netgenium

Installing NET Genium

Framework NET Genium

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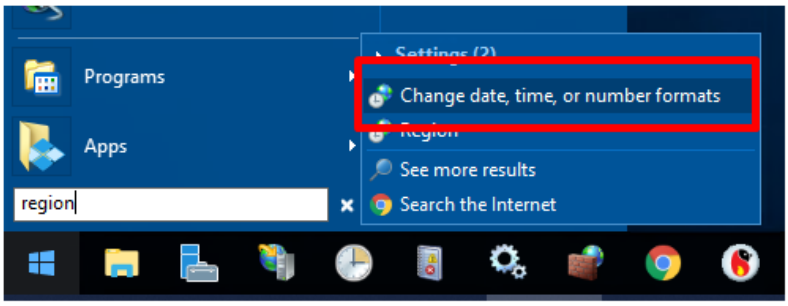
1 NET Genium installation procedure

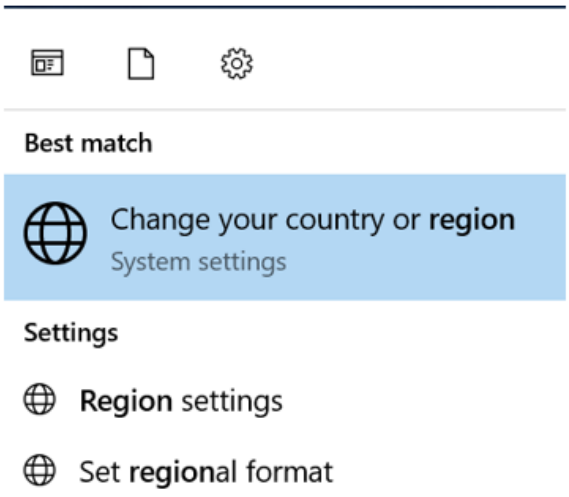
- Server settings
- IIS installation and setup
- Download and unzip NET Genium to the destination directory
- Installation of Firebird database server (or MS SQL Server)
- Installing NET Genium
- File indexing settings for Windows Search
- SMTP Server installation
- Firewall settings

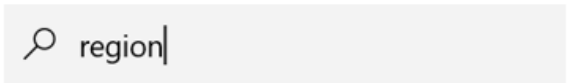
2 Server settings

NET Genium text configuration files or print templates in the "txt" or "html" format require the appropriate region settings according to the customs of the Czech Republic in order to load accents correctly.

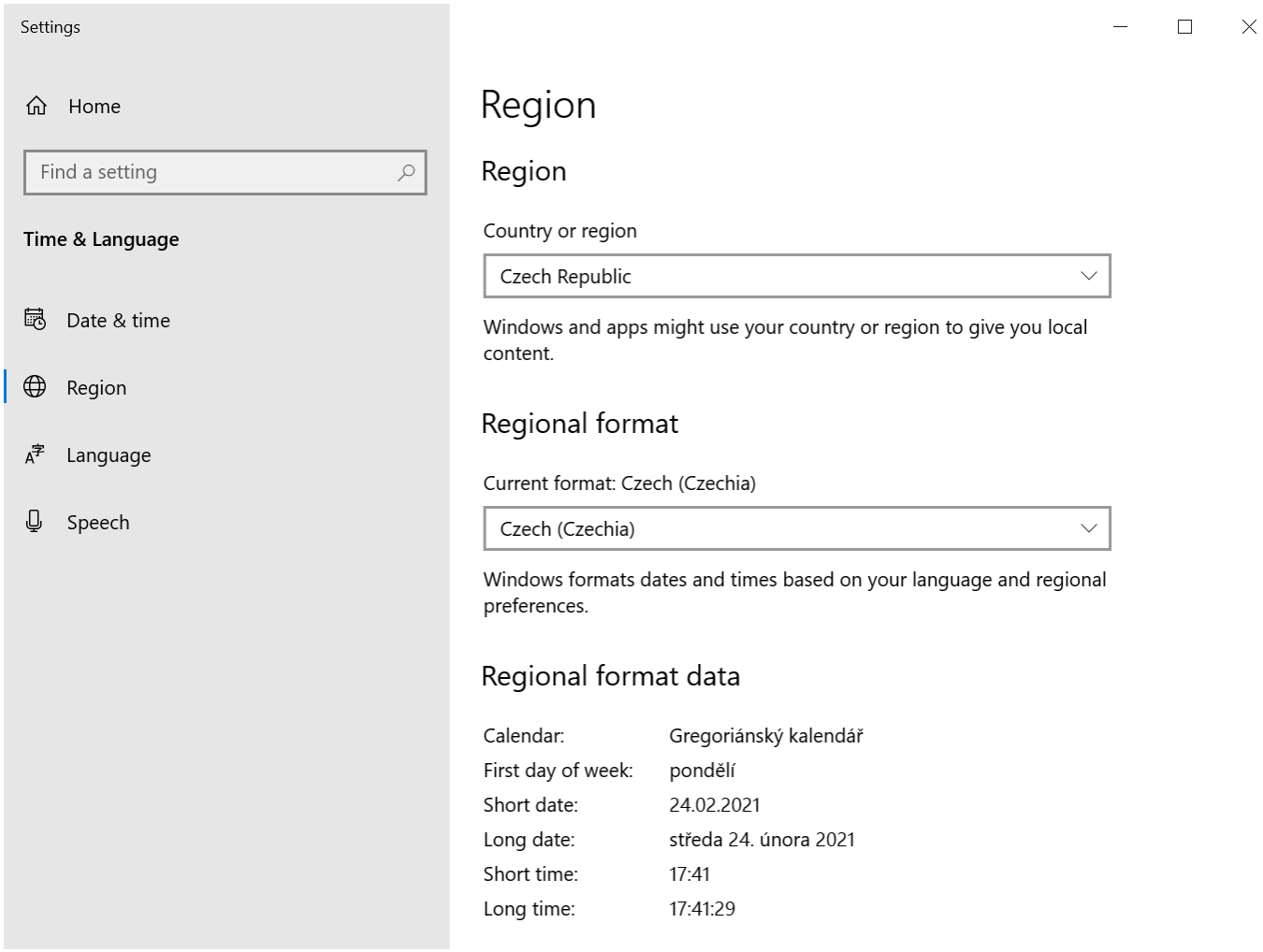
From the "Start" menu, search for "Region" and select "Change date, time, or number formats" or "Change your country or region".



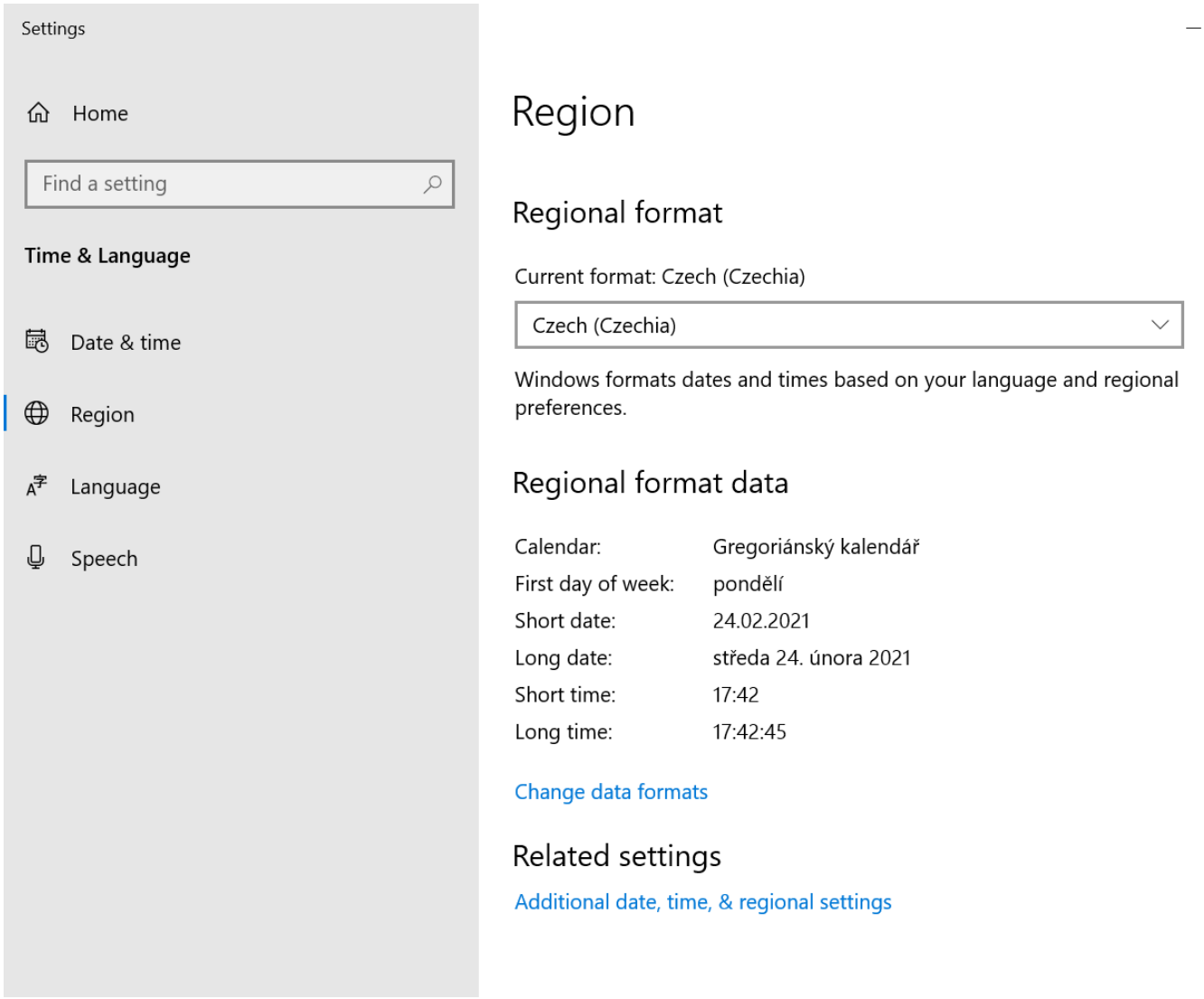




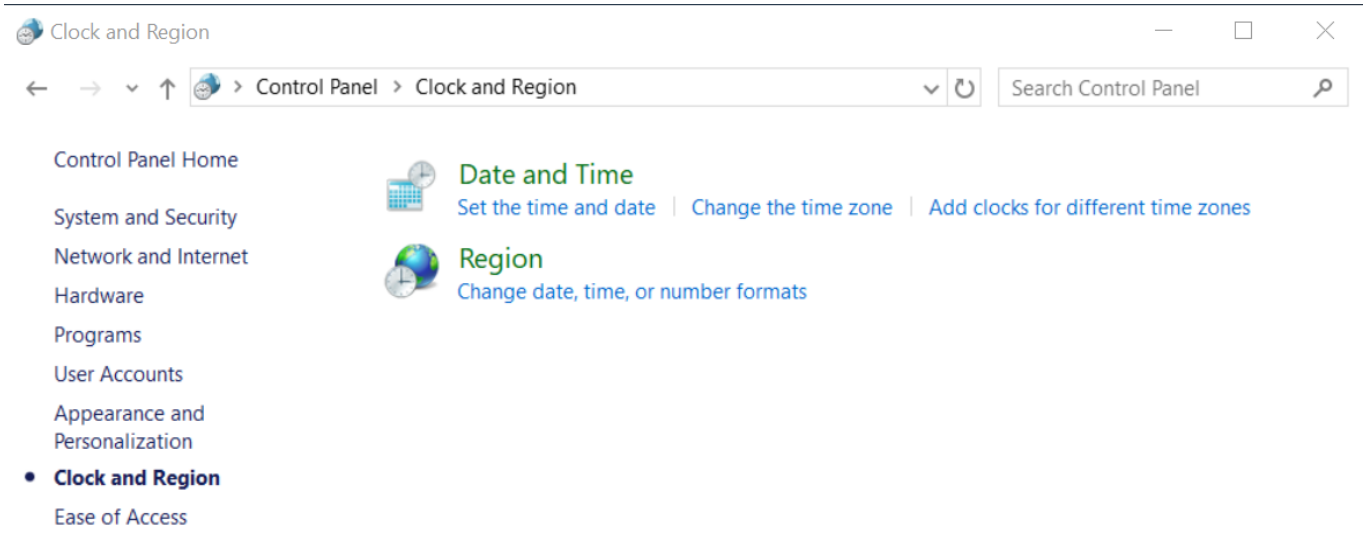
If the following screen appears, scroll all the way down and select “Additional date, time, & regional settings”.



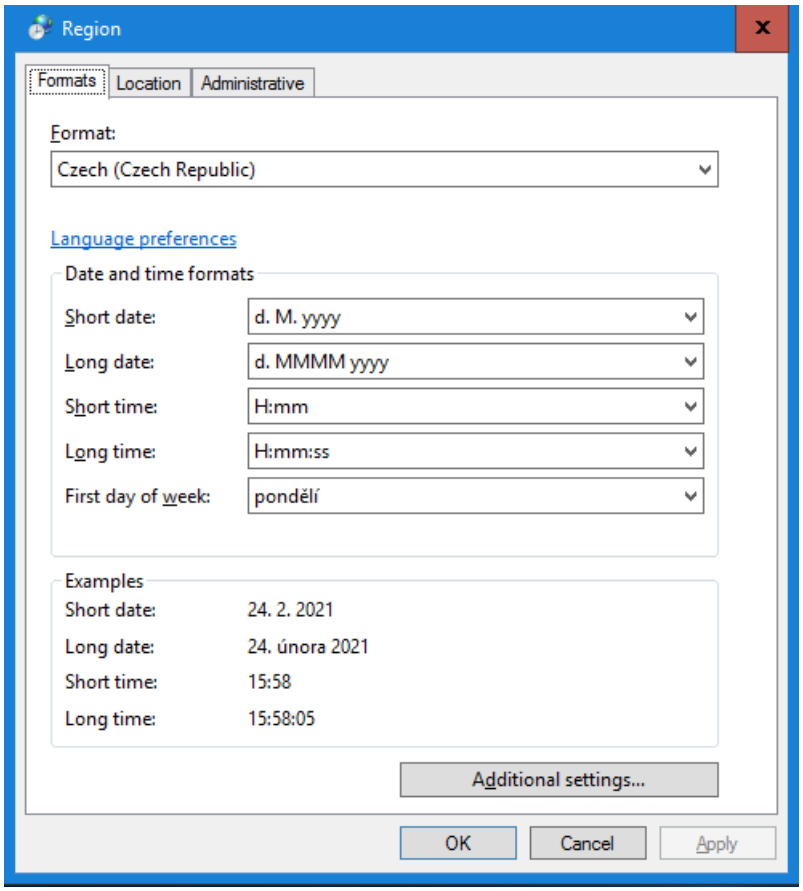
If the following screen appears, scroll all the way down and select “Additional date, time, & regional settings”.



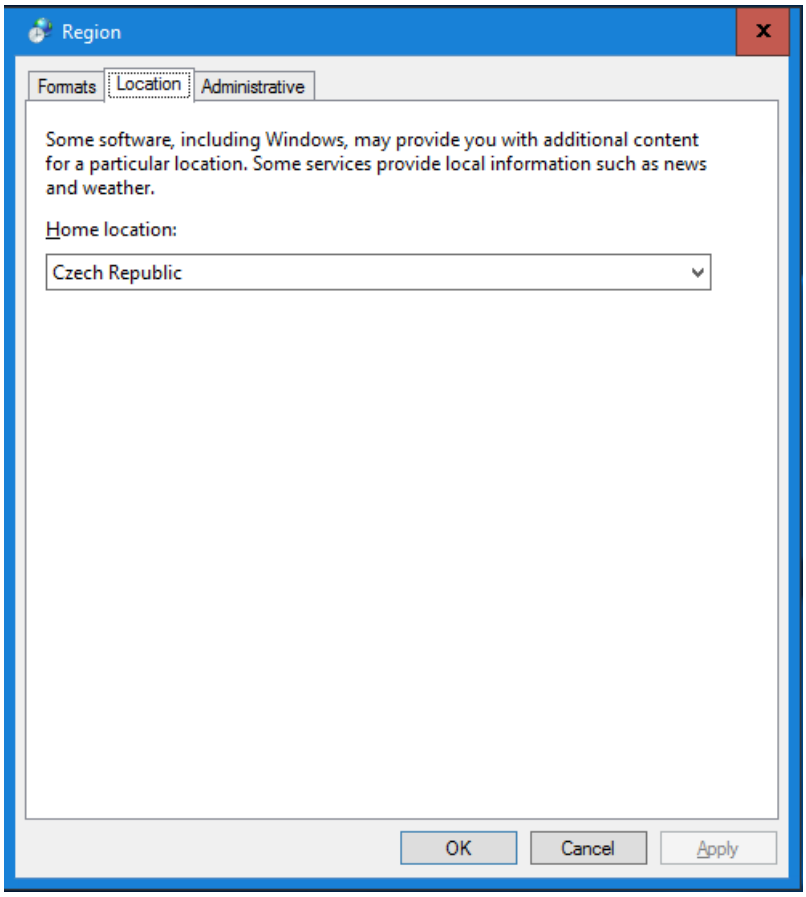
If the following screen appears, select “Change date, time, or number formats”.



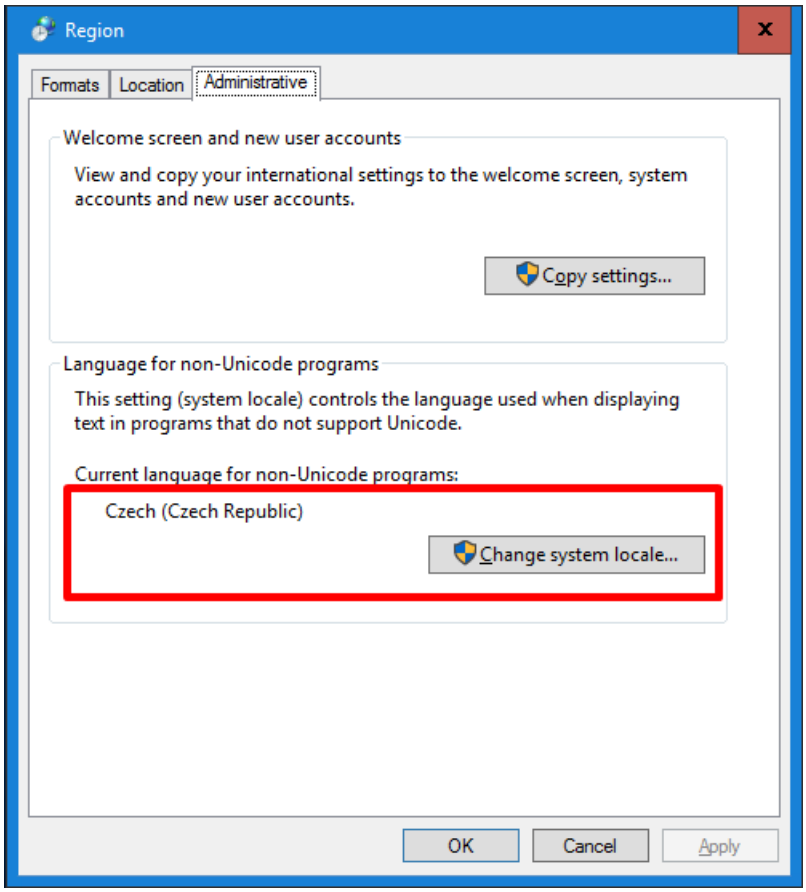
On the “Formats” tab, select “Czech (Czech Republic)”.



On the “Location” tab, select “Czech Republic”.



On the “Administrative” select “Czech (Czech Republic)”.

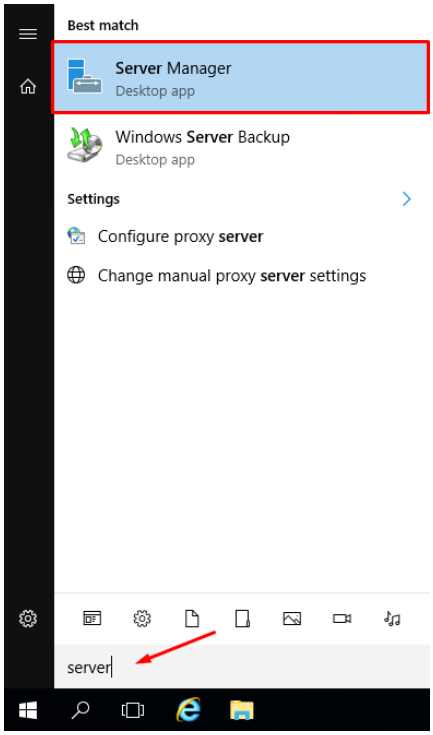


3 Installing IIS

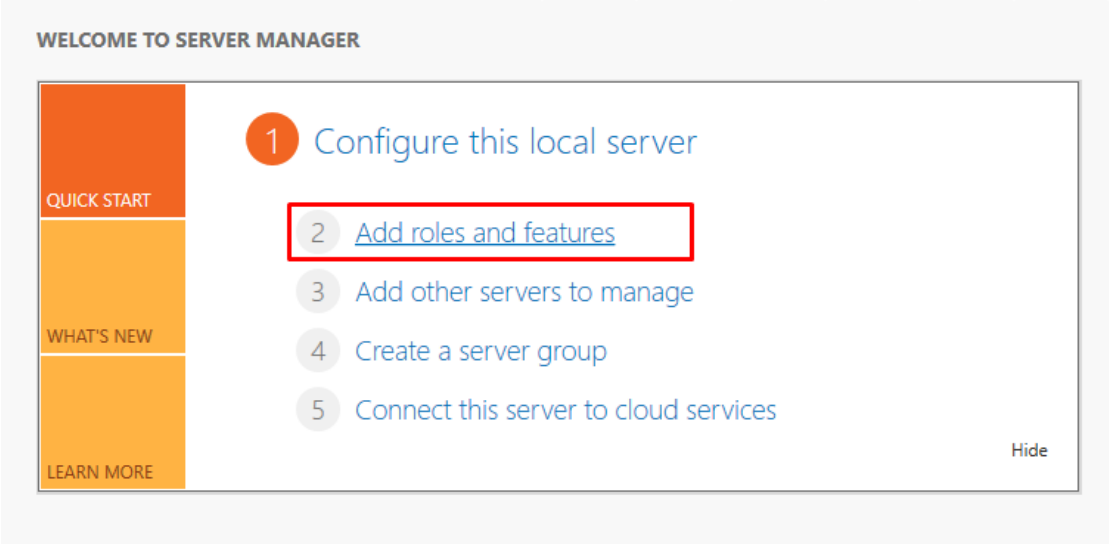
- *All actions must be performed under administrator rights.*
- *Install the necessary services and tools that NET Genium uses (IIS – Internet Information Services and possibly Windows Search, if you will be searching in full text in NET Genium. The procedure is different for Windows Server 2016 and Windows 10 client operating system.*

3.1 Installing IIS on Windows Server 2016 (English)

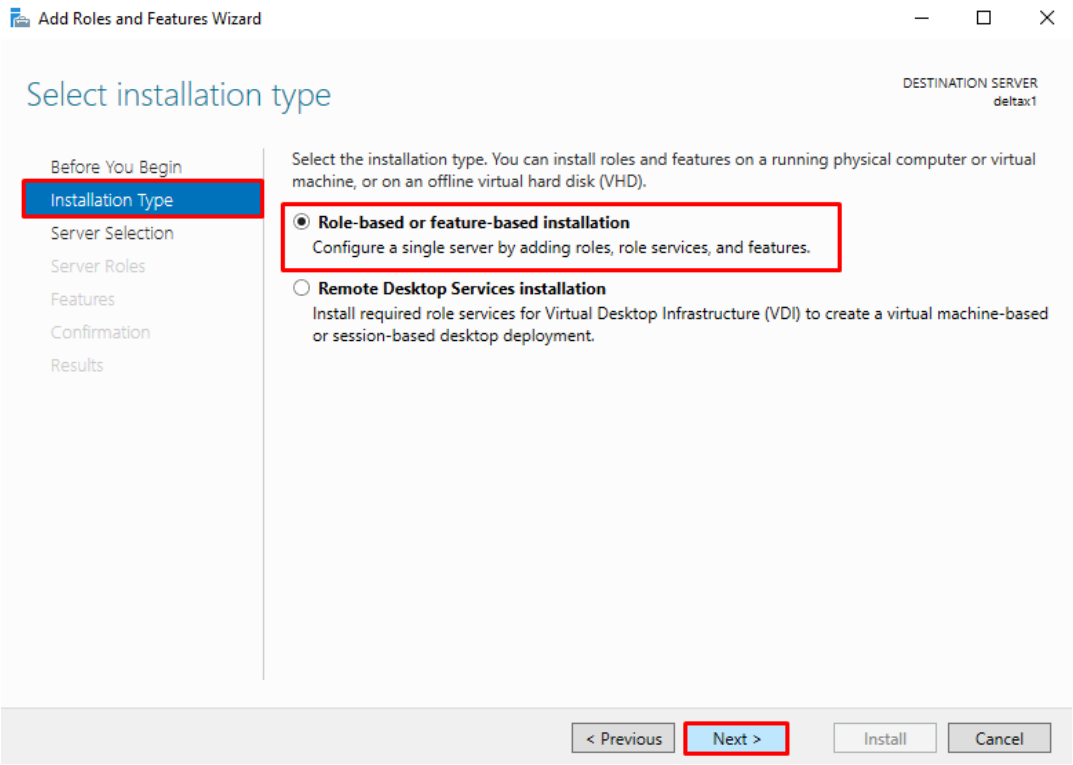
From the “Start” menu, search for “Server manager”.



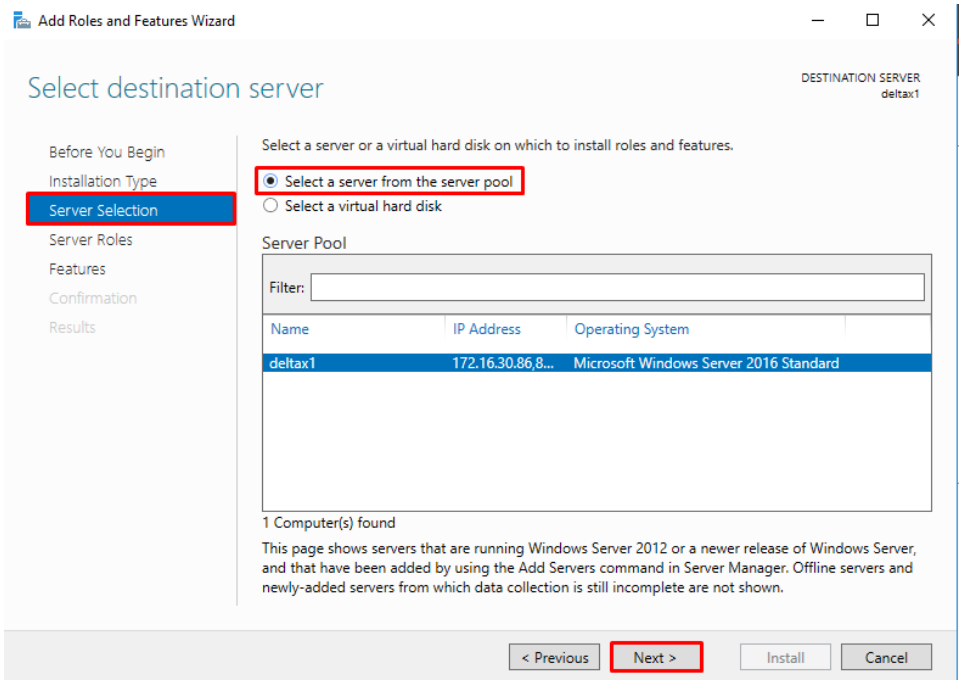
Next, select “Add roles and features”.



In the “Installation Type” window, select the “Role-based or feature-based installation” option and click the “Next” button.



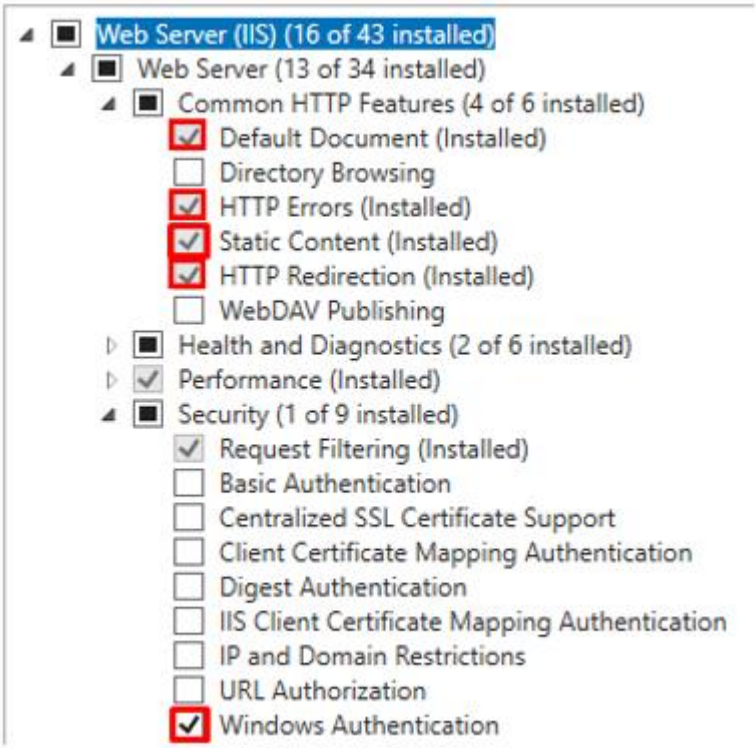
In “Server Selection”, select the server on which you want to install IIS – “Select a server from the server pool” and click “Next”.

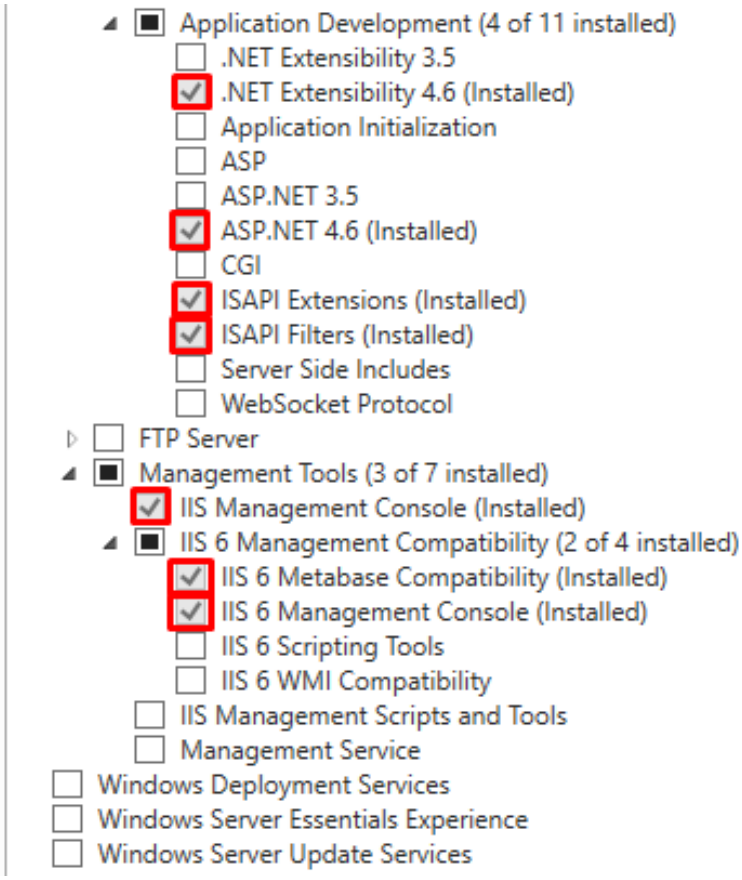


Select the following server roles from the “Server Roles” menu. If the system asks you to install additional services for a particular part of IIS, install them. Then press the “Next” button.

