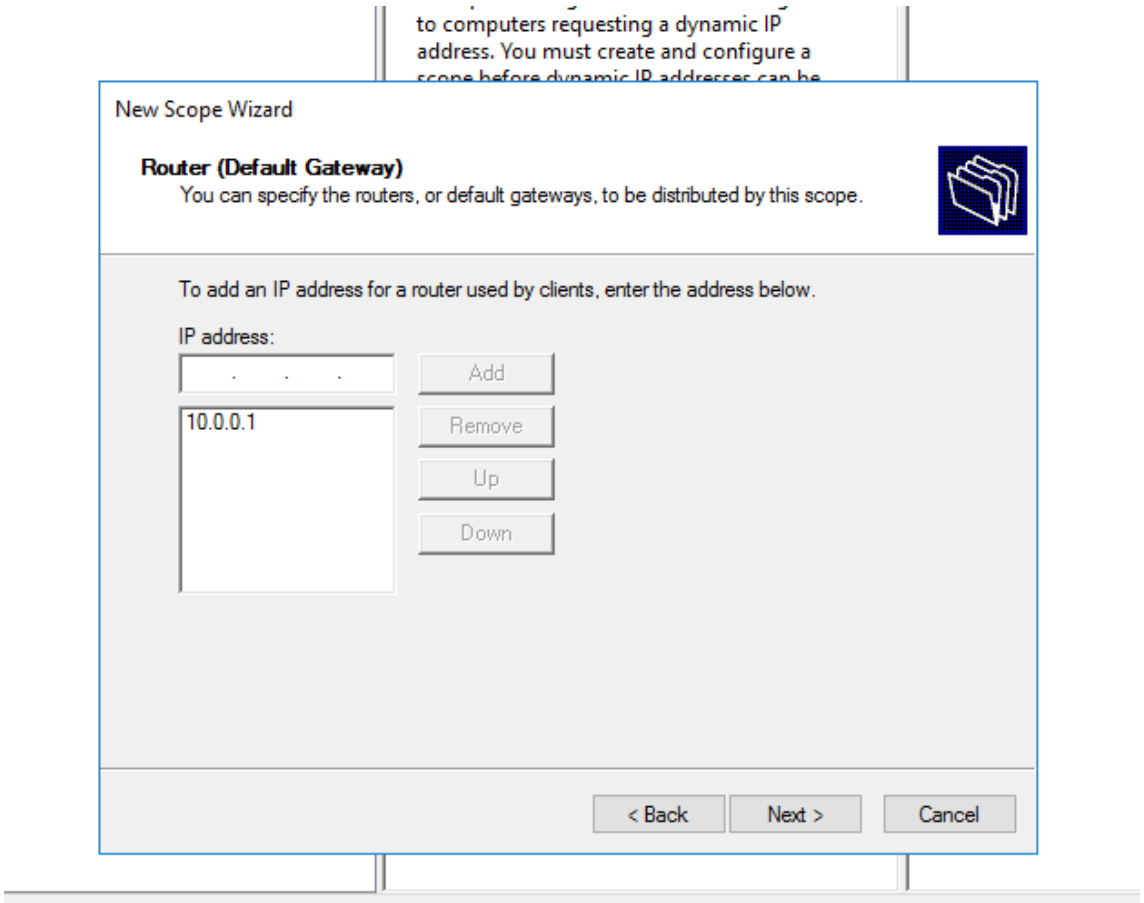

and Features Wizard
server roles
DESTINATION SERVER
Select one or more roles to install on the selected server.
Roles
Active Directory Certificate Services
Active Directory Domain Services (Installed)
Active Directory Federation Services
Active Directory Lightweight Directory Services
Active Directory Rights Management Services
Device Health Attestation
DHCP Server
DNS Server (Installed)
Fax Server
File and Storage Services (2 of 12 installed)
Host Guardian Service
Hyper-V
MultiPoint Services
Network Policy and Access Services
Print and Document Services
Remote Access
Remote Desktop Services
Volume Activation Services
Web Server (IIS)
Windows Deployment Services
Add Roles and Features Wizard
Add features that are required for DHCP Server?
The following tools are required to manage this feature, but do not have to be installed on the same server.
Remote Server Administration Tools
Role Administration Tools
[Tools] DHCP Server Tools
Include management tools (if applicable)
Add Features
Cancel
BPA results

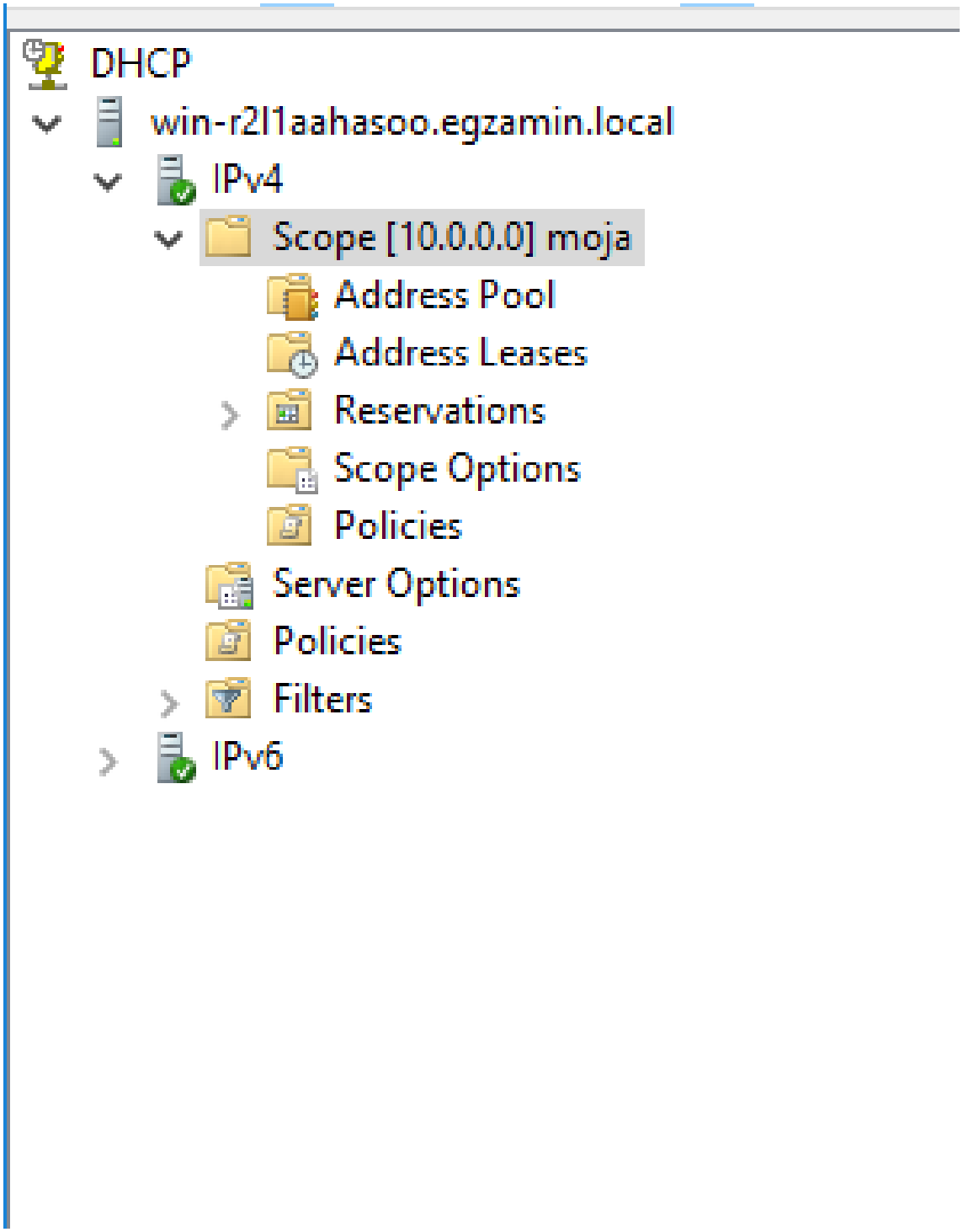

Post-deployment Configuration
Configuration required for DHCP Server at WIN-R2L1AAHASOO
Complete DHCP configuration
Feature installation
TASKS
Configuration required. Installation succeeded on WIN-R2L1AAHASOO.egzamin.local.
Add Roles and Features
Task Details


DHCP Post-Install configuration wizard
Authorization
Description
Authorization
Summary
Specify the credentials to be used to authorize this DHCP server in AD DS.
Use the following user's credentials
User Name:
EGZAMIN\Administrator
Use alternate credentials
UserName:
Specify...
Skip AD authorization
< Previous
Next >
Commit
Cancel

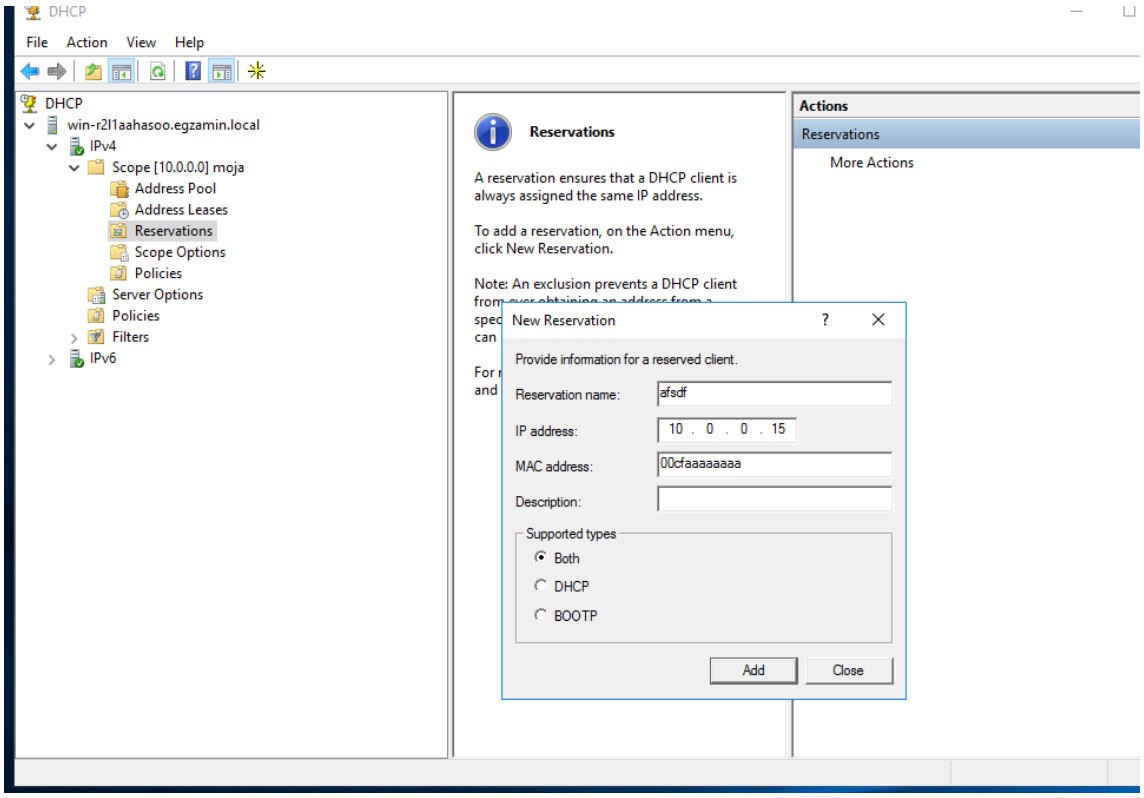

DHCP
File
Action
View
Help
DHCP
win-r2l1aahasoo.egzamin.local
IPv4
Display Statistics...
New Scope...
New Multicast Scope...
Configure Failover...
Replicate Failover Scopes...
Define User Classes...
Define Vendor Classes...
Reconcile All Scopes...
Set Predefined Options...
View
Refresh
Properties
Help
Add a Scope
A scope is a range of IP addresses assigned to computers requesting a dynamic IP address. You must create and configure a scope before dynamic IP addresses can be assigned.
To add a new scope, on the Action menu, click New Scope.
For more information about setting up a DHCP server, see online Help.


