

KRAMER



USER MANUAL

MODEL:

VIA

Integration into DNS and Microsoft Active Directory

Contents

1	Introduction	1
1.1	Microsoft Active Directory to Logon	1
1.2	DNS Services are Central to VIA Applications	1
1.3	Benefits with VIA in Your Active Directory and DNS	2
2	Installation Requirements	4
2.1	Windows Server Version	4
2.2	Setting Up DNS and AD in your Server	4
3	Configuring DNS & AD	18
3.1	Prompt DHCP	18
3.2	Configuring Active Directory Domain Services	20
3.3	Entering a New VIA Host into your DNS	27
3.4	Adding an Active Directory Login to Your VIA Device	33

1 Introduction

1.1 Microsoft Active Directory to Logon

Microsoft Active Directory (AD) provides services such as Windows login and VIA client login. It also supports a wide range of directory services used by Microsoft applications. One of the most critical network services that the Active Directory uses, is the Domain Name System (DNS). DNS services are often deployed on Microsoft domain controllers (DC's) along with other services, such as print and file sharing.

This paper explains how a VIA device (**VIA Campus PLUS, VIA Campus, VIA Connect PLUS, VIA Connect PRO, VIA GO, VIA Collage**) can be implemented into your system and contains a full example installation for integrating VIA in a Windows Server.

The implementation of a VIA device enhances the availability, performance and manageability of your **VIA** system. Improved logon and easy room names are the main topics.

1.2 DNS Services are Central to VIA Applications

The Domain Name System is the backbone of Active Directory and the principal name resolution mechanism of Windows servers and clients. DNS is used to map host names (e.g., via.berlin or meeting1) to IP addresses (e.g., 192.168.1.39 or 10.10.1.100) and vice-versa, and can also be used to store and retrieve other information about a host, such as which services it provides.

1.3 Benefits with VIA in Your Active Directory and DNS

The following benefits are available after implementing the **VIA** into your AD/DNS.

1.3.1 DNS Mapped Host Names for your VIA System

VIA systems are ready to use DNS services. Out of the box they have a DHCP IP or are configured to use a static address (192.168.1.39). This IP is always shown on your wallpaper. While integrating VIA device into your DNS you can replace this IP with an easy to enter name like: "room1" or "via.berlin". Also the integrated Web interface is now available for everyone with this name.

1.3.2 Via Login with AD Credentials

The **VIA** systems are able to read your login credentials and handshake every user with the **VIA** System.

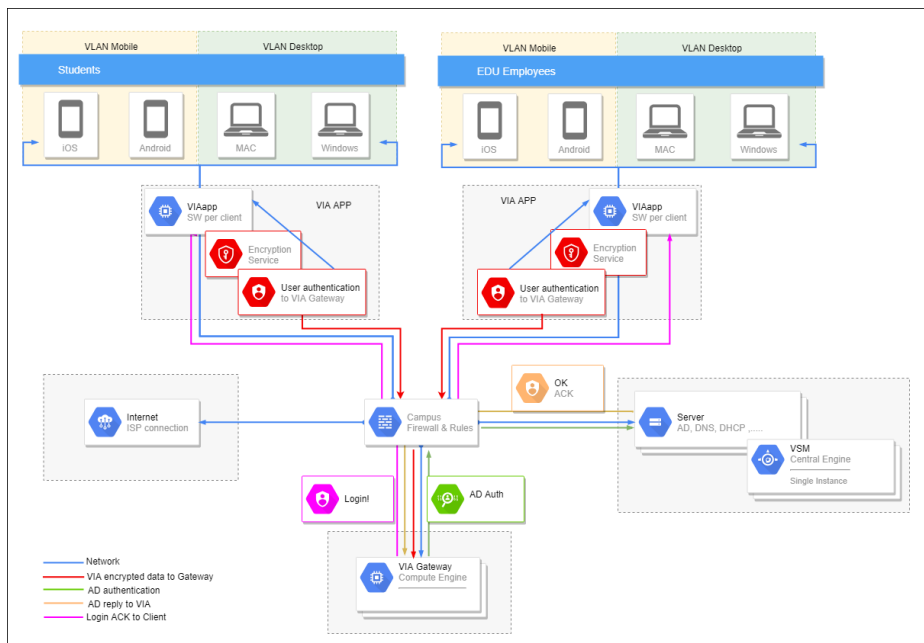
Every employee can now join the **VIA** system with the credentials that he/she uses daily and doesn't have to think about new ones. This makes it more productive, less stressful and comfortable for everyone inside the company.

1.3.3 VIA User / Manager Groups in AD

Decide between the meeting leader and the participant. **VIA** is capable of handling two groups to give your meeting more structure.

Users are allowed to display themselves immediately after a manager's confirmation.

1.3.4 How VIA AD Authentication Works



2 Installation Requirements

- Windows Server with sAMAccountName support.
- DNS – Domain Name System as central for Microsoft-based and non-Microsoft based devices.
- AD – Microsoft Active Directory as database for Windows and **VIA** login.

2.1 Windows Server Version

Install or use the already installed version of Windows Server to proceed with the next steps.

This paper does not cover the installation of Windows Server on a machine as an operating system (OS). For more information, consult your IT administrator or supporting company.



2.2 Setting Up DNS and AD in your Server

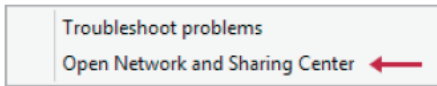
2.2.1 Changing Adapter Settings

Change your IP settings to make sure your server is running on a static address.

1. Right-click the Network Settings icon and go to your adapter.



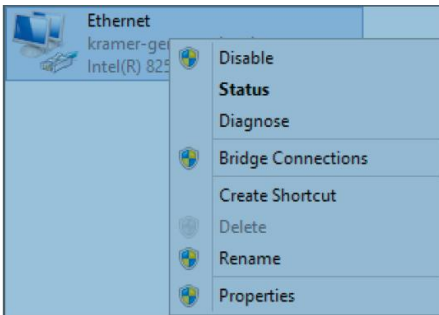
2. Select Open Network and Sharing Center.



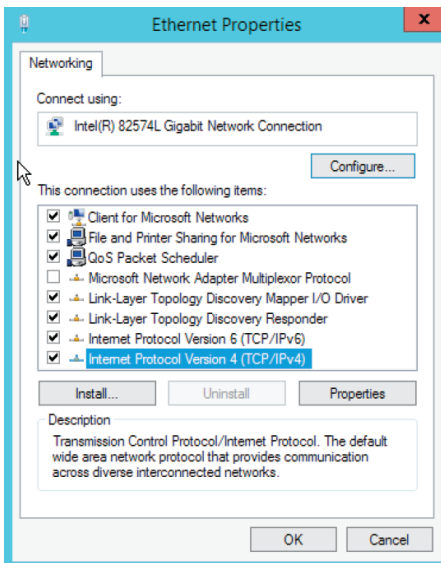
3. Navigate to **Change adapter settings** on the right side of the new Window.

Change adapter settings

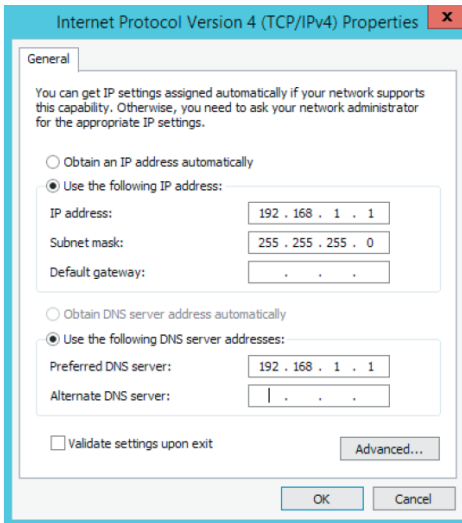
4. Select your connected adapter and right-click to choose **Properties**.



5. Go to **Internet Protocol Version 4** and click **Properties**.



6. Assign a static address and choose as the pre-selected DNS server address:



7. Confirm your changes by clicking **OK** and close all windows.

2.2.2 Adding Roles and Features by Wizard (Add DNS and AD)

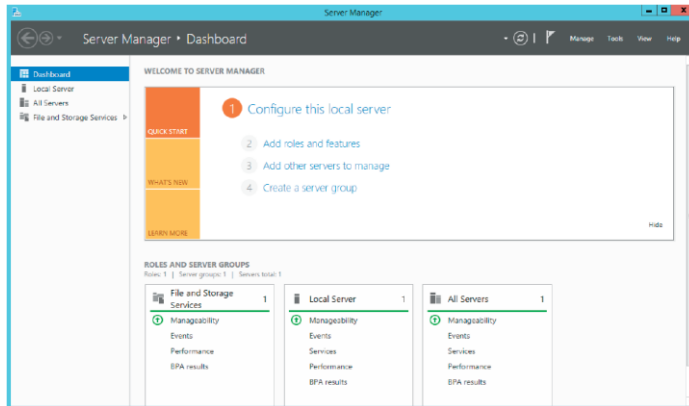
1. Click the Server Managers Icon next to the windows icon in the taskbar.