- Web Server (IIS)
  - Web Server
    - Common HTTP Features
      - Default Document
      - HTTP Errors
      - Static Content
      - HTTP Redirection
    - Security
      - Windows Authentication
    - Application Development
      - .NET Extensibility 4.6
      - ASP.NET 4.6
      - ISAPI Extensions
      - ISAPI Filters

- Management Tools
  - IIS Management Console
  - IIS 6 Management Compatibility
    - IIS 6 Metabase Compatibility
    - IIS 6 Management Console (in case we also install SMTP Server)

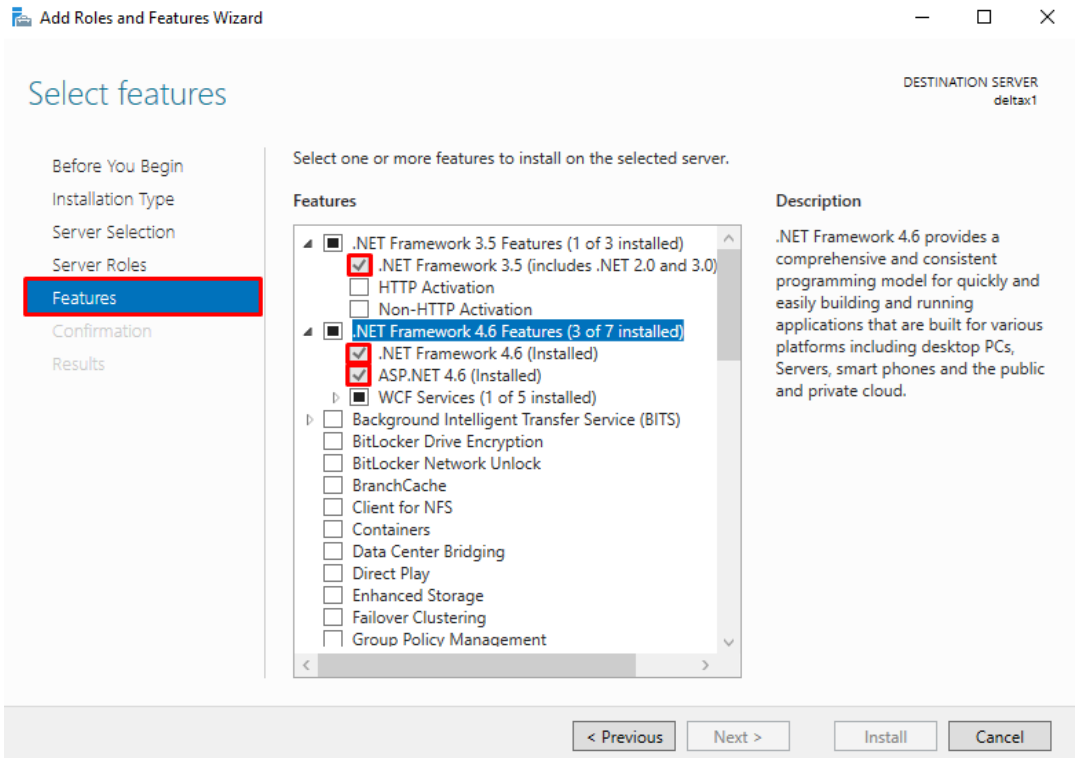


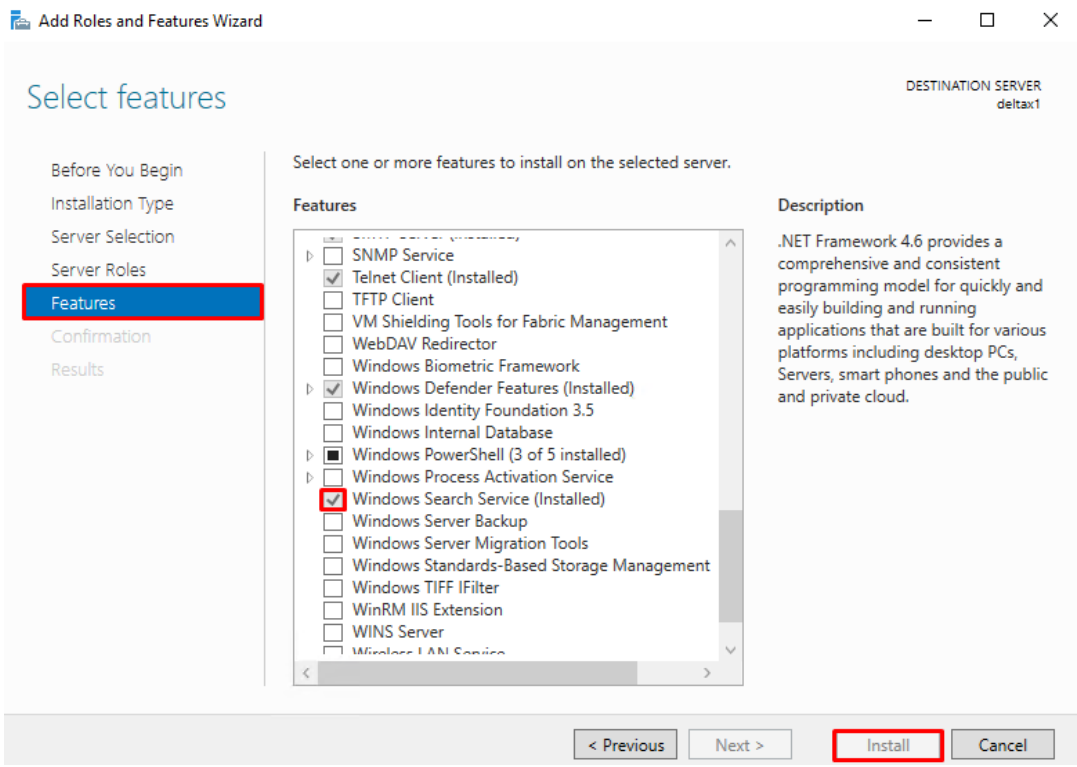


Select features from the “Features” menu:

- .NET Framework 3.5 Features
  - .NET Framework 3.5
- .NET Framework 4.6 Features
  - .NET Framework 4.6
  - ASP.NET 4.6
- Windows Search Service

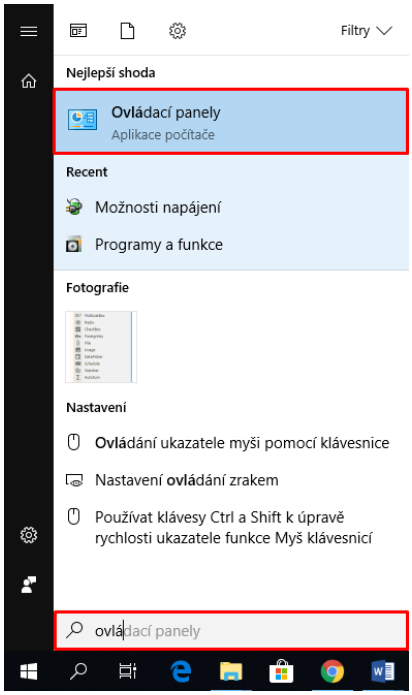
Press the “Install” button.


Add Roles and Features Wizard
Select features
DESTINATION SERVER
deltax1
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results
Select one or more features to install on the selected server.
Features
.NET Framework 3.5 Features (1 of 3 installed)
.NET Framework 3.5 (includes .NET 2.0 and 3.0)
HTTP Activation
Non-HTTP Activation
.NET Framework 4.6 Features (3 of 7 installed)
.NET Framework 4.6 (Installed)
ASP.NET 4.6 (Installed)
WCF Services (1 of 5 installed)
Background Intelligent Transfer Service (BITS)
BitLocker Drive Encryption
BitLocker Network Unlock
BranchCache
Client for NFS
Containers
Data Center Bridging
Direct Play
Enhanced Storage
Failover Clustering
Group Policy Management
Description
.NET Framework 4.6 provides a comprehensive and consistent programming model for quickly and easily building and running applications that are built for various platforms including desktop PCs, Servers, smart phones and the public and private cloud.
< Previous
Next >
Install
Cancel

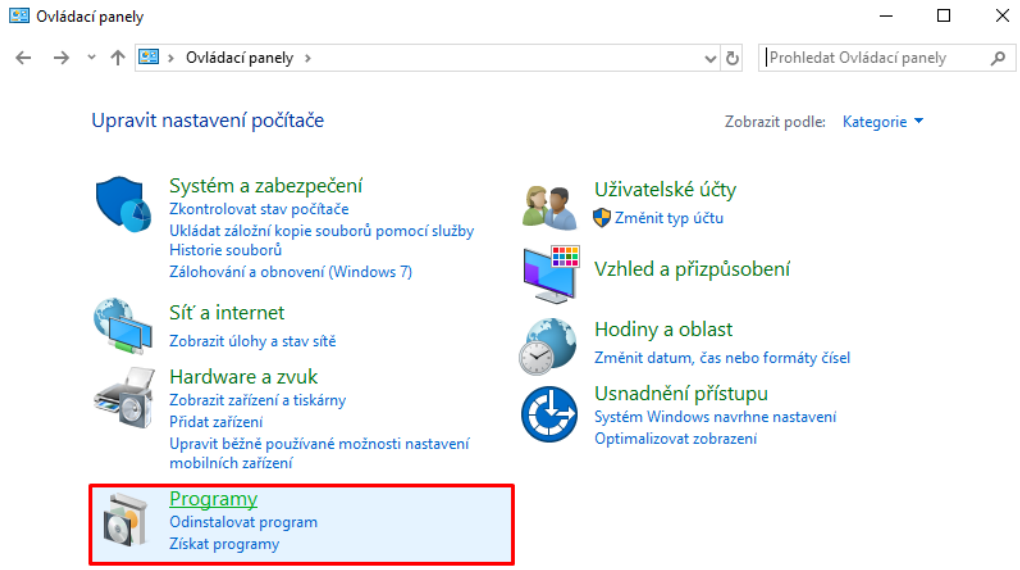

Add Roles and Features Wizard
Select features
DESTINATION SERVER
deltax1
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results
Select one or more features to install on the selected server.
Features
SNMP Service
Telnet Client (Installed)
TFTP Client
VM Shielding Tools for Fabric Management
WebDAV Redirector
Windows Biometric Framework
Windows Defender Features (Installed)
Windows Identity Foundation 3.5
Windows Internal Database
Windows PowerShell (3 of 5 installed)
Windows Process Activation Service
Windows Search Service (Installed)
Windows Server Backup
Windows Server Migration Tools
Windows Standards-Based Storage Management
Windows TIFF IFilter
WinRM IIS Extension
WINS Server
Description
.NET Framework 4.6 provides a comprehensive and consistent programming model for quickly and easily building and running applications that are built for various platforms including desktop PCs, Servers, smart phones and the public and private cloud.
< Previous
Next >
Install
Cancel

3.2 Installing IIS on Windows 10 (English)

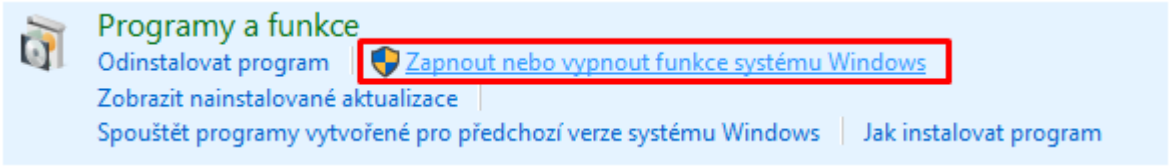
From the “Start” menu, find “Control Panel”.



Switch the display to “Categories” and select “Programs”.

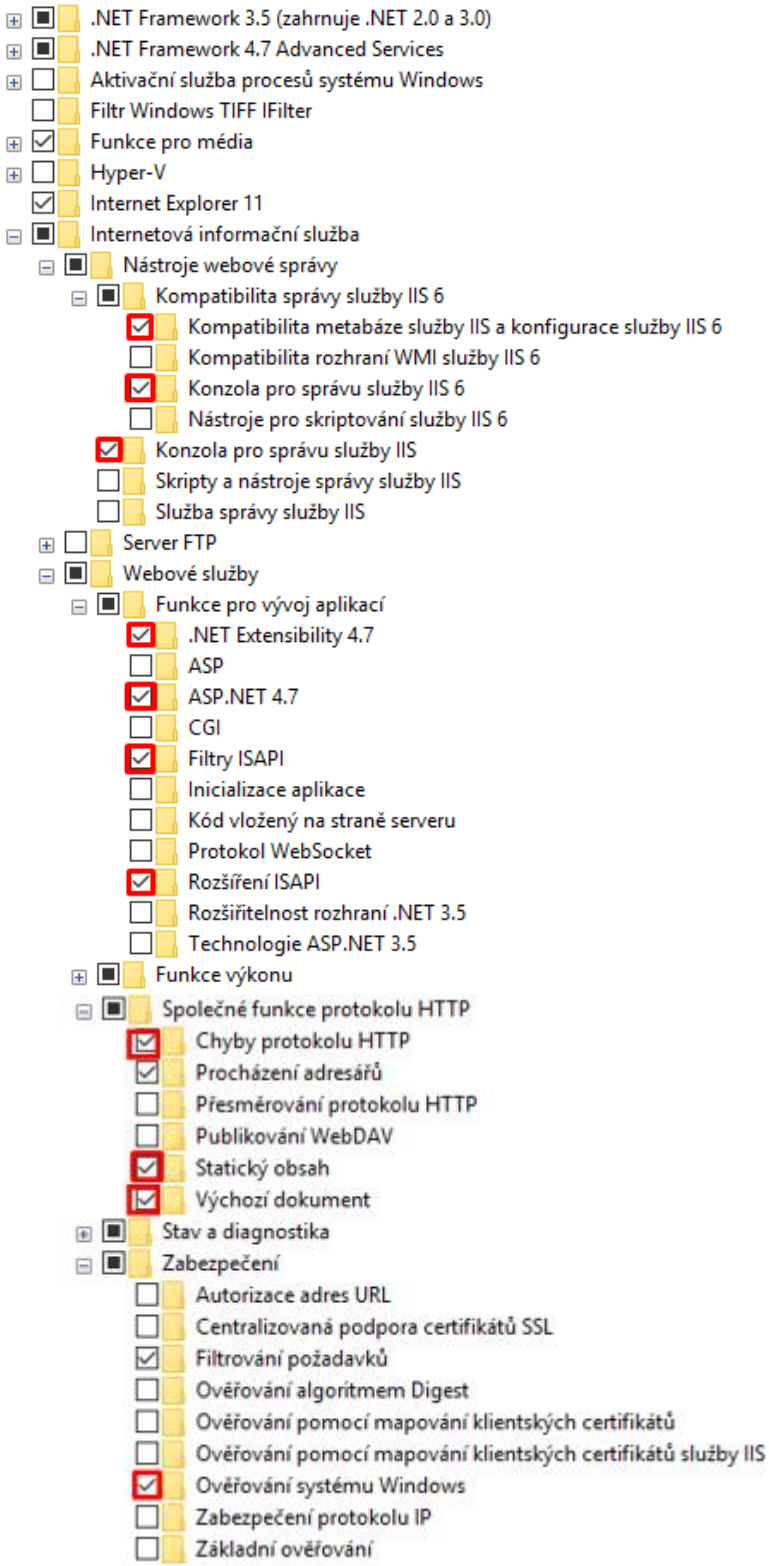


In the "Programs and Features" category, select "Turn Windows features on or off."



In the newly opened window, select to install:

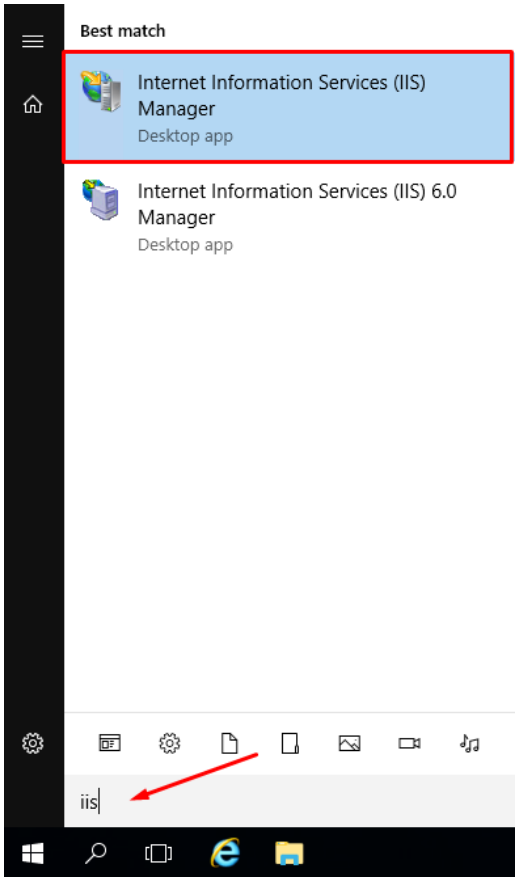
- Internet information service
  - Web administration tools
    - IIS 6 Administration Compatibility
      - IIS metabase compatibility and IIS 6 configuration
      - IIS 6 Management Console (in case we also install SMTP Server)
    - IIS Admin Console
  - Web services
    - Application development functions
      - .NET Extensibility 4.7
      - ASP.NET 4.7
      - ISAPI filters
      - ISAPI extensions
    - Common HTTP features
      - HTTP errors
      - Static content
      - Default document
    - Security
      - Windows authentication


.NET Framework 3.5 (zahrnuje .NET 2.0 a 3.0)
.NET Framework 4.7 Advanced Services
Aktivační služba procesů systému Windows
Filtr Windows TIFF IFilter
Funkce pro média
Hyper-V
Internet Explorer 11
Internetová informační služba
Nástroje webové správy
Kompatibilita správy služby IIS 6
Kompatibilita metabáze služby IIS a konfigurace služby IIS 6
Kompatibilita rozhraní WMI služby IIS 6
Konzola pro správu služby IIS 6
Nástroje pro skriptování služby IIS 6
Konzola pro správu služby IIS
Skripty a nástroje správy služby IIS
Služba správy služby IIS
Server FTP
Webové služby
Funkce pro vývoj aplikací
.NET Extensibility 4.7
ASP
ASP.NET 4.7
CGI
Filtry ISAPI
Inicializace aplikace
Kód vložený na straně serveru
Protokol WebSocket
Rozšíření ISAPI
Rozšiřitelnost rozhraní .NET 3.5
Technologie ASP.NET 3.5
Funkce výkonu
Společné funkce protokolu HTTP
Chyby protokolu HTTP
Procházení adresářů
Přesměrování protokolu HTTP
Publikování WebDAV
Statický obsah
Výchozí dokument
Stav a diagnostika
Zabezpečení
Autorizace adres URL
Centralizovaná podpora certifikátů SSL
Filtrování požadavků
Ověřování algoritmem Digest
Ověřování pomocí mapování klientských certifikátů
Ověřování pomocí mapování klientských certifikátů služby IIS
Ověřování systému Windows
Zabezpečení protokolu IP
Základní ověřování

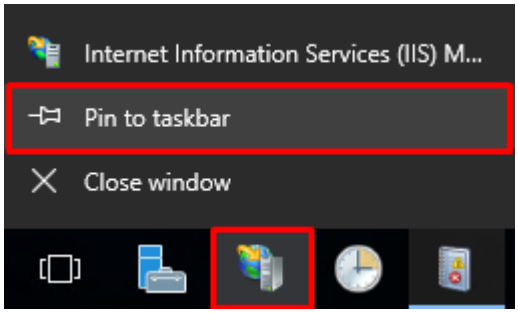
4 IIS settings

4.1 Pin IIS to the taskbar

Find “Internet Information Services (IIS) Manager” in the start menu.

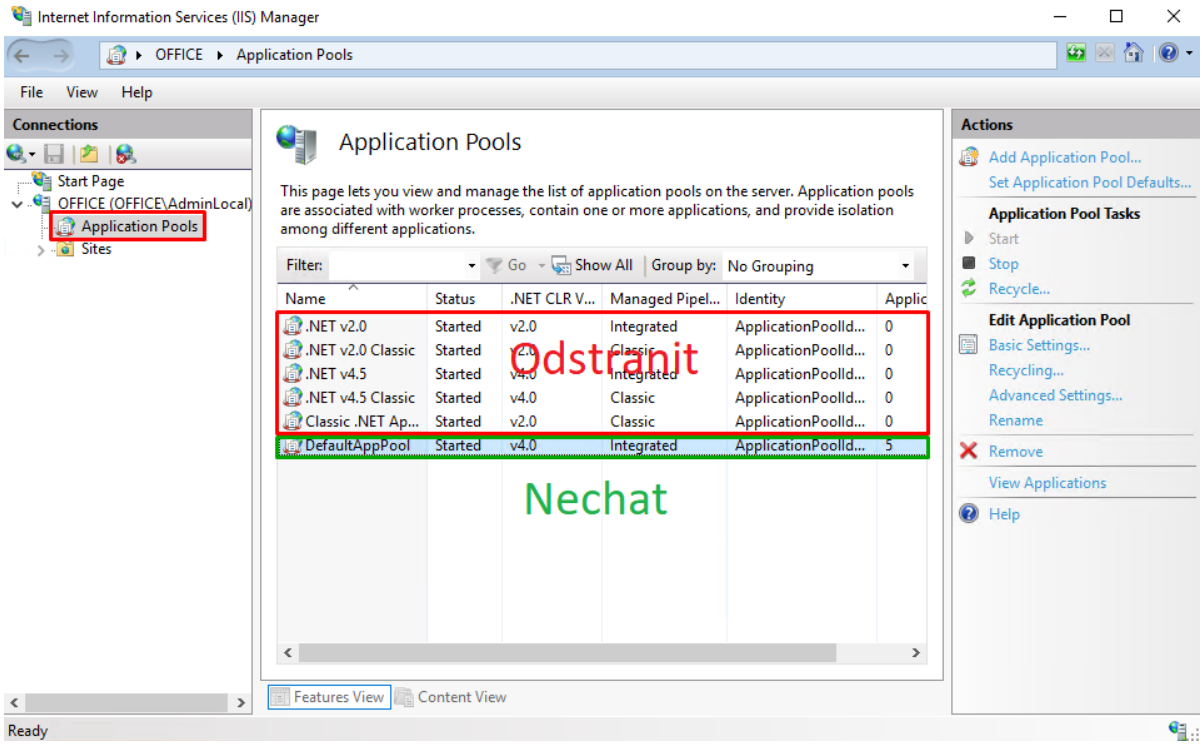


In the bottom bar, right-click on IIS and select “Pin to taskbar”.



4.2 Delete default application pools

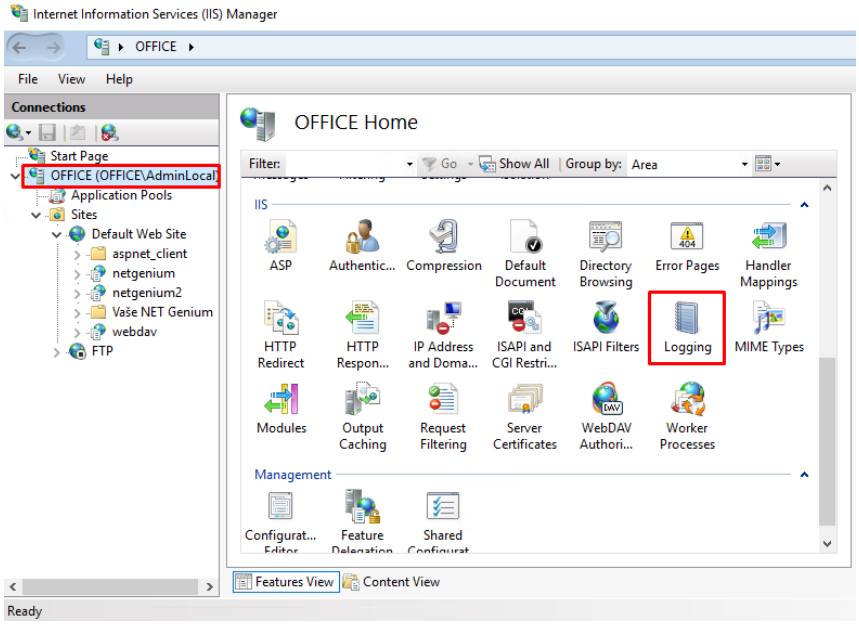
Click on “Application Pools” and remove all default application pools except “DefaultAppPool”- do not delete it!



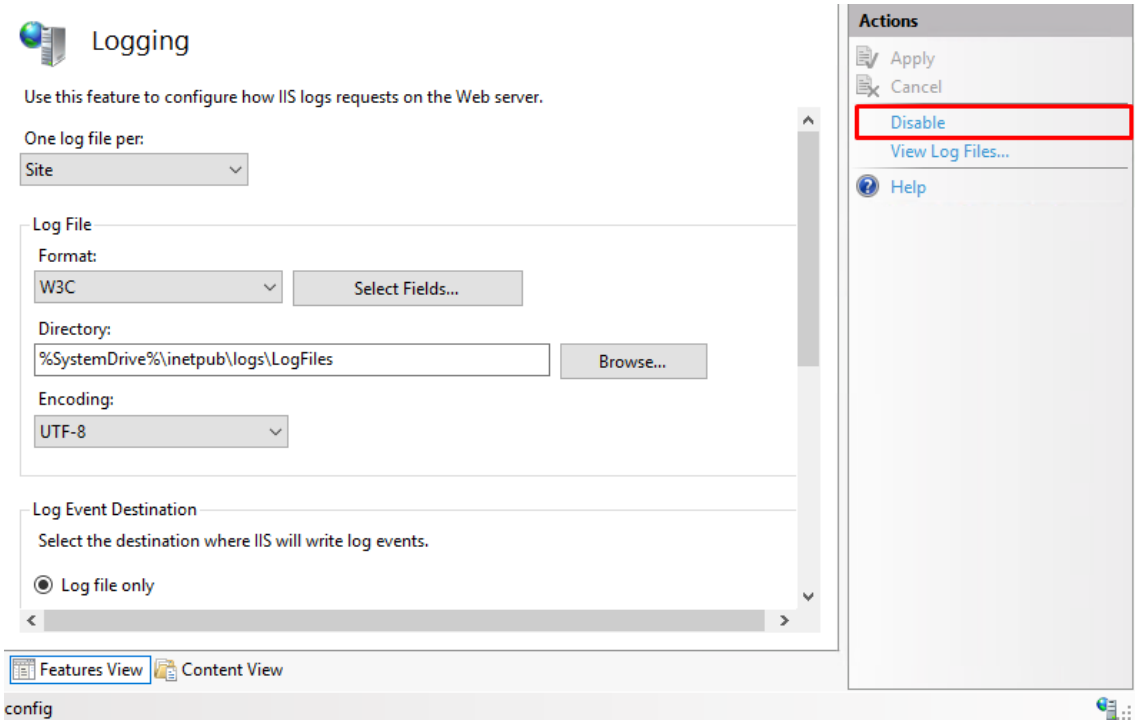
4.3 Turn off logging

To prevent unexpected server/computer disk fullness, it is desirable to turn off traffic logging within your server/computer node in IIS.

Go to the IIS settings and select the highest node of your server/computer (for example “OFFICE”) so that the settings are overwritten to other child nodes, and select “Logging” in the “IIS” section.



Then click “Disable” in the “Actions” panel on the right side of the window. This disables vehicle logging for your server/computer node.

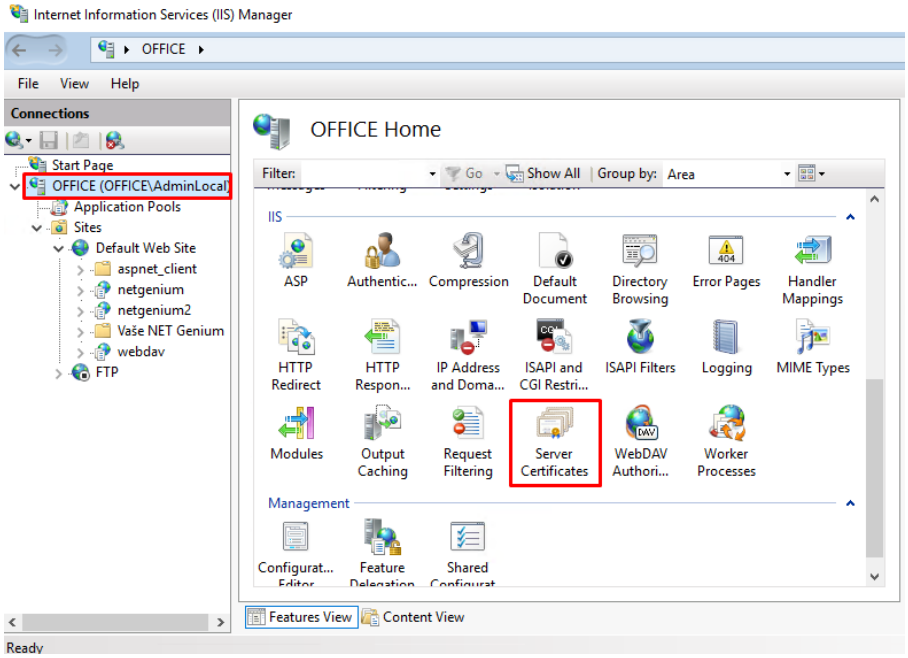


4.4 Creating and installing SSL certificates

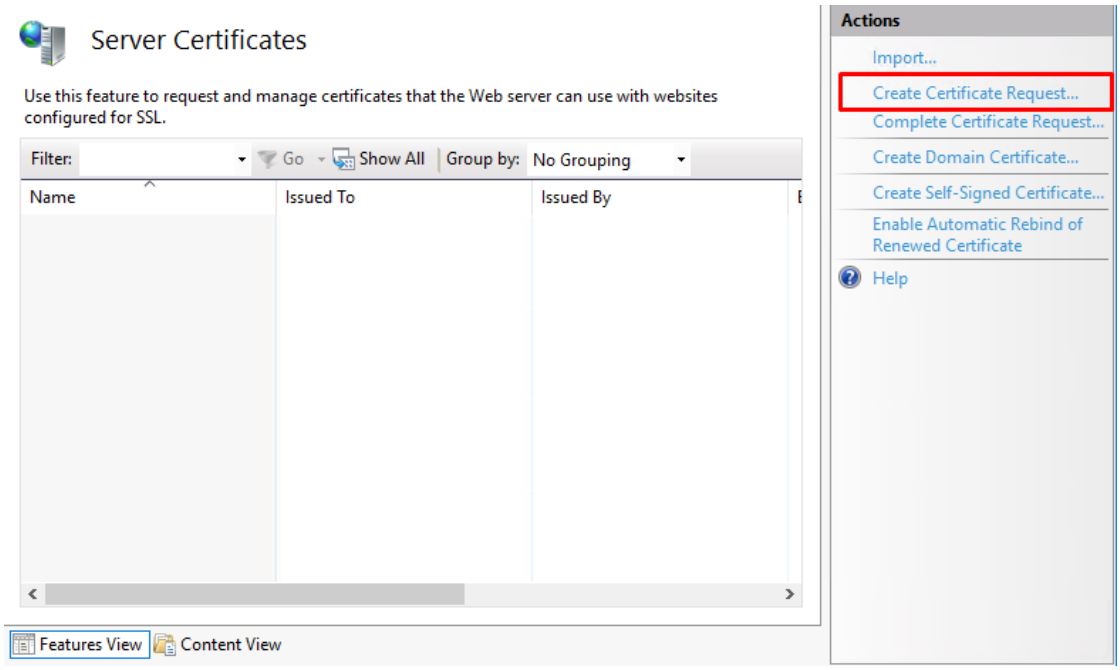
⚠ *The setting described in this chapter is intended only for the use of web servers exposed on the Internet, where communication security is expected via an SSL certificate.*

4.4.1 Create an SSL certificate request

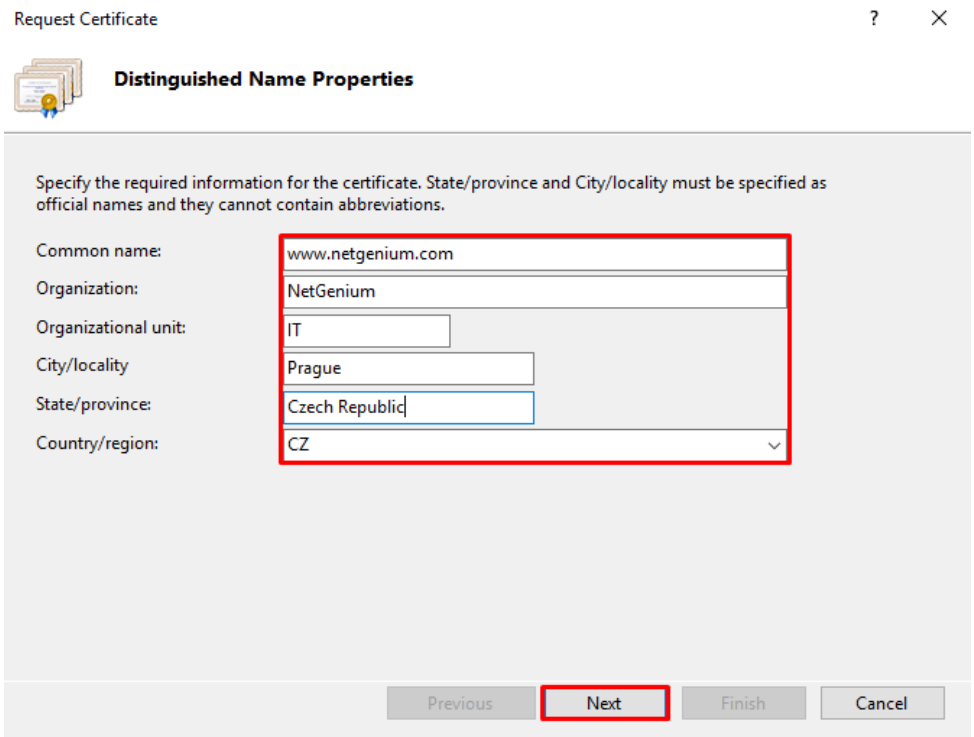
Go to IIS settings and select the node of your server/computer (for example “OFFICE”) and select “Server certificates” in the “IIS” section.