DHCP
File Action View Help
DHCP
win-r2l1aahasoo.egzamin.local
IPv4
Server Options
Policies
Filters
IPv6
Add a Scope
Actions
IPv4
New Scope Wizard
IP Address Range
You define the scope address range by identifying a set of consecutive IP addresses.
Configuration settings for DHCP Server
Enter the range of addresses that the scope distributes.
Start IP address: 10 . 0 . 0 . 10
End IP address: 10 . 0 . 0 . 20
Configuration settings that propagate to DHCP Client
Length: 24
Subnet mask: 255 . 255 . 255 . 0
< Back
Next >
Cancel

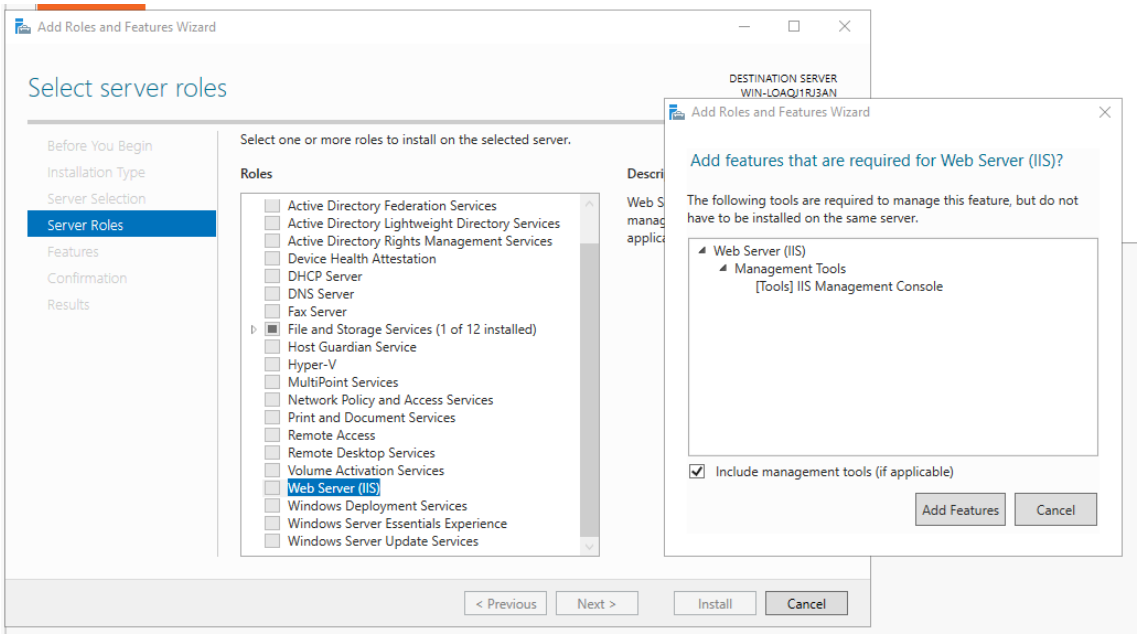

to computers requesting a dynamic IP address. You must create and configure a
New Scope Wizard
Router (Default Gateway)
You can specify the routers, or default gateways, to be distributed by this scope.
To add an IP address for a router used by clients, enter the address below.
IP address:
Add
10.0.0.1
Remove
Up
Down
< Back
Next >
Cancel


DHCP
win-r2l1aahasoo.egzamin.local
IPv4
Scope [10.0.0.0] moja
Address Pool
Address Leases
Reservations
Scope Options
Policies
Server Options
Policies
Filters
IPv6

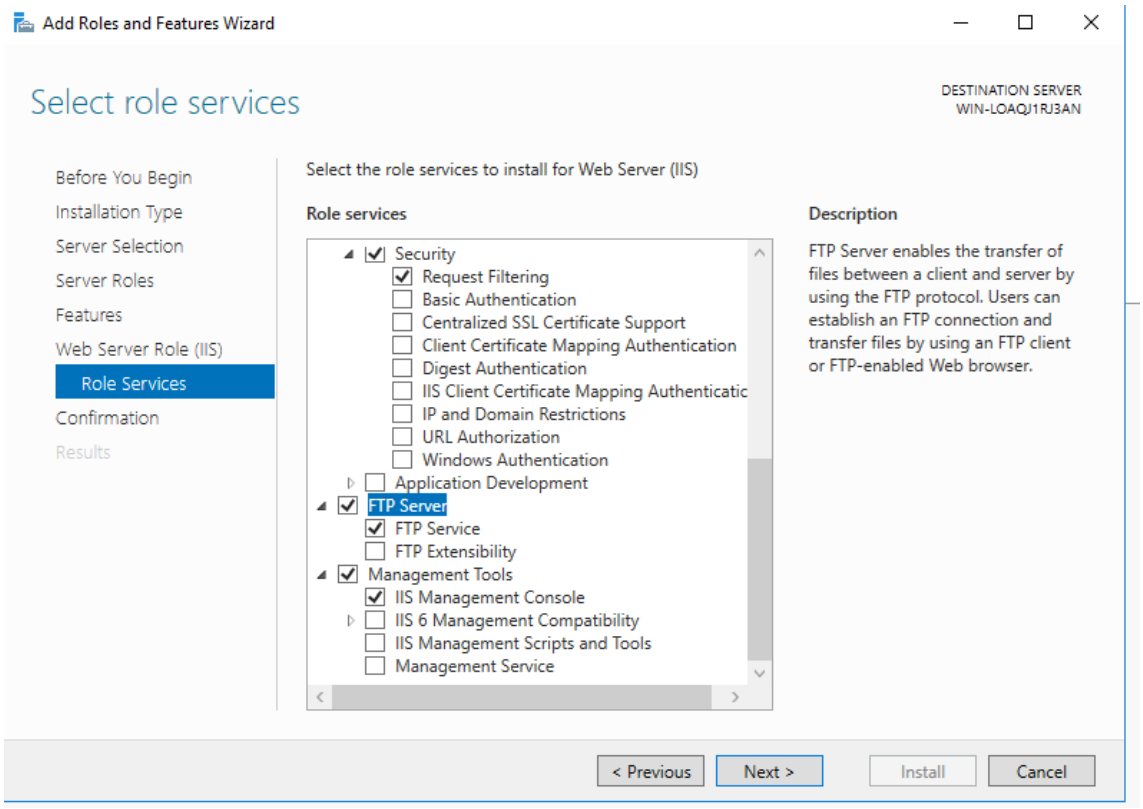
3.1 Rezerwacja adresu

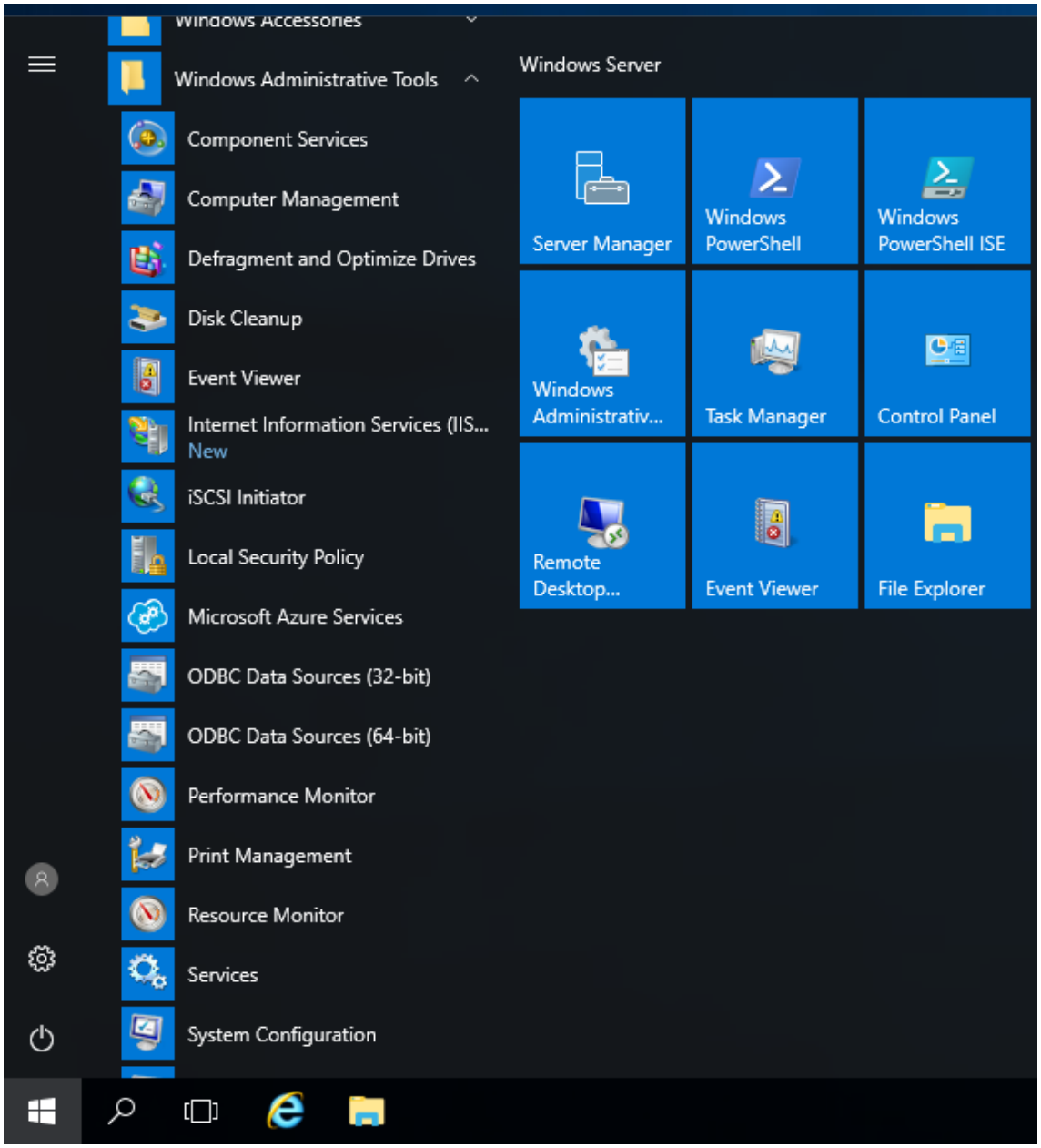


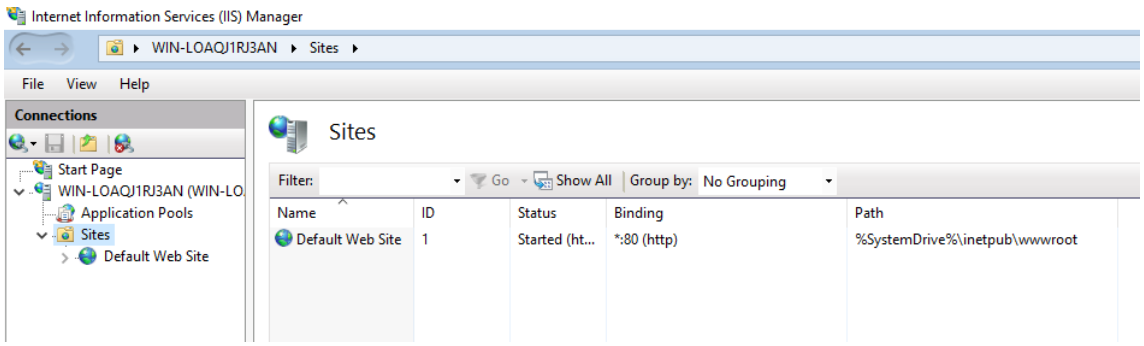
4 Serwer IIS (Stron Internetowych)



Przy okazji można zainstalować serwer FTP jeśli taki jest wymagany.