2. The Server Manager now starts.

Server Manager

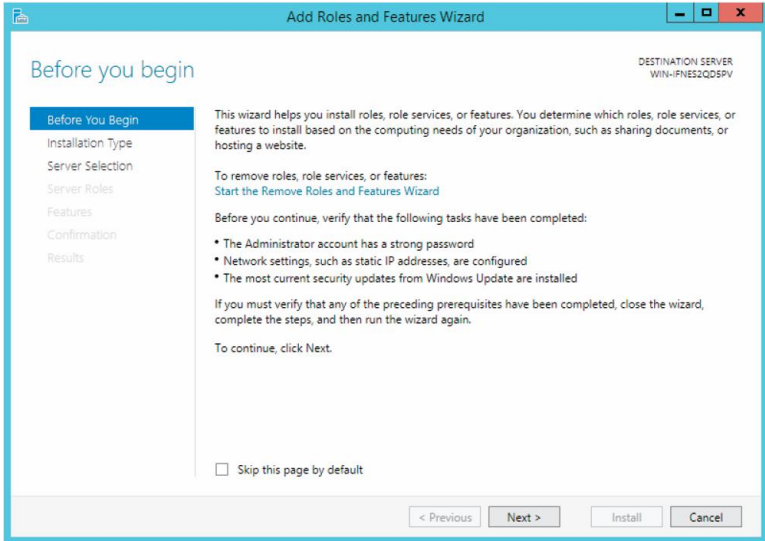
Initially the Server looks empty.



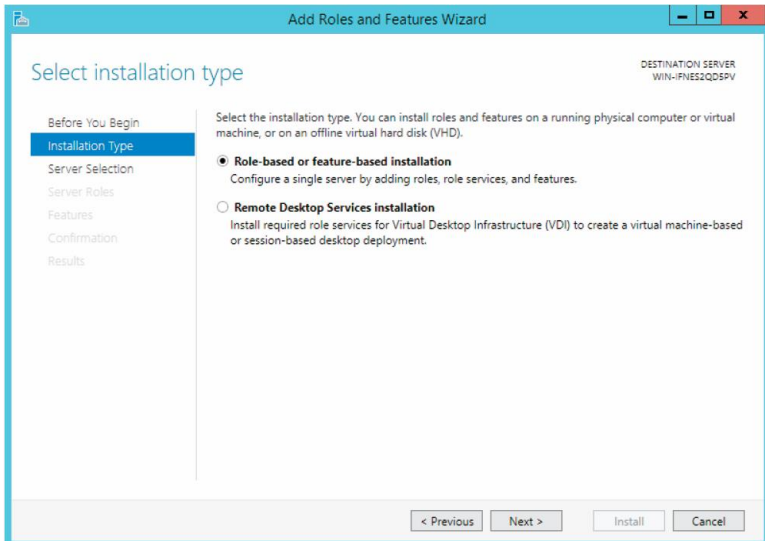
3. Click **Add roles and features**.

- 1 Configure this local server
- 2 Add roles and features

4. Make sure that the server is updated and has a strong admin password.
Click **Next**.



5. Choose if you want to install on the local machine, remote machine, virtual machine or an offline HDD. Once selected, click **Next**.



6. Select the server upon which to install roles/features and click **Next**.

The screenshot shows the 'Add Roles and Features Wizard' window. The title bar says 'Add Roles and Features Wizard'. The main heading is 'Select destination server'. On the left, there is a navigation pane with the following items: 'Before You Begin', 'Installation Type', 'Server Selection' (which is highlighted), 'Server Roles', 'Features', 'Confirmation', and 'Results'. The main content area has the text 'Select a server or a virtual hard disk on which to install roles and features.' Below this, there are two radio buttons: 'Select a server from the server pool' (which is selected) and 'Select a virtual hard disk'. Below the radio buttons is a 'Server Pool' section. It contains a 'Filter:' text box. Below the filter is a table with the following columns: 'Name', 'IP Address', and 'Operating System'. The table has one row with the following data: 'WIN-IFNES2QD5PV', '10.10.20.53', and 'Microsoft Windows Server 2012 R2 Standard'. Below the table, it says '1 Computer(s) found'. At the bottom of the main content area, there is a paragraph: 'This page shows servers that are running Windows Server 2012, and that have been added by using the Add Servers command in Server Manager. Offline servers and newly-added servers from which data collection is still incomplete are not shown.' At the bottom of the window, there are four buttons: '< Previous', 'Next >', 'Install', and 'Cancel'.

DESTINATION SERVER
WIN-IFNES2QD5PV

Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results

Select a server or a virtual hard disk on which to install roles and features.

☒ Select a server from the server pool
☐ Select a virtual hard disk

Server Pool

Filter:

Name	IP Address	Operating System
WIN-IFNES2QD5PV	10.10.20.53	Microsoft Windows Server 2012 R2 Standard

1 Computer(s) found

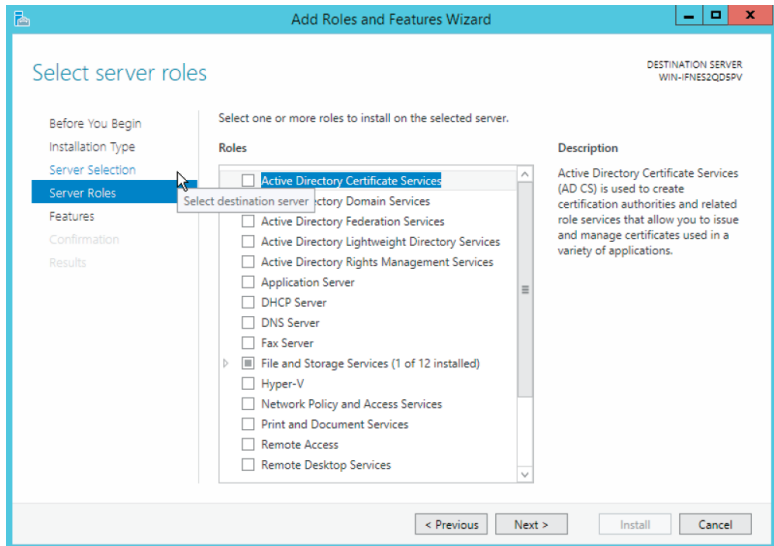
This page shows servers that are running Windows Server 2012, and that have been added by using the Add Servers command in Server Manager. Offline servers and newly-added servers from which data collection is still incomplete are not shown.

< Previous Next > Install Cancel

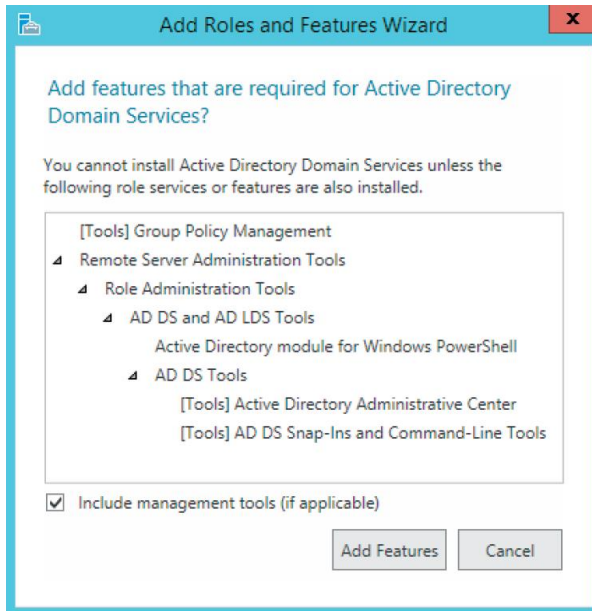
7. Select the roles to add. Select:

Active Directory Domain Services > DNS Server > DHCP Server

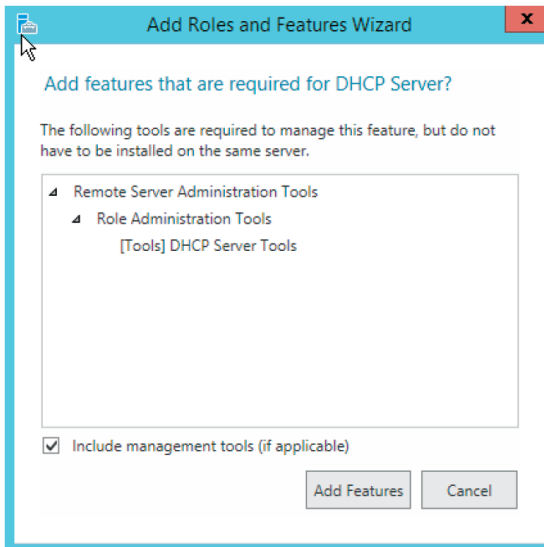
Note: After installing and running the DHCP Role you must deactivate any other DHCP service in the same network. If you prefer to use DHCP from a router or firewall, do not install the DHCP server.