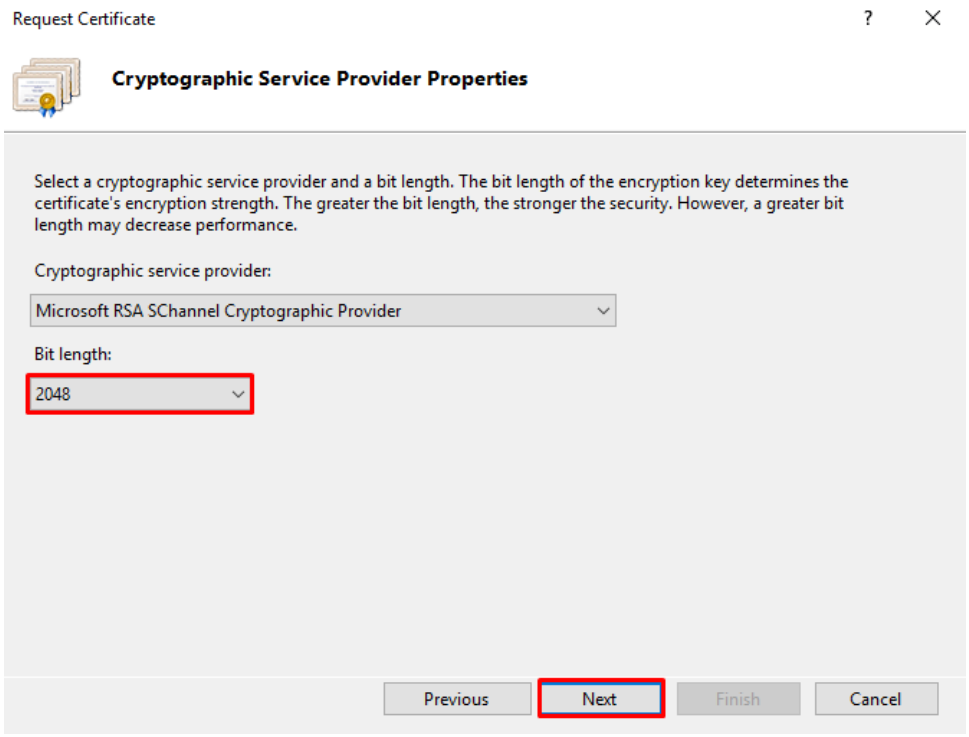
In the right part of the window, in the “Actions” panel, click on “Create Certificate Request...”.



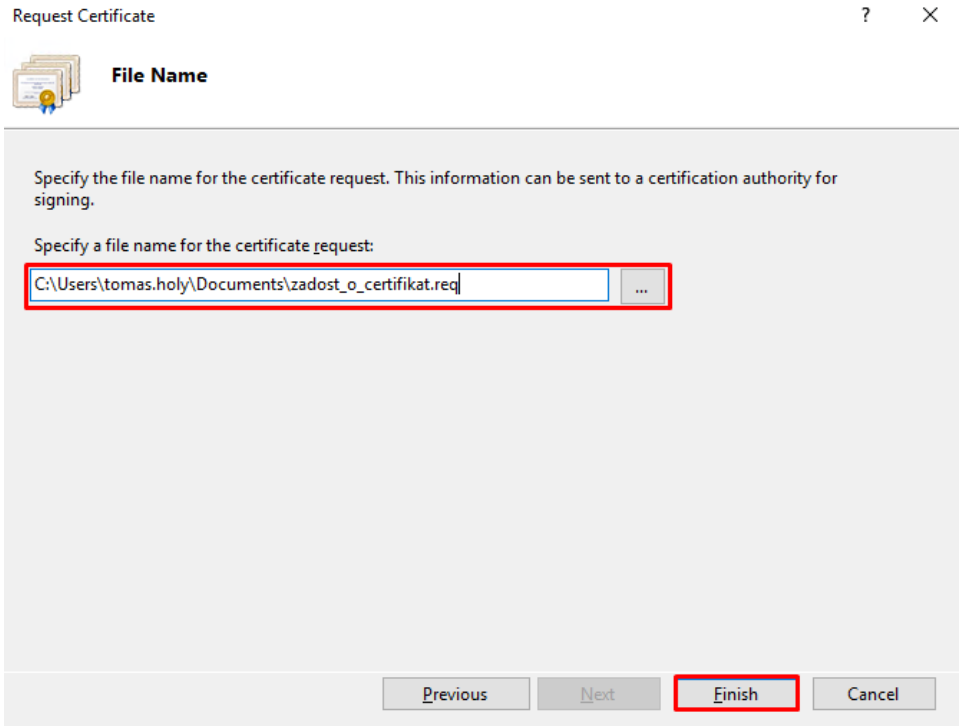
Then enter all the required information for the certificate in the newly opened window and click on the “Next” button.



In the next step, set the bit length to “2048” and click the “Next” button.

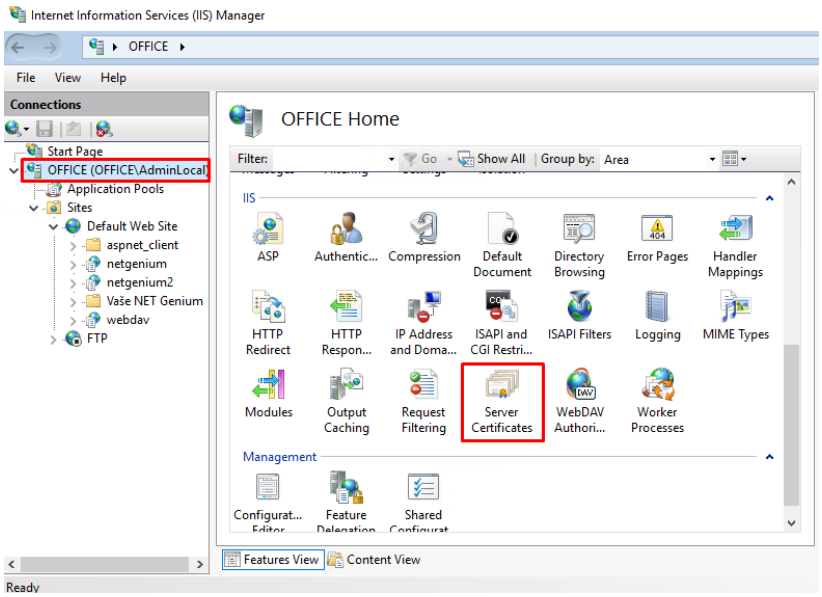


Enter a file name for the certificate request and click “Finish”.

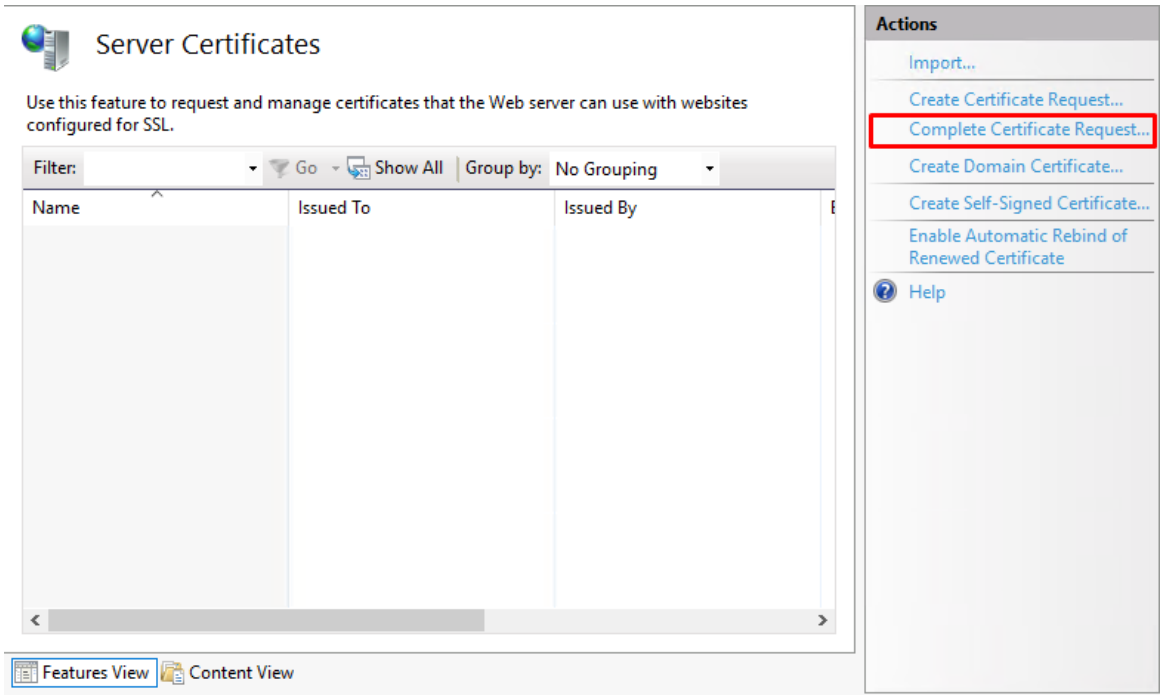


4.4.2 SSL certificate request completed

- Once you receive your certificate from a certification authority (e.g. www.sslmarket.cz), save it, for example, in the text file "C:\Users\tomas.holy\Desktop\netgenium.txt". If you obtain the certificate by copying the contents of the certificate, for example, from an e-mail message, it is important to save the contents, including the ----- BEGIN CERTIFICATE ----- and ----- END CERTIFICATE ----- tags.
- Go to IIS settings and select your server/computer node (for example "OFFICE") and select "Server Certificates" in the "IIS" section.

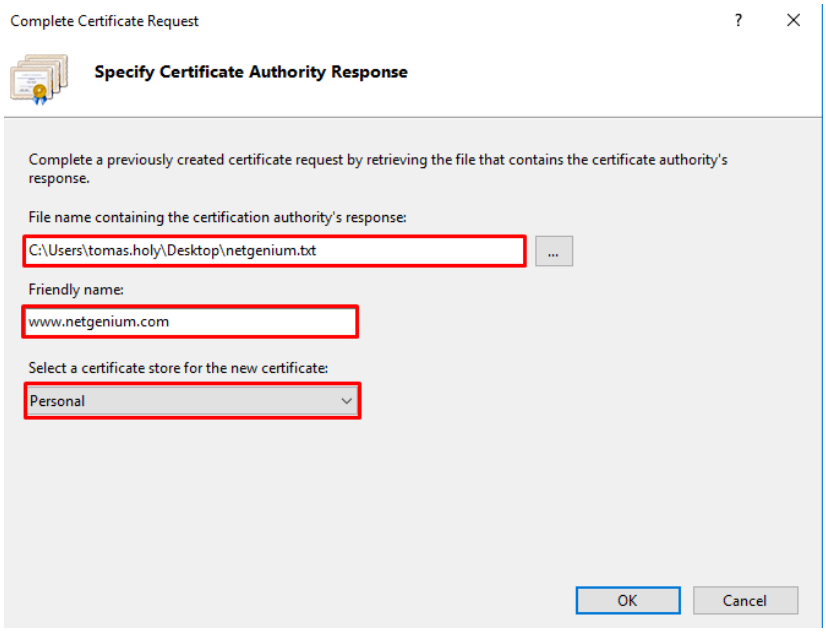


In the right part of the window, in the “Actions” panel, click on “Complete Certificate Request…”.



In the wizard, enter the location and name of the certificate you previously saved on your server, enter “Friendly name” and select “Certificate store for the new certificate” to “Personal”. Then click the “OK” button.

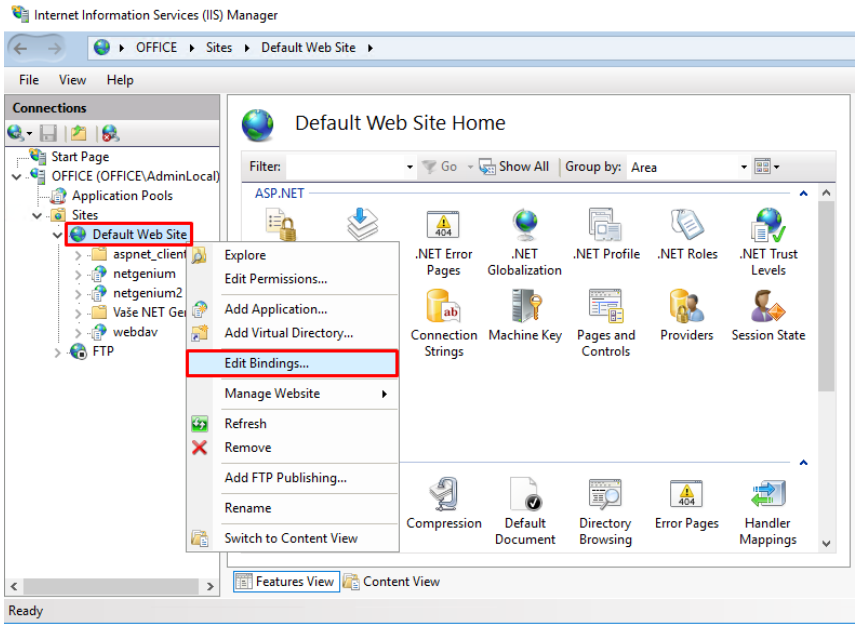
“Friendly name” is not part of the certificate, but is entered by the administrator to better identify the certificate among others.



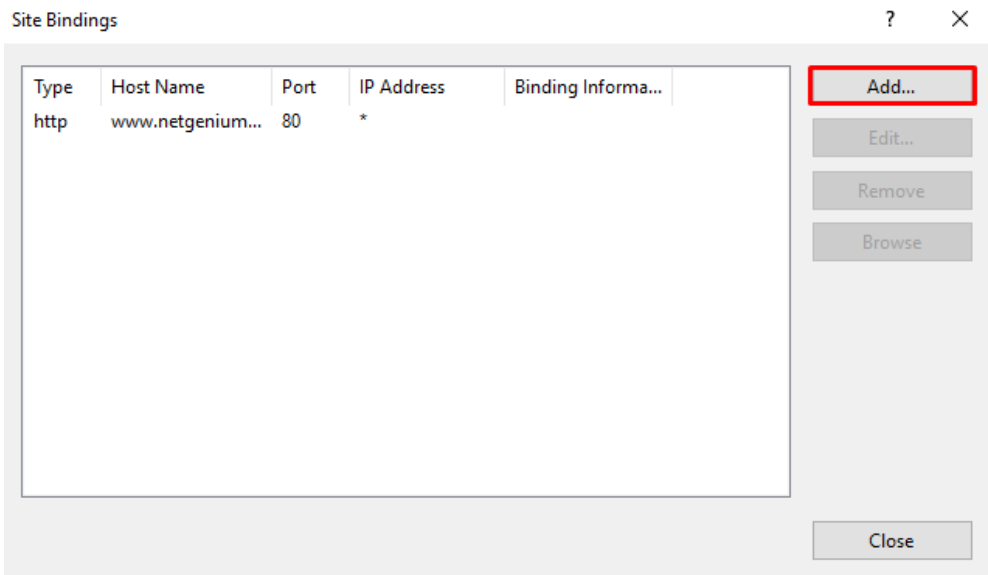
After successfully installing a certificate on the server, you need to assign this certificate to a specific site using IIS.

From the “Connections” menu, select the website to which you want to assign the certificate in the “Internet Information Services” main window.

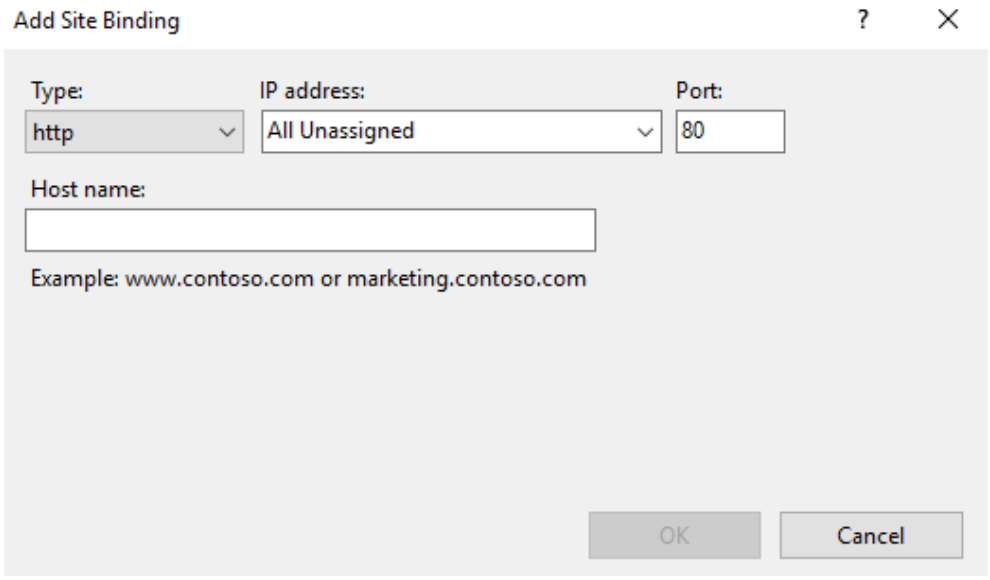
Right-click on the website and select “Edit Bindings…”.



In the newly opened window, click on the “Add” button.

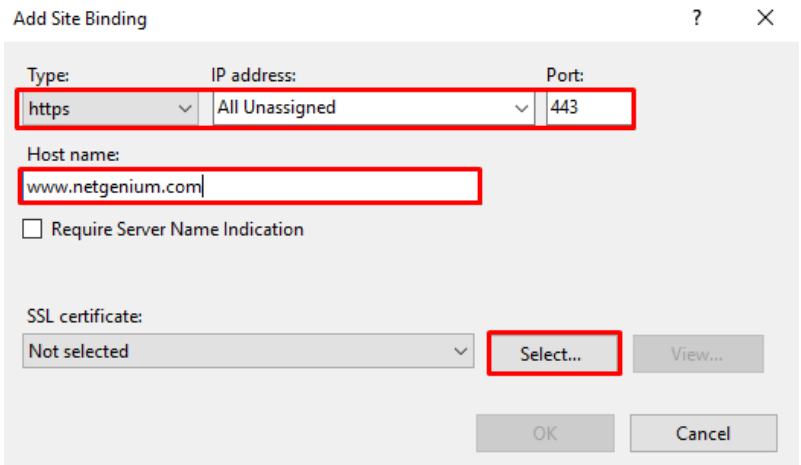


- The following “Add Site Binding” dialog box opens.



- Select “https” in the “Type” field. Leave the IP address set to “All Unassigned”, leave the port “443”. Fill in the domain name of the website in the “Host name” field, and use the “Select…” button to select the SSL certificate you want to assign to this website.
- Do not check “Require Server name Indication” if this is the default site you run on that server. Within one IP address (or within the whole IIS, if we use an IP address set to “All Unassigned”), only one SSL certificate can be defined, which has this option unchecked and which we therefore consider as the default.

  Check “Require Server name Indication” if it is a second or additional SSL site running on the same IP address. It is important to note that older client devices (older Windows, tablets or mobile phones) can communicate with only one SSL certificate on one IP address. However, all the usual modern equipment today can so-called. SNI (Server Name Indication), which allows you to run multiple SSL certificates on one IP address. To enable this feature, check “Require Server name Indication”.
- Click the “OK” button.



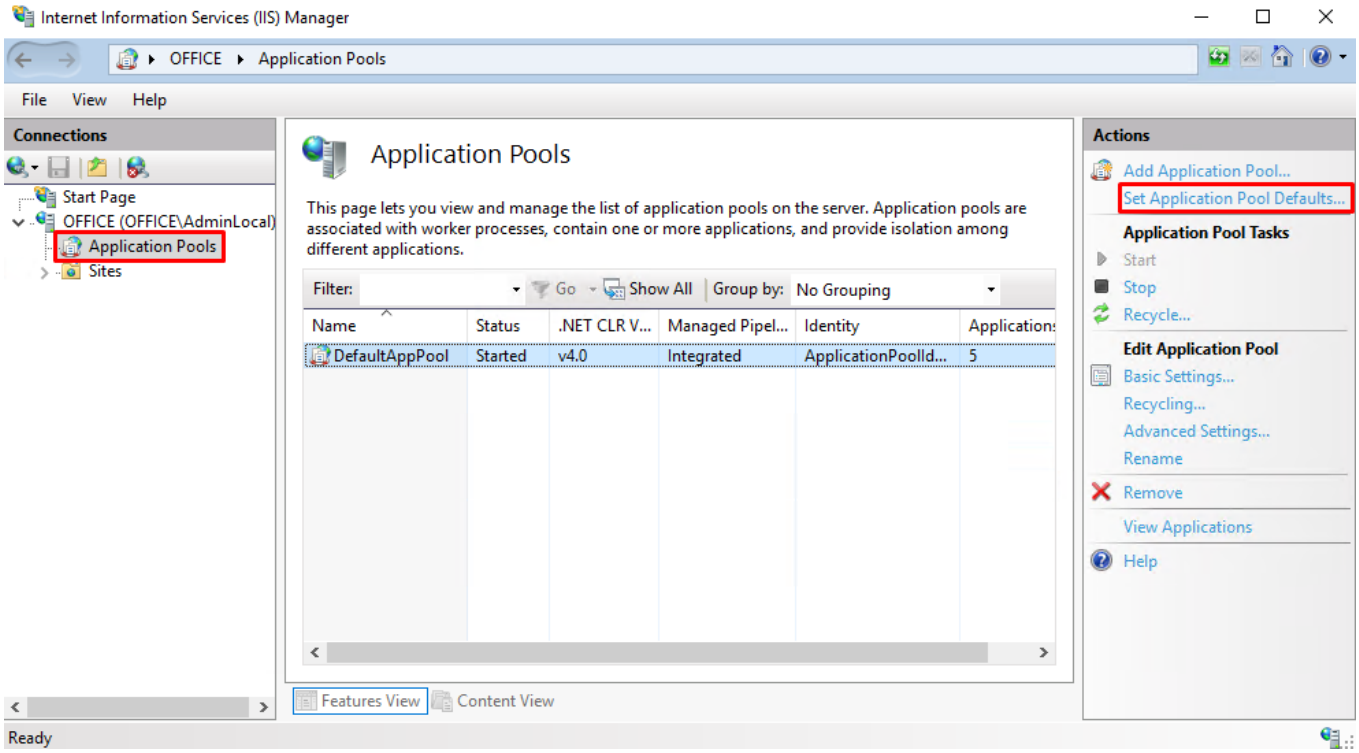
4.5 Turn off recycling

To prevent unexpected restarts of NET Genium, it is necessary to turn off the so-called "recycling" of application pools (end of the w3wp.exe process) on the web server. This prevents regular restart of the application pools that IIS basically has set up.

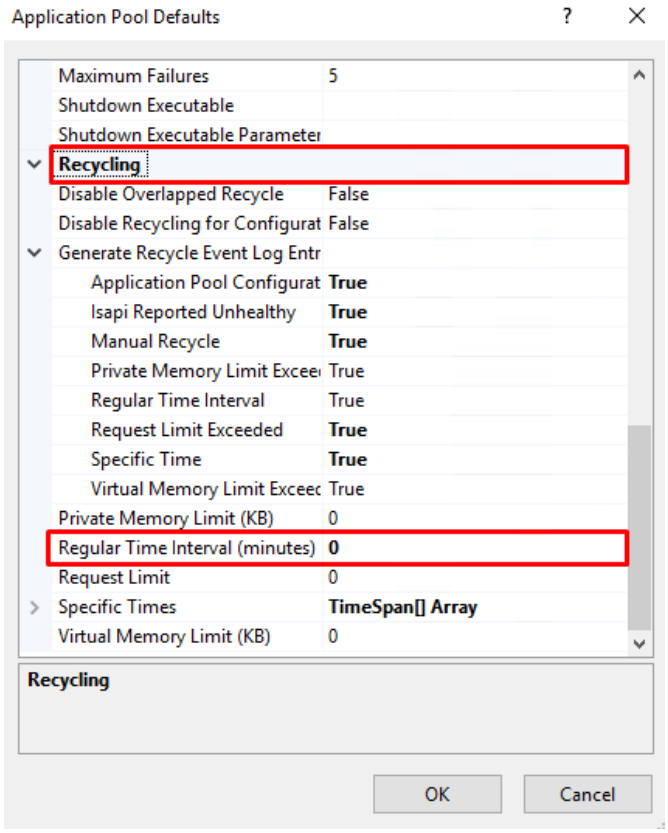
4.5.1 Disable recycling via application pool preferences

Go to "Application Pools" and "Set Application Pool Defaults" in the "Actions" section, or right-click on the IIS desktop and select "Set Application Pool Defaults".

This way you change the default settings for all application pools so that you do not have to set each application pool separately.



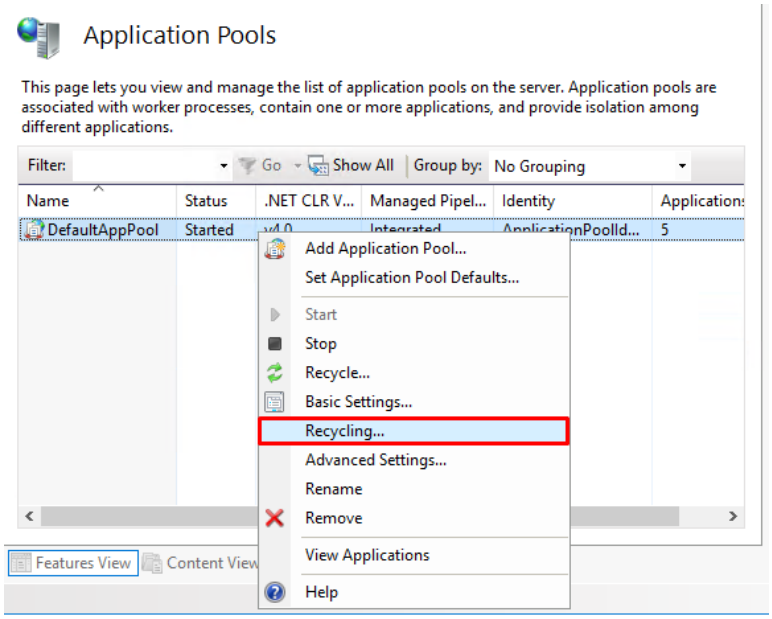
By default, the application pool will go to the “Recycling” section and set the “Regular Time Interval” to “0”.



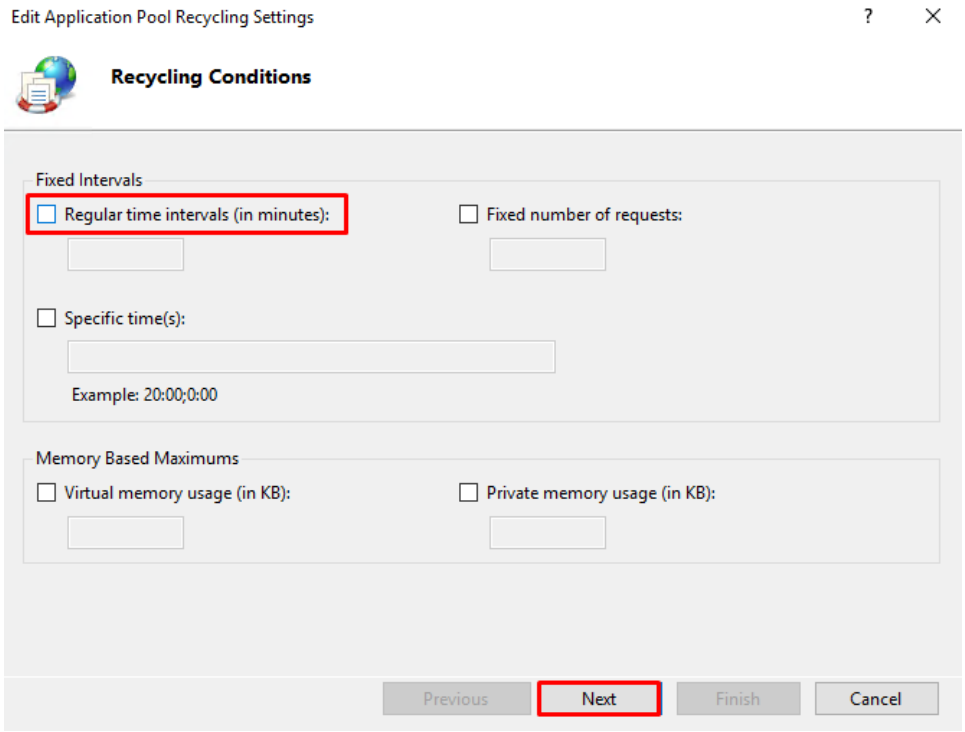
4.5.2 Disabling recycling for individual application pools

⚠ *If recycling has been turned off via the application pool preferences, which are listed in the previous chapter, you only need to check that it is turned off.*

👉 Go to “Application Pools” and right-click “DefaultAppPool” and select “Recycling”.



In the newly opened window, deselect “Regular time intervals”, click on the “Next” button and then on the “Finish” button.



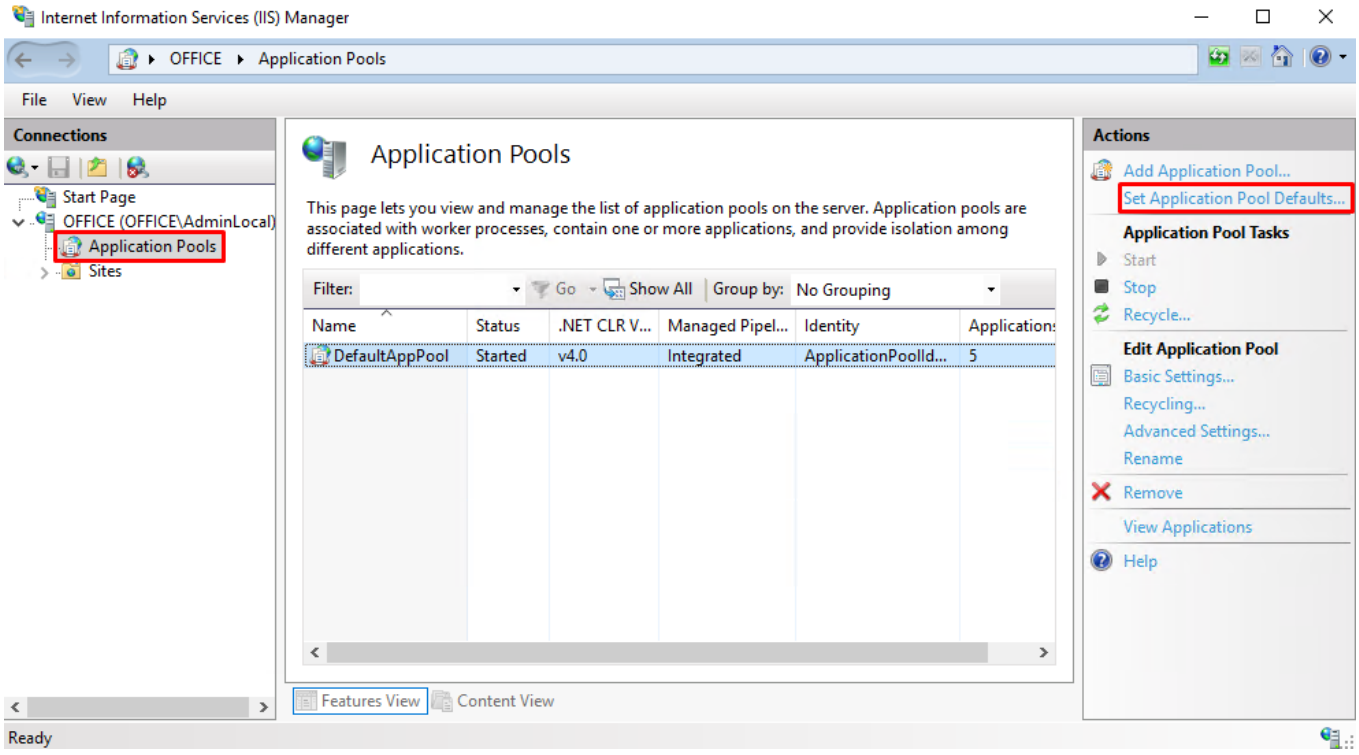
4.6 Idle timeout setting

Idle time is the interval at which the application pool automatically shuts down when web applications are idle (no requests from site visitors).

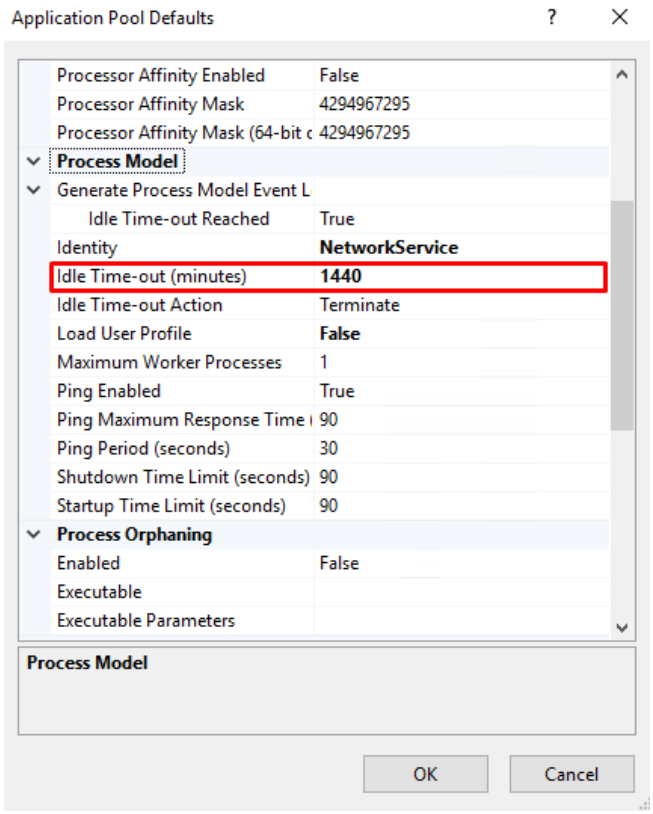
4.6.1 Set an idle timeout through application pool preferences

Go to “Application Pools” and click on “Set Application Pool Defaults” in the “Actions” section, or right-click on the IIS desktop and select “Set Application Pool Defaults”.

This way you change the default settings for all application pools so that you do not have to set each application pool separately.