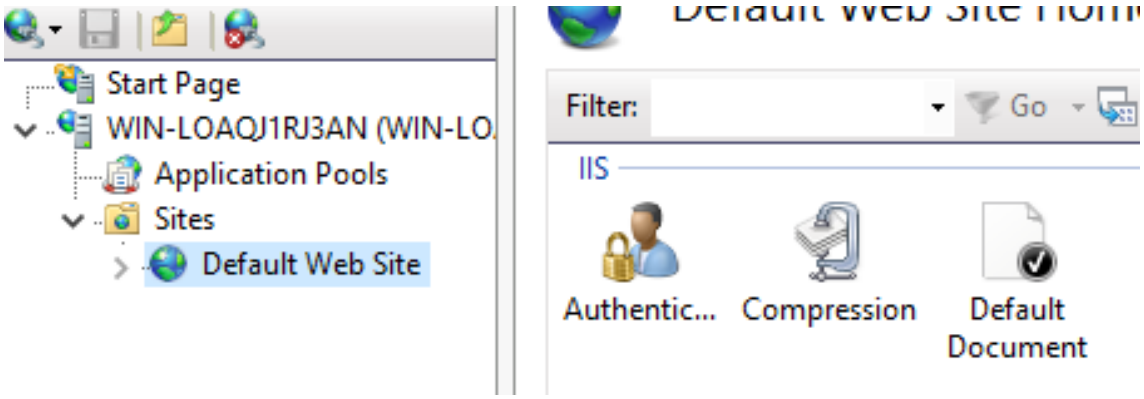


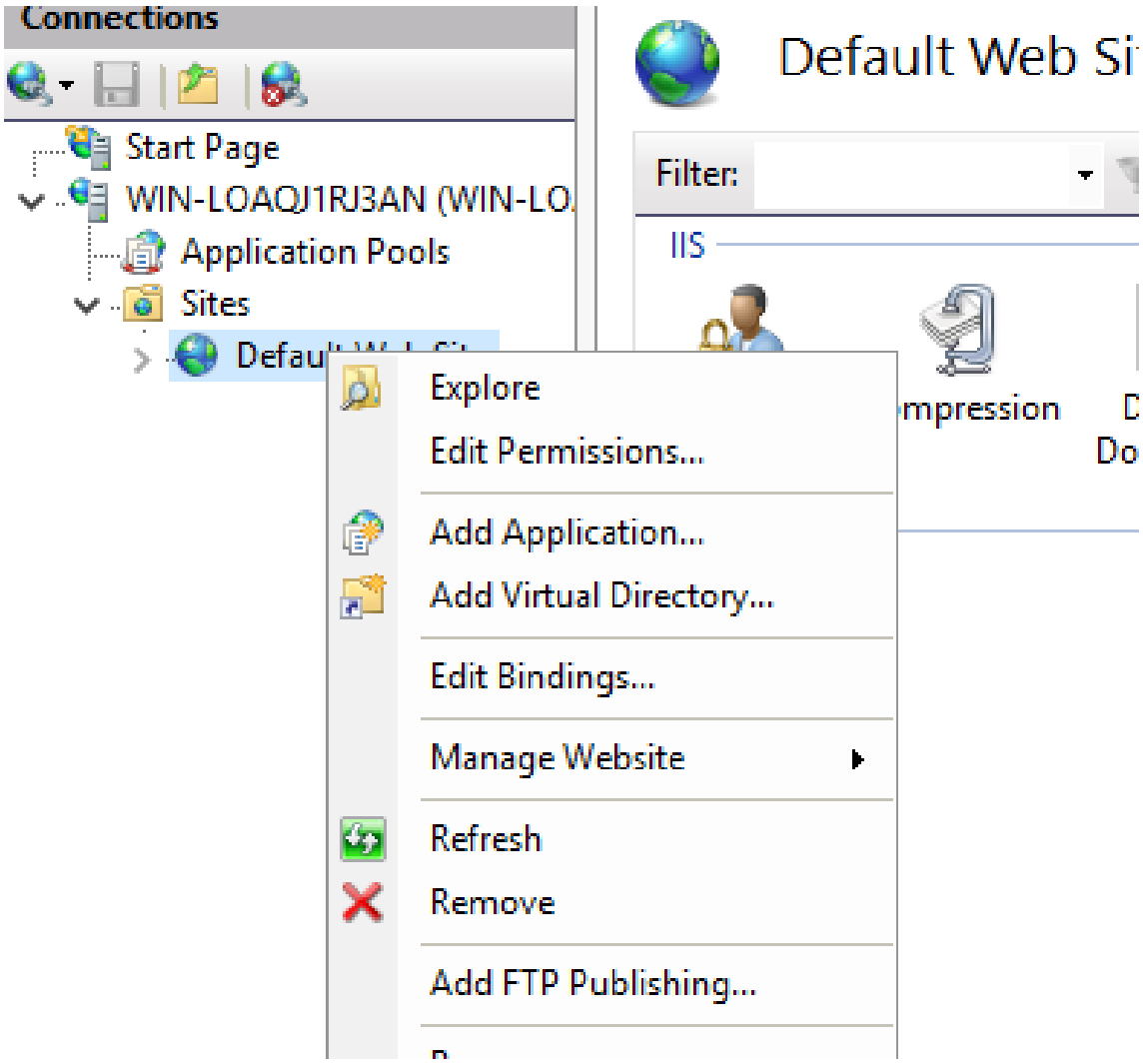




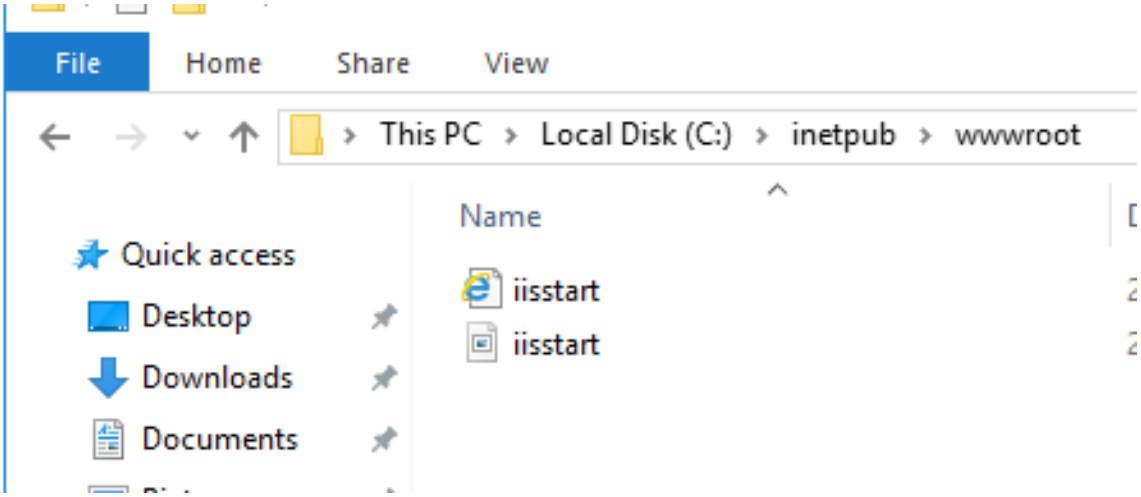
W zakładce Default Document można dodać do listy nazwę dokumentu domyślnego in-

nego niż standarowe. (Np. inny niż index.html)

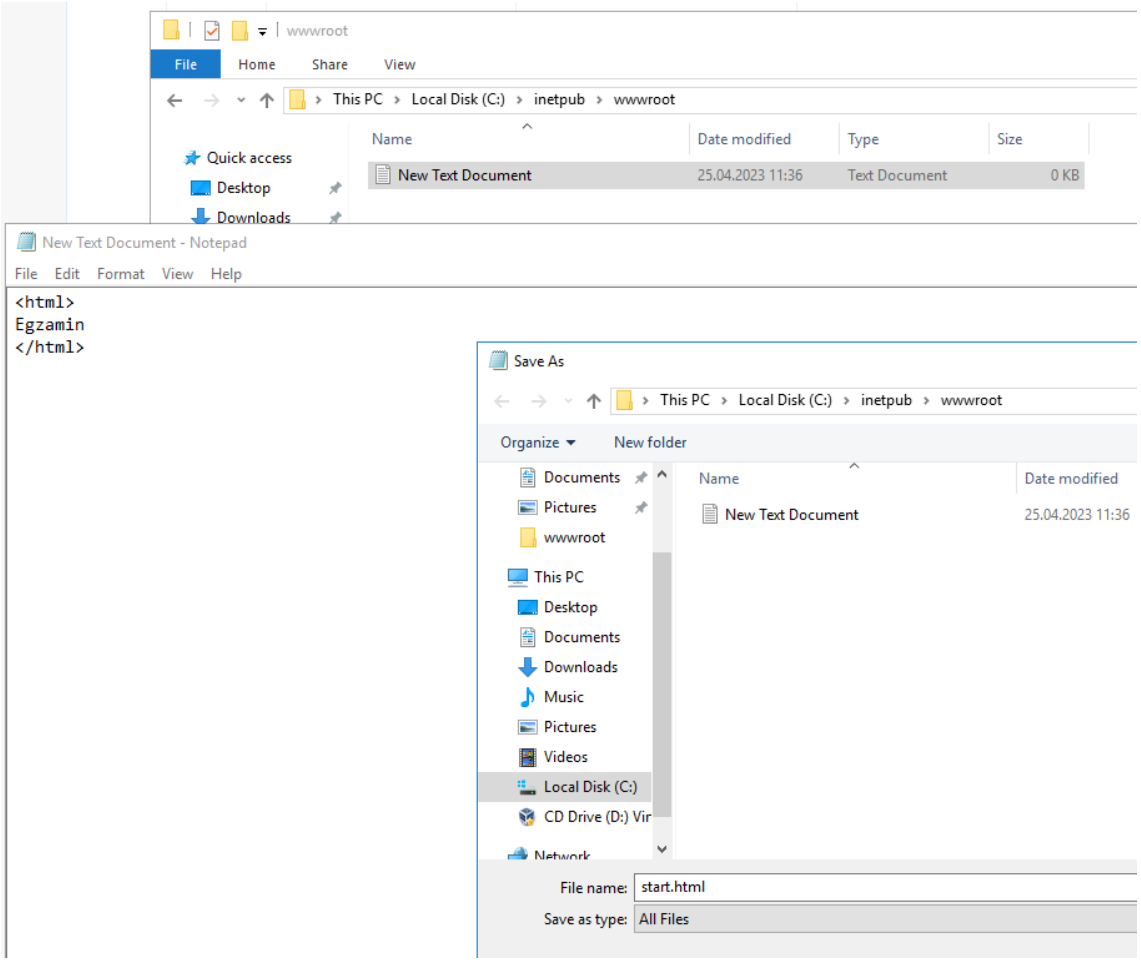




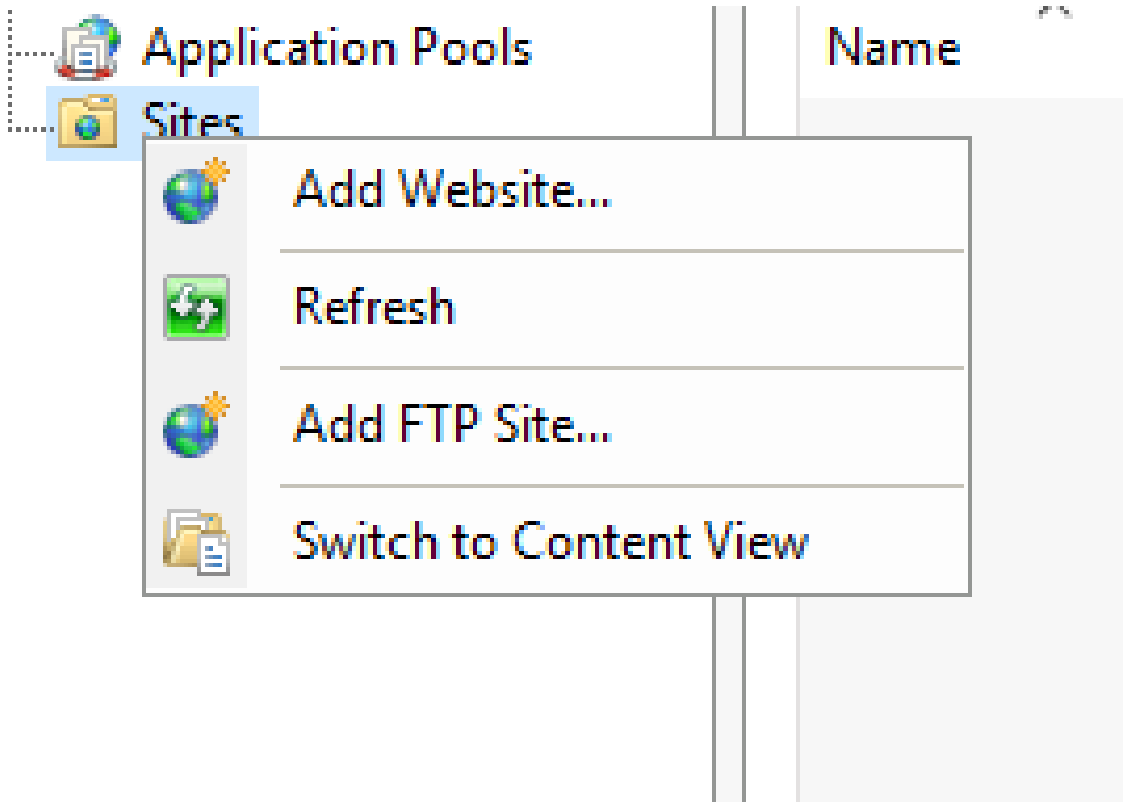
Usuwanie domyślnych plików witryny.

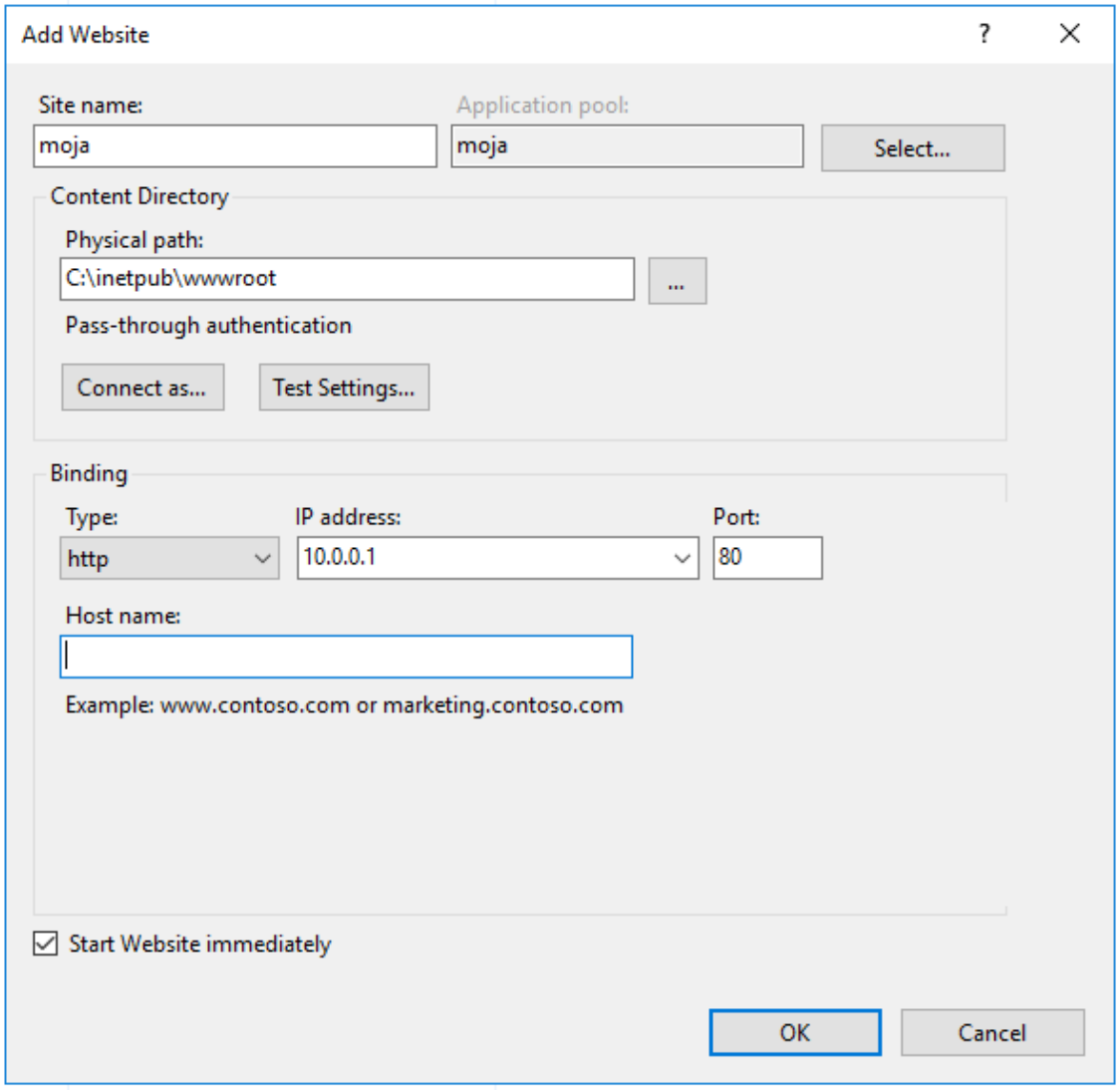


Stworzenie pliku tekstowego, wpisanie prostego kodu html, zapisanie jako start.html z typem all files.