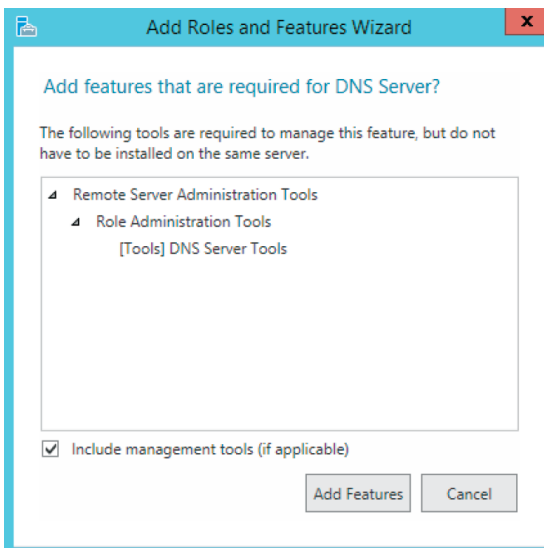
8. The Wizard prompts you to add features after clicking on one of the roles. Install them if needed by clicking **Add Features**.



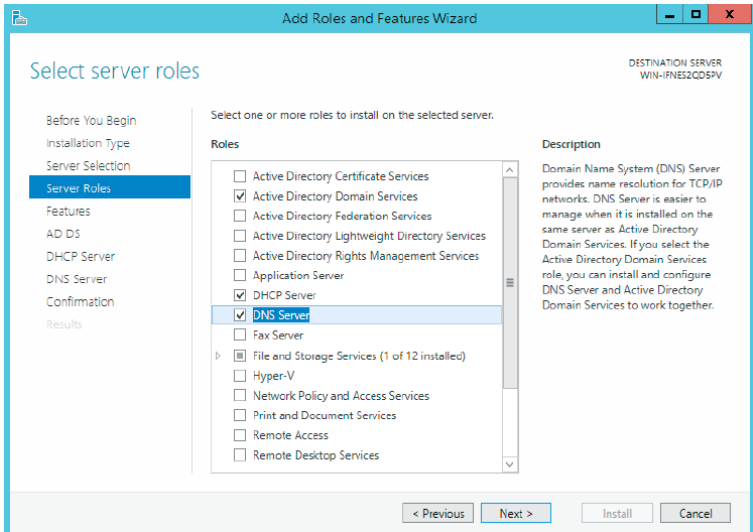
9. Add features for DHCP:



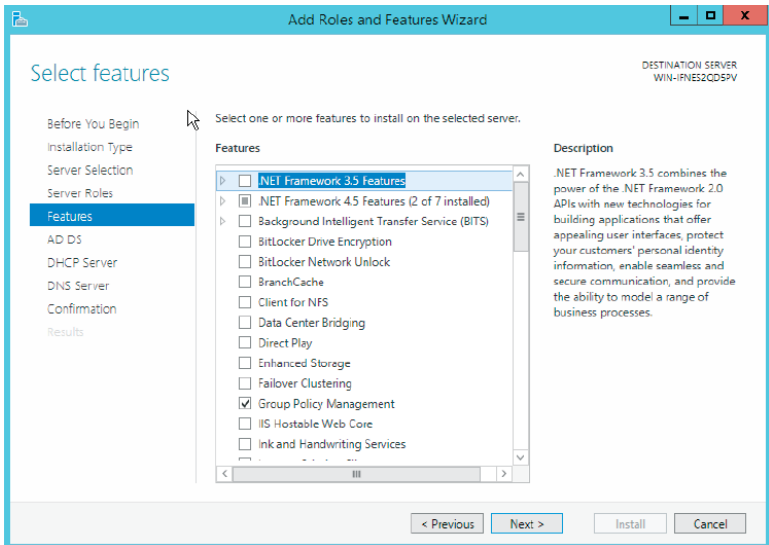
10. Add features for DNS:



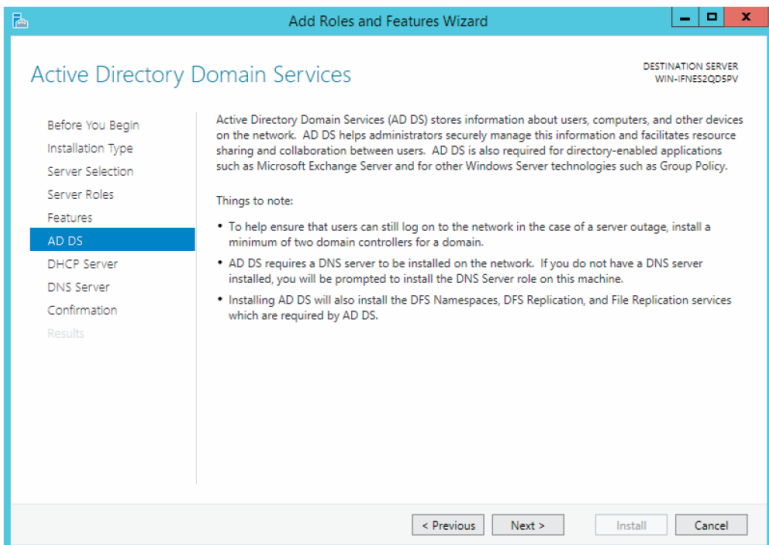
11. After finishing and adding all the Roles and features, click **Next**.



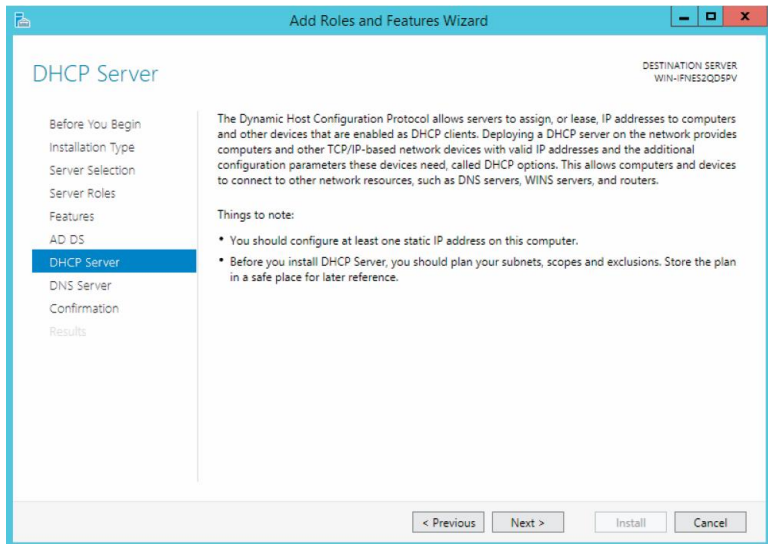
12. Add features like .NET Framework. This example is unchanged:



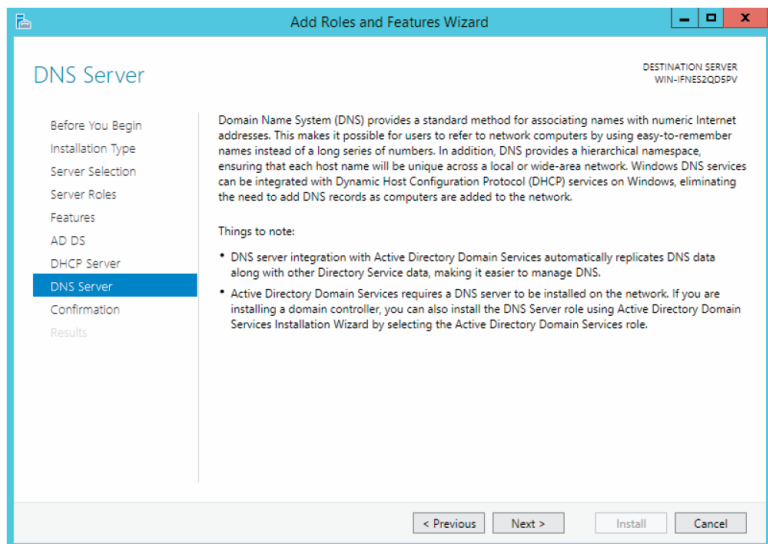
13. Active Directory Domain Services (AD DS):



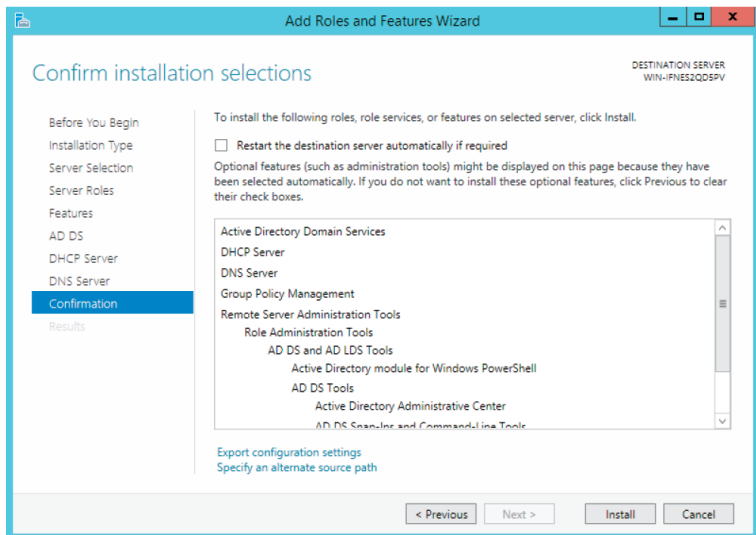
14. Dynamic Host Configuration Protocol (DHCP), if added previously:



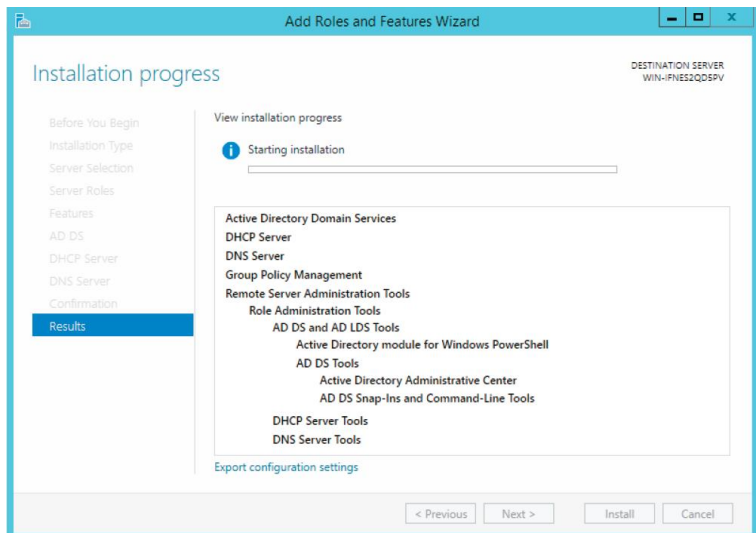
15. Domain Name System (DNS):



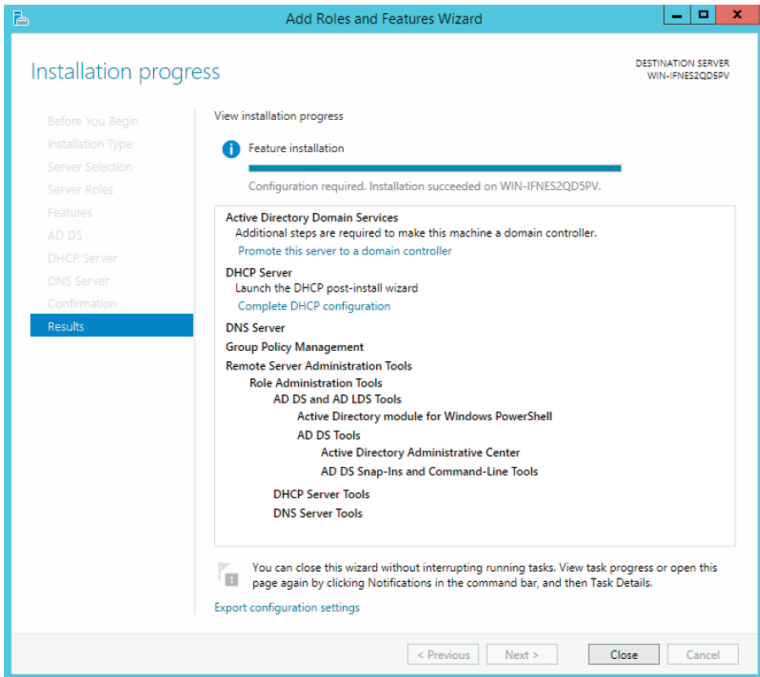
16. Confirm the installation of the selected roles and features. If required, select to restart the Server automatically otherwise you are prompted to restart later.



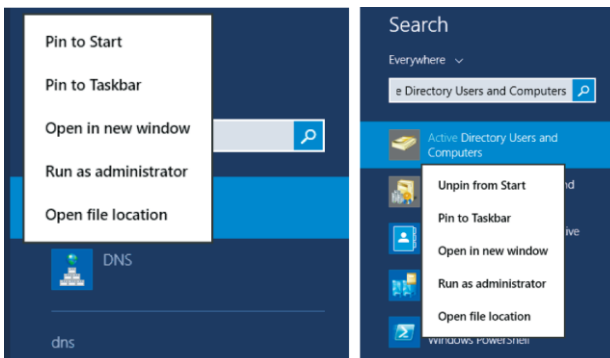
17. Begin installation. This might take a few minutes.



18. Results:



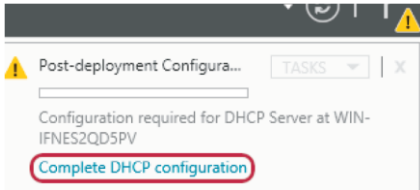
19. Add your recent Roles to your Taskbar or Start for easy and quick access to all of them.



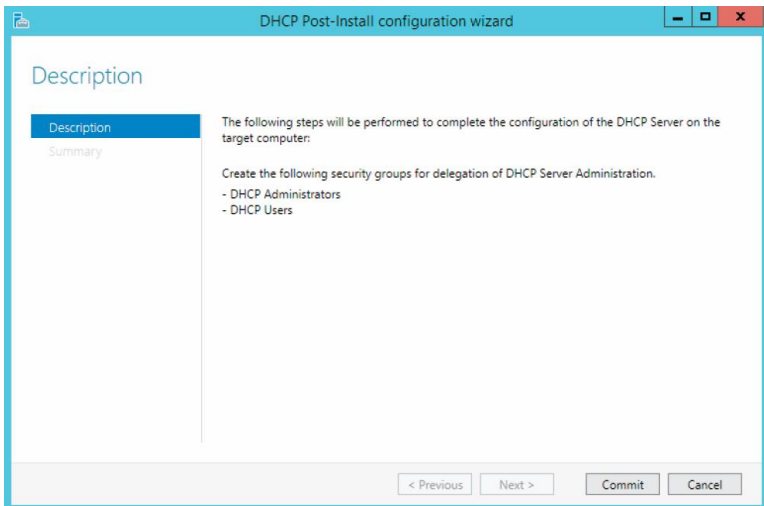
3 Configuring DNS & AD

3.1 Prompt DHCP

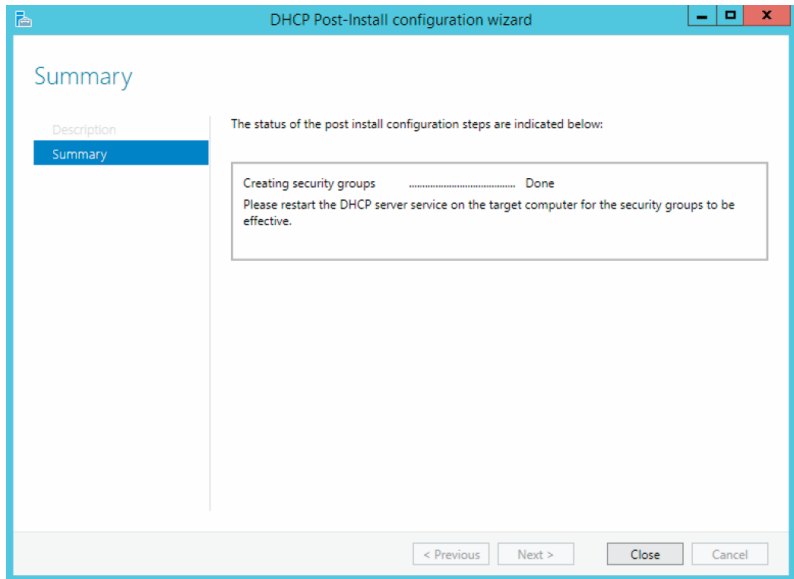
1. Select from the prompt inside your Server Manager. (This only appears if you selected to install the DHCP server):



2. The install Wizard now opens.

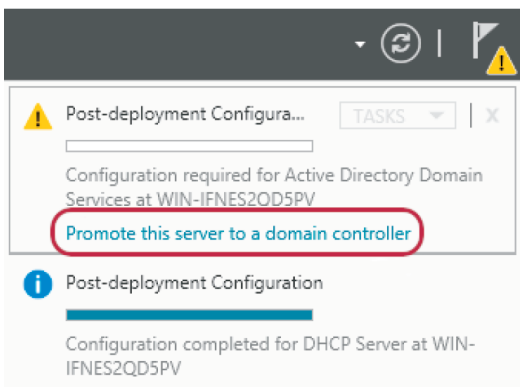


3. Summary and close:

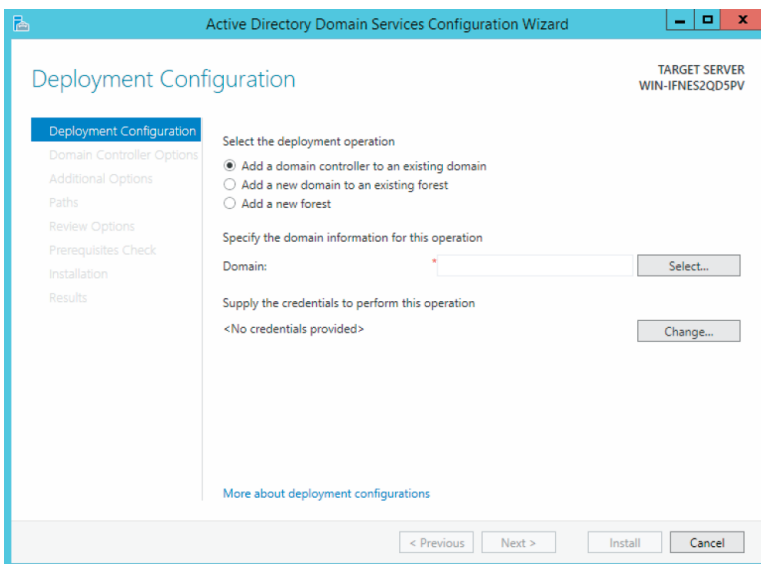


3.2 Configuring Active Directory Domain Services

1. Select this from your Server Manager:



2. The Wizard appears:



3. Select **Add a new forest** as we are not part of one in this example.

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:

4. Choose a name for the domain. If you have a domain name, enter it here (example, google.com):

Specify the domain information for this operation

Root domain name:

5. Click **Next** to continue.

The screenshot shows the 'Active Directory Domain Services Configuration Wizard' window. The title bar includes the Windows logo, the text 'Active Directory Domain Services Configuration Wizard', and standard window controls. The main window has a blue header with the title 'Deployment Configuration'. On the right side of the header, it says 'TARGET SERVER WIN-IFNES2QD5PV'. A left-hand navigation pane lists several steps: 'Deployment Configuration' (highlighted with a blue bar and a mouse cursor), 'Domain Controller Options', 'Additional Options', 'Paths', 'Review Options', 'Prerequisites Check', 'Installation', and 'Results'. The main content area is titled 'Select the deployment operation' and contains three radio button options: 'Add a domain controller to an existing domain', 'Add a new domain to an existing forest', and 'Add a new forest' (which is selected). Below this, the section 'Specify the domain information for this operation' contains a label 'Root domain name:' followed by a text box containing 'kramergermany.local'. At the bottom of the window, there is a bar with four buttons: '< Previous', 'Next >', 'Install', and 'Cancel'. A link 'More about deployment configurations' is also visible above the buttons.

6. If you setup Win Server 2012 R2 make sure that all the computers are compatible and if not, you may install older legacy versions.

The screenshot shows the 'Active Directory Domain Services Configuration Wizard' window. The title bar includes standard window controls and the text 'Active Directory Domain Services Configuration Wizard'. The main window has a blue header with 'Domain Controller Options' and 'TARGET SERVER WIN-IFNES2QD5PV'. On the left is a navigation pane with links: 'Deployment Configuration', 'Domain Controller Options' (highlighted), 'Additional Options', 'Paths', 'Review Options', 'Prerequisites Check', 'Installation', and 'Results'. The main content area is titled 'Select functional level of the new forest and root domain'. It contains two dropdown menus: 'Forest functional level:' and 'Domain functional level:', both set to 'Windows Server 2012 R2'. Below this is a section 'Specify domain controller capabilities' with three checkboxes: 'Domain Name System (DNS) server' (checked), 'Global Catalog (GC)' (checked), and 'Read only domain controller (RODC)' (unchecked). Further down is a section 'Type the Directory Services Restore Mode (DSRM) password' with two text boxes labeled 'Password:' and 'Confirm password:'. At the bottom right are buttons for '< Previous', 'Next >', 'Install', and 'Cancel'. A link 'More about domain controller options' is at the bottom left of the main content area.

7. Enter the preferred DSRM password and click **Next**.

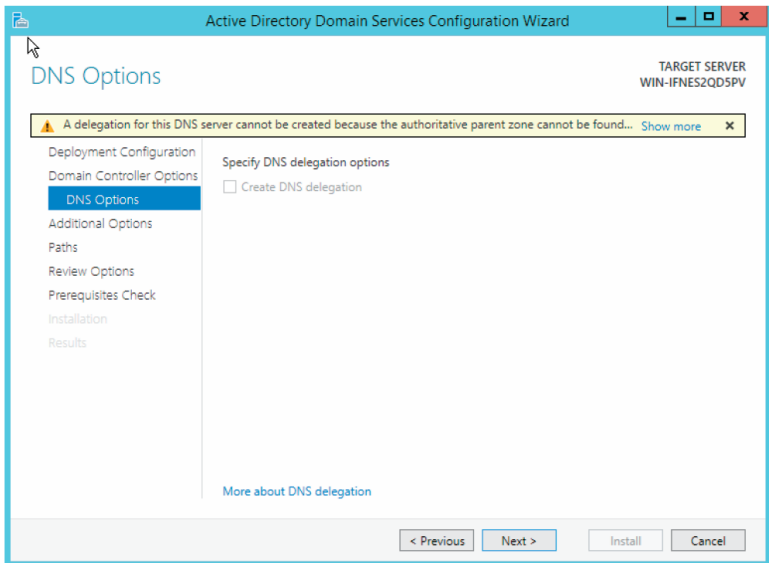
☐ Read only domain controller (RODC)

Type the Directory Services Restore Mode (DSRM) password

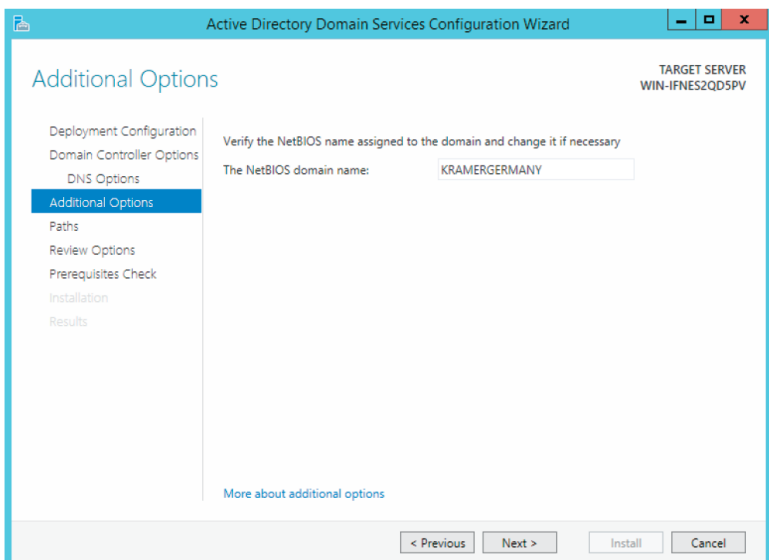
Password:

Confirm password:

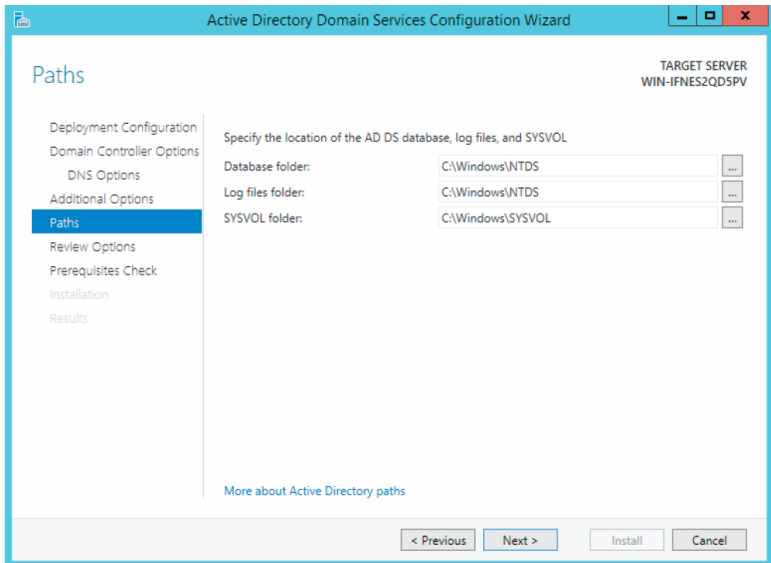
8. Since the DNS is not yet specified this error appears. Ignore it and continue by clicking **Next**. The DNS is added later.



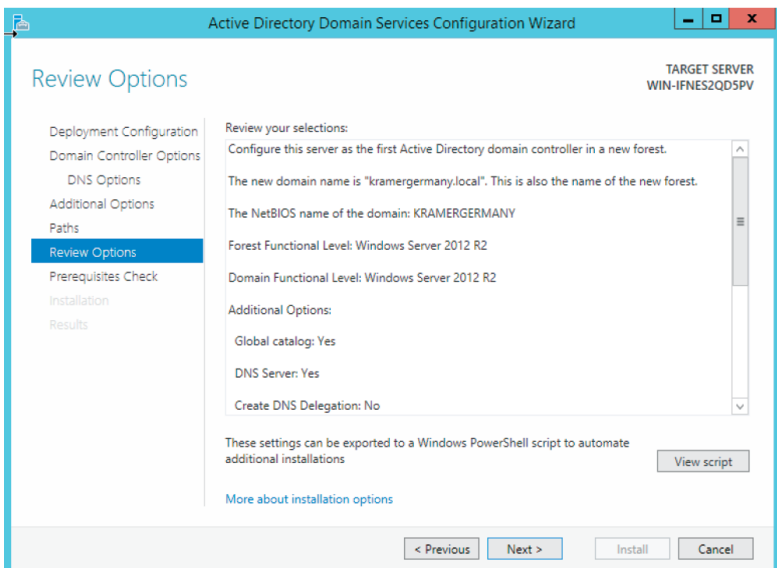
9. If you have legacy equipment, you may need this NetBIOS domain name. It is chosen automatically like your domain name.