Internet Information Services (IIS) Manager
OFFICE ▸ Application Pools
File View Help
Connections
Start Page
OFFICE (OFFICE\AdminLocal)
Application Pools
Sites
Application Pools
This page lets you view and manage the list of application pools on the server. Application pools are associated with worker processes, contain one or more applications, and provide isolation among different applications.
Filter: Go Show All Group by: No Grouping
Name Status .NET CLR V... Managed Pipel... Identity Application
DefaultAppPool Started v4.0 Integrated ApplicationPoolId... 5
Features View Content View
Actions
Add Application Pool...
Set Application Pool Defaults...
Application Pool Tasks
Start
Stop
Recycle...
Edit Application Pool
Basic Settings...
Recycling...
Advanced Settings...
Rename
Remove
View Applications
Help
Ready

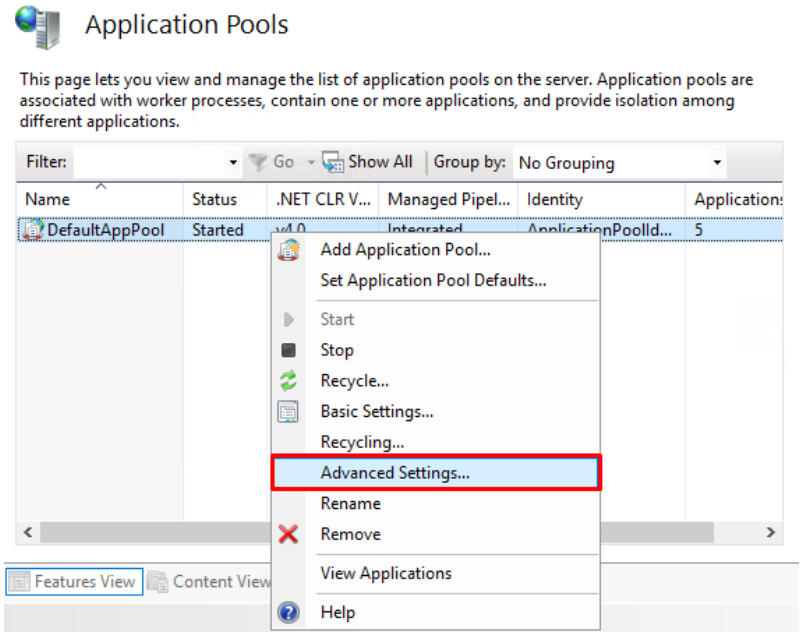
In the “Process Model” section, set the “Idle Time-out” to 1440 minutes (one day).



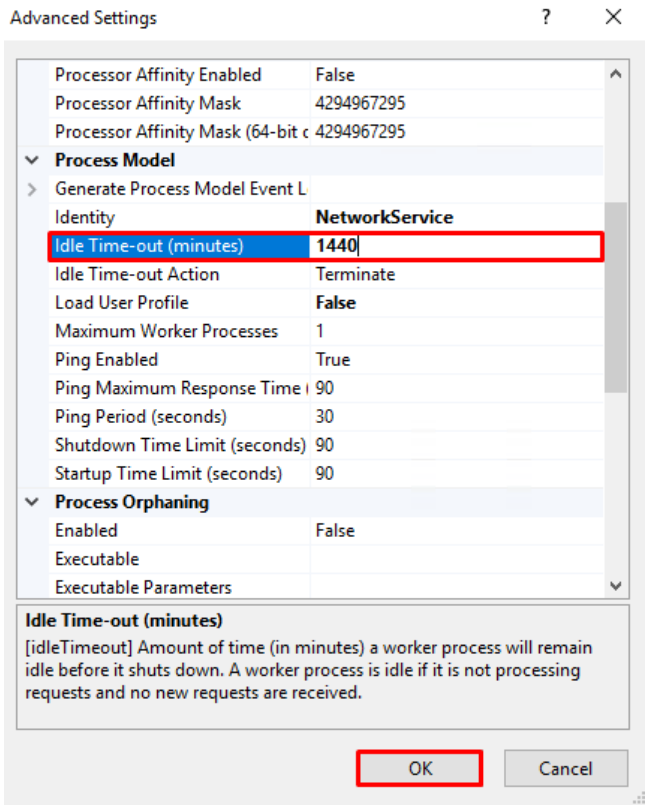
4.6.2 Setting the idle timeout for individual application pools

⚠ *If the idle timeout has been set through the application pool preferences, which are listed in the previous chapter, you only need to check its settings.*

☞ Go to “Application Pools” and right-click “DefaultAppPool” and select “Advanced Settings”.



In the “Process Model” section, set the “Idle Time-out” to 1440 minutes (one day).



4.7 Identity settings

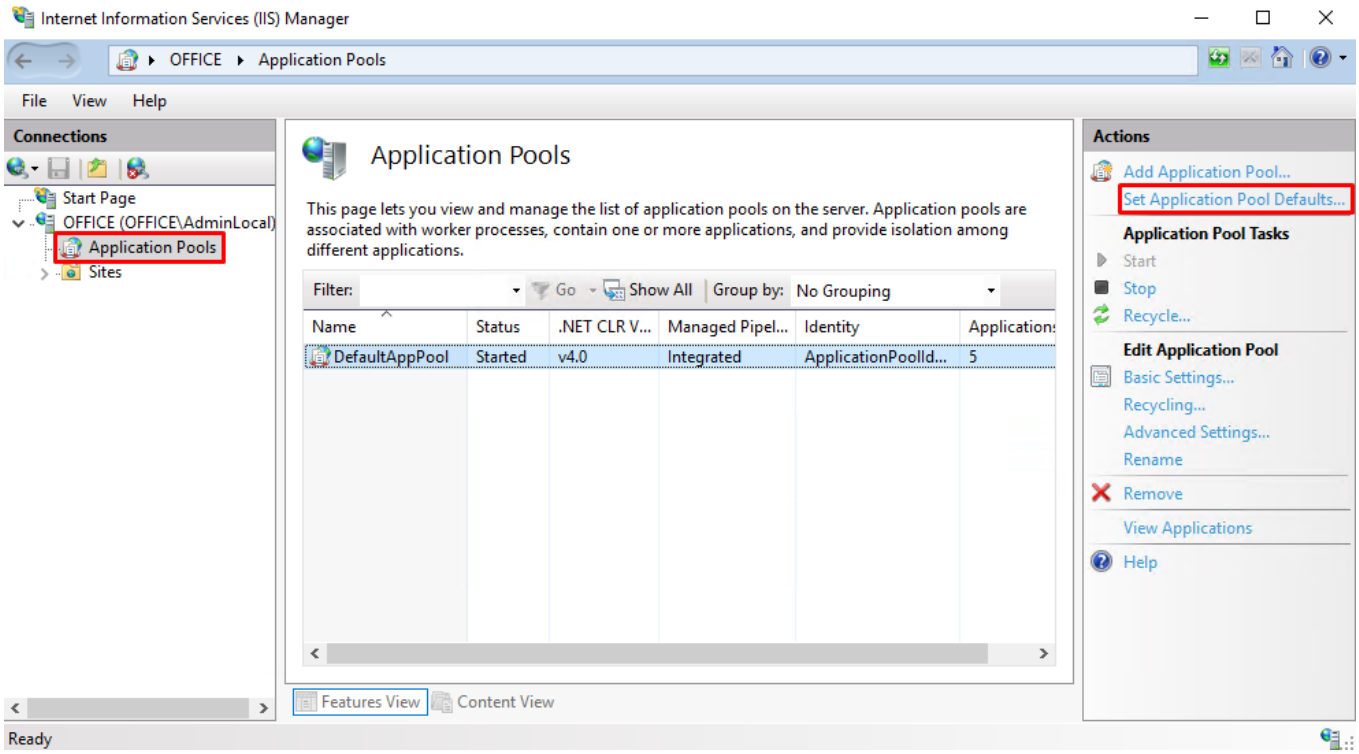
4.7.1 Identity settings via application pool preferences

4.7.1.1 Predefined “NetworkService” account

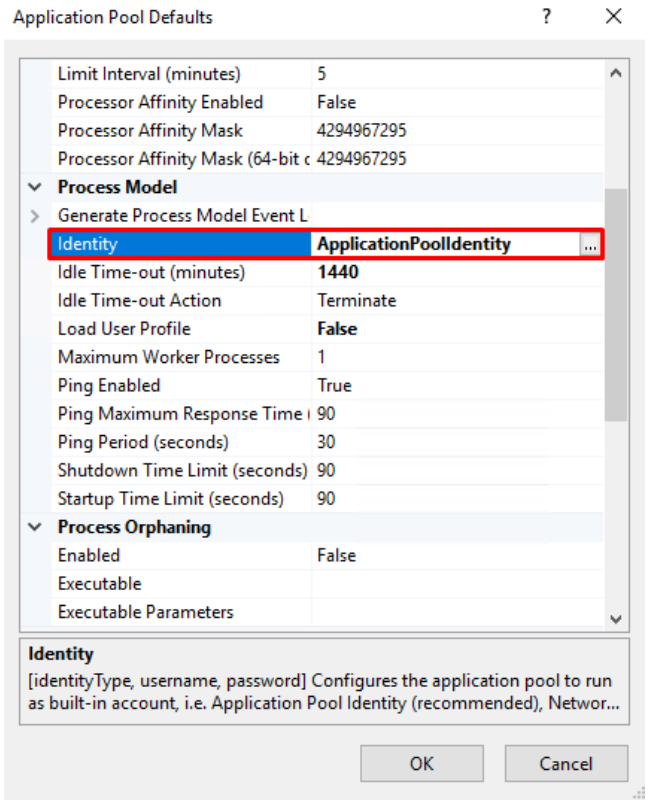
The standard settings of “DefaultAppPool” are described below, when the database server is installed on the same computer as the application itself, resp. IIS.

Go to “Application Pools” and set “Application Pool Defaults” in the “Actions” section, or right-click on the IIS desktop and select “Set Application Pool Defaults”.

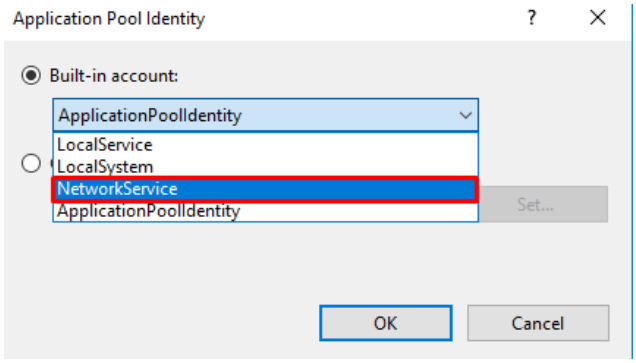
This way you change the default settings for all application pools so that you do not have to set each application pool separately.



Select “Identity” and click on the three dots on the right in the dialog.



Select and set “NetworkService” from the list.



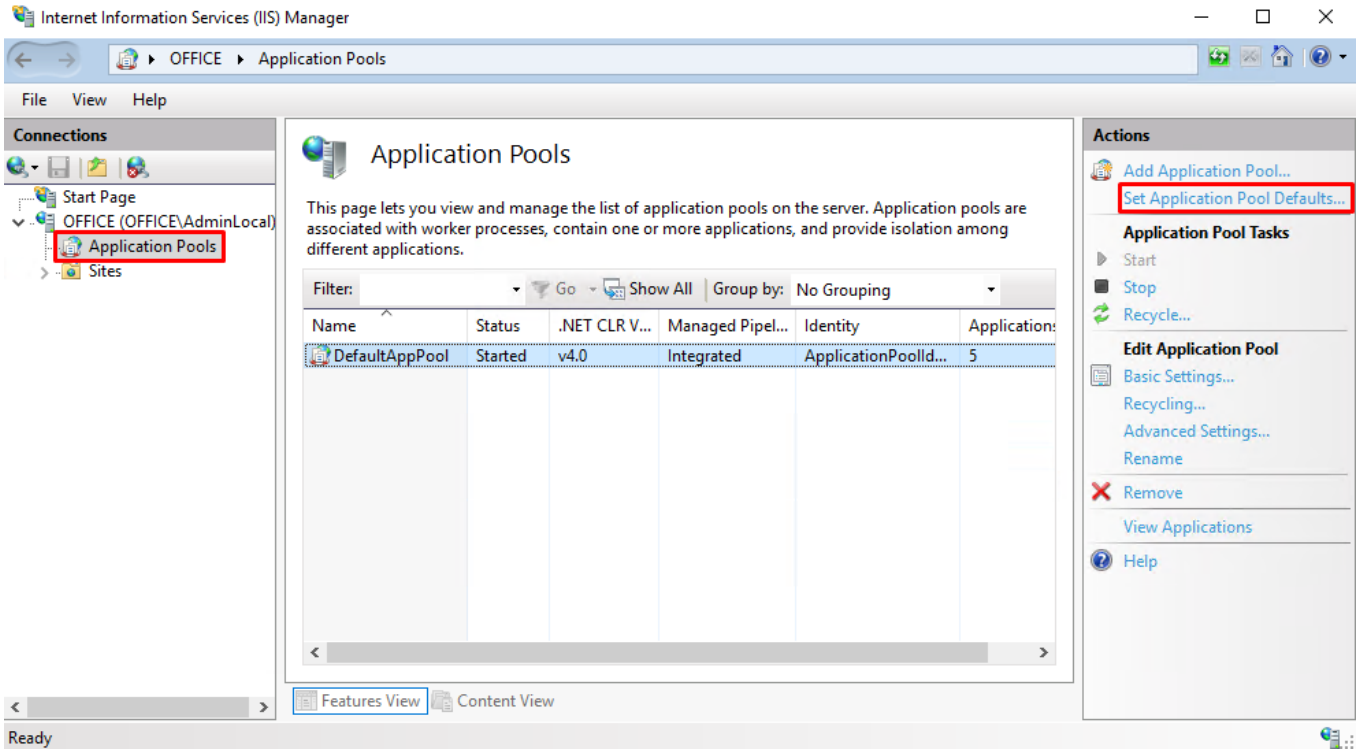
4.7.1.2 Own technology account

⚠ *We typically set up our own technology account when the database server is installed on a different computer than the application itself, or IIS. Otherwise, we leave the identity set to "NetworkService".*

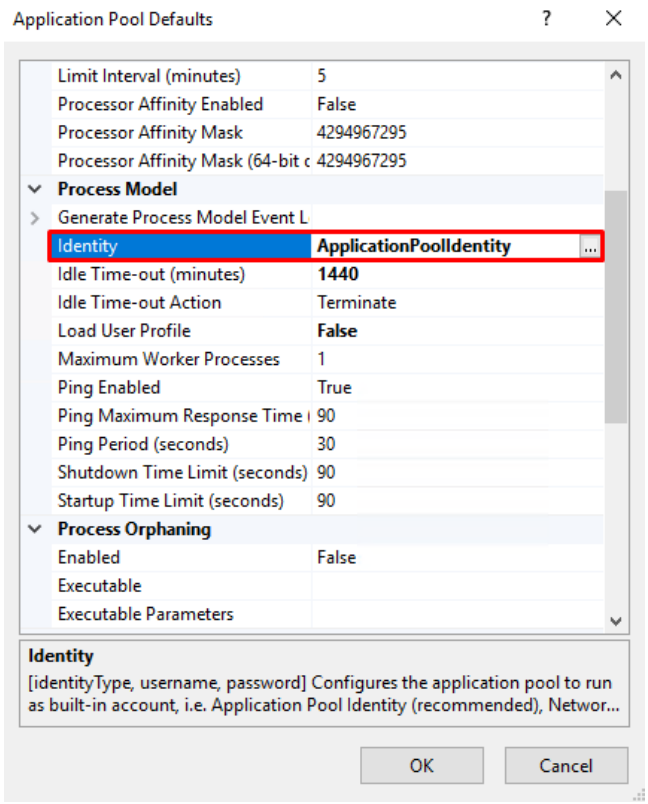
ℹ *We typically set our own technological account in the case when the database server is installed on a different computer than the application itself, resp. IIS. Otherwise, we leave the identity setting to "NetworkService".*

☞ Go to "Application Pools" and "Set Application Pool Defaults" in the "Actions" section, or right-click on the IIS desktop and select "Set Application Pool Defaults".

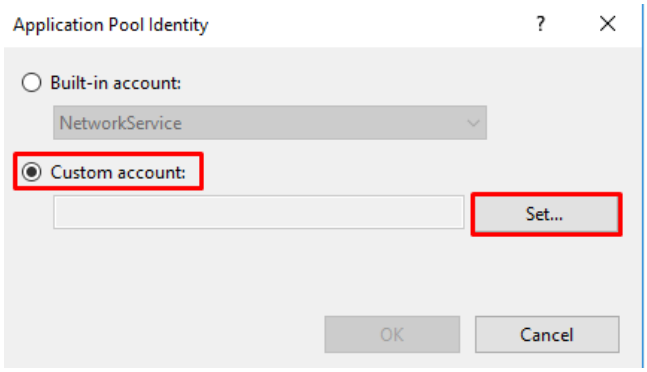
ℹ *This way you change the default settings for all application pools so that you do not have to set each application pool separately.*



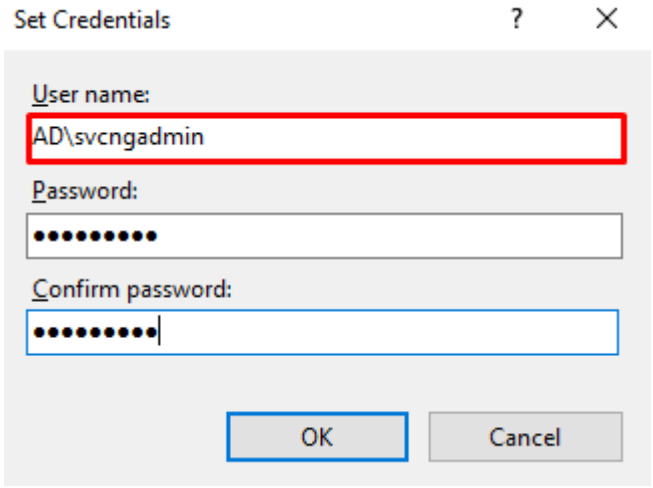
Select “Identity” and click on the three dots on the right in the dialog.



Check “Custom account” and click on the “Set…” button.



For example, set the username to “AD\svcngadmin” and choose a password.



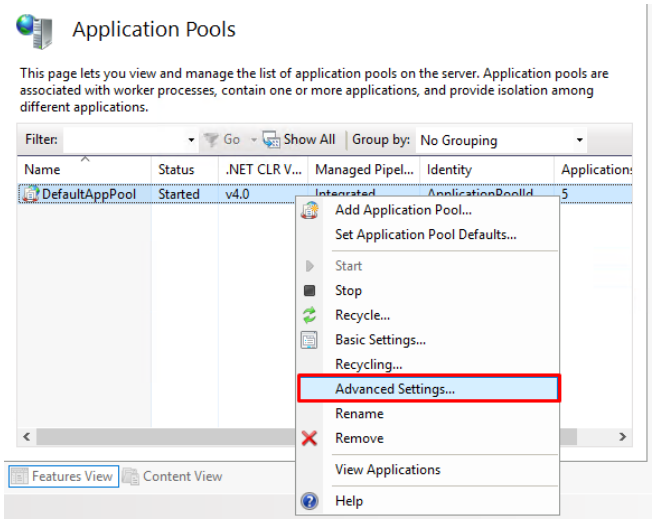
4.7.2 Identity settings for individual application pools

If the identity has been set through the application pool preferences, which are listed in the previous chapters, you only need to check its settings.

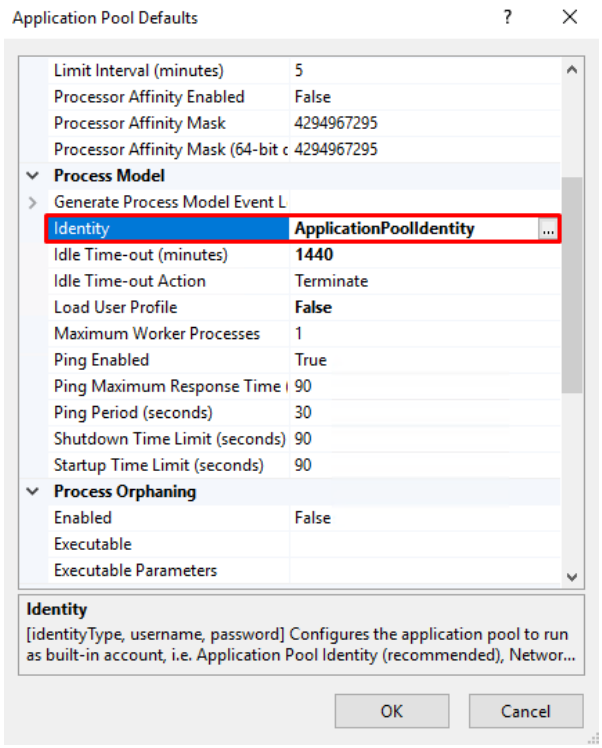
4.7.2.1 Predefined “NetworkService” account

The standard settings of “DefaultAppPool” are described below, when the database server is installed on the same computer as the application itself, resp. IIS.

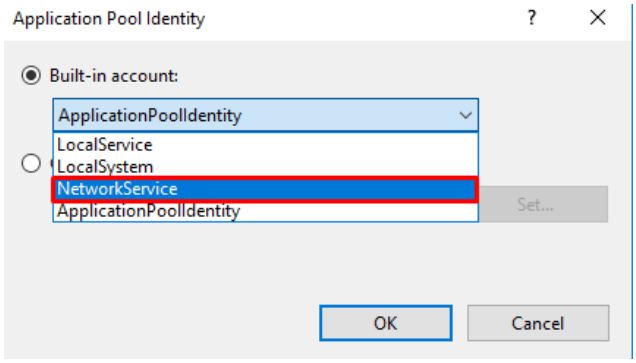
To set the identity, right-click on “DefaultAppPool” and select “Advanced Settings”.



Select “Identity” and click on the three dots on the right in the dialog.



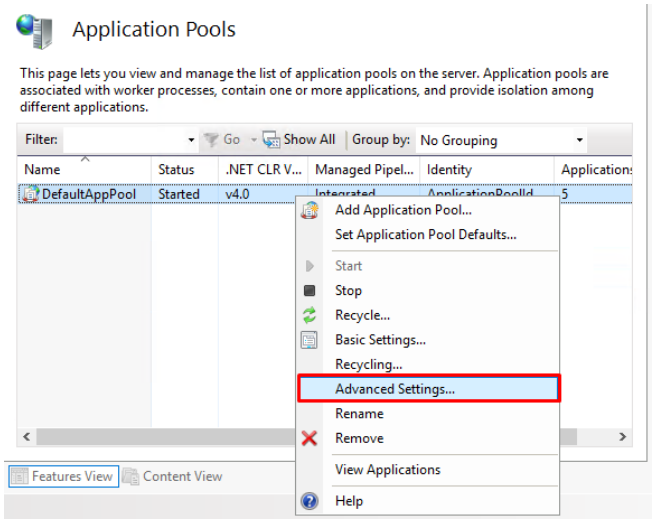
Select and set “NetworkService” from the list.



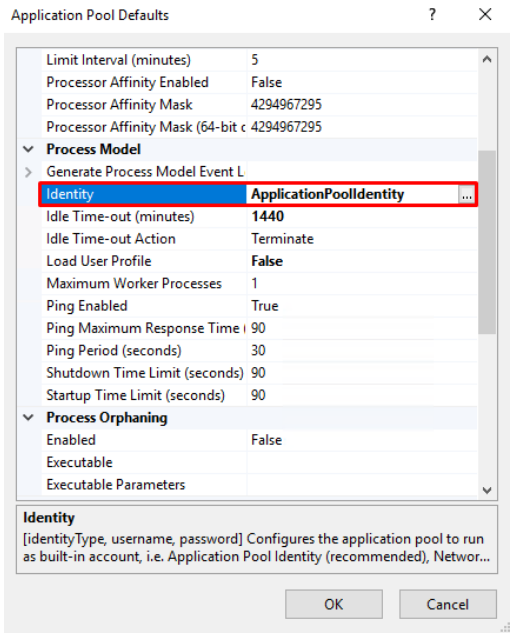
4.7.2.2 Own technology account

We typically set our own technological account in the case when the database server is installed on a different computer than the application itself, resp. IIS. Otherwise, we leave the identity setting to "NetworkService".

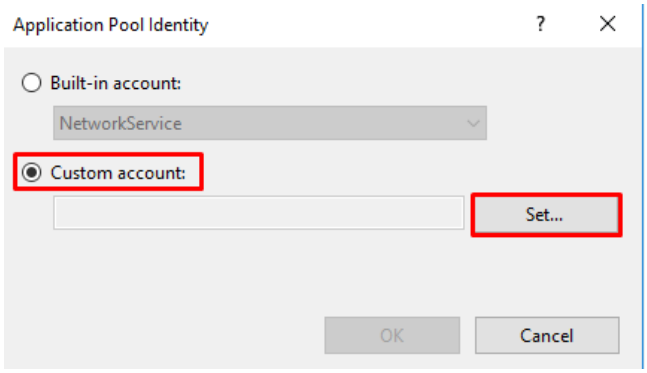
To set the identity, right-click on "DefaultAppPool" and select "Advanced Settings".



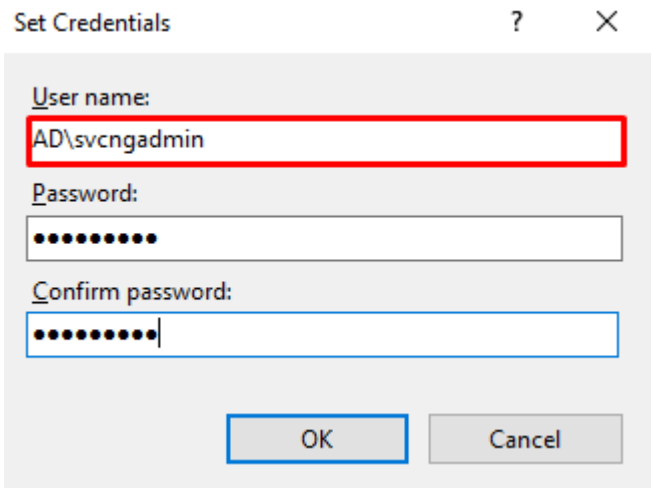
Select "Identity" and click on the three dots on the right in the dialog.



- Check “Custom account” and click on the “Set…” button.



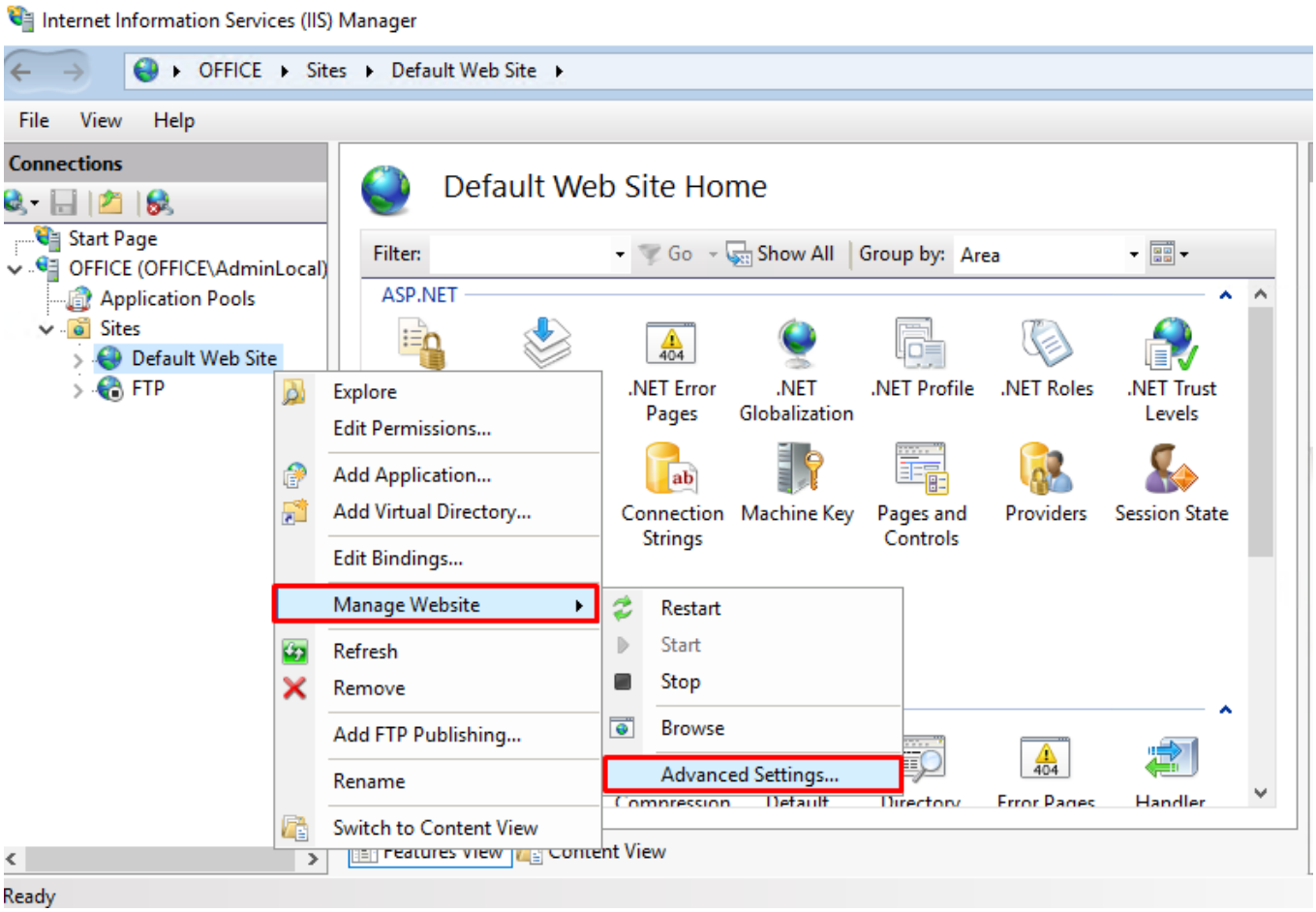
- For example, set the username to “AD\svcngadmin” and choose a password.



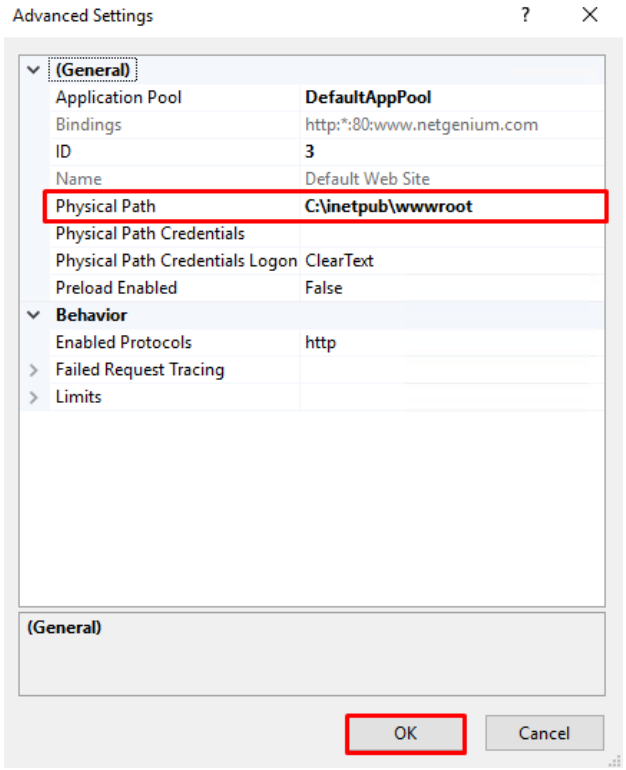
4.8 Default site directory

- *The default site directory, or root, is the directory on the disk where the tree structure of subdirectories and files within a site is stored. By default, a clean installation of IIS creates a single site named "Default Web Site" that has "C:\inetpub\wwwroot" set as the default site directory. The default site directory settings can be changed, so it is up to the administrator to decide which directory to choose as the default site directory. Any number of sites can be created in IIS, with each site having its own default site directory.*
- *If you want to change the default site directory, follow the instructions below.*

Open the "Internet Information Services" application and right-click on the "Default Web Site" and select "Manage Website" –> "Advanced Settings…".