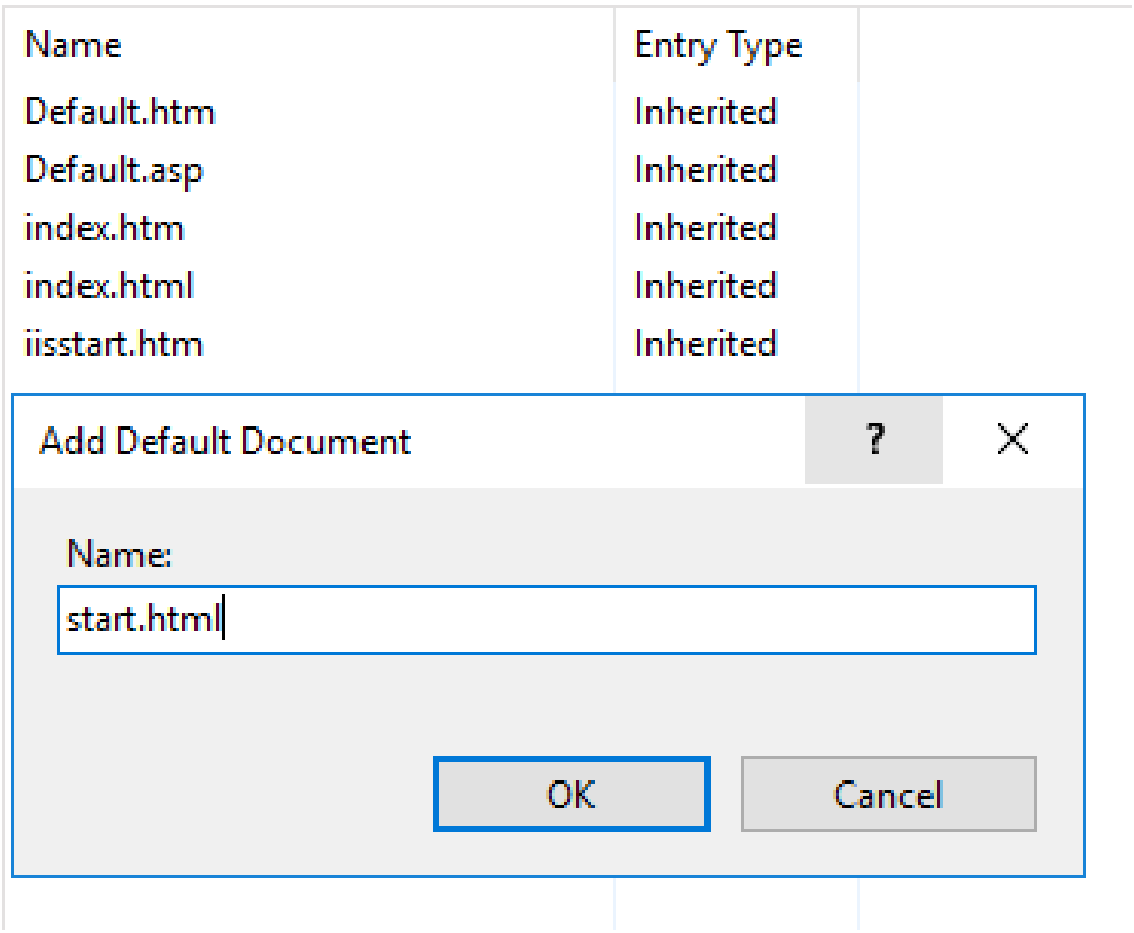
Dodanie nowej witryny.


Application Pools
Sites
Name
Add Website...
Refresh
Add FTP Site...
Switch to Content View



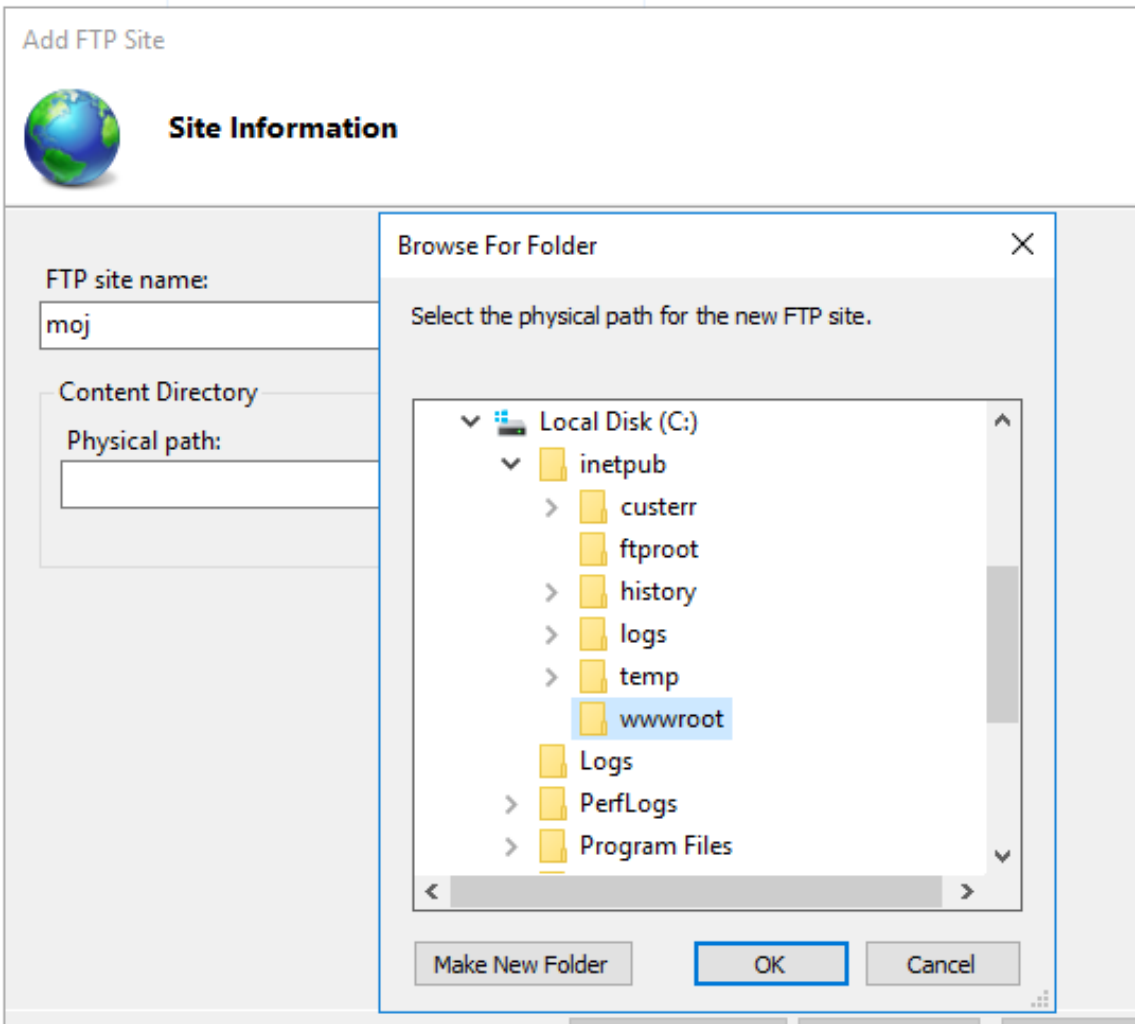
Jeśli po wpisaniu adresu IP w przeglądarkę pojawia się poniższy komunikat to znaczy, że trzeba dodać nazwę domyślnego pliku do listy.

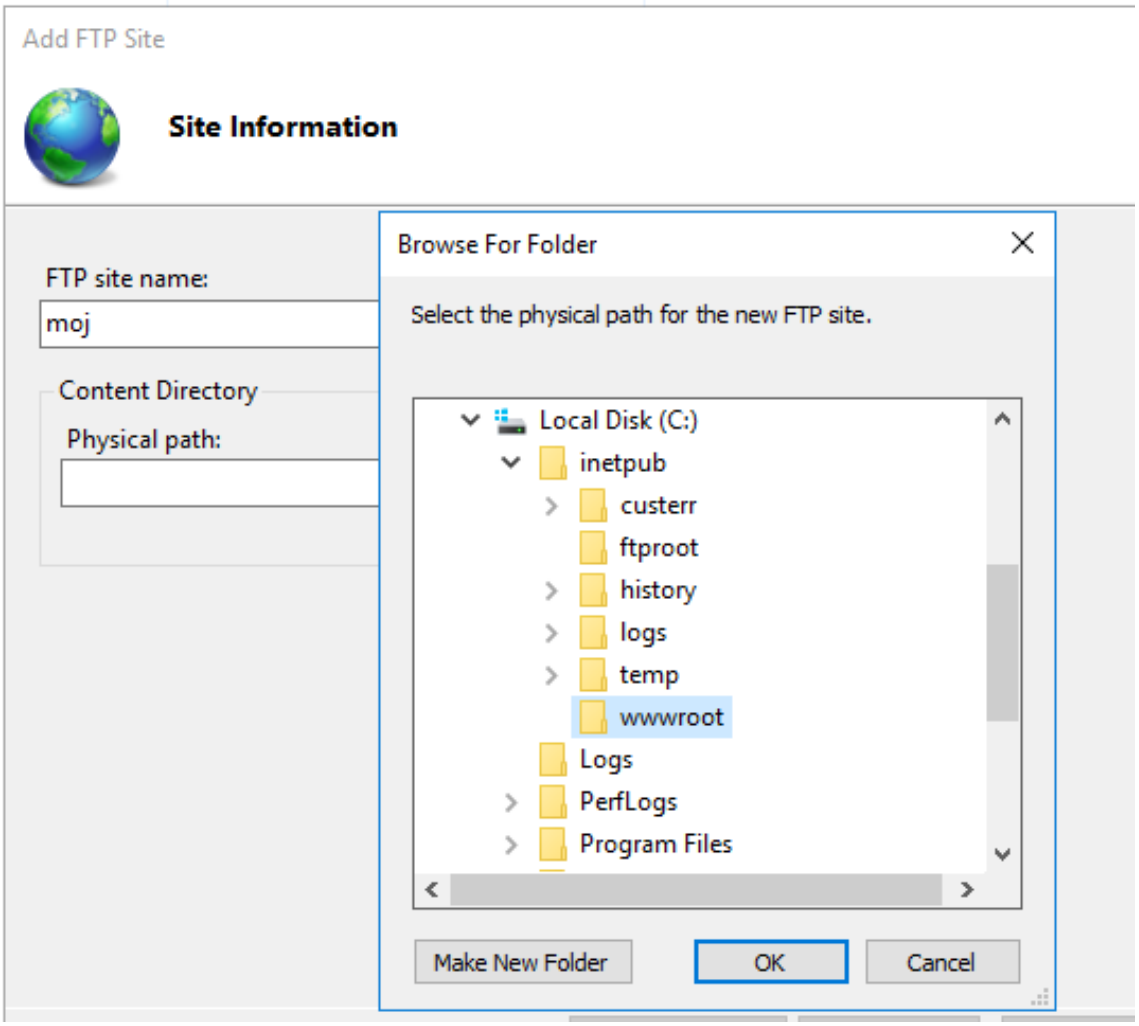
Dodawanie nazwy start.html to listy domyślnych plików.