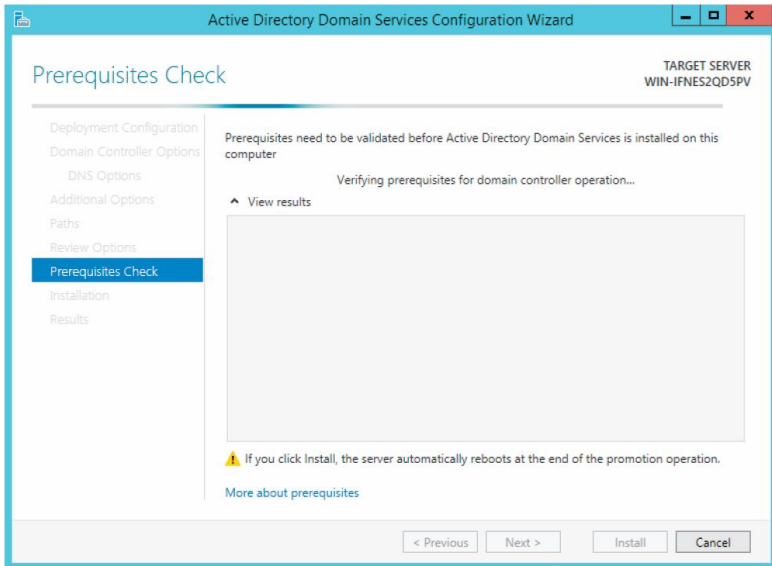
10. An active directory is a database. It asks where to store the information.
Keep the default settings in this example.



11. Review your settings and confirm by clicking **Next**.

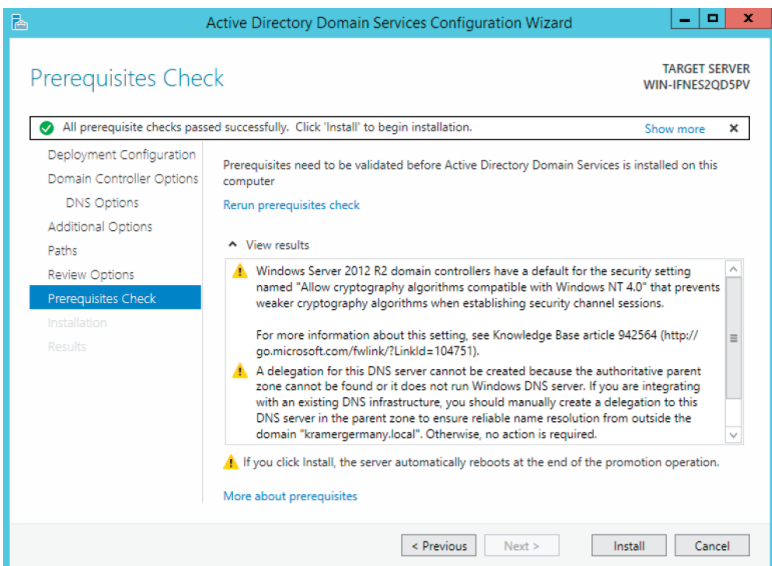


12. The automatic installation begins and may take a few minutes.

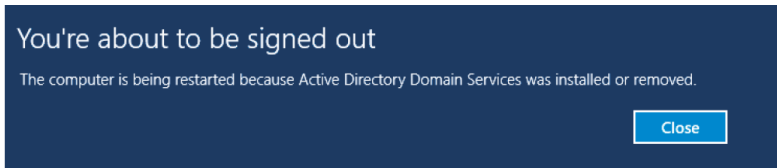


13. The server checks for the needed prerequisites. If there is no red STOP flag, continue since basic errors do not concern us now.

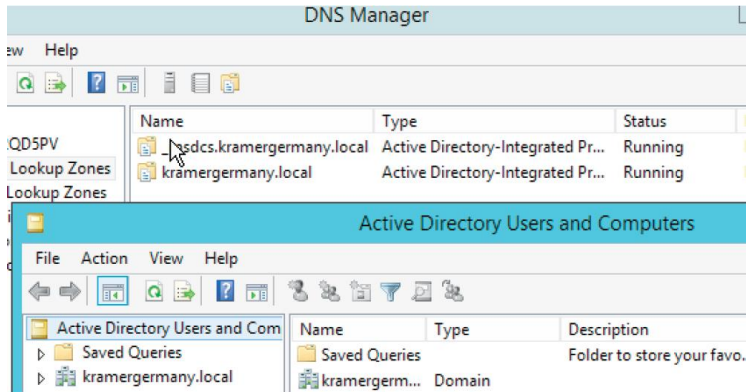
Click **Install** to continue:



14. After installing you're prompted to log off prior to restarting.

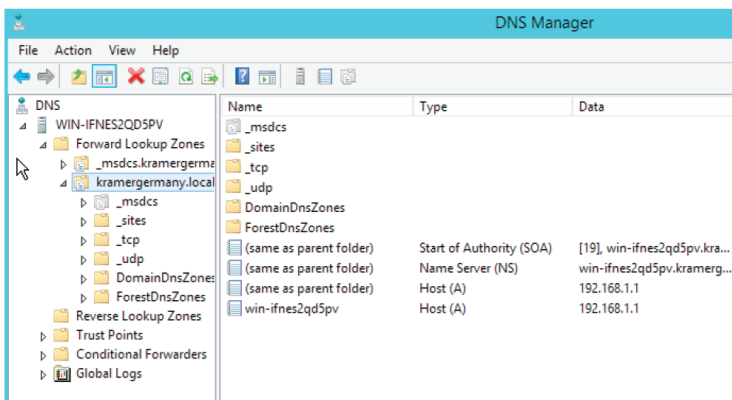


15. The server is now basically ready to use.

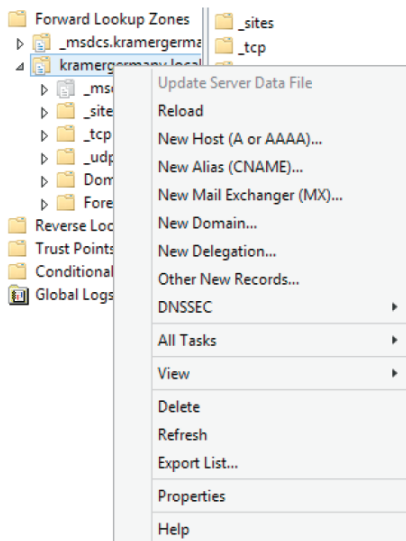


3.3 Entering a New VIA Host into your DNS

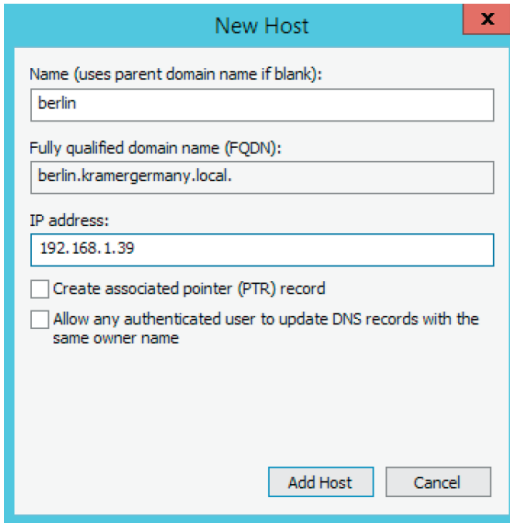
1. Select the zone to enter **VIA**.



2. Right-click the free area or right-click the zone itself to select **New Host (A or AAAA)**:



3. Name your host. Later on, this name appears on the **VIA** screen.

A dialog box titled "New Host" with a red close button in the top right corner. It contains three text input fields: "Name (uses parent domain name if blank):" with the value "berlin", "Fully qualified domain name (FQDN):" with the value "berlin.kramergyman.y.local.", and "IP address:" with the value "192.168.1.39". Below these fields are two unchecked checkboxes: "Create associated pointer (PTR) record" and "Allow any authenticated user to update DNS records with the same owner name". At the bottom right are two buttons: "Add Host" and "Cancel".

New Host

Name (uses parent domain name if blank):
berlin

Fully qualified domain name (FQDN):
berlin.kramergyman.y.local.

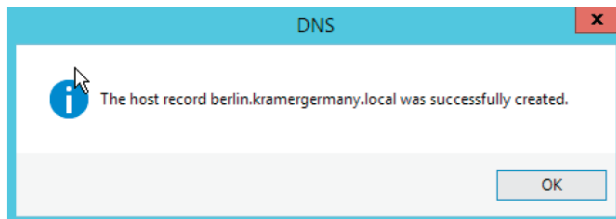
IP address:
192.168.1.39

☐ Create associated pointer (PTR) record

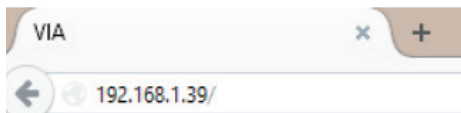
☐ Allow any authenticated user to update DNS records with the same owner name

Add Host Cancel

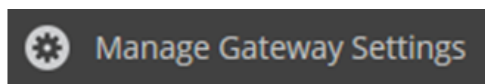
4. Click **OK** to continue after creating the record.