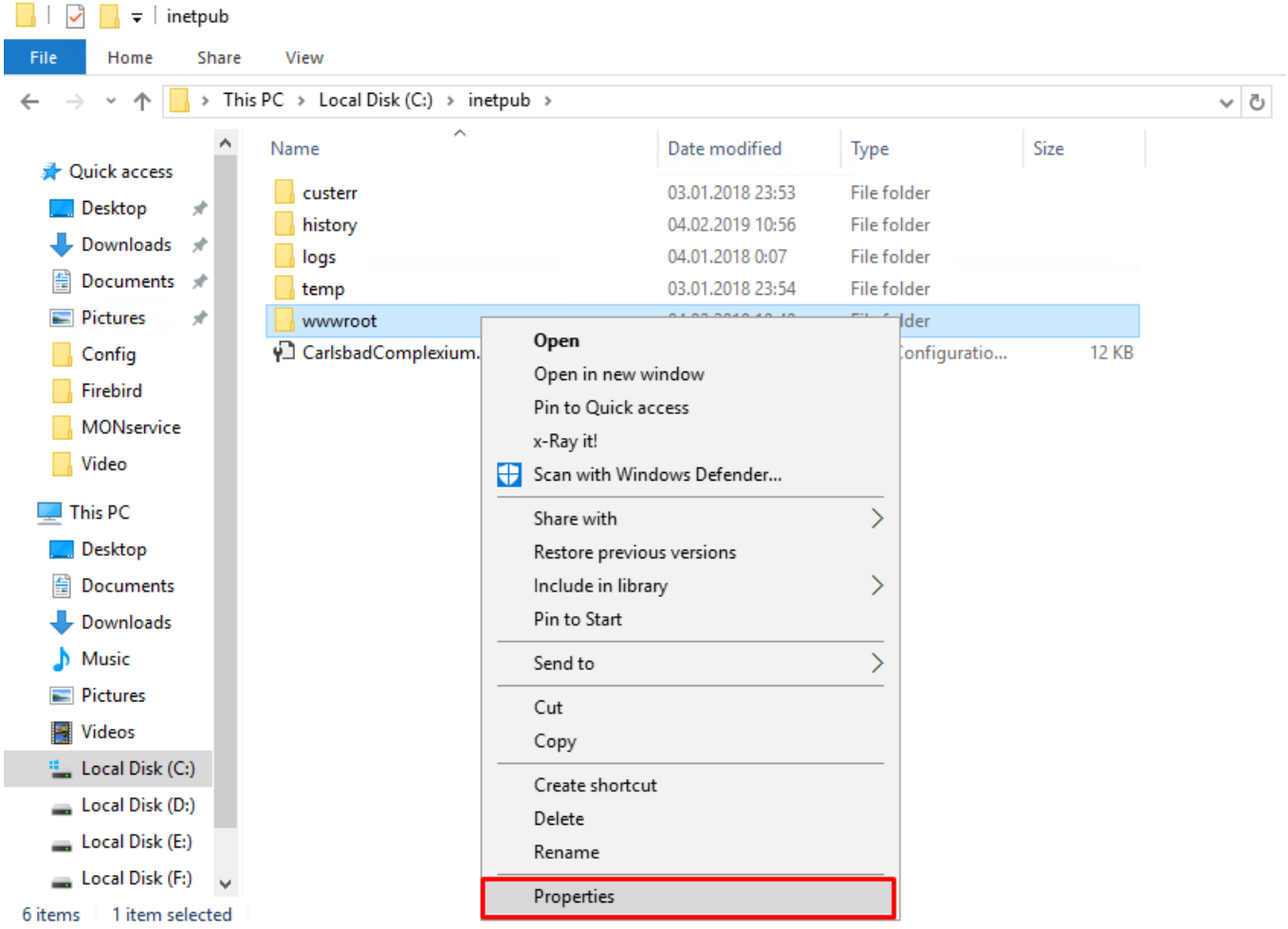
Change the set physical path to the path you selected and press the “OK” button.



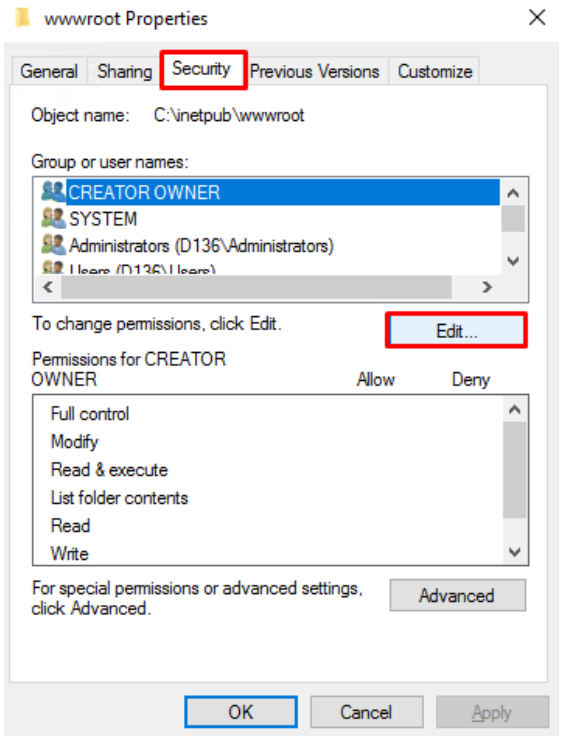
4.9 Set default directory permissions

- *This step is important so that your NET Genium can write files to disk (for example, file attachments, cascading styles, log files, etc.).*
- *Before setting the authorization itself, it is important to realize under which account the application pool is configured, see the chapter "Identity settings", and therefore for which account we will set the authorization. Whether it is a predefined "NetworkService" account or your own technology account. The procedure below describes how to set permissions for the "NetworkService" account. This procedure also changes the default permissions for all other subdirectories.*

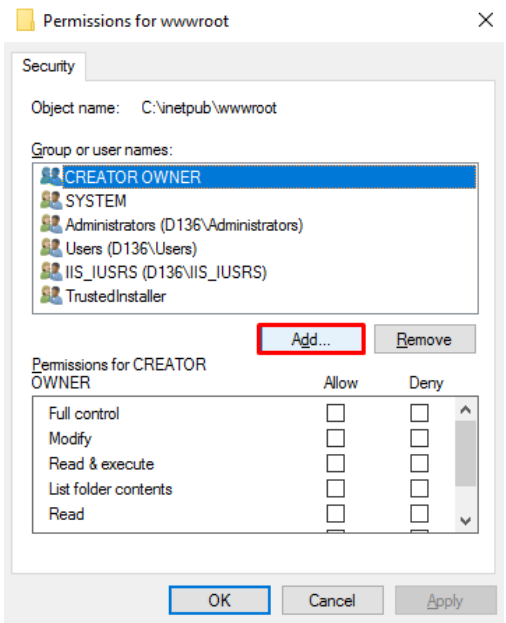
Go to the location of your default web directory, eg "C:\inetpub", right-click on the "wwwroot" folder and select "Properties".



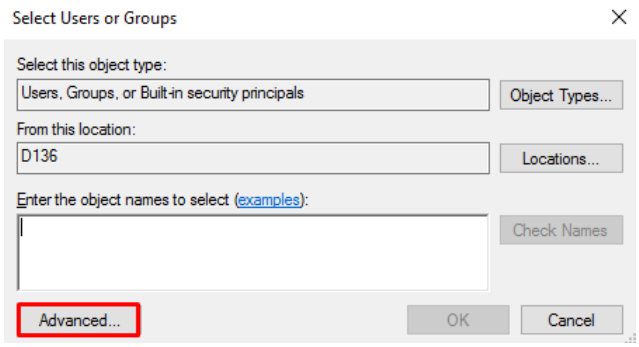
Go to the “Security” tab and click on the “Edit” button.



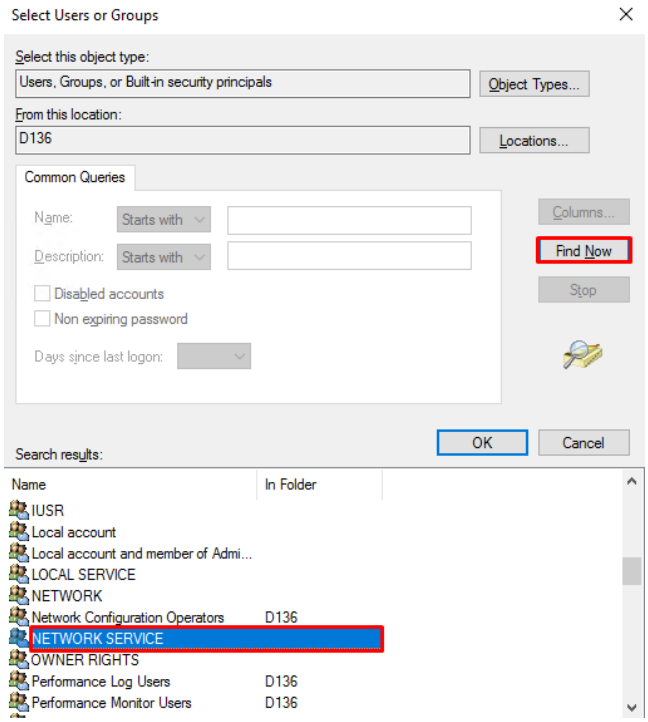
Click on the “Add” button.



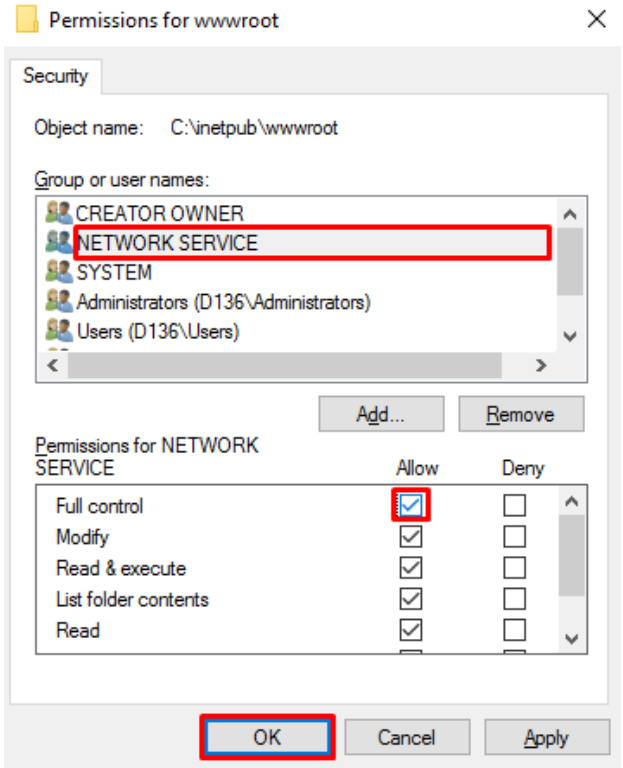
Then click on the “Advanced” button.



Search for “NETWORK SERVICE” via the “Find Now” button and click on the “OK” button.



Highlight the “NETWORK SERVICE” user group, check “Full control” and confirm with “OK”.

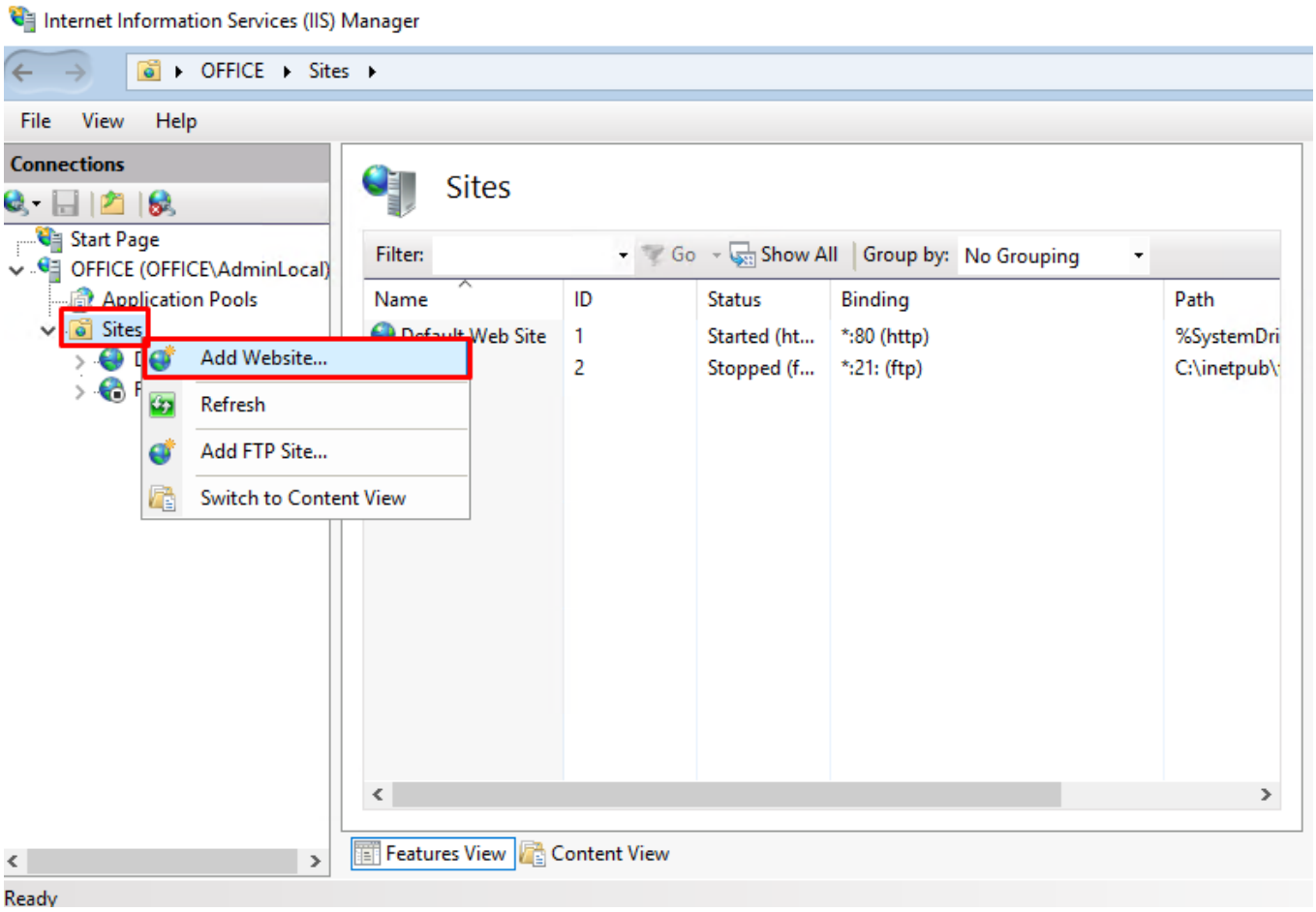


If it is not possible to set the permissions of the default directory, follow the steps given in the chapter Installing NET Genium via "Setup.exe".

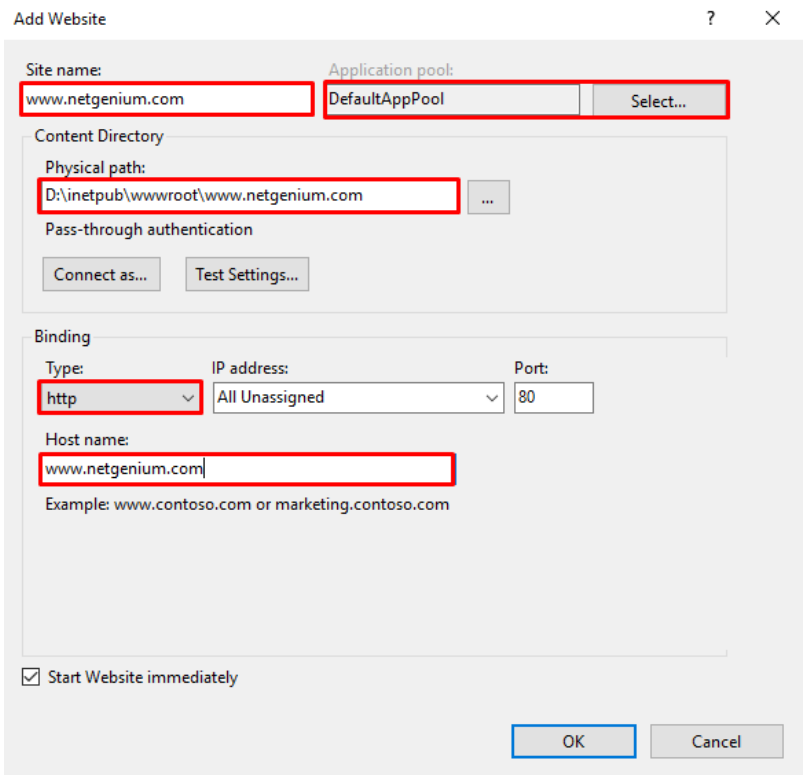
4.10 Creating a new site

By default, a clean installation of IIS creates a single site named "Default Web Site" that has "C:\inetpub\wwwroot" set as the default site directory. On web servers, other sites are usually stored on a different disk (separate disk space) than the default "C", typically in the "D:\inetpub\wwwroot" directory. On the local computer, the default "C" will suffice.

In IIS, right-click on "Sites" and select "Add Website".



- In the newly opened window fill in:
  - The name of the site
  - Set the application pool to “DefaultAppPool”
  - The physical path
  - Http type
  - Hostname
- Click the “OK” button.



5 Download and unzip NET Genium to the destination directory

- Download the archive with the latest full version of NET Genium from the URL: "https://www.netgenium.com/download/netgenium4.zip".
- Unzip the contents of the archive to the location where you want NET Genium installed and saved. In real deployment, a different disk (separate disk space) is usually used than the default "C", but within this document, to simplify NET Genium, we will install it in the default IIS directory. So we will unzip the archive to the location "C:\inetpub\wwwroot\netgenium".

6 Database server installation – Firebird or MS SQL

- *Before installing NET Genium, you need to install a database server, either Firebird or MS SQL Server. After installing the database server, you can continue installing NET Genium.*
  - *To install Firebird, see the Firebird Installation Guide.*
  - *The procedure for installing MS SQL Server can be found in the manual "Installation and configuration of MS SQL Server DB".*

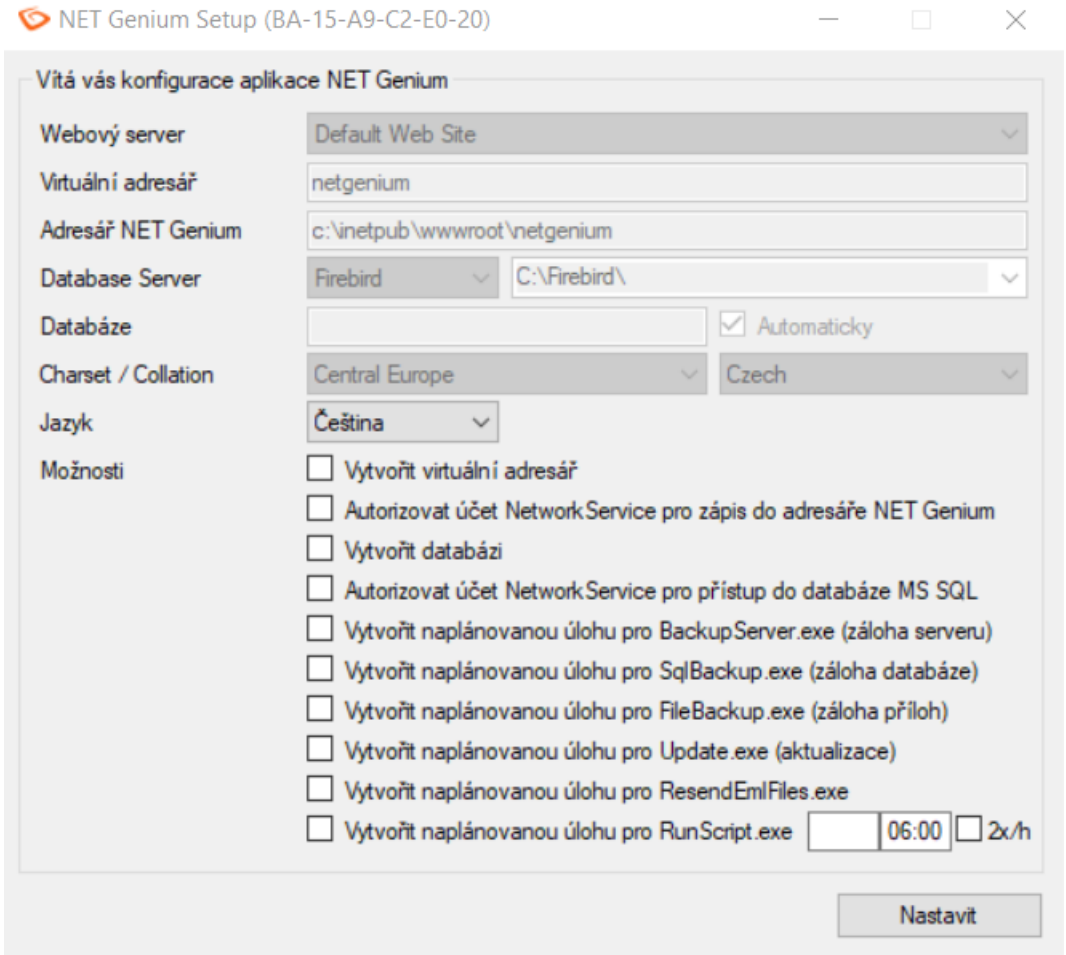
7 Installing NET Genium

- *NET Genium can be installed in two different ways:*
  - Via "Setup.exe"
  - Via "IIS"

7.1 NET Genium installation via "Setup.exe"

- Run the "Setup.exe" program, which is located in the "bin" directory of NET Genium. After its first run, only the libraries will be created for it to run properly, then run "Setup.exe" again ("Setup.exe" must be run as an administrator).

- *If you have a NET Genium license, copy your license file "license.txt" to the "Config" directory of NET Genium.*
- *The introductory window of the program looks like this:*



Check the options you want to select as described below:

- "Create virtual directory"
  - Check this option if you want to convert the NET Genium directory on disk to the IIS virtual directory (run the equivalent of a manual NET Genium installation performed in IIS).
- "Authorize a NetworkService account to enroll in the NET Genium directory"
  - Check this option if you want to set the rights for the "NetworkService" account to full access to the NET Genium directory. If you have set the rights according to the chapter "Setting the permissions of the default directory" for the entire "wwwroot", it is not necessary (if this option is checked) to set the rights individually. Thus, the rights for each individual NET Genium are already preset.
- "Create database"
  - Check this option if you want to create a new database and your database server is located on the same computer as the application itself, resp. IIS. If the database server is located on another computer, the database on the database server must be created manually, and then the "ConnectionString.txt" file must be created in the "Config" directory of NET Genium, which contains the definition of the connection string to the database.
  - Specify what type of database you will use – Firebird or MS SQL Server.
  - Leave the "Automatic" option checked – the database will have the same name as the virtual directory, or specify your own database name.
  - In the case of Firebird, select the directory where the database is to be stored (the default location is "C:\Firebird").
  - In the case of MS SQL Server, select the instance in which the database will be created.
- "Authorize NetworkService account to access MS SQL database"
  - Check this option if you use an MS SQL database and your database server is located on the same computer as the application itself, resp. IIS.
  - Authorization consists of creating a login to the "NetworkService" account and assigning the "sysadmin" role.
- "Create a scheduled task for BackupServer.exe"
  - Check this option if you want to automatically create a scheduled task for regular server and database backups.
- "Create a scheduled task for SqlBackup.exe (database backup)"
  - Check this option if you want to automatically create a scheduled task for regular database backups.
- "Create a scheduled task for FileBackup.exe (attachment backup)"
  - Check this option if you want to automatically create a scheduled task for regular file attachment backups.
- "Create a scheduled task for Update.exe"
  - Check this option if you want to automatically create a scheduled task for regularly updating NET Genium to the new version.

- "Create a scheduled task for ResendEmlFiles.exe"
    - Check this option if you want to automatically create a scheduled task for regularly sending unsuccessful e-mails from the "Logs" directory.
- "Create a scheduled task for RunScript.exe"
    - Check this option if you want to automatically create a scheduled task to run a script with a given ID, at a specified time, or with the option to repeat the task regularly twice an hour for 18 hours.

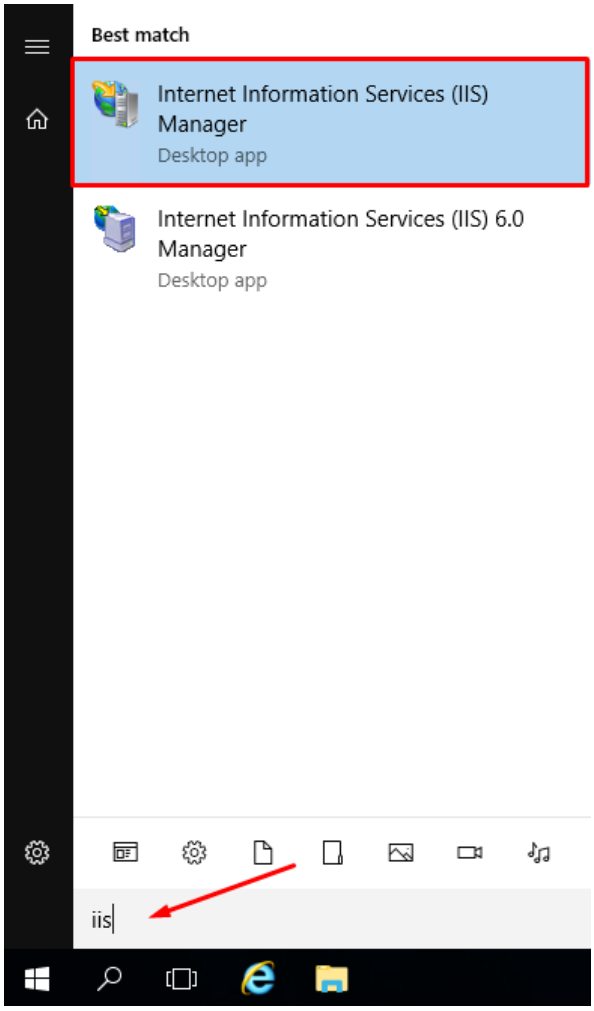
Click on the "Set up" button to start the installation. When the installation is complete, the program displays a message about this fact.

After successful creation of the database, the file "ConnectionString.txt" is created automatically.
A "DefaultLanguage.txt" file is created in the "Config" directory, in which the abbreviation of the default portal language is placed. This will be the default language according to which all subsequently created NET Genium applications will be created.

7.2 Installing NET Genium over "IIS"

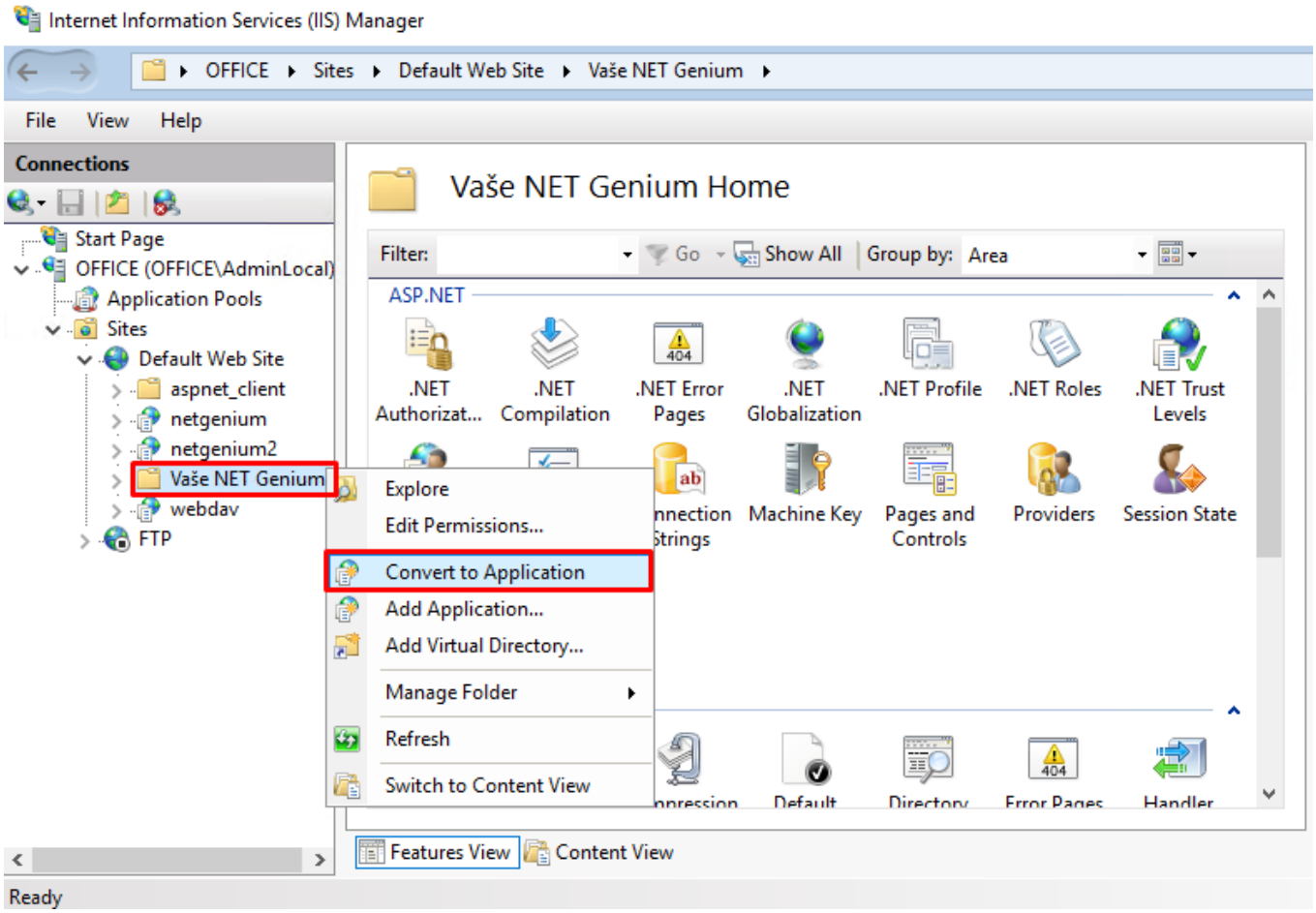
Only install via IIS if you have a NET Genium database created and you have a "ConnectionString.txt" file in the "Config" directory, which contains the definition of the connection string to the database.

Find "Internet Information Services (IIS) Manager" via the "Start" menu.



In the open window on the left, click on the tree structure of the drop-down list up to “Default Web Site”, select the directory on your NET Genium's disk, right-click on it, and select “Convert to Application” from the menu.

This step assumes that NET Genium is expanded in the “netgenium” directory in the default site directory (for example, “C:\inetpub\wwwroot\netgenium”). See the chapter “Downloading and unpacking NET Genium to the destination directory”.



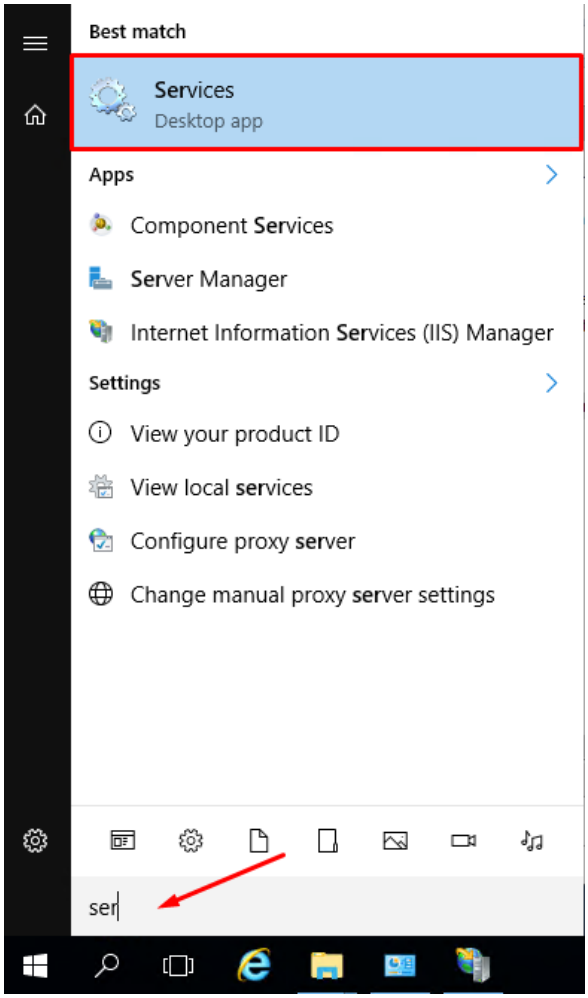
7.3 Additional settings

⚠ *The settings described in this chapter are only intended for use by web servers.*

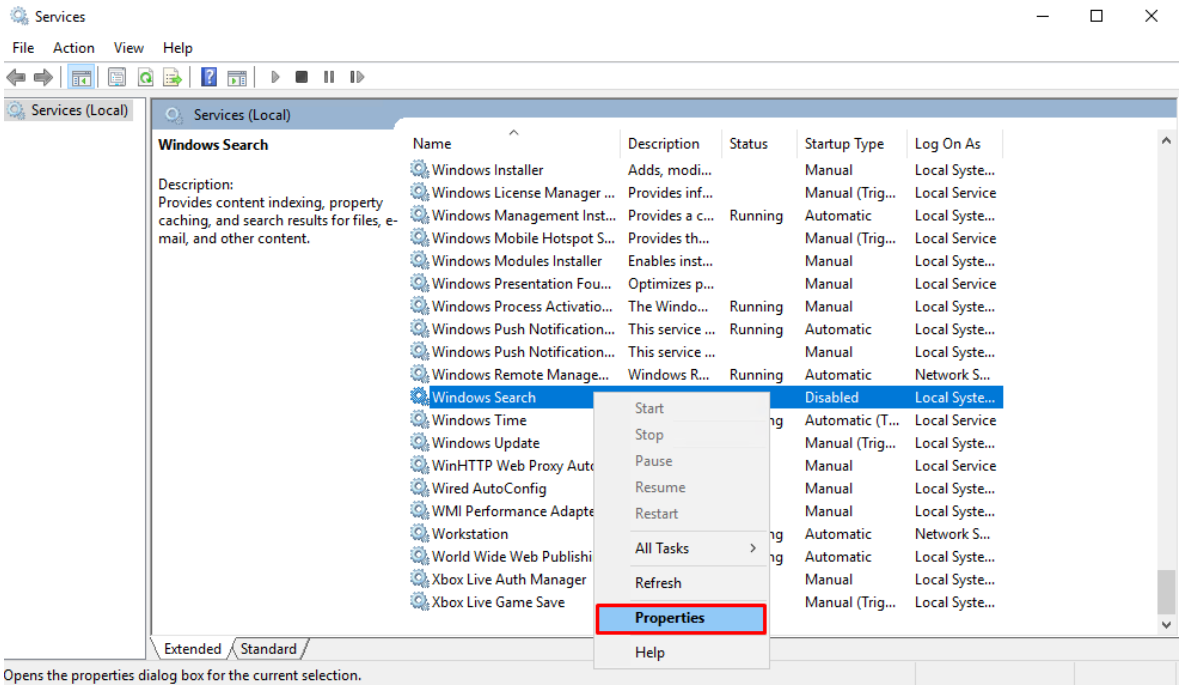
7.3.1 File indexing settings for “Windows Search”

7.3.1.1 Turn on Windows Search

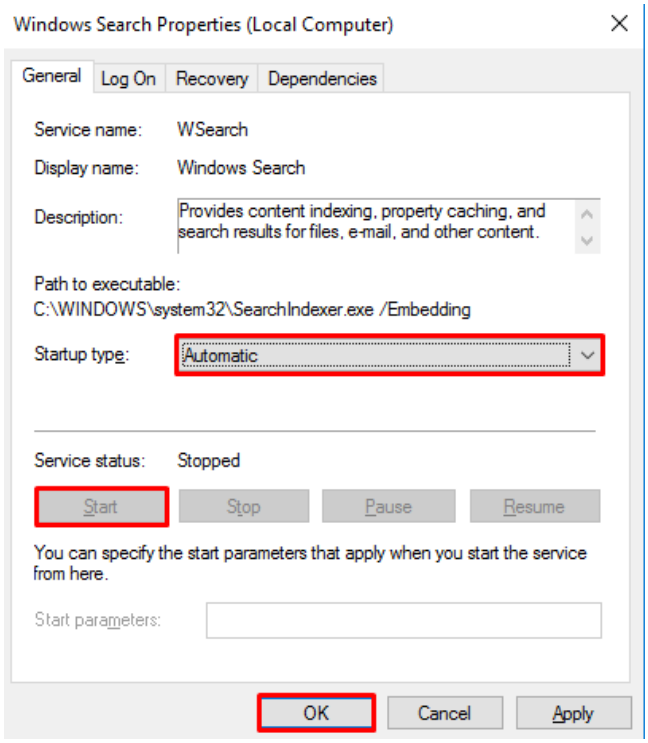
Find “Services” via the “Start” menu.