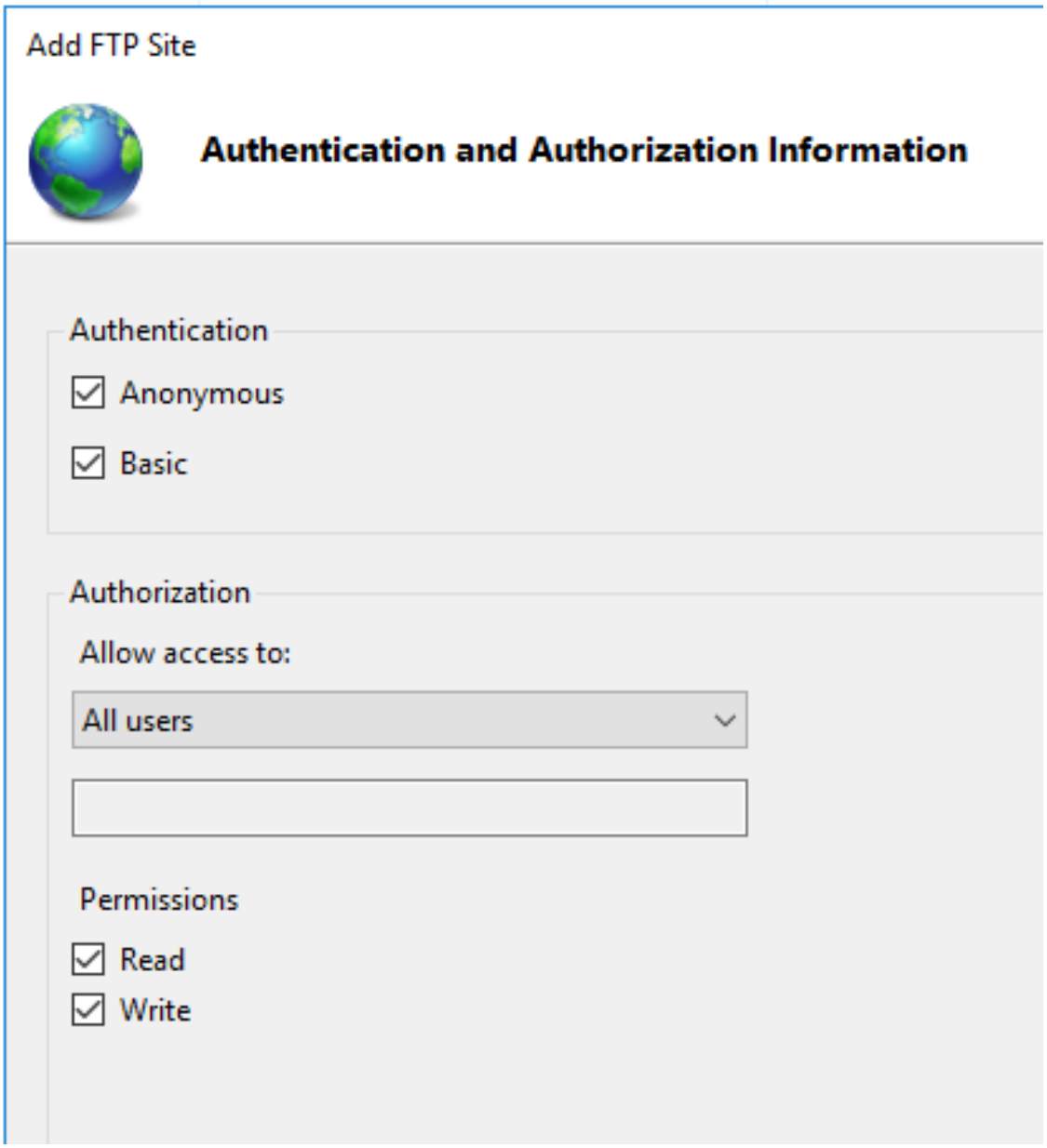


Test konfiguracji strony internetowej.

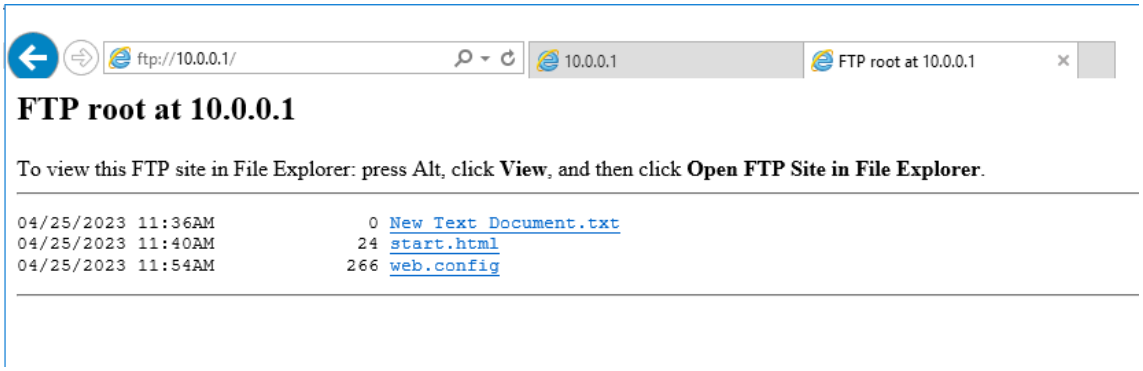
4.1 Konfiguracja serwera plików ftp



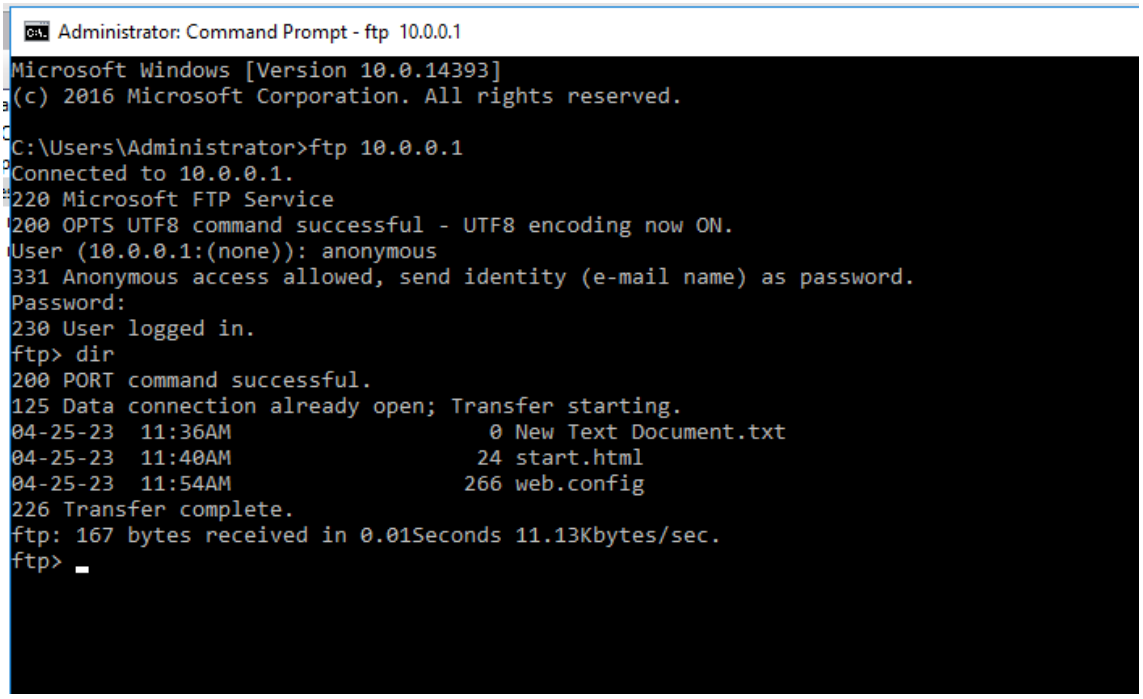

Add FTP Site
Site Information
FTP site name:
moj
Content Directory
Physical path:
Browse For Folder
Select the physical path for the new FTP site.
Local Disk (C:)
inetpub
custerr
ftproot
history
logs
temp
wwwroot
Logs
PerfLogs
Program Files
Make New Folder
OK
Cancel



Test konfiguracji serwera ftp w przeglądarce.

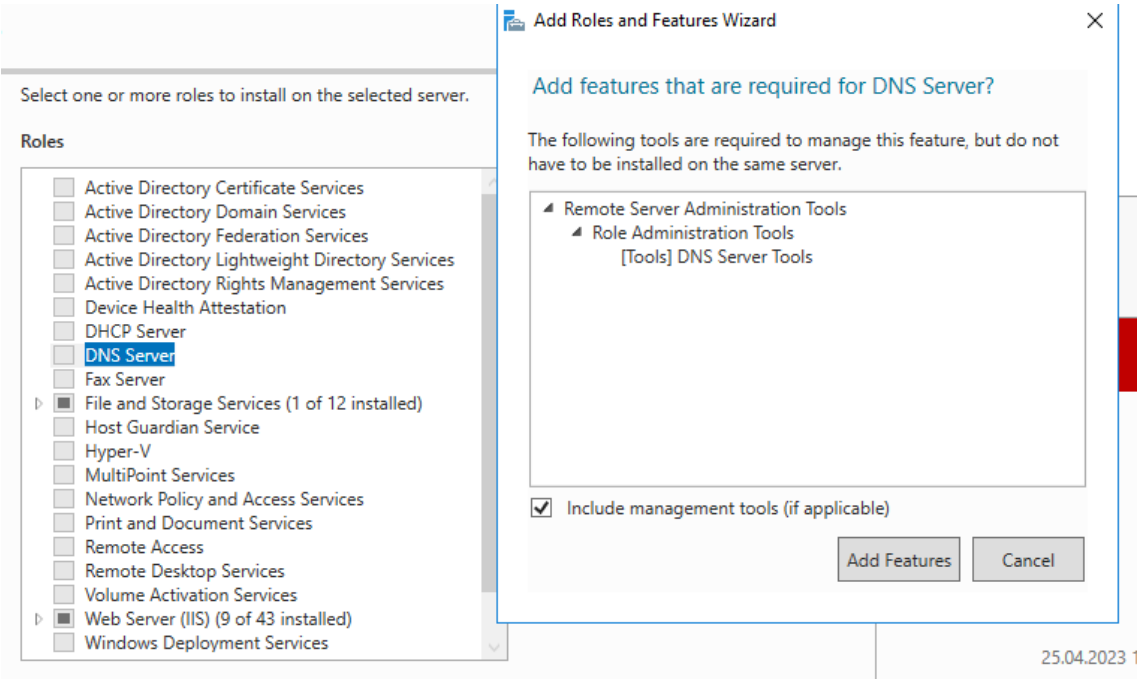


Test konfiguracji serwera ftp w cmd.