5. Go to the Web page of your **VIA** to implement the data.



6. Select **Manage Gateway Settings**.

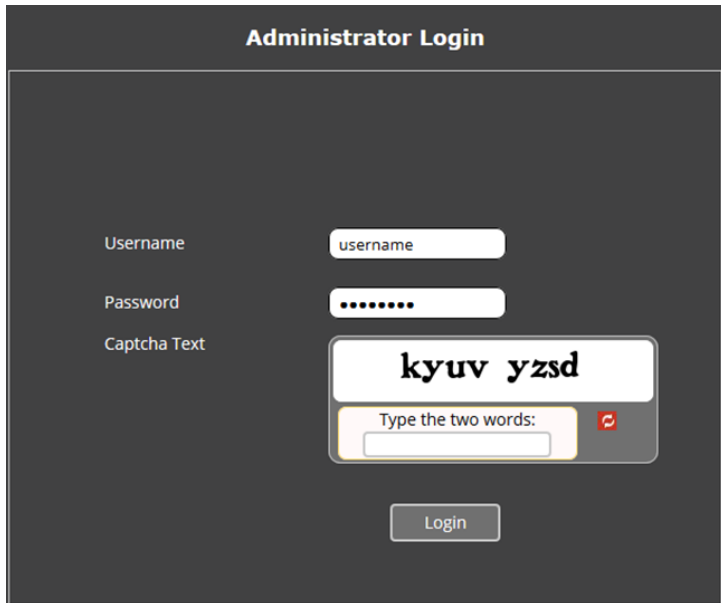


7. Login with your credentials or use the Admin access.

User: su

Password: supass

Captcha



The image shows a dark-themed login interface titled "Administrator Login". It contains three input fields: "Username" with the placeholder text "username", "Password" with masked characters ".....", and "Captcha Text" which displays a captcha image showing the words "kyuv yzsd". Below the captcha image is a prompt "Type the two words:" followed by a small input box and a red refresh icon. At the bottom of the form is a "Login" button.

8. Navigate to Network Settings:



9. Enter your IP related to the Host record and paste your DNS as well as Gateway.

Device Information	
Gateway IP	192.168.1.39
Subnet Mask	255.255.255.0
Default Gateway	192.168.1.1
DNS Server	192.168.1.254
Apply Settings	

10. Click **Apply Settings** and move to System Configuration:



11. Change the default address for the room name from 192.168.1.39 to your host record. In this example it is "berlin".

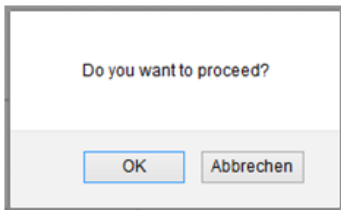
Room Code, Room Name Settings

☒ Show Room Name on wallpaper | Room Name Color 

☒ Activate Room Code | Room Code Color 

☒ Always show on wallpaper

12. Click **Apply** and confirm your changes.



13. Scroll to the end of the page and click **Reboot**.

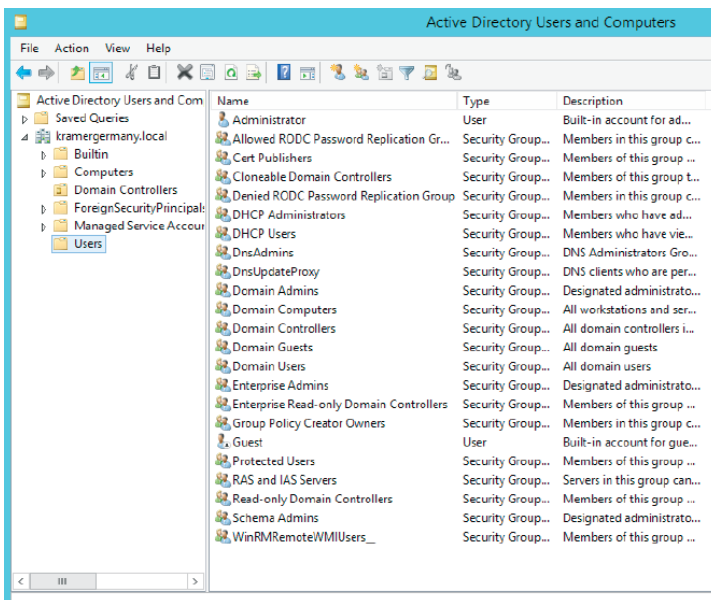
Reboot

14. Your Main display shows the correct room name “berlin” now.

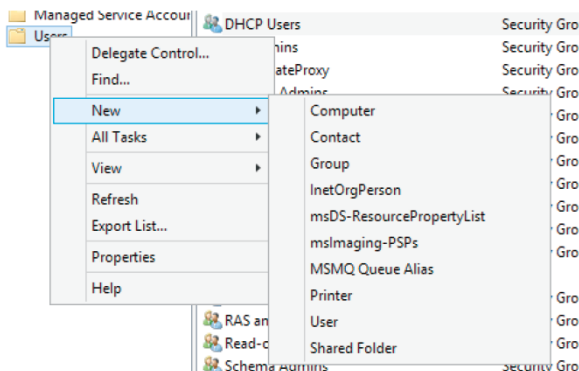


3.4 Adding an Active Directory Login to Your VIA Device

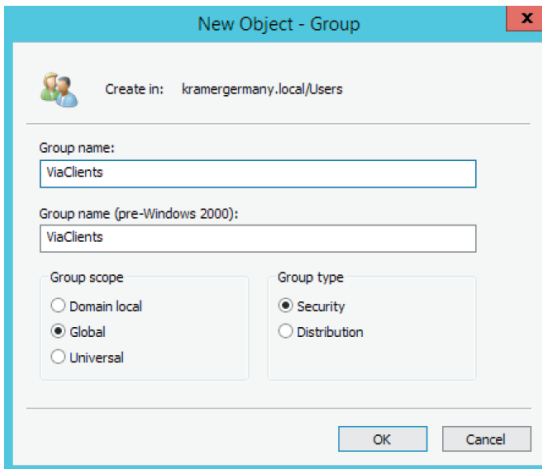
1. Navigate to your active directory on the server.



2. Create a new group for clients to join meetings on the **VIA**. Right-click **Users** and create a new **Group**:
Groups cannot be nested but OUs can.



3. Assign a group name that is easy to identify.



New Object - Group

Create in: kramergermany.local/Users

Group name:
ViaClients

Group name (pre-Windows 2000):
ViaClients

Group scope

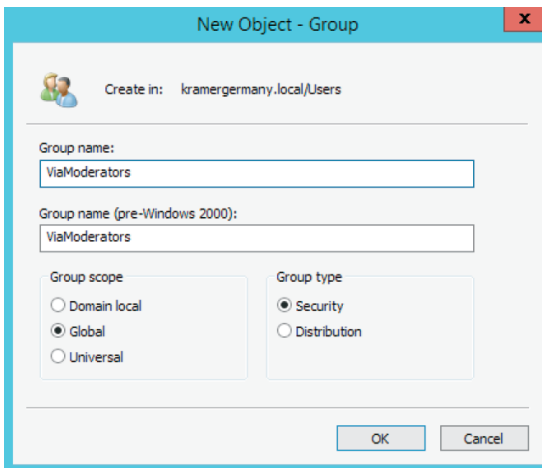
- ☐ Domain local
- ☒ Global
- ☐ Universal

Group type

- ☒ Security
- ☐ Distribution

OK Cancel

4. Click **OK** to confirm. Repeat for the next group of moderators.



New Object - Group

Create in: kramergermany.local/Users

Group name:
ViaModerators

Group name (pre-Windows 2000):
ViaModerators

Group scope

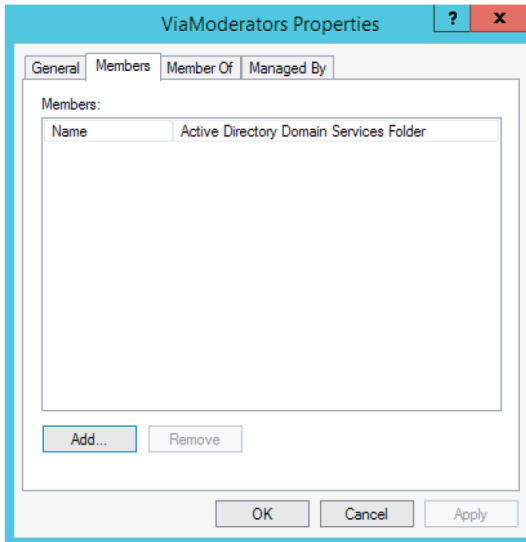
- ☐ Domain local
- ☒ Global
- ☐ Universal

Group type

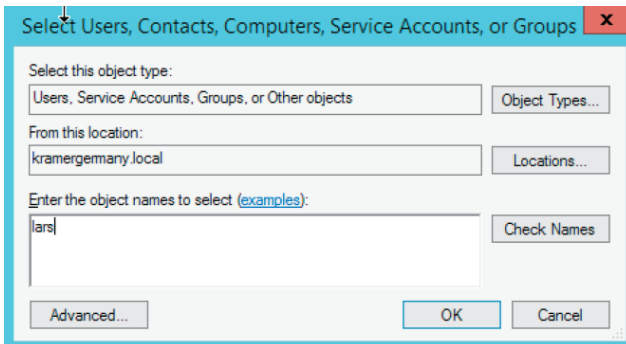
- ☒ Security
- ☐ Distribution

OK Cancel

5. When finished, add users to the groups to ensure that each has access to the VIA device. Double-click the group and go to members.