- Right-click on “Windows Search” and select “Properties”.

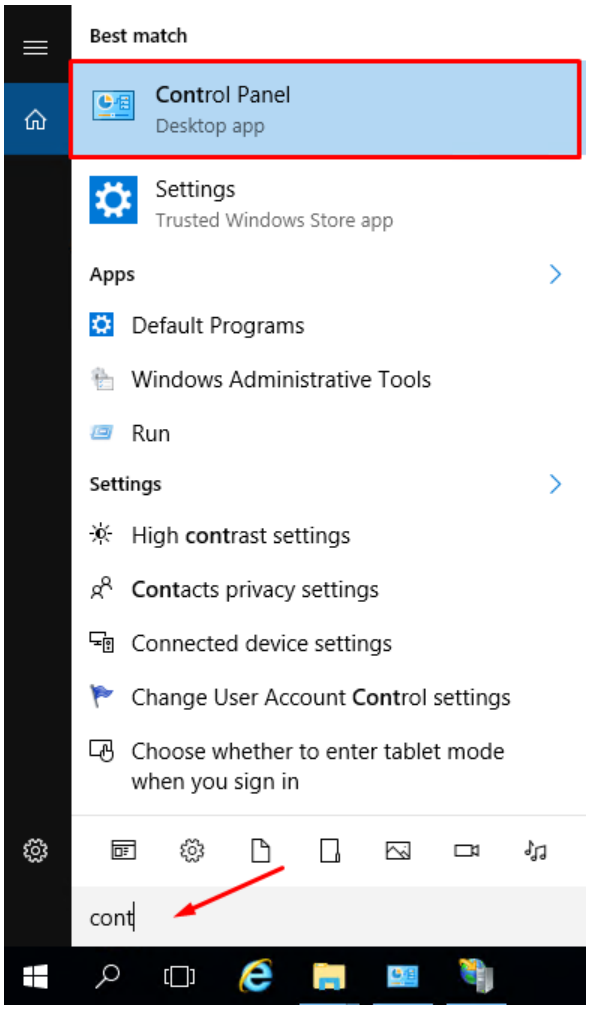


- Set the startup type to “Automatic” and if the service has been disabled, click on the “Start” button.
- Confirm the changes with “OK”.

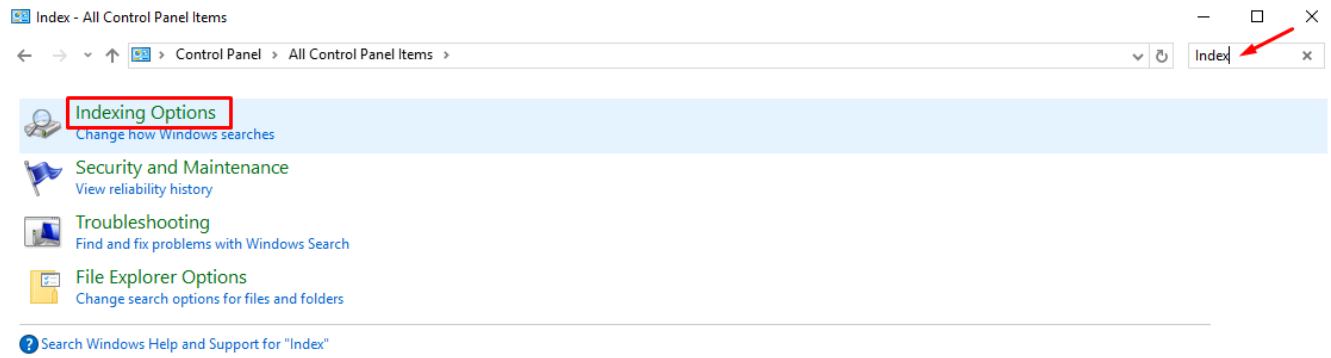


7.3.1.2 File indexing settings for “Windows Search”

Find “Control Panel” via the “Start” menu.



In the control panel, type “index” into the search box. Select “Indexing Options” from the results found.

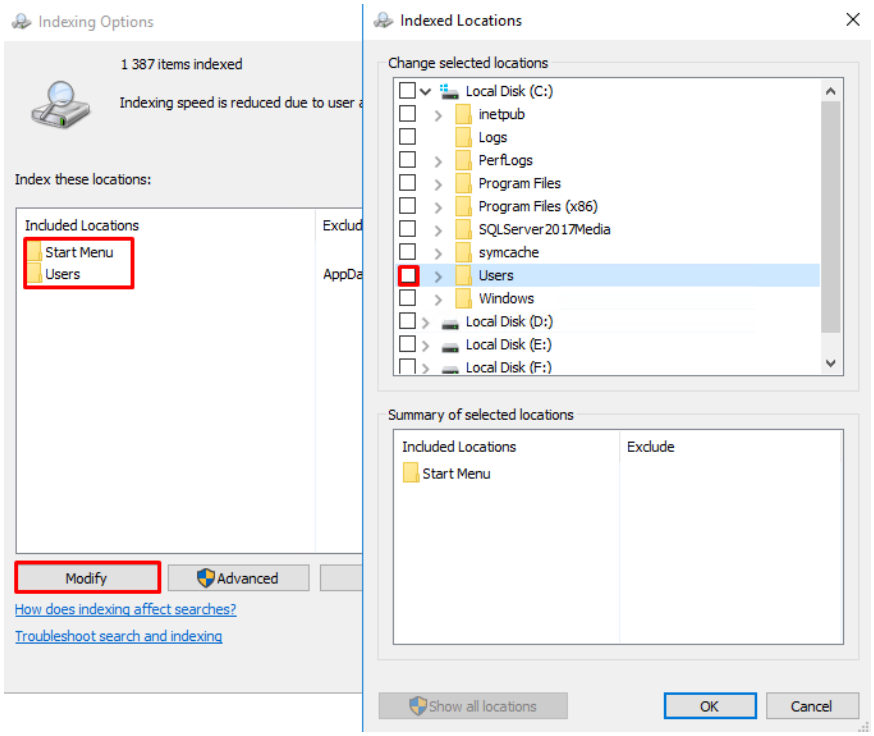


In the newly opened “Indexing Options” window, click on the “Modify” button. A window opens with a selection of the placements you want to include in the index. Check the box next to the NET Genium “Files” directory. Click “OK” in the last step.

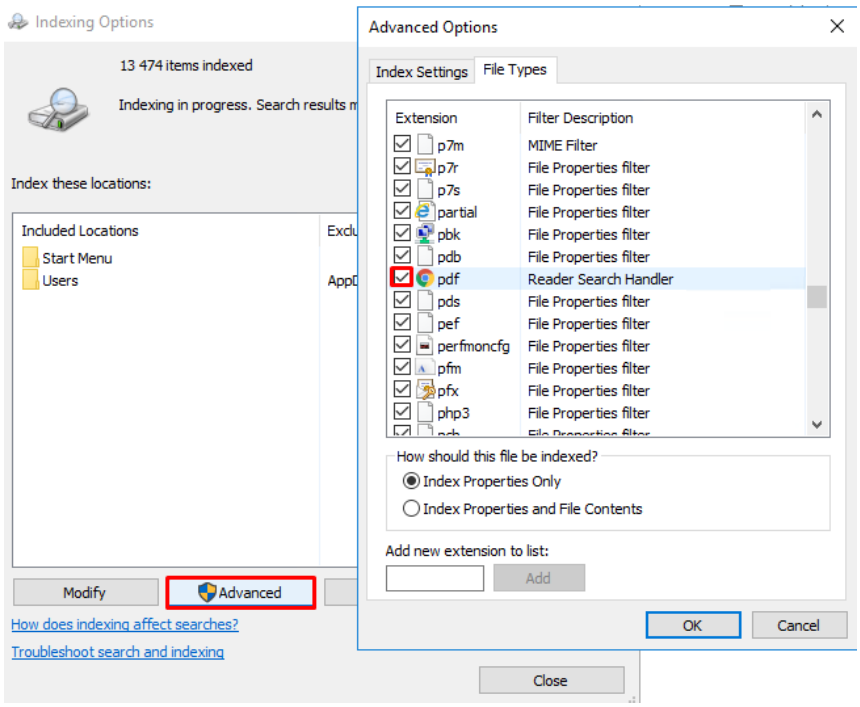
If you are setting up file indexing for the server operating system, we recommend that you uncheck all default indexing locations. They are:

- Internet Explorer History
- Start menu
- Users

This setting for the server operating system is shown in the first figure.



For Windows Search, you can check which file types are included in the index. For example, to check whether the “pdf” files are actually indexed, click on the “Advanced” button – in the new dialog, click on the “File Types” tab and check the “pdf” files.



8 Authentication settings

⚠ *The settings described in this chapter are only intended for use by web servers.*

ℹ *Authentication settings can be set for 3 types of access (login) to your NET Genium.*

Anonymous approach

ℹ *Anonymous access is used when you want to connect to your NET Genium either over the Internet or over an internal computer network, and you do not require automatic user authentication using the integrated IIS features.*

Windows authentication

ℹ *Windows authentication is used if you want to connect to your NET Genium either over the Internet or over an internal computer network, and you require automatic user authentication using the built-in IIS features.*

⚠ *In this configuration, it is not possible to access NET Genium anonymously via the Internet or via an internal computer network.*

⚠ *Client stations must have the NET Genium address set in the intranet zone, see the "Web Browser Settings" manual.*

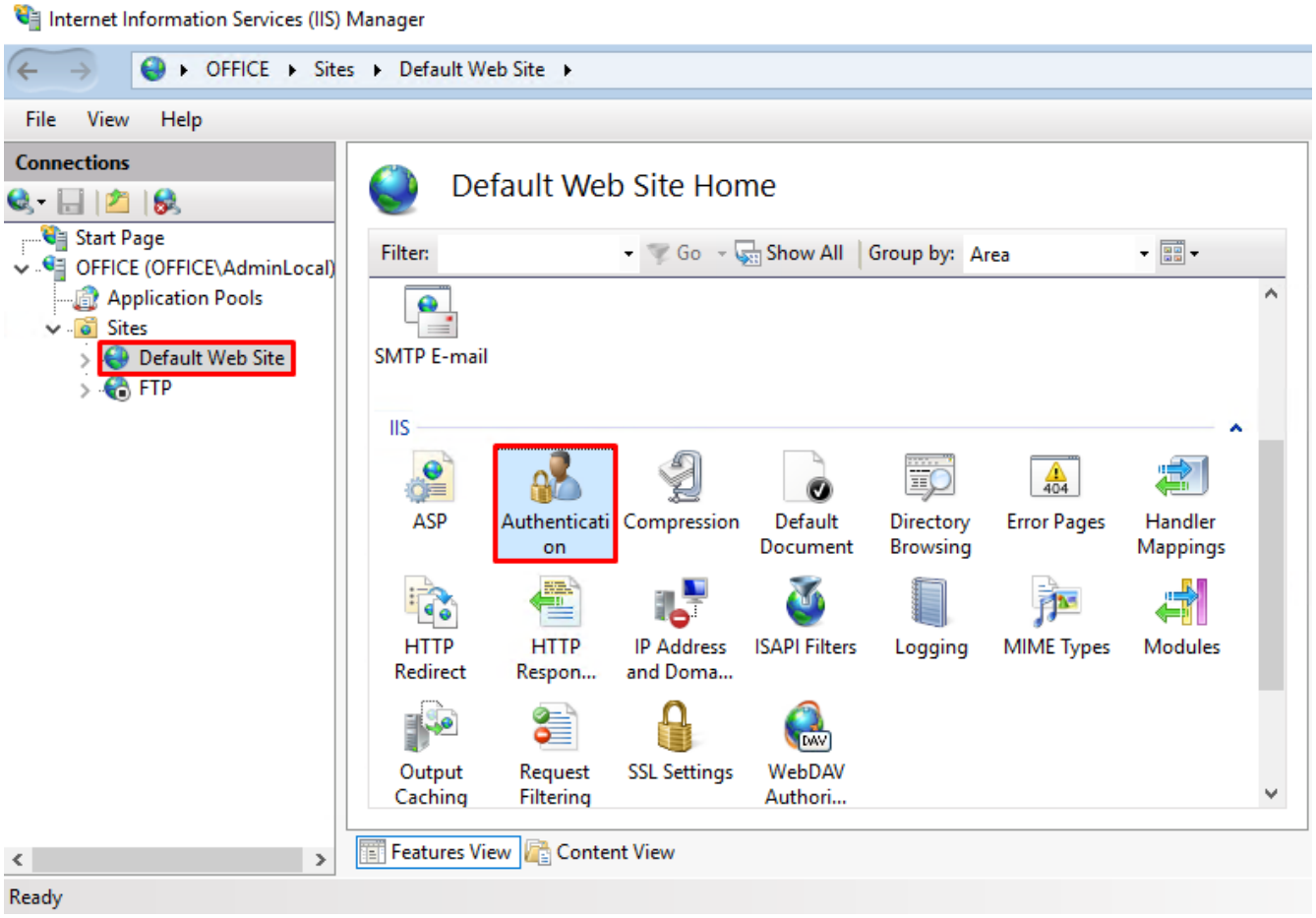
Combined approach

ℹ *Combined access is used when we need to use a combination of anonymous access and Windows authentication.*

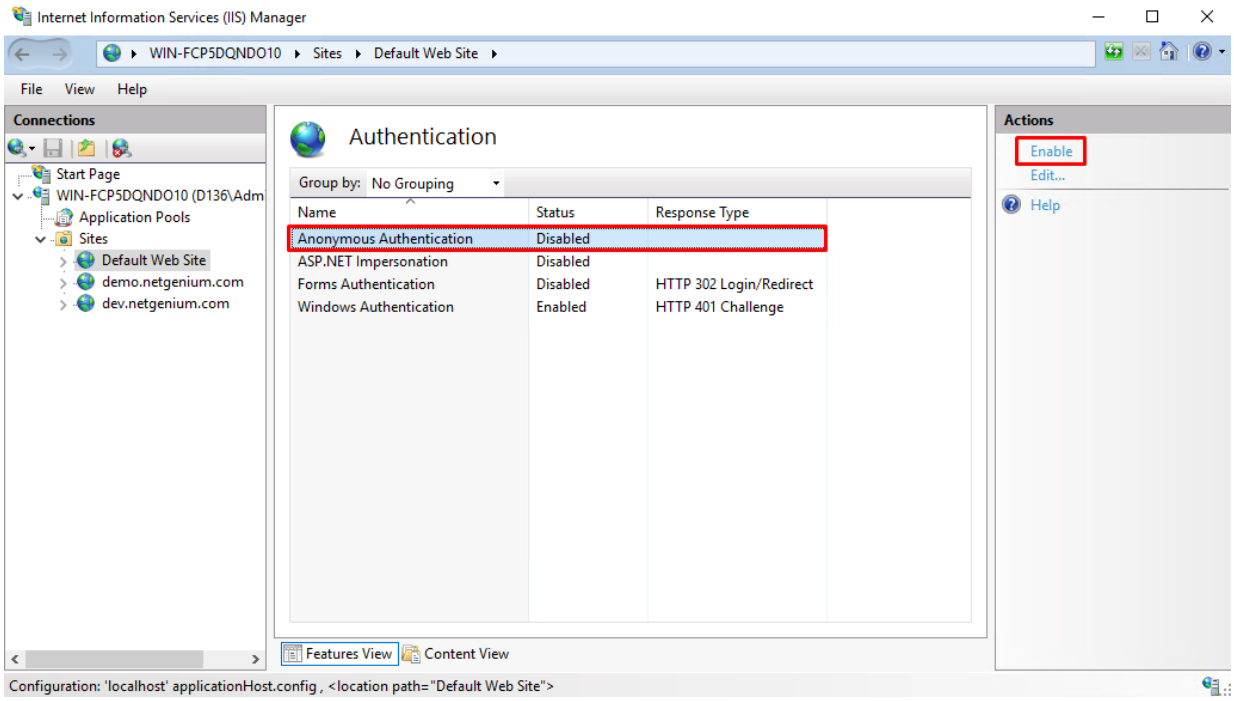
8.1 Anonymous approach

- *Anonymous access is used when you want to connect to your NET Genium either over the Internet or over an internal computer network, and you do not require automatic user authentication using the integrated IIS features.*
- *Before setting up authentication in IIS, it is important to know whether to set the authentication type for the entire site or just for the virtual directory. Below is the procedure for the entire site.*

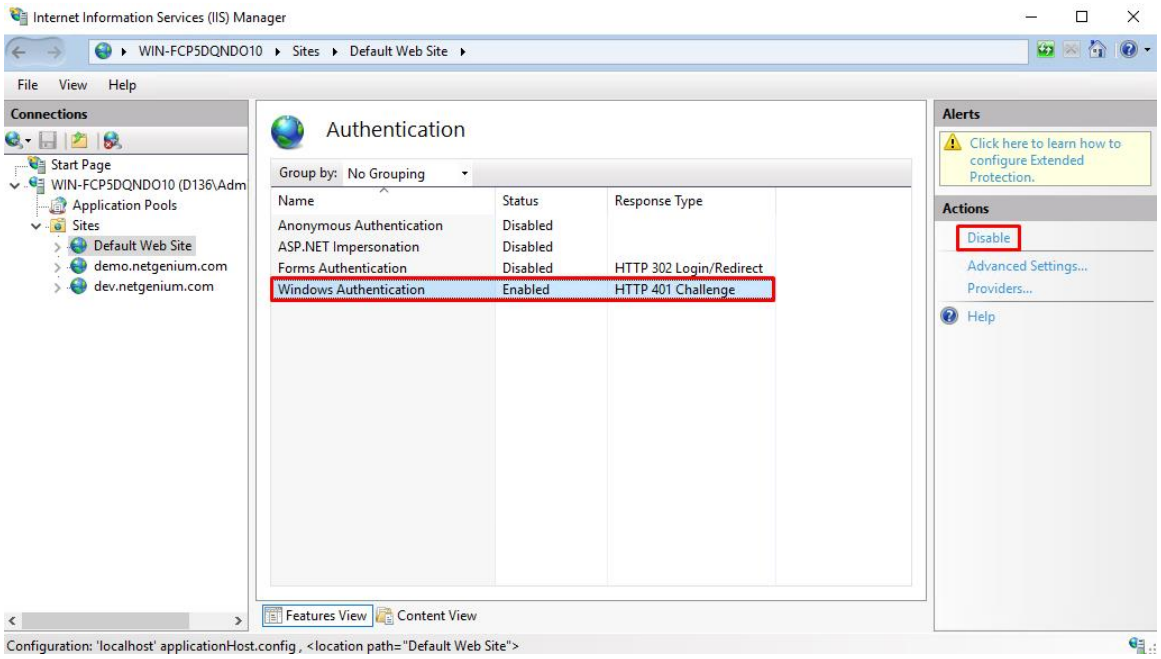
Go to IIS settings, select “Default Web Site” and select “Authentication” in the “IIS” section.



In the “Authentication” section, select “Anonymous Authentication” and in the “Actions” section, click on “Enable”.



Then select “Windows Authentication” in the “Authentication” section and click “Disable” in the “Actions” section.



8.2 Windows authentication

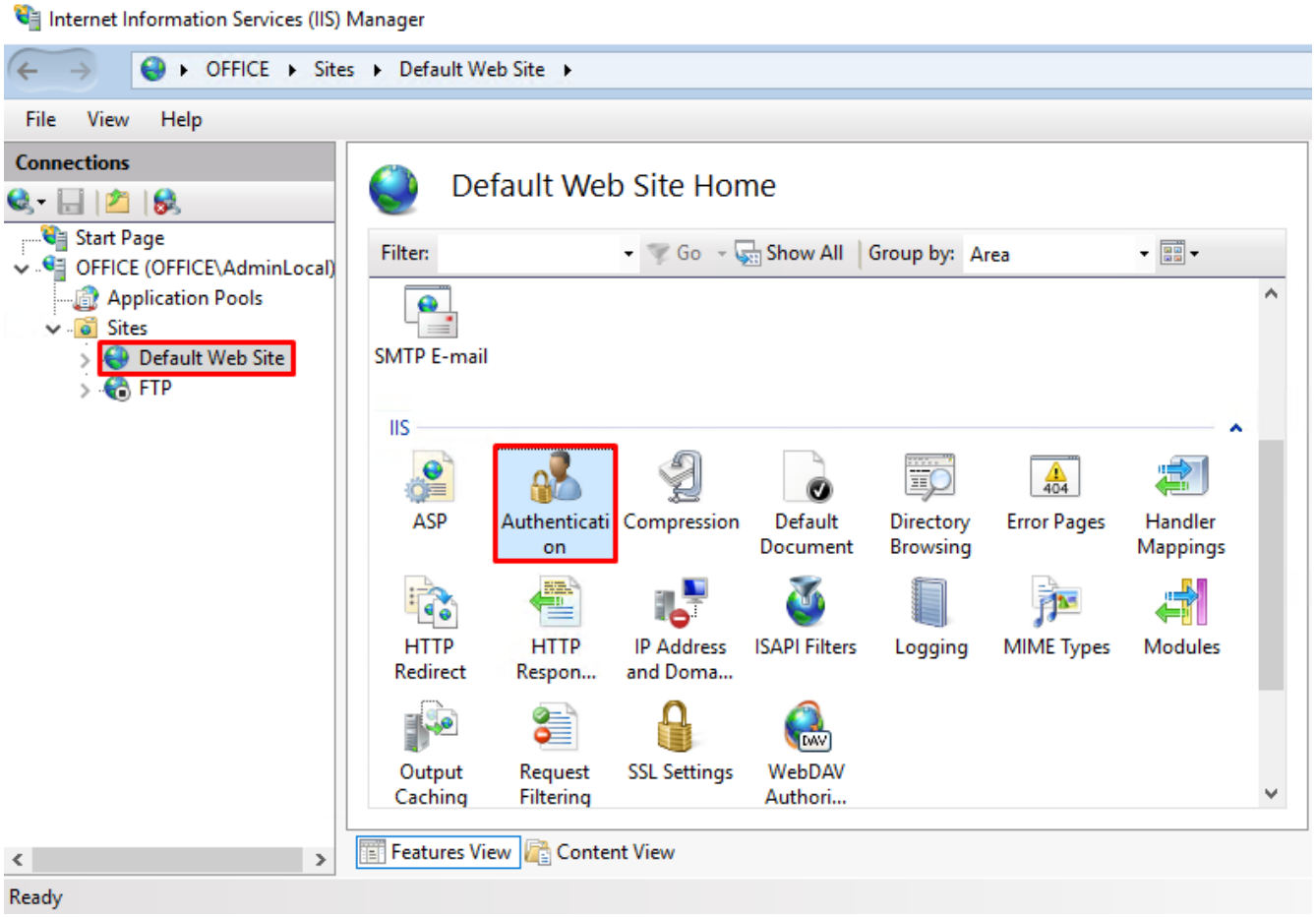
Windows authentication is used if you want to connect to your NET Genium either over the Internet or over an internal computer network, and you require automatic user authentication using the built-in IIS features.

In this configuration, it is not possible to access NET Genium anonymously via the Internet or via an internal computer network.

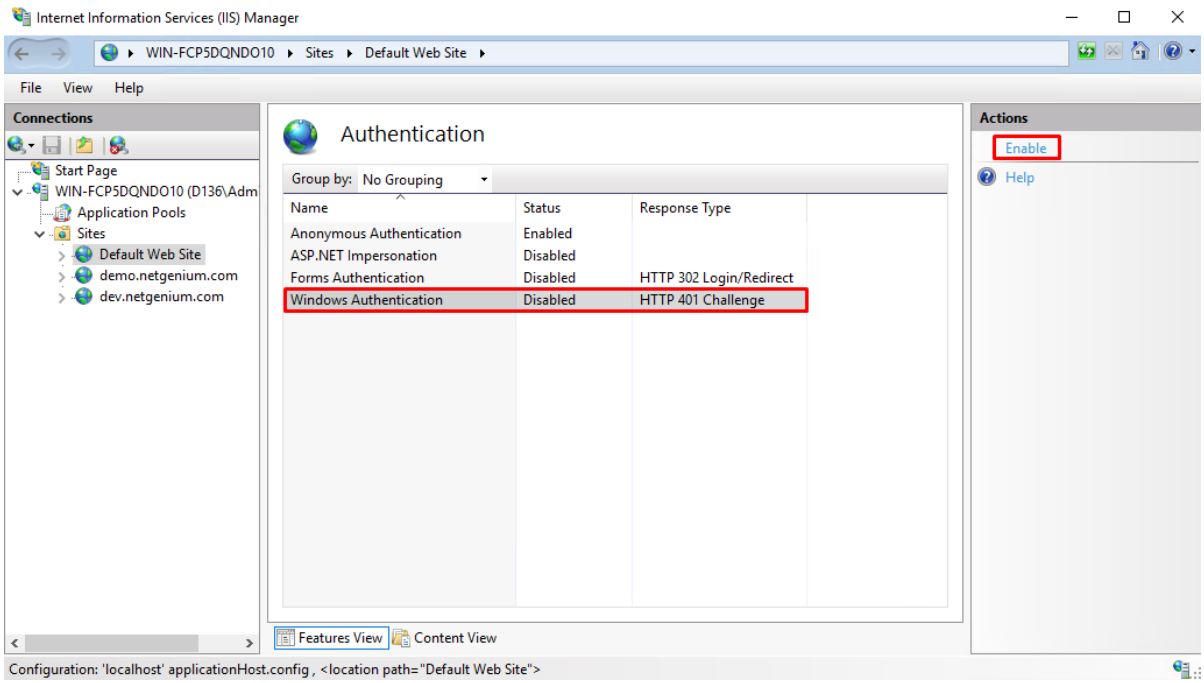
Client stations must have the NET Genium address set in the intranet zone, see the "Web Browser Settings" manual.

Before setting up authentication in IIS, it is important to know whether to set the authentication type for the entire site or just for the virtual directory. Below is the procedure for the entire site.

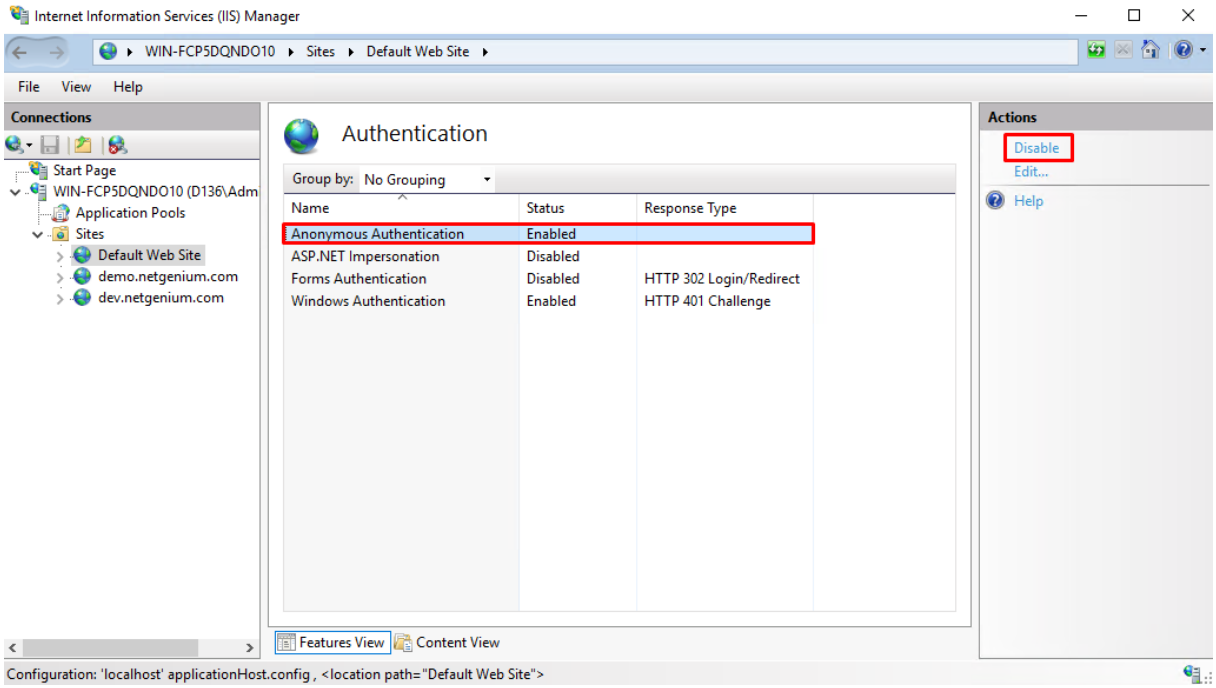
Go to IIS settings, select "Default Web Site" and select "Authentication" in the "IIS" section.



In the “Authentication” section, select “Windows Authentication” and in the “Actions” section click on “Enable”.



Then select “Anonymous Authentication” in the “Authentication” section and click on “Disable” in the “Actions” section.



8.3 Combined approach

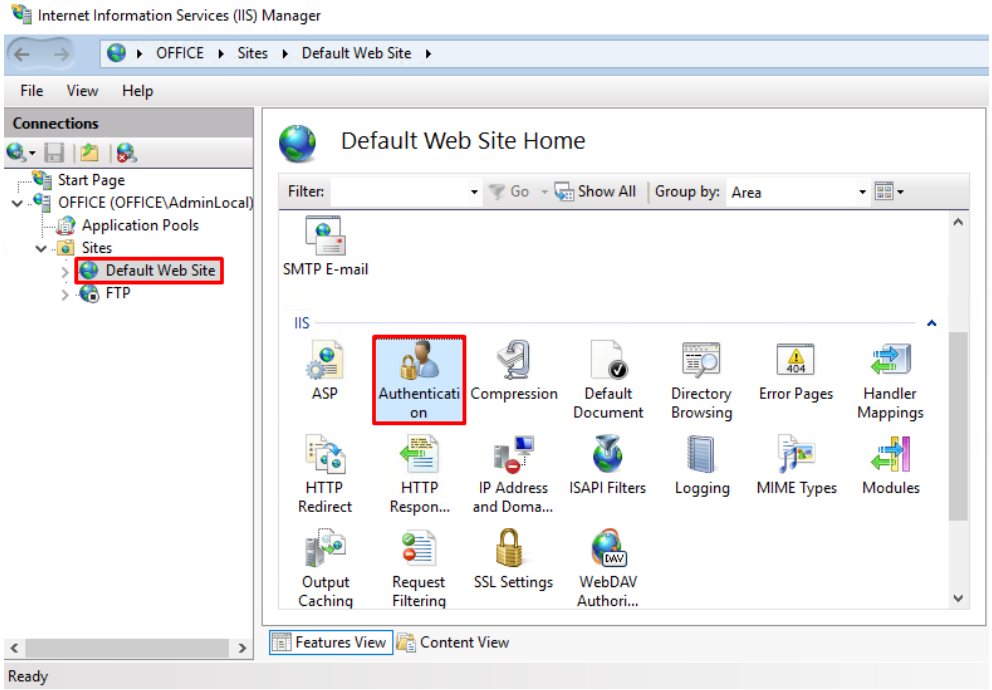
- *Combined access is used when we need to use a combination of anonymous access and Windows authentication.*
- *There are two ways to set up combined access to NET Genium:*
  - Using two virtual directories, one of which is set up for Windows authentication and the other for anonymous access (NET Genium is accessed via two different URLs).
  - Using one virtual directory (NET Genium is accessed via one URL).