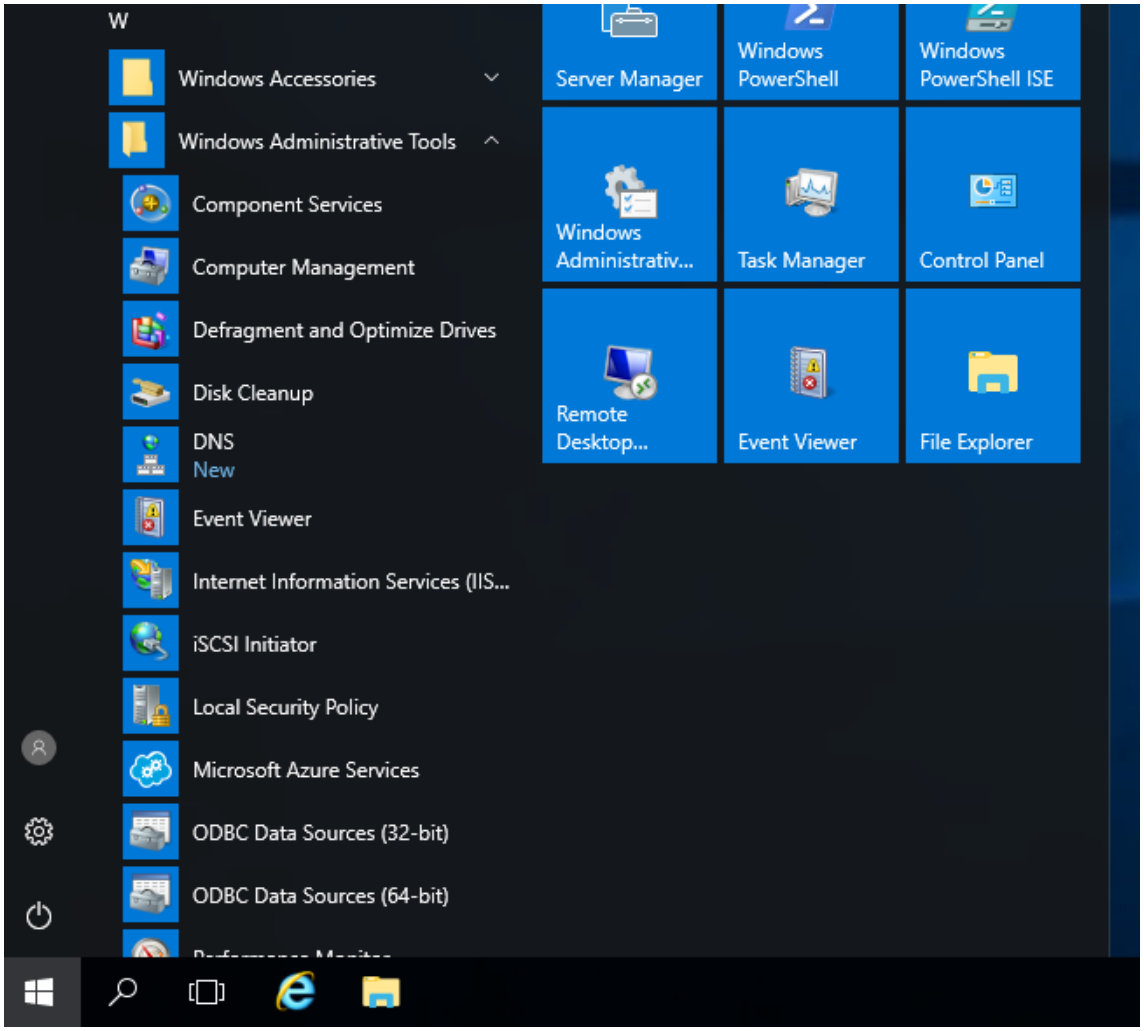


5 Konfiguracja nazwy domenowej dla strony internetowej

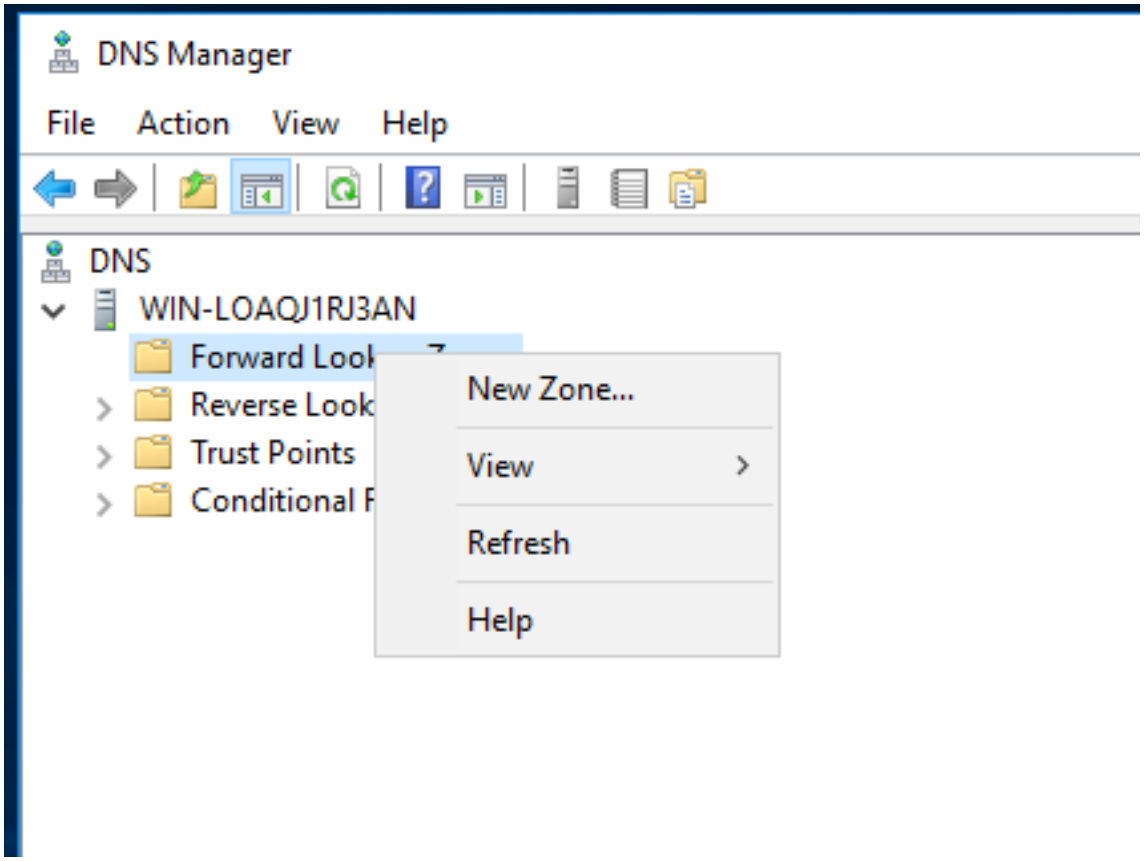
Jeśli nie została zainstalowana usługa DNS wcześniej (np. z usługą Active Directory) należy zainstalować ją osobno. w przeciwnym wypadku należy pominąć poniższy krok.



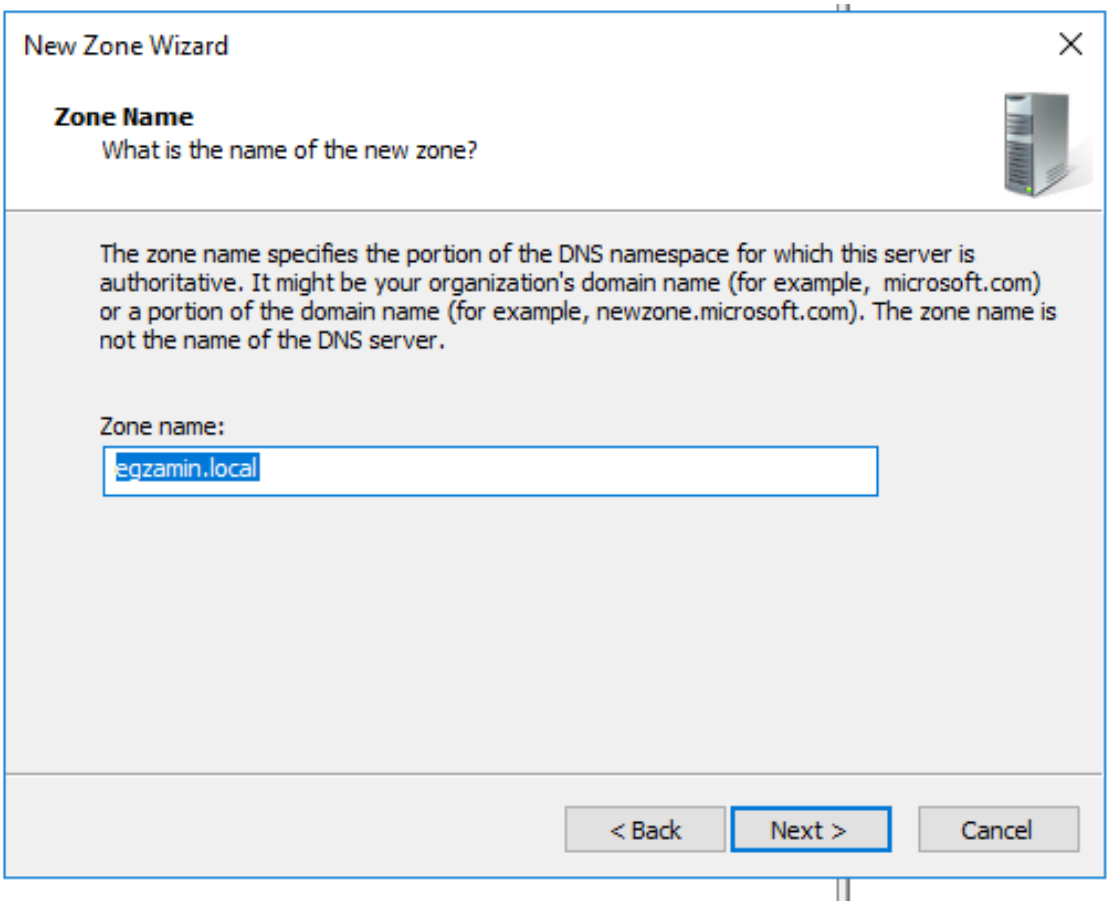
Należy otworzyć przystawkę DNS.



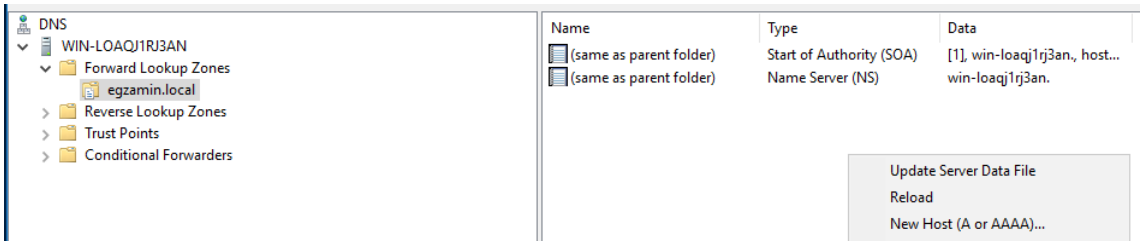
Następne dwa kroki wykonuje się tylko jeśli doinstalowano DNS po instalacji Active Directory. Należy utworzyć nową strefę wyszukiwania w przód (forward)



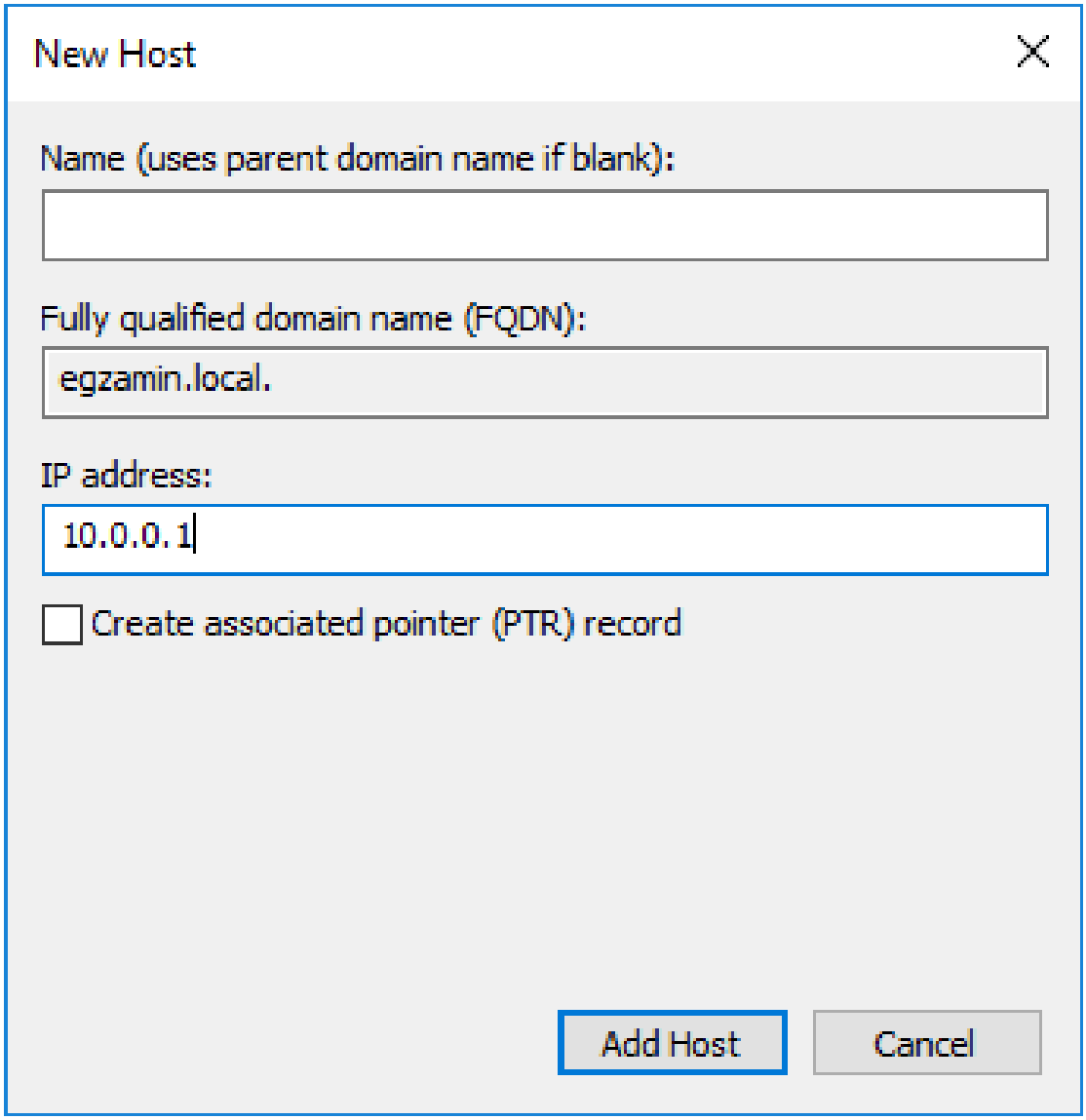
Następnie należy nadać nazwę strefie.



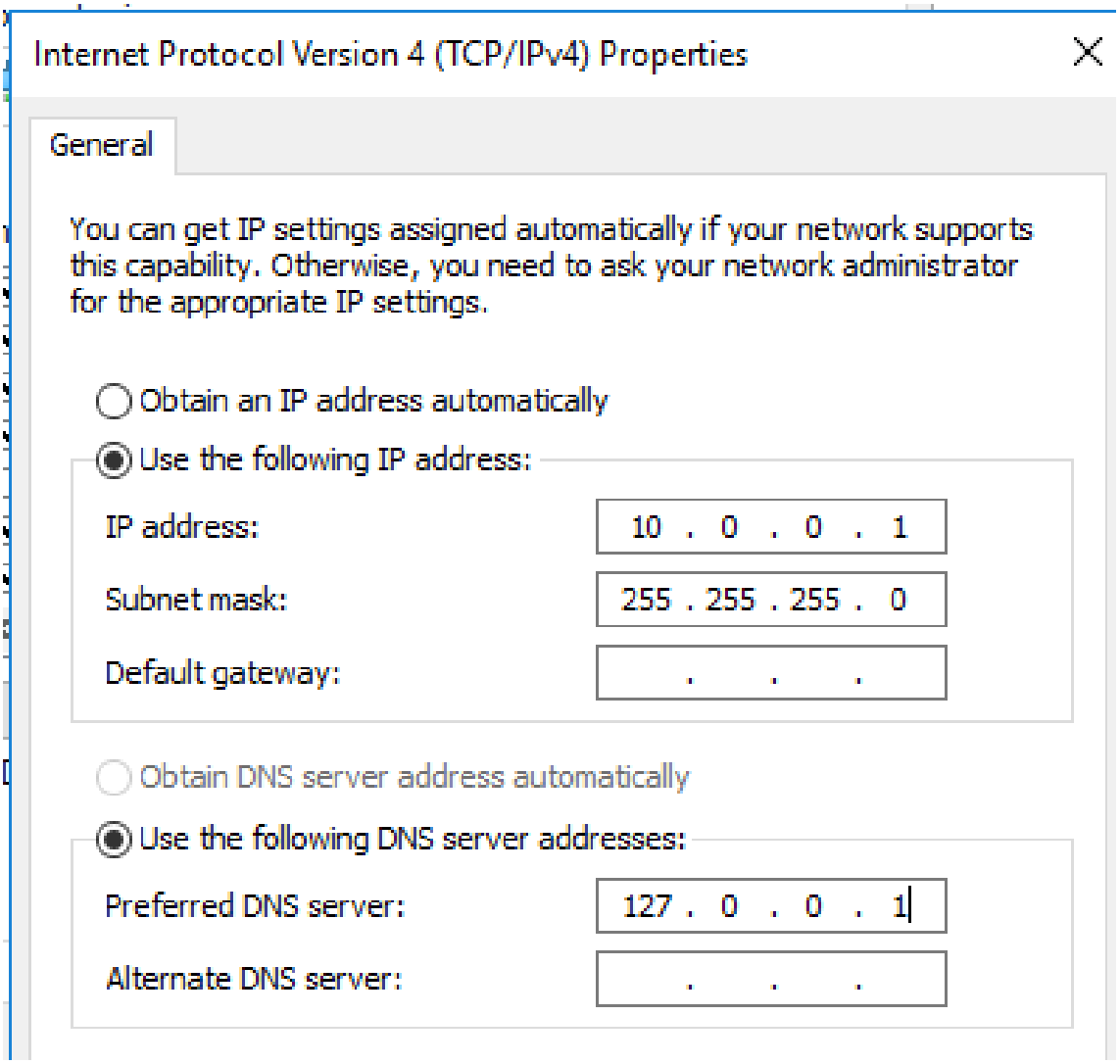
Następie należy dodać nowy rekord A.