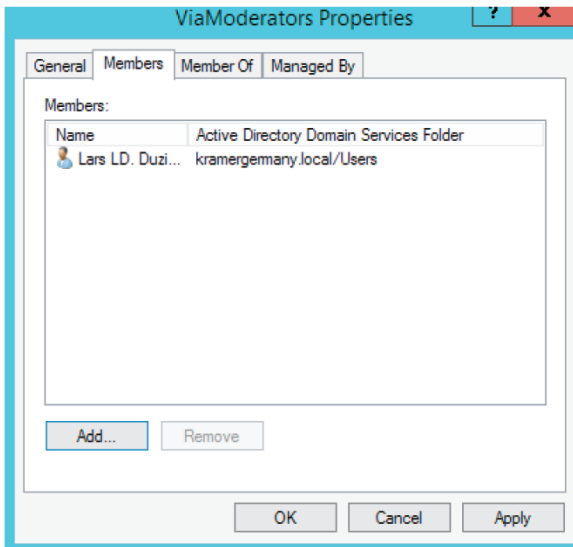
6. Click **Add** to add members to the group. The following window appears.
Enter the name of a user or object inside the AD and click **Check Names**:



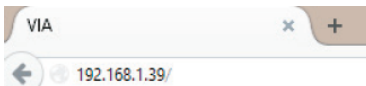
7. After checking, the name is written in full text. Add more members or objects to each group to populate with your employees. Click **OK** to finish.



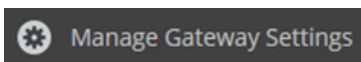
8. Click **Apply** to apply the settings to your group and click **OK** to confirm and close the window.



9. After completing, go to your **VIA** Web pages. Enter the AD data into the VIA device.



10. Select **Manage Gateway Settings**.

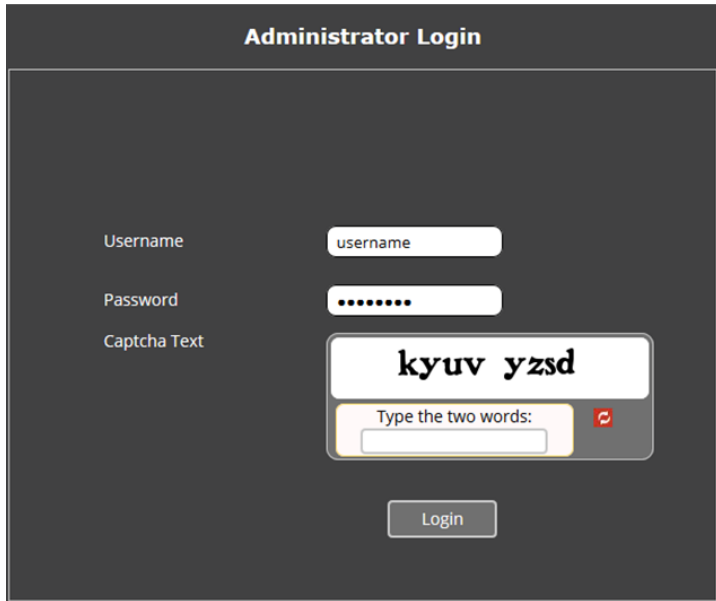


11. Login with your credentials or use the admin access.

User: su

Password: supass

Captcha



The image shows a dark-themed login interface titled "Administrator Login". It contains three input fields: "Username" with the placeholder text "username", "Password" with masked characters ".....", and "Captcha Text" which displays a captcha image showing the words "kyuv yzsd". Below the captcha is a text input field with the prompt "Type the two words:" and a red refresh icon. A "Login" button is positioned at the bottom center of the form.

12. Navigate to Authentication:

User Management
VIA Management
Network Settings
VIAPad Configuration
VIA Site Management
Wallpaper
Configuration
Advanced Configuration
Authentication
Gateway Features
Client Features(Window/Mac)
Mobile Features
Utilities
Audience Response System
Home

13. Select **Activate Moderator Mode**, confirm the popup and choose **Active Directory**.

Authentication

☐ Activate Moderator Mode

Authentication Mode

☐ Database Based ☐ Active Directory ☐ Basic

Reboot

Kindly reboot the server for impact. Do you want to proceed?

OK Abbrechen

14. The side enlarges, and you can enter the data to connect your clients and moderators with the VIA device system.

☒ Activate Moderator Mode

Authentication Mode

☐ Database Based ☒ Active Directory ☐ Basic

Active Directory Settings

Active Directory Domain

☒ Group Based ☐ OU Based

VIA Group/OU

Moderator

Participant

Apply

Reboot

15. Apply your changes.
The system now reboots.

16. Change your Host file if needed.

A. On your **VIA** unit, open the Features menu and click **Settings**.



B. Enter the Super User name and Password, (defaults are **su** and **supass**).

A screenshot of the VIA login form. At the top, there is a dark grey header bar with the 'VIA' logo on the left and a close button (X) on the right. Below the header, there are two radio buttons: 'Super User' (selected) and 'General User'. Under the 'Super User' radio button, there are two input fields: 'User Name' with the text 'su' and 'Password' which is empty. Below the 'Password' field is a small icon of a document with a lock. At the bottom right, there is a dark grey button labeled 'Login'.

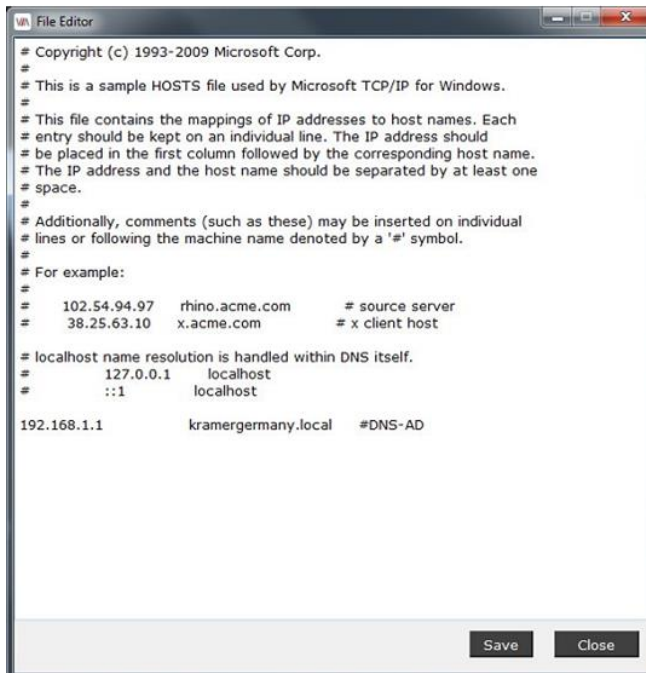
C. On the LAN Settings tab, click **Host Configurator**.

The screenshot shows the 'V-Settings' application window. The title bar includes the 'VA Settings' logo and the version 'V-SET-2.0.0616.286'. The 'LAN Settings' tab is selected, with other tabs for 'Third Party Apps' and 'System Controls'. Under 'IP Configuration', the 'DHCP' radio button is selected. An 'IP Address' field contains the value '10.10.40.51'. At the bottom, there are buttons for 'Host Configurator', 'Apply Settings', 'ShutDown', and 'Reboot'. A keyboard icon is visible in the bottom left corner.

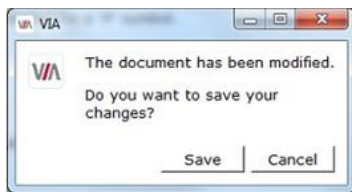
D. Add the IP of your Server, followed by a TAB and the domain name, for example:

IP<TAB>Domain<TAB>#Description

192.168.1.1 kramergyman.local #DNS

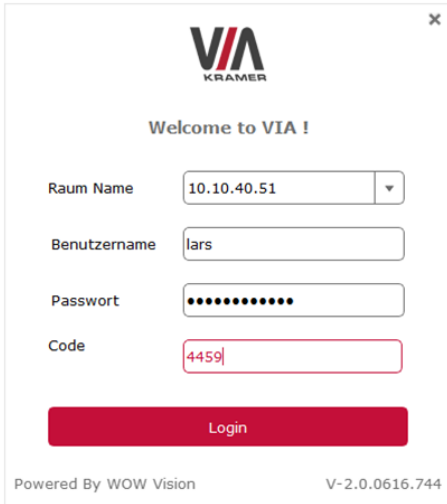


17. Click **Save** and then reboot after confirming the prompt window.



Reboot

18. Your login data is now available for **VIA** to use. Every user with an AD account can easily join any meeting on **VIA**.



VIA
KRAMER

Welcome to VIA !

Raum Name 10.10.40.51 ▼

Benutzername lars

Passwort ●●●●●●●●

Code 4459

Login

Powered By WOW Vision V-2.0.0616.744

For a better user experience you can disable the room code. Once disabled, users don't need visible contact to the screen attached to your **VIA**.

This guide covers only topics directly related to basic AD/DNS/DHCP setup for **VIA**. Several more options are available for the specific roles than are discussed in this document. Consult your network administrator or contracted company for deeper information related to this topic.