8.3.1 Setting up combined access using two virtual directories

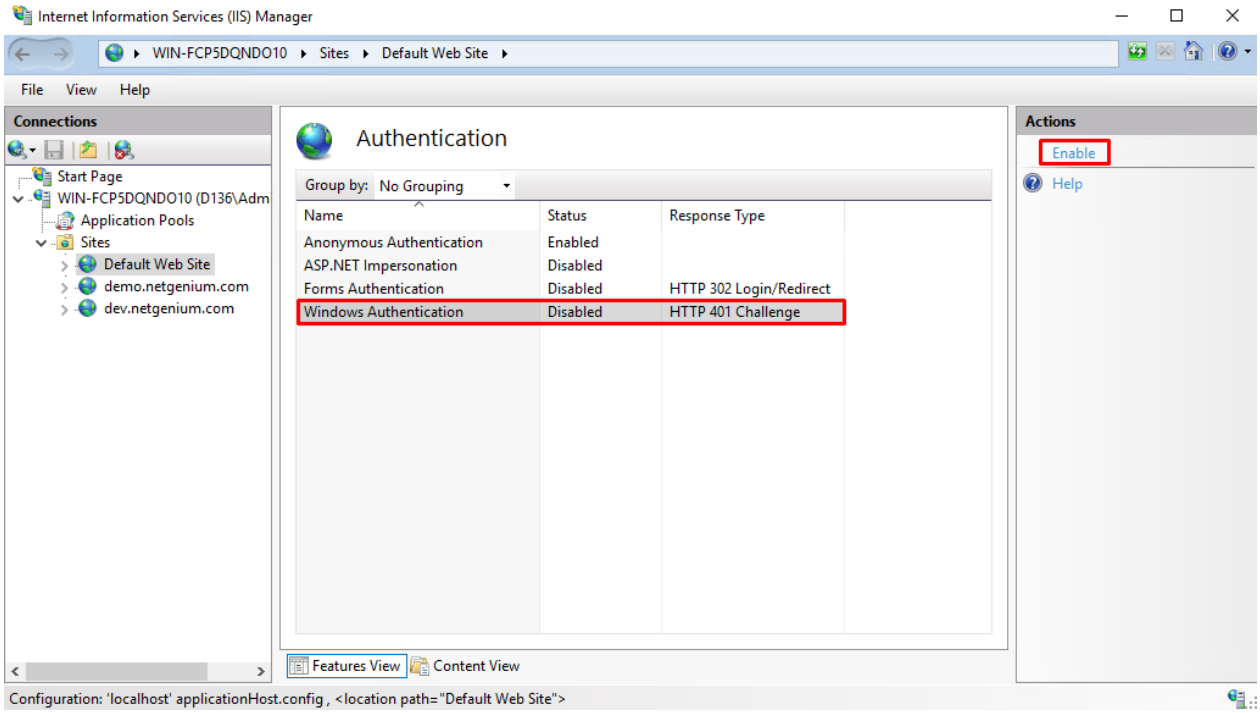
- *The usual feature of this configuration is that the "Default Web Site" has the default site directory set to the directory on the disk where NET Genium itself is stored. This site has Windows authentication set up. Next, a new virtual directory is created that has anonymous login set up and points to the same disk location as the "Default Web Site" itself.*

8.3.1.1 Setting the "Default Web Site" for Windows authentication

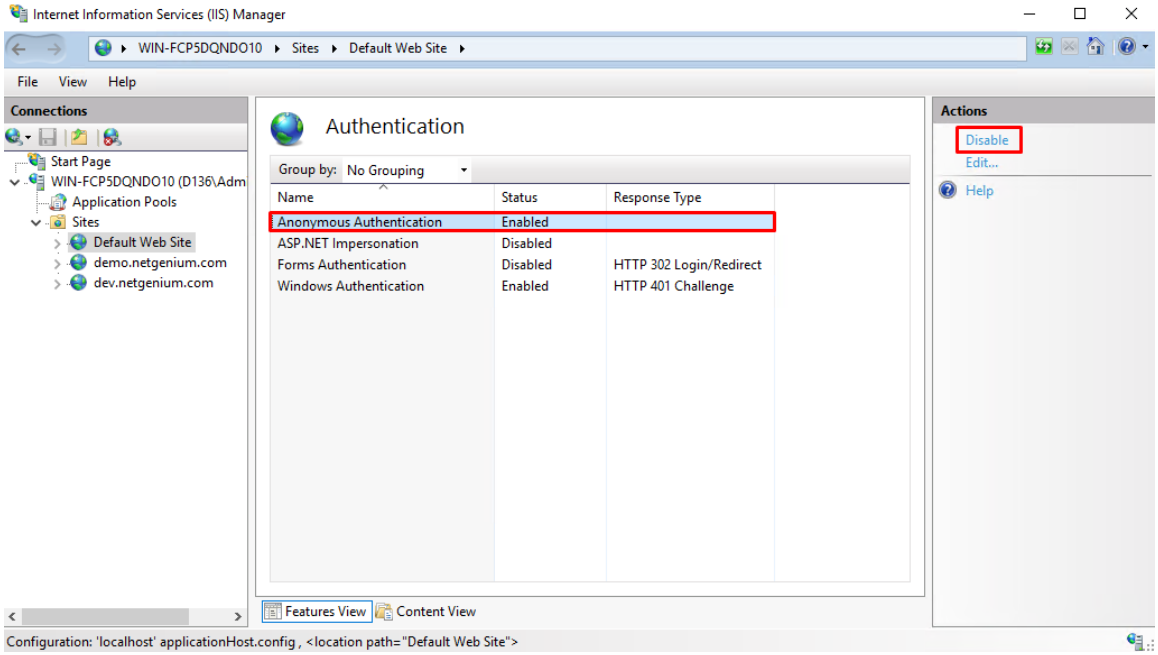
- Go to IIS settings, select "Default Web Site" and select "Authentication" in the "IIS" section.



In the “Authentication” section, select “Windows Authentication” and in the “Actions” section, click on “Enable”.

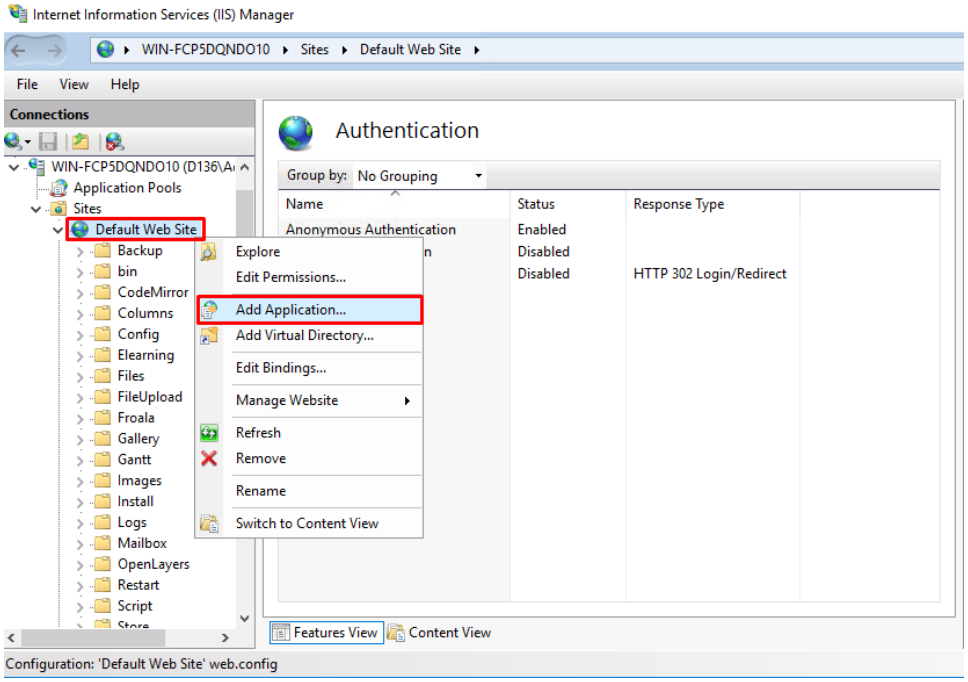


Then select “Anonymous Authentication” in the “Authentication” section and click “Disable” in the “Actions” section.

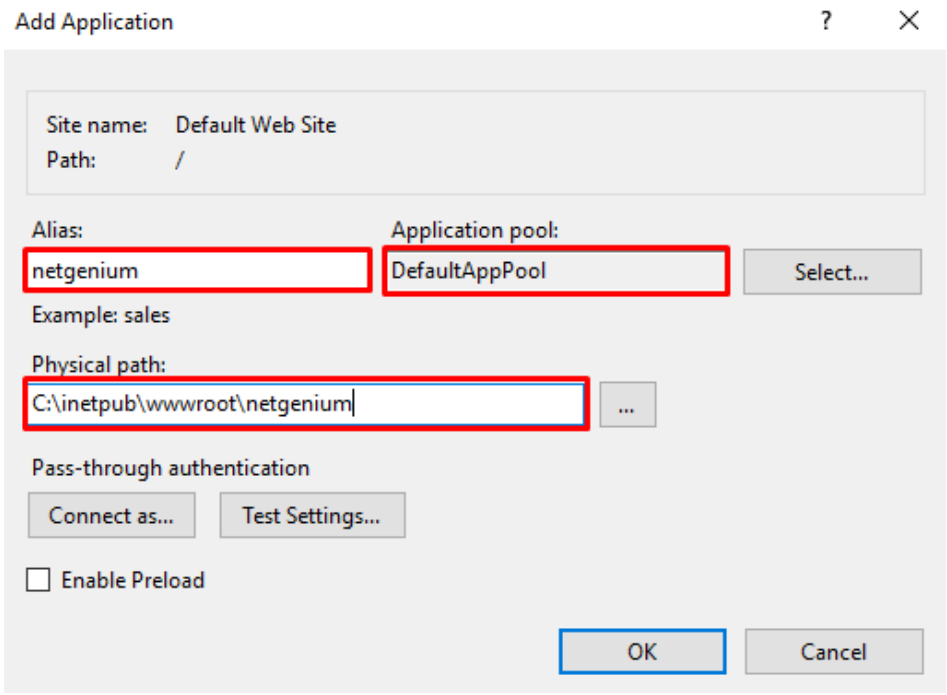


8.3.1.2 Create a second virtual directory for anonymous access

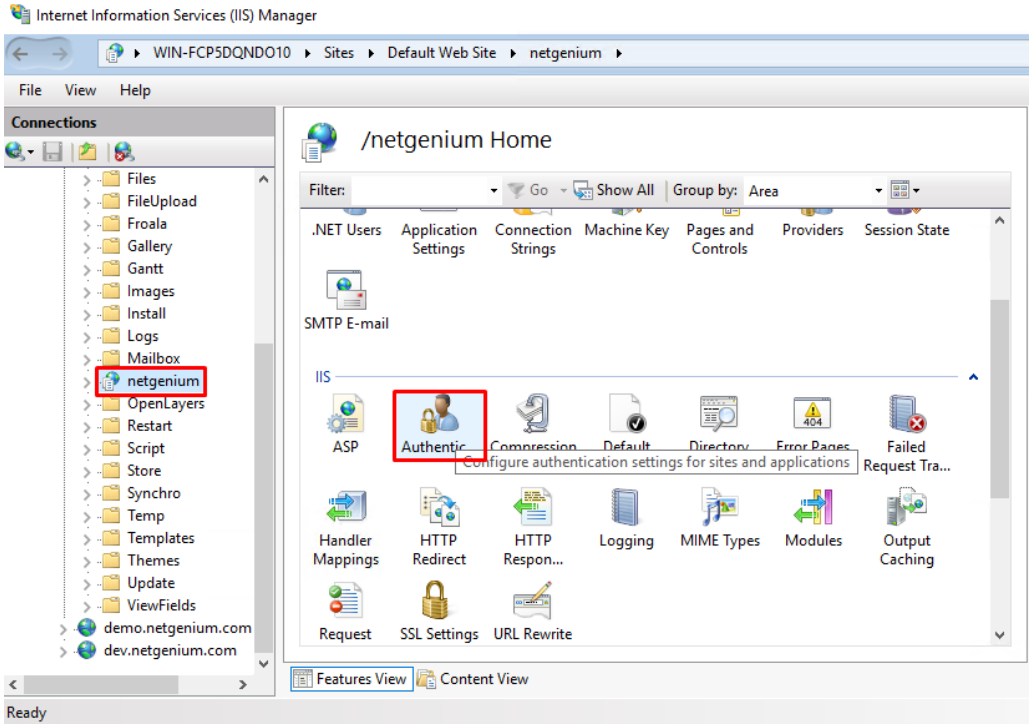
- Right-click on “Default Web Site” and select “Add Application”.



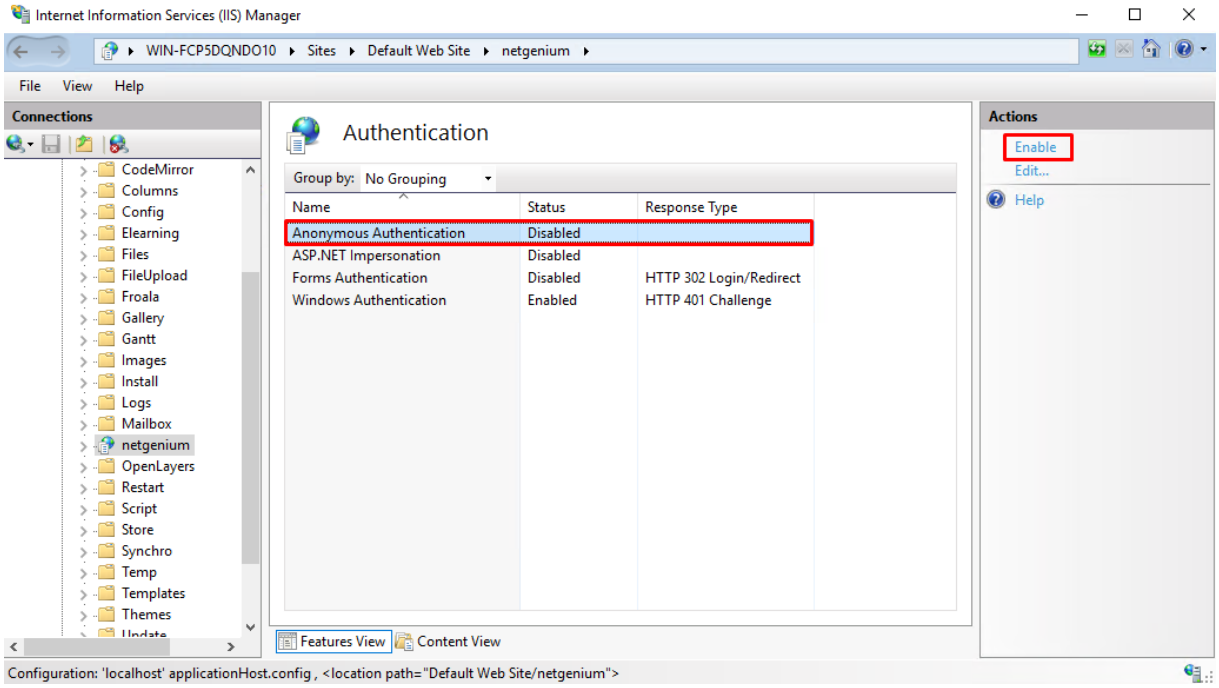
- Fill in the alias (eg “netgenium”), set the application pool to “DefaultAppPool” and fill in the physical path (directory on the disk) where you have stored your NET Genium (for example “C:\inetpub\wwwroot\netgenium”).



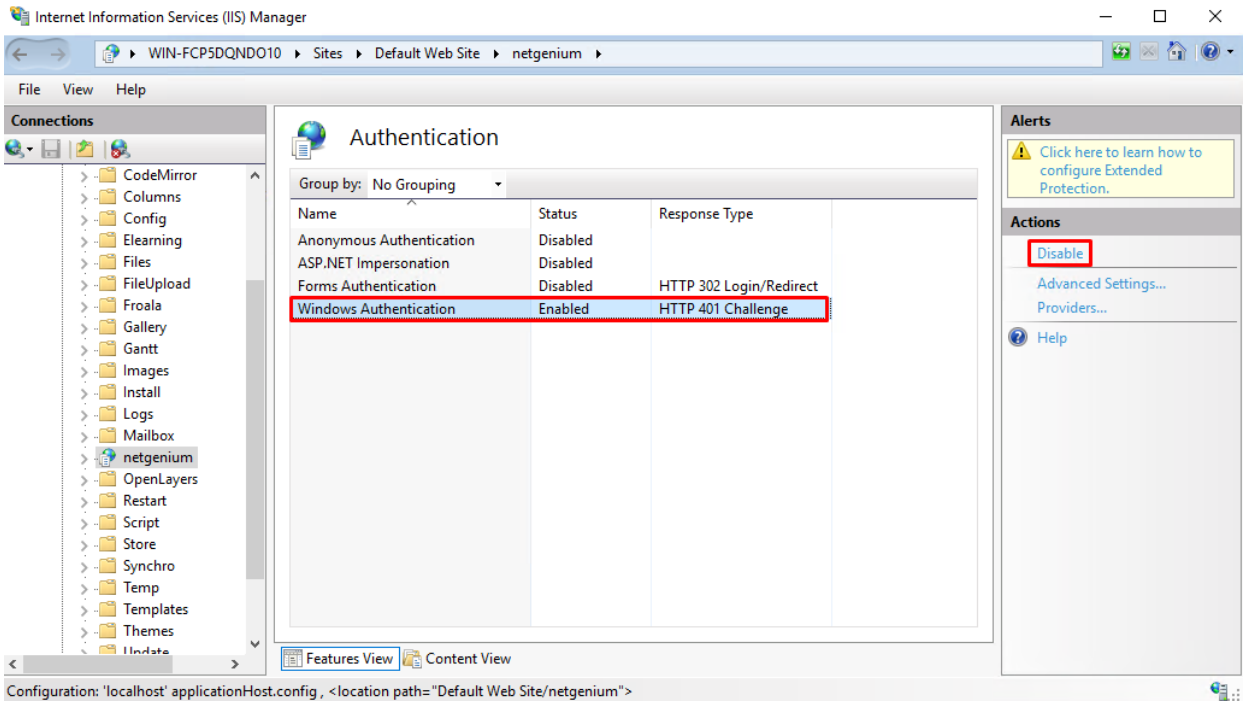
Click on the “netgenium” application and select “Authentication” in the “IIS” section.



In the “Authentication” section, select “Anonymous Authentication” and in the “Actions” section, click on “Enable”.



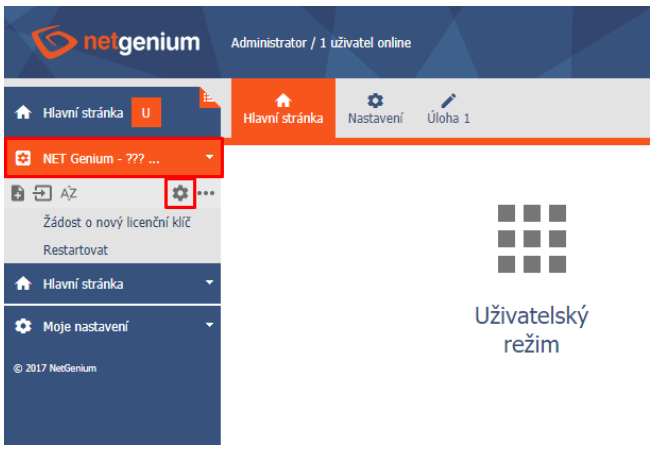
Then select “Windows Authentication” in the “Authentication” section and click “Disable” in the “Actions” section.



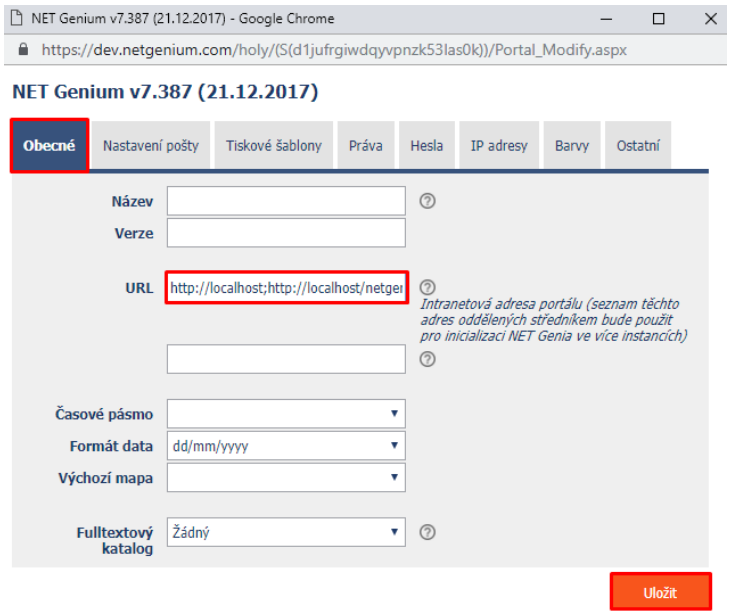
8.3.1.3 Setting up virtual directory URLs in NET Genium portal settings

This step is important in order to synchronize administrative modifications in individual instances of NET Genium (virtual directory with Windows vs. Internet authentication). virtual directory with anonymous access).

Launch your NET Genium.
Go to the NET Genium portal settings (via the gear symbol).



- In the newly opened dialog, go to the “General” tab and enter both URLs of your NET Genium in the “URL” field (for example “http://localhost; http://localhost/netgenium”). Confirm the changes with the “Save” button.

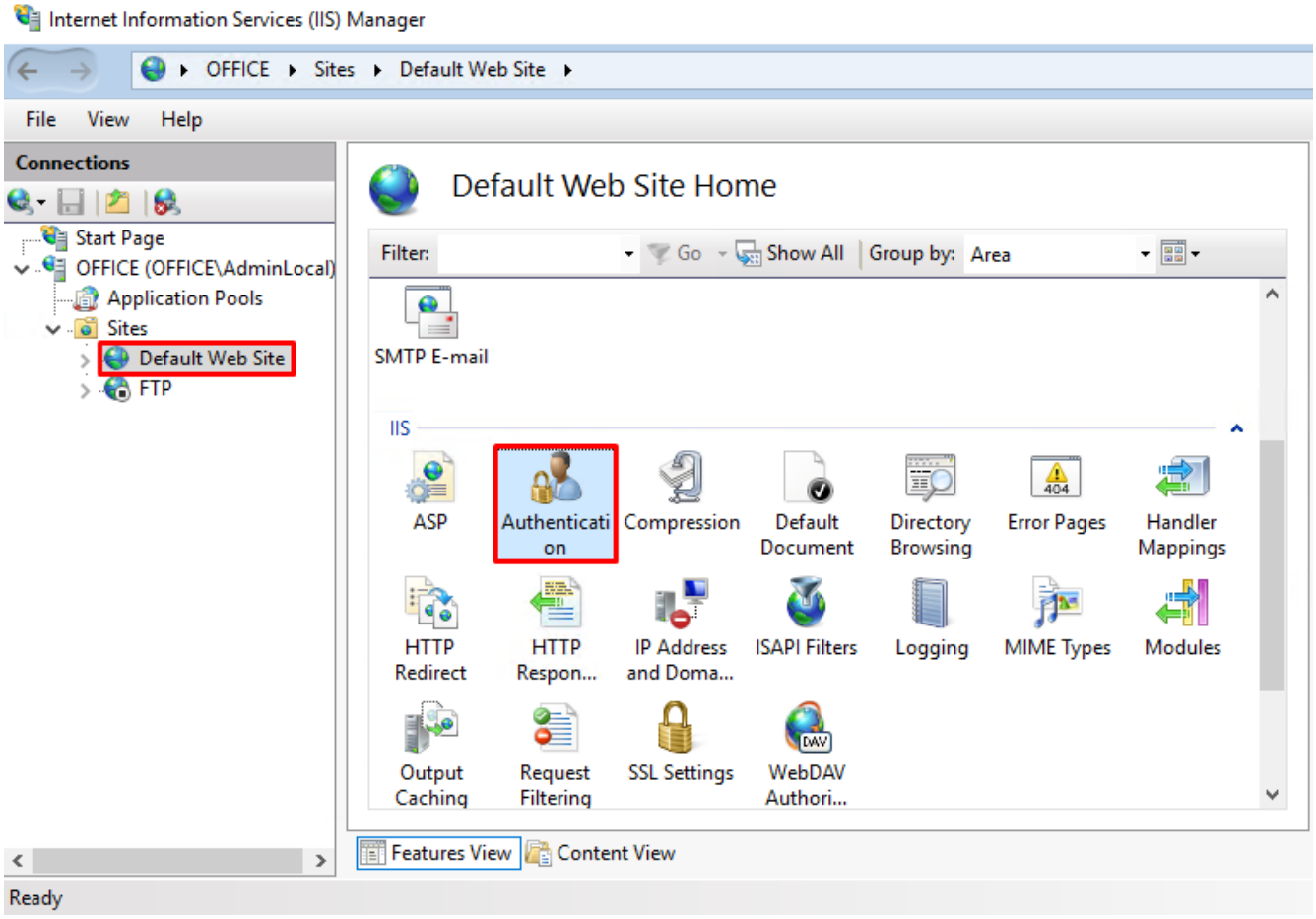


8.3.2 Setting up combined access using one virtual directory

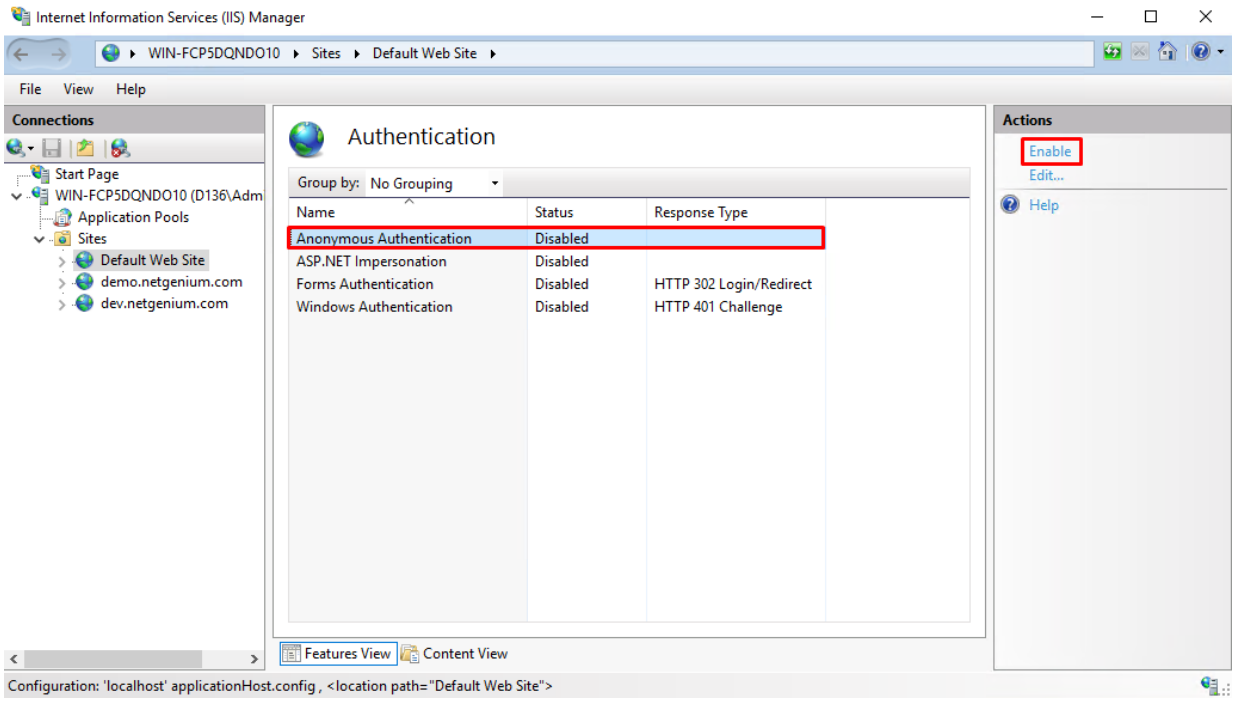
8.3.2.1 Setting “Default Web Site” to double authentication

Before setting up authentication in IIS, it is important to know whether to set the authentication type for the entire site or just for the virtual directory. Below is the procedure for the entire site.

- Go to IIS settings, select “Default Web Site” and select “Authentication” in the “IIS” section.

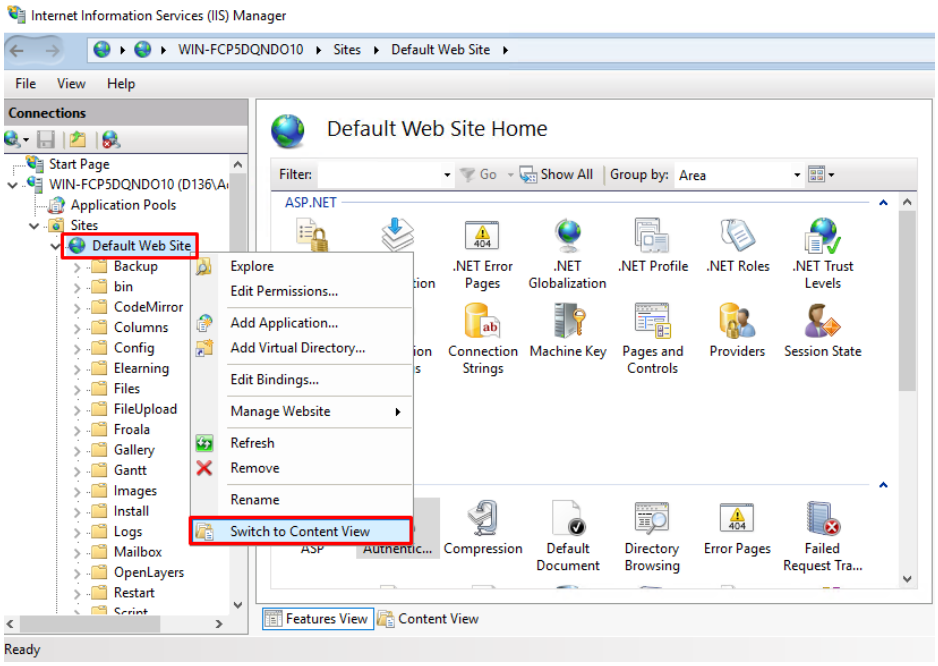

Internet Information Services (IIS) Manager
OFFICE ▸ Sites ▸ Default Web Site ▸
File View Help
Connections
Start Page
OFFICE (OFFICE\AdminLocal)
Application Pools
Sites
Default Web Site
FTP
Default Web Site Home
Filter:
Go
Show All
Group by: Area
SMTP E-mail
IIS
ASP
Authentication
Compression
Default Document
Directory Browsing
Error Pages
Handler Mappings
HTTP Redirect
HTTP Respon...
IP Address and Doma...
ISAPI Filters
Logging
MIME Types
Modules
Output Caching
Request Filtering
SSL Settings
WebDAV Authori...
Features View
Content View
Ready

In the “Authentication” section, select “Anonymous Authentication” and in the “Actions section, click on “Enable”.