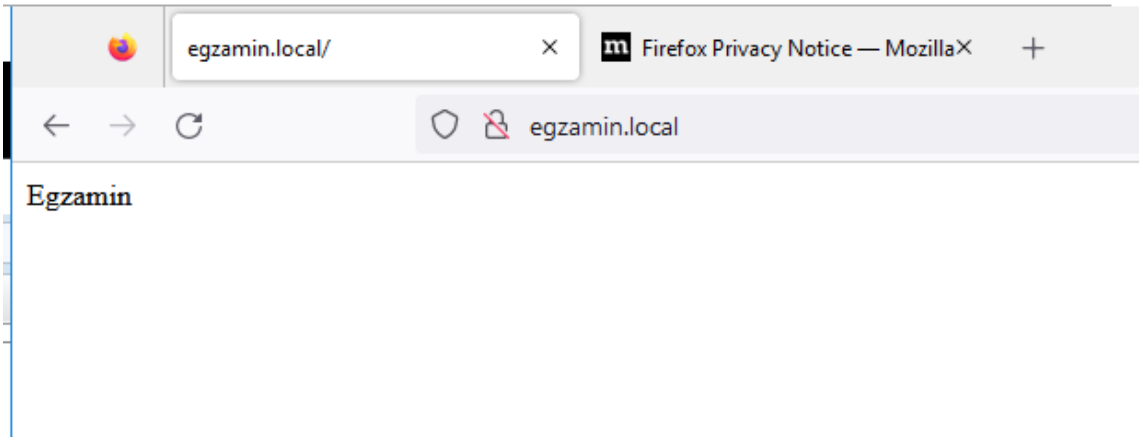
Powiązanie z domeną bieżącego adresu IP serwera. Pole Name należy pozostawić puste.



Przed testem należy upenić się, że adres DNS ustawiony jest na ten serwer czyli 127.0.0.1 (lub w tym przykładzie można też użyć 10.0.0.1)

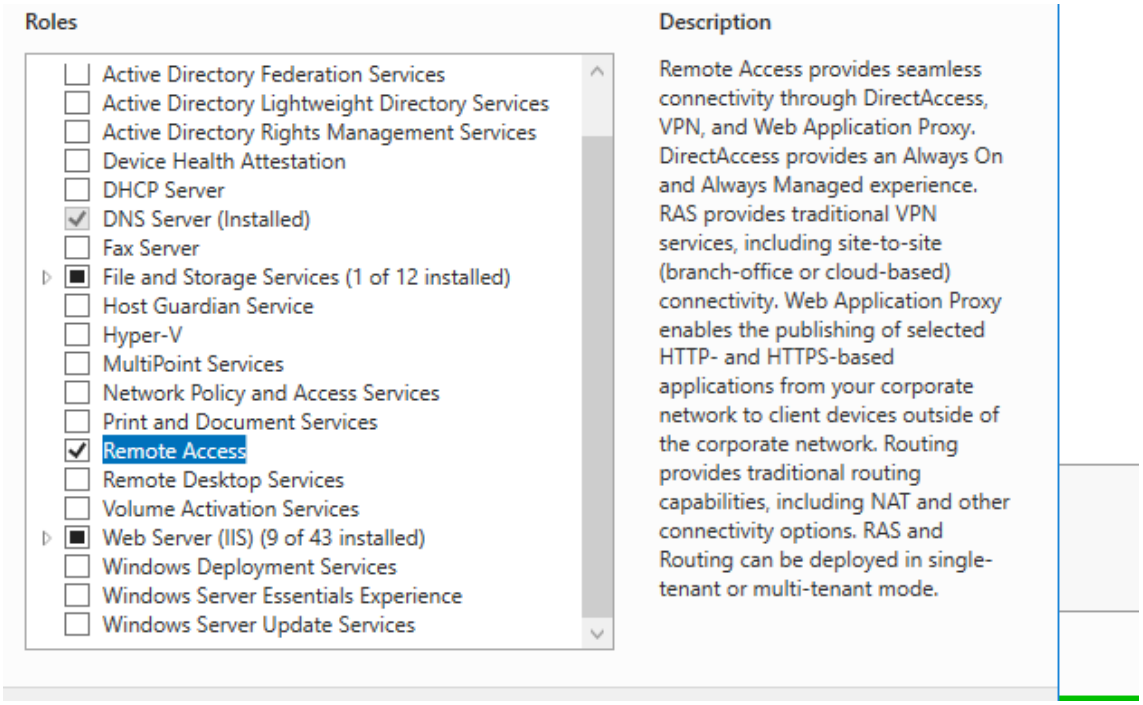


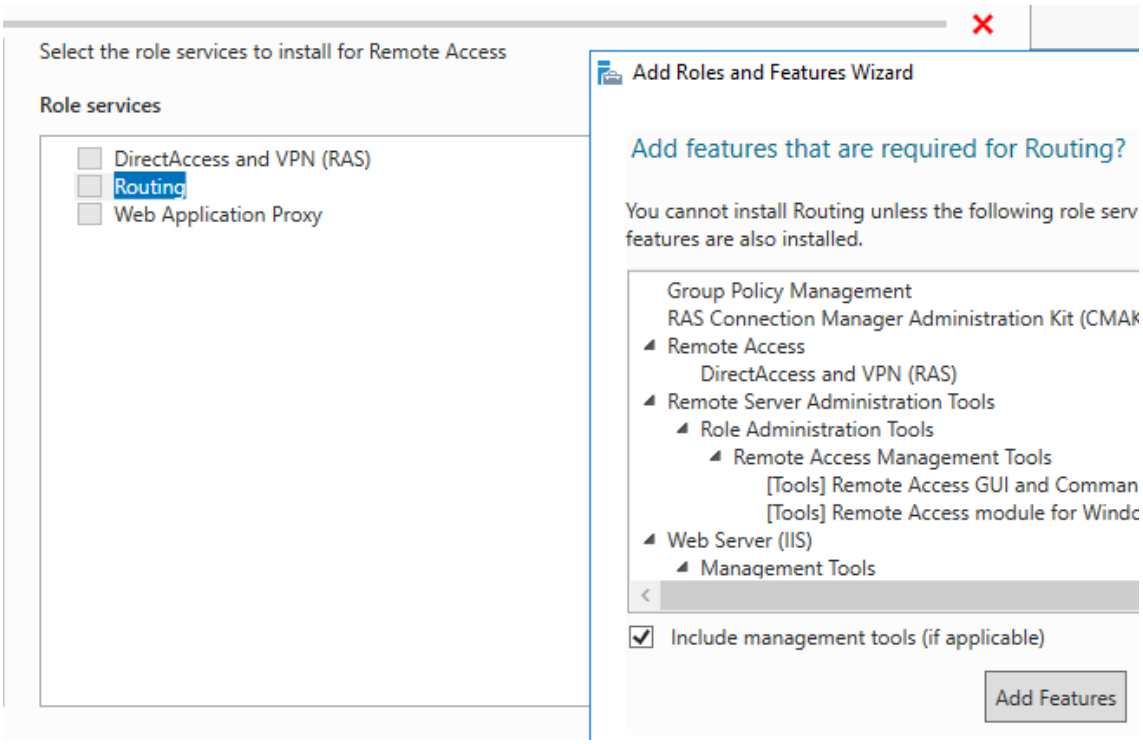
Test konfiguracji serwera DNS.



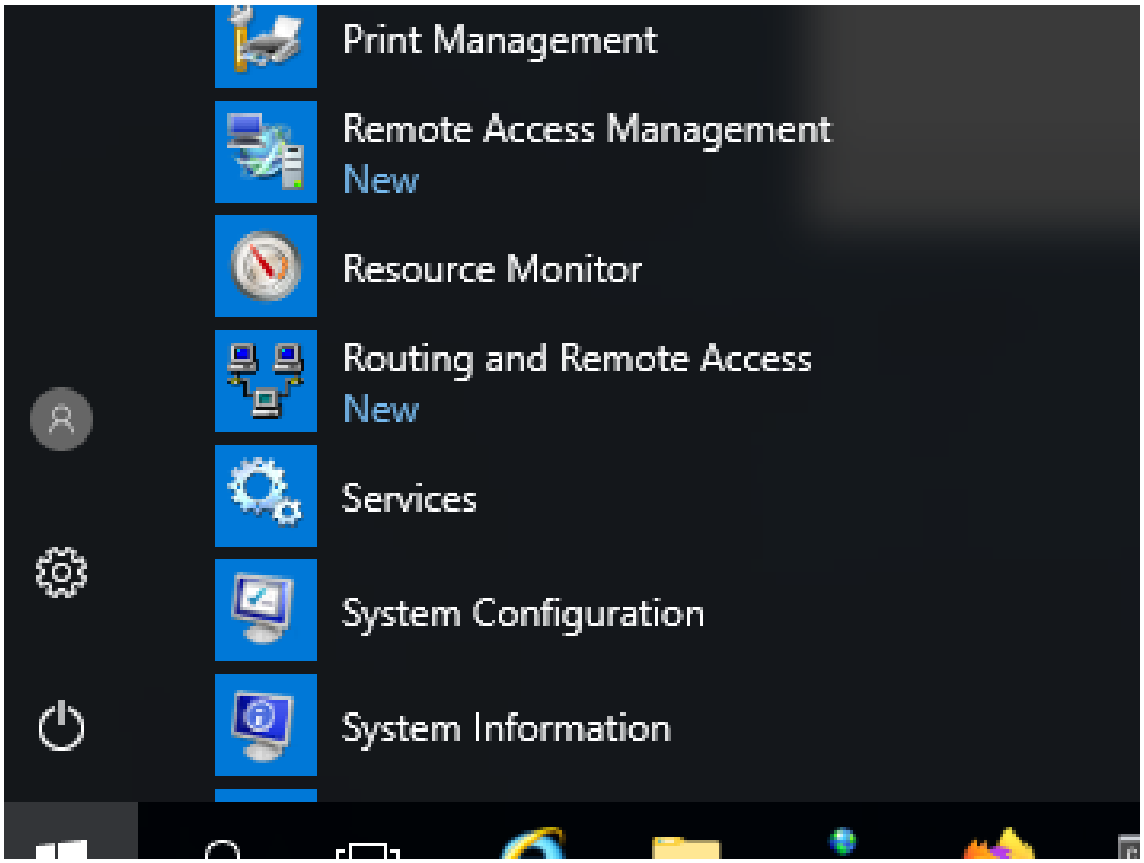
6 Routing

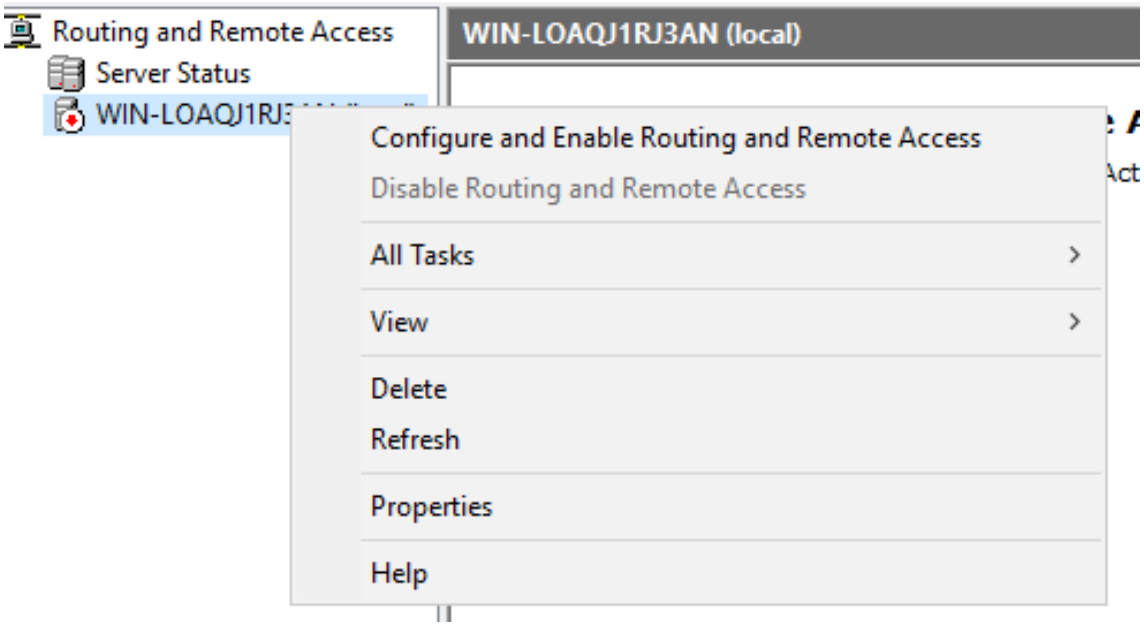
Poniżej zostanie zainstalowana usługa Routingu umożliwiająca przekazywanie pakietów z jednej sieci do drugiej. (Z jednej karty sieciowej do drugiej)

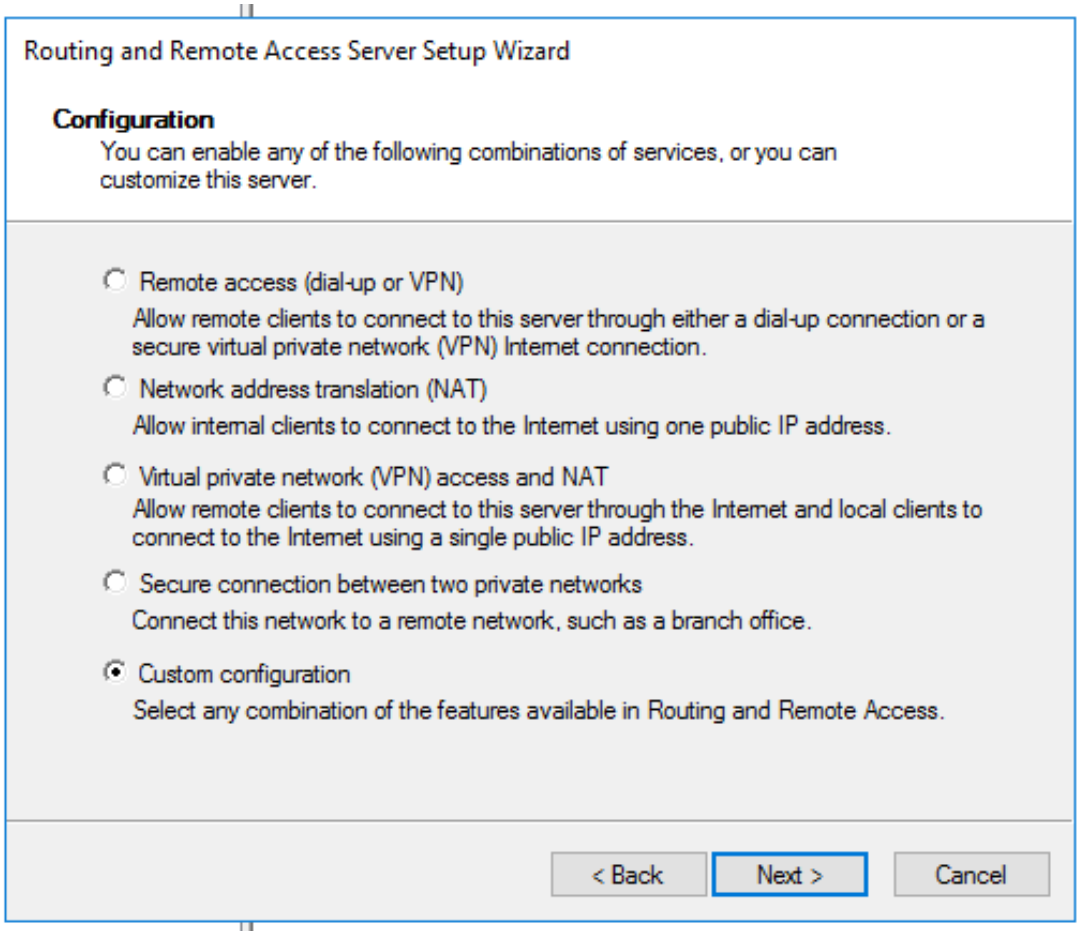


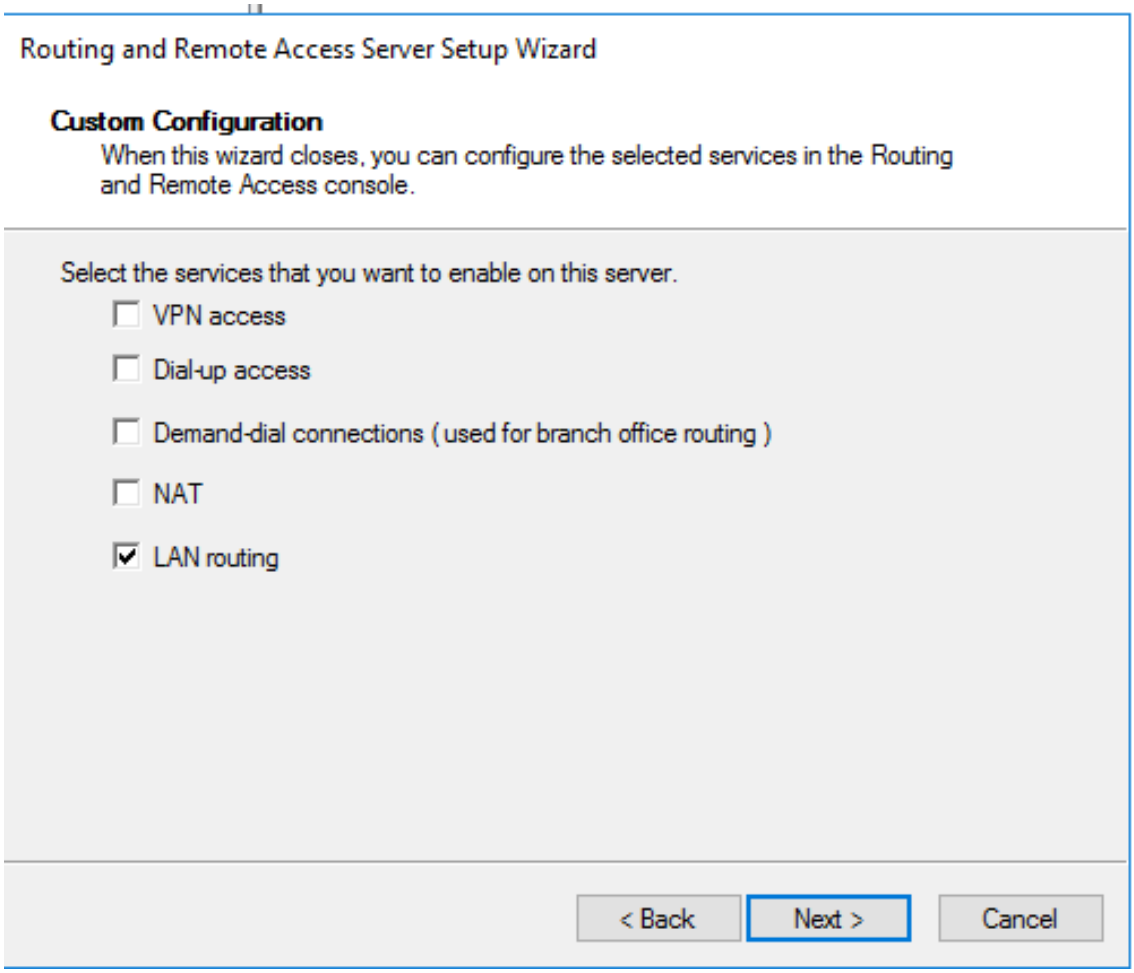


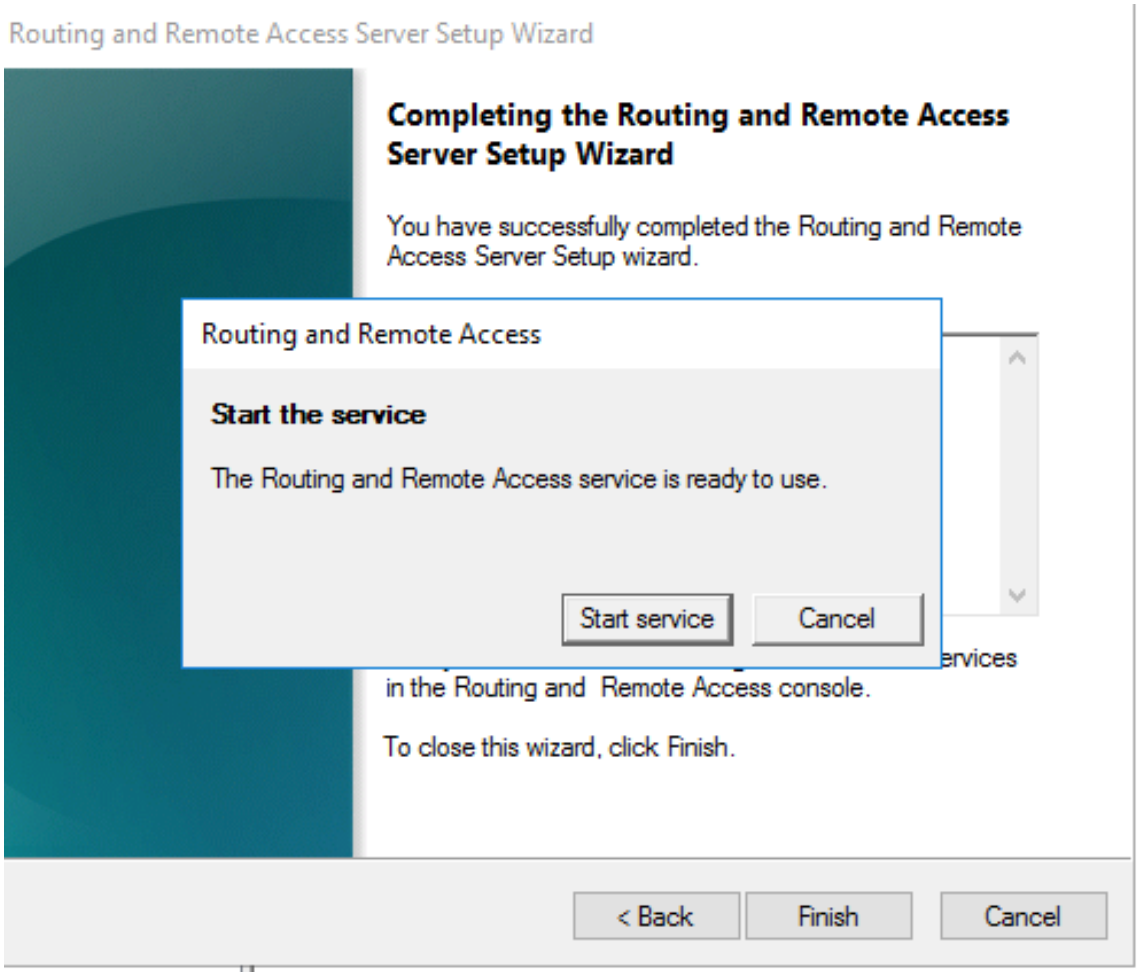
Otwieramy przystawkę Routing and Remote Access

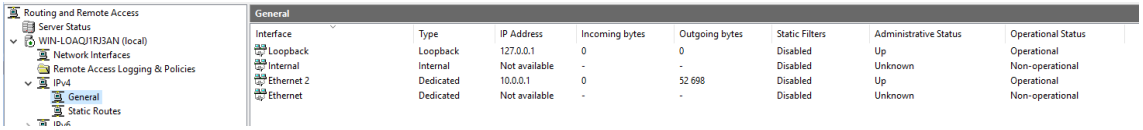





Routing and Remote Access Server Setup Wizard
Configuration
You can enable any of the following combinations of services, or you can customize this server.
Remote access (dial-up or VPN)
Allow remote clients to connect to this server through either a dial-up connection or a secure virtual private network (VPN) Internet connection.
Network address translation (NAT)
Allow internal clients to connect to the Internet using one public IP address.
Virtual private network (VPN) access and NAT
Allow remote clients to connect to this server through the Internet and local clients to connect to the Internet using a single public IP address.
Secure connection between two private networks
Connect this network to a remote network, such as a branch office.
Custom configuration
Select any combination of the features available in Routing and Remote Access.
< Back
Next >
Cancel


Routing and Remote Access Server Setup Wizard
Custom Configuration
When this wizard closes, you can configure the selected services in the Routing and Remote Access console.
Select the services that you want to enable on this server.
VPN access
Dial-up access
Demand-dial connections (used for branch office routing)
NAT
LAN routing
< Back
Next >
Cancel


Routing and Remote Access Server Setup Wizard
Completing the Routing and Remote Access Server Setup Wizard
You have successfully completed the Routing and Remote Access Server Setup wizard.
Routing and Remote Access
Start the service
The Routing and Remote Access service is ready to use.
Start service
Cancel
ervices
in the Routing and Remote Access console.
To close this wizard, click Finish.
< Back
Finish
Cancel


Routing and Remote Access
Server Status
WIN-LOAQJ1RJ3AN (local)
Network Interfaces
Remote Access Logging & Policies
IPv4
General
Static Routes
General
Interface
Type
IP Address
Incoming bytes
Outgoing bytes
Static Filters
Administrative Status
Operational Status
Loopback
Loopback
127.0.0.1
0
0
Disabled
Up
Operational
Internal
Internal
Not available
-
-
Disabled
Unknown
Non-operational
Ethernet 2
Dedicated
10.0.0.1
0
52 698
Disabled
Up
Operational
Ethernet
Dedicated
Not available
-
-
Disabled
Unknown
Non-operational