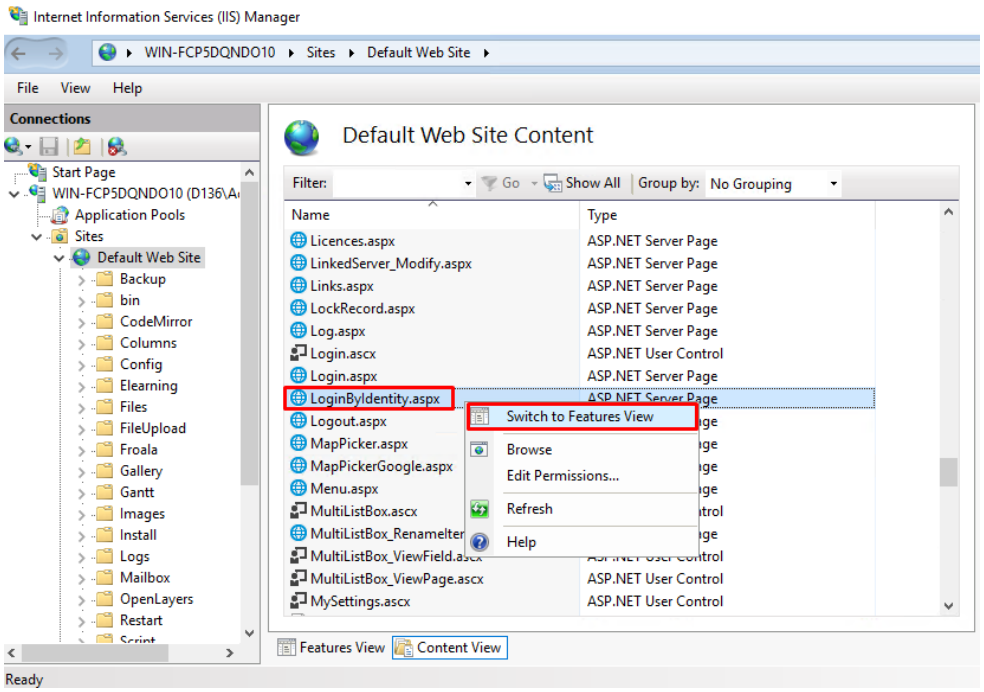

Internet Information Services (IIS) Manager
WIN-FCP5DQNDO10 ▸ Sites ▸ Default Web Site ▸
File View Help
Connections
Start Page
WIN-FCP5DQNDO10 (D136\Adm
Application Pools
Sites
Default Web Site
demo.netgenium.com
dev.netgenium.com
Authentication
Group by: No Grouping
Name
Status
Response Type
Anonymous Authentication
Disabled
ASP.NET Impersonation
Disabled
Forms Authentication
Disabled
HTTP 302 Login/Redirect
Windows Authentication
Disabled
HTTP 401 Challenge
Actions
Enable
Edit...
Help
Features View
Content View
Configuration: 'localhost' applicationHost.config , <location path="Default Web Site">
Internet Information Services (IIS) Manager
WIN-FCP5DQNDO10 ▸ Sites ▸ Default Web Site ▸
File View Help
Connections
Start Page
WIN-FCP5DQNDO10 (D136\Adm
Application Pools
Sites
Default Web Site
demo.netgenium.com
dev.netgenium.com
Authentication
Group by: No Grouping
Name
Status
Response Type
Anonymous Authentication
Enabled
ASP.NET Impersonation
Disabled
Forms Authentication
Disabled
HTTP 302 Login/Redirect
Windows Authentication
Disabled
HTTP 401 Challenge
Actions
Enable

8.3.2.2 Setting the "LoginByIdentity.aspx" file for Windows authentication

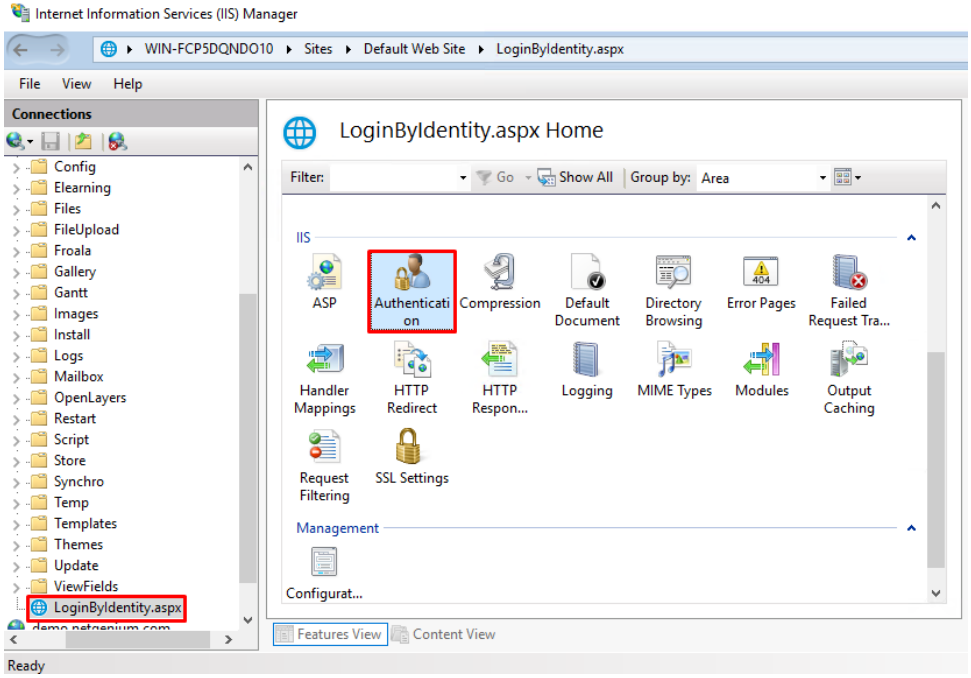
- Right-click on "Default Web Site" and select "Switch to Content View".



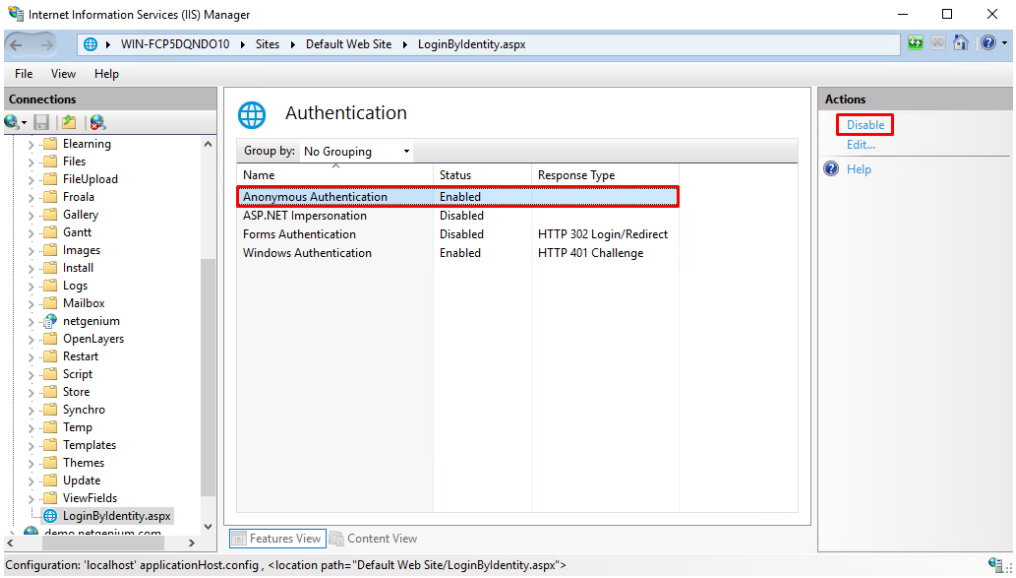
- Locate the "LoginByIdentity.aspx" file, right-click on it and select "Switch to Features View".



In the “IIS” section, select “Authentication”.



In the “Authentication” section, select “Anonymous Authentication” and in the “Actions” section, click on “Disable”.



8.3.2.3 Creating the “LoginByIdentity.txt” file

Go to the directory where you have your NET Genium installed (eg “C:\inetpub\wwwroot\netgenium”) and create the file “LoginByIdentity.txt” in the “Config” directory (it does not matter the contents of the file).

9 Problem solving

9.1 Installing IIS

Problem: The “Turn Windows features on or off” setting does not display the features needed to fully install IIS.

Solution: Update Windows and install updates.

If you still don't see all the features you need, Windows doesn't have the .NET framework 4.7 installed. Download it from the site https://www.microsoft.com/cs-cz/download/details.aspx?id=55167 and install it.

9.2 NET Genium installation via “Setup.exe”

If you encounter any problems while installing NET Genium with the “Setup.exe” program, their details can be found in the “Logs” directory in the “Install.log” file. These problems include:

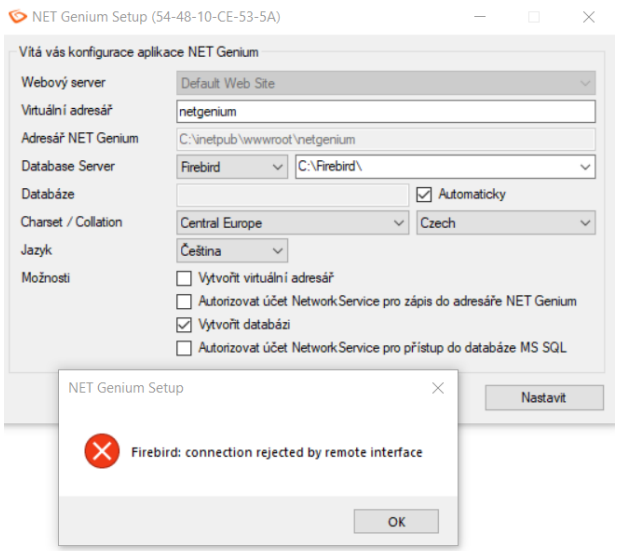
Problem: IIS is not installed.

Solution: Install IIS (see chapter “Installing IIS”).

Problem: The selected database system is not installed.

Solution: Install the database server (see chapter “Database server installation – Firebird or MS SQL”).

Problem: When creating the setup database, it reports an error: “Firebird: connection rejected by remote interface “.



✓ Solution: Check which version of Firebird you have installed. Version 2.5.n or higher must be installed.

✗ Problem: Backward compatibility with IIS 6 and .NET and ASP.NET extensions is not installed.

✓ Solution: Install the appropriate missing extension through the "Turn Windows features on or off" feature (for Windows 10) or by installing Server Features (for Windows Server 2016).

9.3 Windows authentication

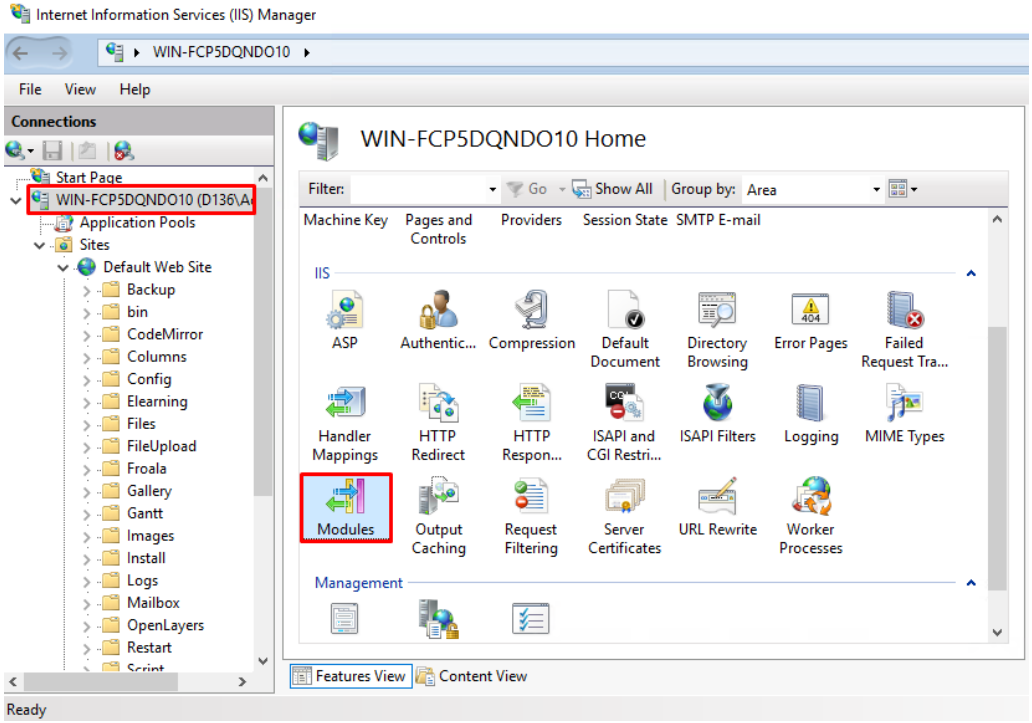
✗ Problem: Windows authentication does not work.

✓ Solution: Make sure you have a NET Genium address on the client stations located in the Intranet zone.

✓ Solution: Make sure you have "Windows Authentication" installed, see chapter "**Chyba! Nenalezen zdroj odkazů.**".

✓ Solution: Check the authentication settings according to your chosen type of access to NET Genium (see chapter "**Chyba! Nenalezen zdroj odkazů.**").

✓ Solution: Make sure that you have the entry "WindowsAuthentication" and "WindowsAuthenticationModule" in the main node of the server/computer – in the section "Modules".


Internet Information Services (IIS) Manager
WIN-FCP5DQNDO10
File View Help
Connections
Start Page
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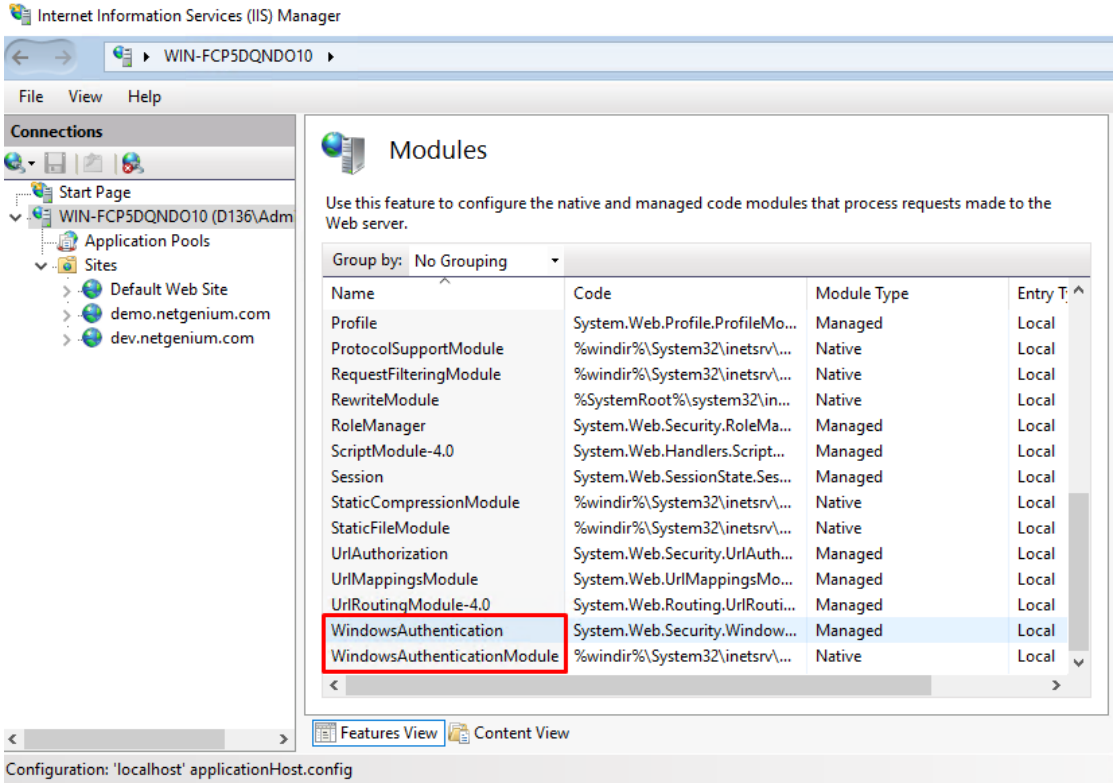
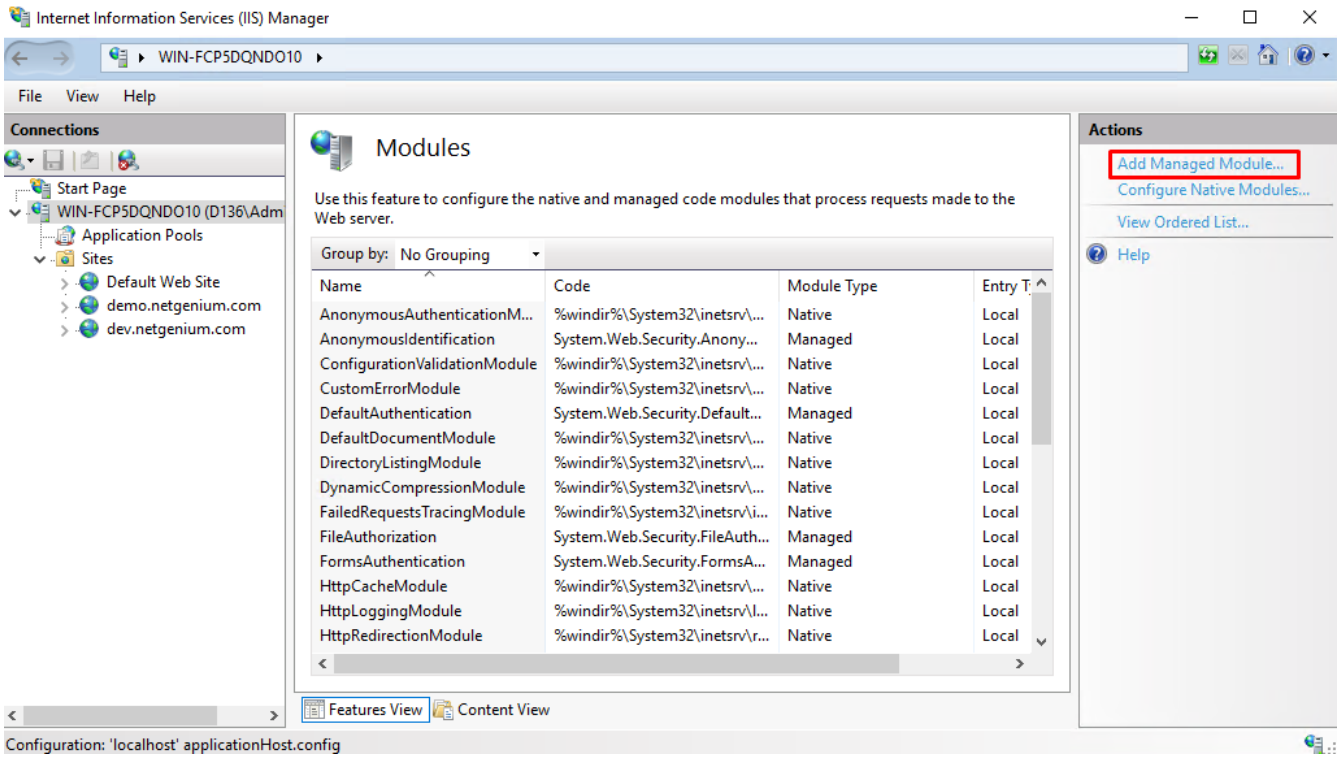
Application Pools
Sites
Default Web Site
Backup
bin
CodeMirror
Columns
Config
Elearning
Files
FileUpload
Froala
Gallery
Gantt
Images
Install
Logs
Mailbox
OpenLayers
Restart
WIN-FCP5DQNDO10 Home
Filter:
Go
Show All
Group by: Area
Machine Key
Pages and Controls
Providers
Session State
SMTP E-mail
IIS
ASP
Authentic...
Compression
Default Document
Directory Browsing
Error Pages
Failed Request Tra...
Handler Mappings
HTTP Redirect
HTTP Respon...
ISAPI and CGI Restri...
ISAPI Filters
Logging
MIME Types
Modules
Output Caching
Request Filtering
Server Certificates
URL Rewrite
Worker Processes
Management
Features View
Content View
Ready

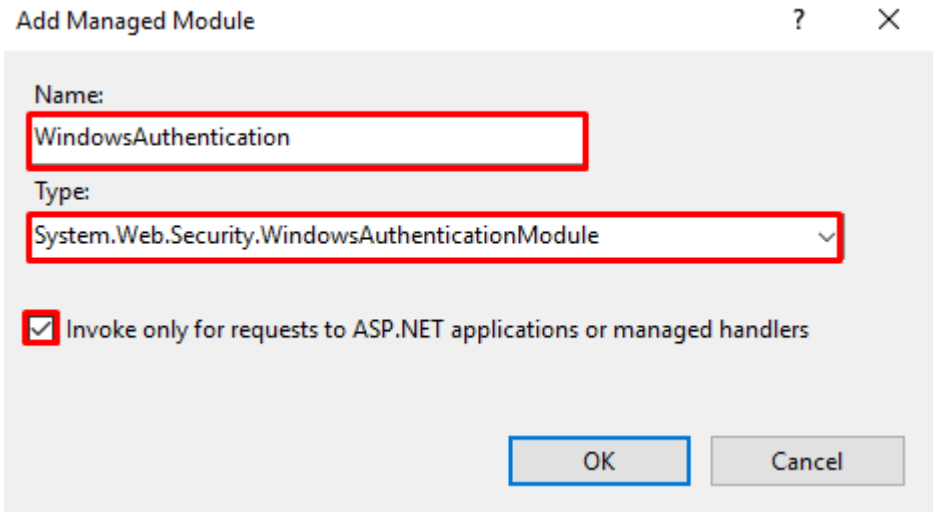

Internet Information Services (IIS) Manager
WIN-FCP5DQNDO10
File View Help
Connections
Start Page
WIN-FCP5DQNDO10 (D136\Adm
Application Pools
Sites
Default Web Site
demo.netgenium.com
dev.netgenium.com
Modules
Use this feature to configure the native and managed code modules that process requests made to the Web server.
Group by: No Grouping
Name
Code
Module Type
Entry T
Profile
System.Web.Profile.ProfileMo...
Managed
Local
ProtocolSupportModule
%windir%\System32\inetsrv\...
Native
Local
RequestFilteringModule
%windir%\System32\inetsrv\...
Native
Local
RewriteModule
%SystemRoot%\system32\in...
Native
Local
RoleManager
System.Web.Security.RoleMa...
Managed
Local
ScriptModule-4.0
System.Web.Handlers.Script...
Managed
Local
Session
System.Web.SessionState.Ses...
Managed
Local
StaticCompressionModule
%windir%\System32\inetsrv\...
Native
Local
StaticFileModule
%windir%\System32\inetsrv\...
Native
Local
UrlAuthorization
System.Web.Security.UrlAuth...
Managed
Local
UrlMappingsModule
System.Web.UrlMappingsMo...
Managed
Local
UrlRoutingModule-4.0
System.Web.Routing.UrlRouti...
Managed
Local
WindowsAuthentication
System.Web.Security.Window...
Managed
Local
WindowsAuthenticationModule
%windir%\System32\inetsrv\...
Native
Local
Features View
Content View
Configuration: 'localhost' applicationHost.config

If you do not find these entries in the list of modules, add them manually as follows:

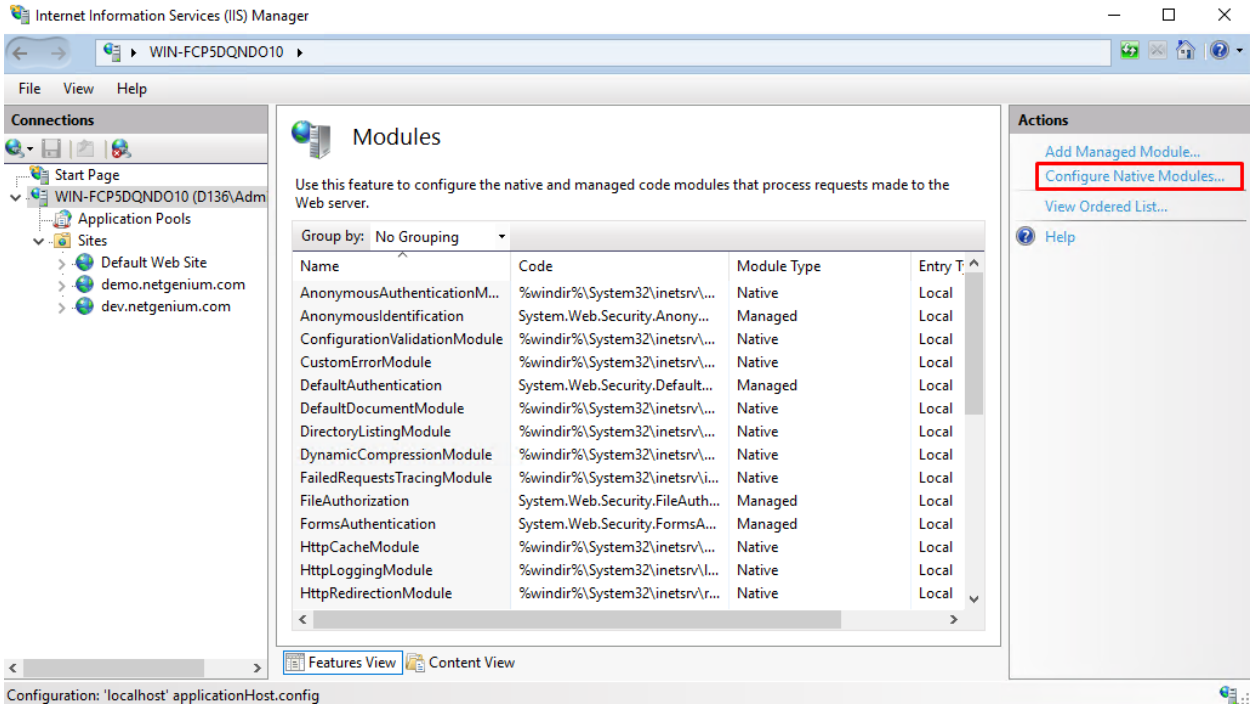
In the “Actions” section, click on “Add Managed Module”.



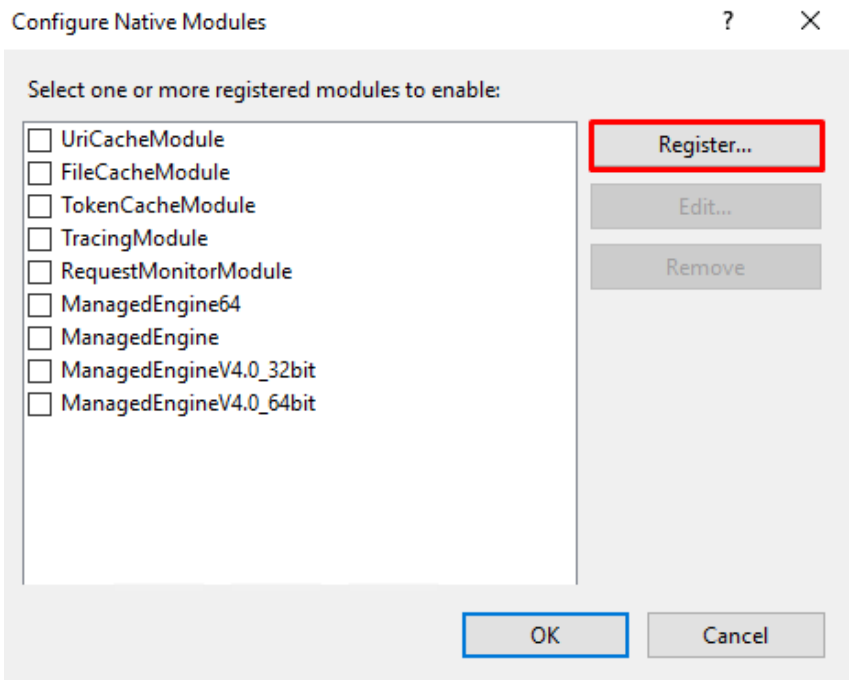
In the newly opened dialog box, type the name of the module “WindowsAuthentication”, select the type “System.Web.Security.WindowsAuthenticationModule” and check the option “Invoke only for requests to ASP.NET applications or managed handlers”.



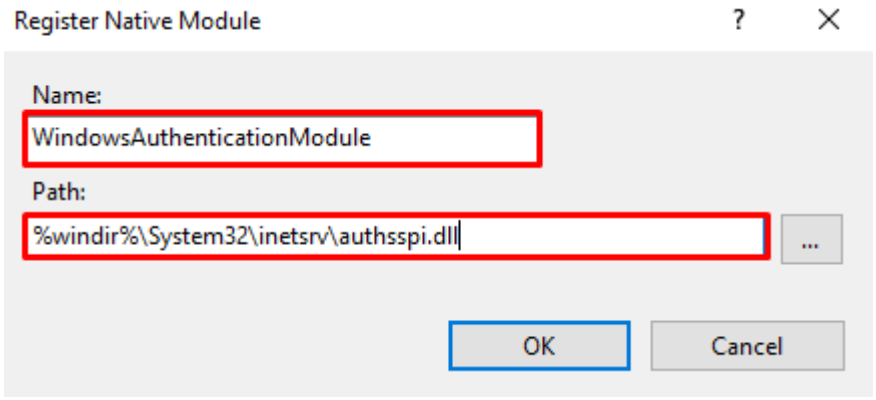
In the “Actions” section, click on “Configure Native Modules”.



Click on the “Register” button.



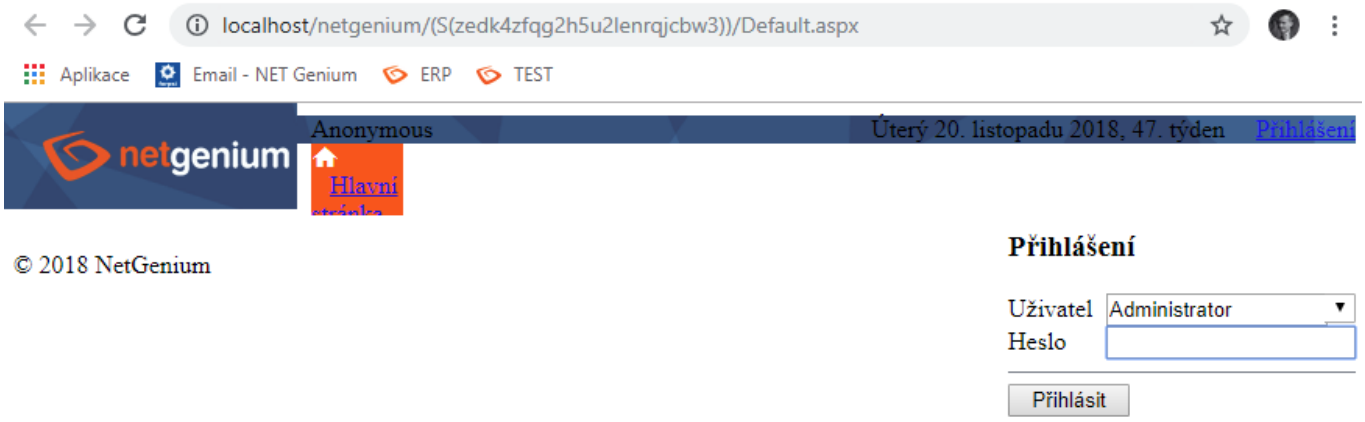
In the newly opened dialog, type the name of the module “WindowsAuthenticationModule” and select the path “% windir%\System32\inetsrv\authsspi.dll”.



9.4 The first launch of NET Genium

✗ Problem: NET Genium is displayed without styles.

✓ Solution: If you see your NET Genium without styles, you do not have either the permissions set on your default web directory (see chapter “**Chyba! Nenalezen zdroj odkazů.**“), Or you did not check the” Static Content “ option when installing IIS (see chapter”**Chyba! Nenalezen zdroj odkazů.**“).

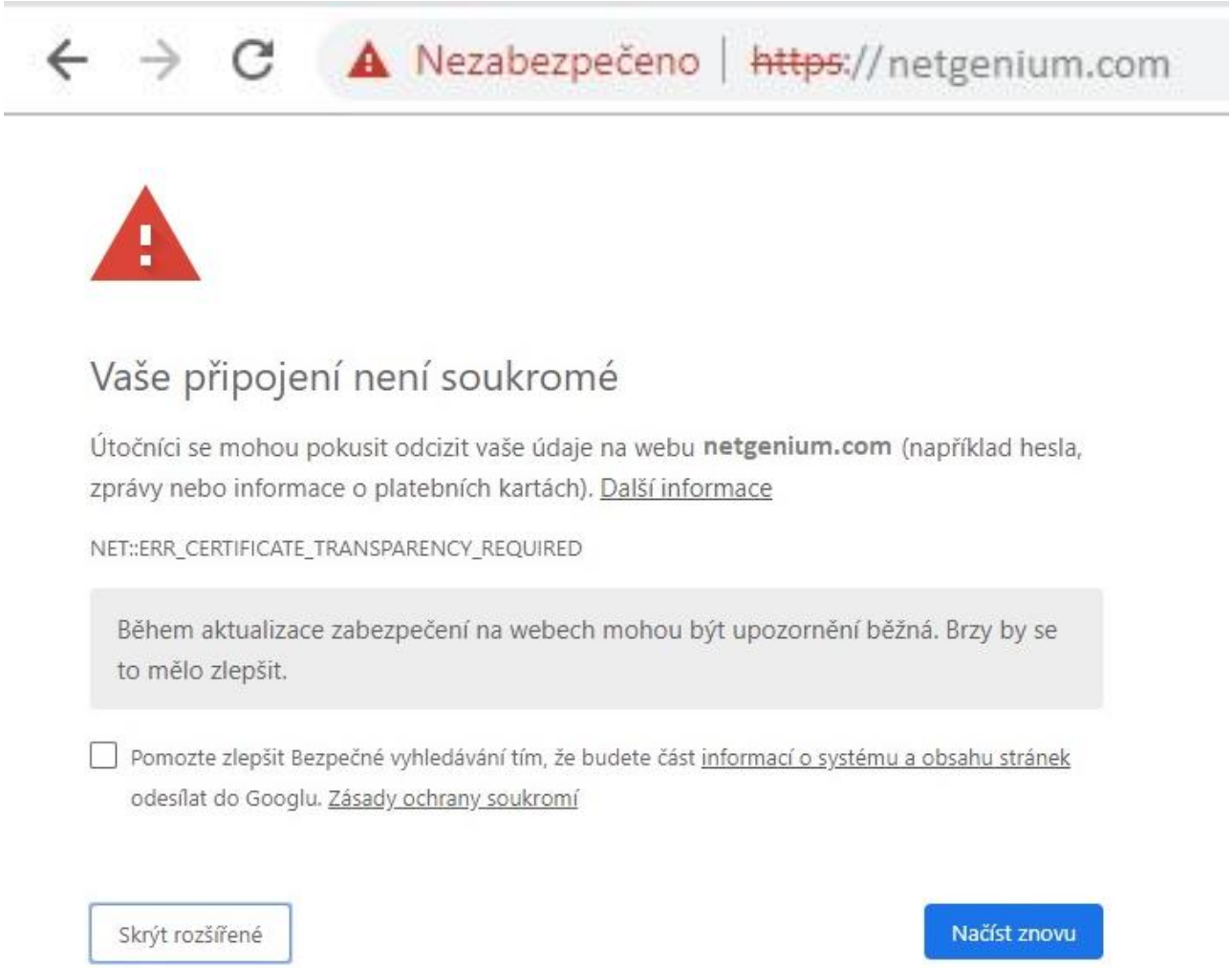


✗ Problem: Unable to save form in NET Genium. Error saving form: “No message for error code 335544865 found”.

✓ Solution: Make sure you have FlameRobin running. If so, close the program.

9.5 NET Genium display issues after installing or importing a new SSL certificate

✗ Problem: Your connection is not private: NET :: ERR_CERTIFICATE_TRANSPARENCY_REQUIRED



✓ Solution: Contact the certificate issuer, resp. the certification authority that issued the certificate and have it verified that the certificate has been correctly logged in accordance with "Certificate Transparency" after it has been generated. See the site for more https://comodosslstore.com/resources/how-to-fix-neterr_certificate_transparency_required-error-in-google-chrome/.