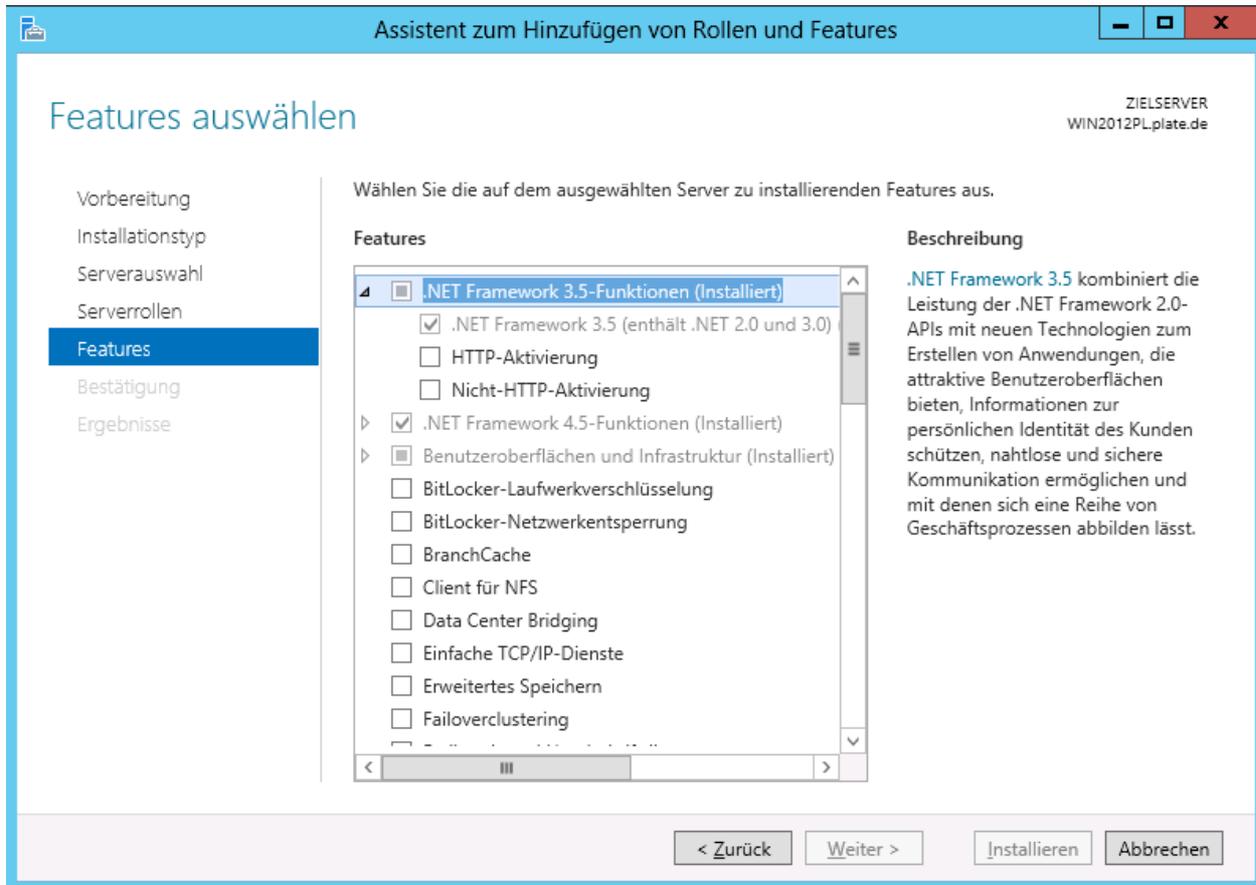## Installation and Configuration of ADOplusWeb

Overview

With ADOplusWeb administrators can now do essential parts of ADO++ administrative tasks also through a Web browser. ADOplusWeb uses AJAX Web-programming technologies, providing a kind of desktop in the browser. However, the speed performance of applications even using this technology is not comparable to desktop application. However, almost all functions of the Exchange and Active Directory user administration are implemented in the same way as in ADO++. So for ADO++ users only little training is required. ADOplusWeb also comes with a full version and a special edition. ADOplusWeb is compatible with ADO++, which means, that the Enterprise Edition version of both applications use the same SQL database and the same user settings. The SQL database logs the AD changes of both applications in one database.

ADOplusWeb can be installed on computers with the Internet Information Server, Version IIS 6 or IIS 7 and up. The installation is done by calling the setup program as an administrator of the computer, or the Active Directory. The computer can be a server or a workstation. If necessary the IIS must be installed before the installation ADOplusWeb. To install ADOplusWeb on a system with IIS 7 or greater, the IIS 6 Management Compatibility tools must be installed first.

ADOplusWeb is based on the .NET Framework 2.0. This is included in current operating systems in .NET 3.51. Install the .NET 3.51 first, if it is not present on your system.

Select the installation option for the framework as in the screenshot below.

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Installation of IIS on Windows Server 2012 R2

The IIS is installed on the server systems as a role. Start to the Server Manager and select Add Roles and then select the item Web Server (IIS). In this screenshot of IIS is already installed.
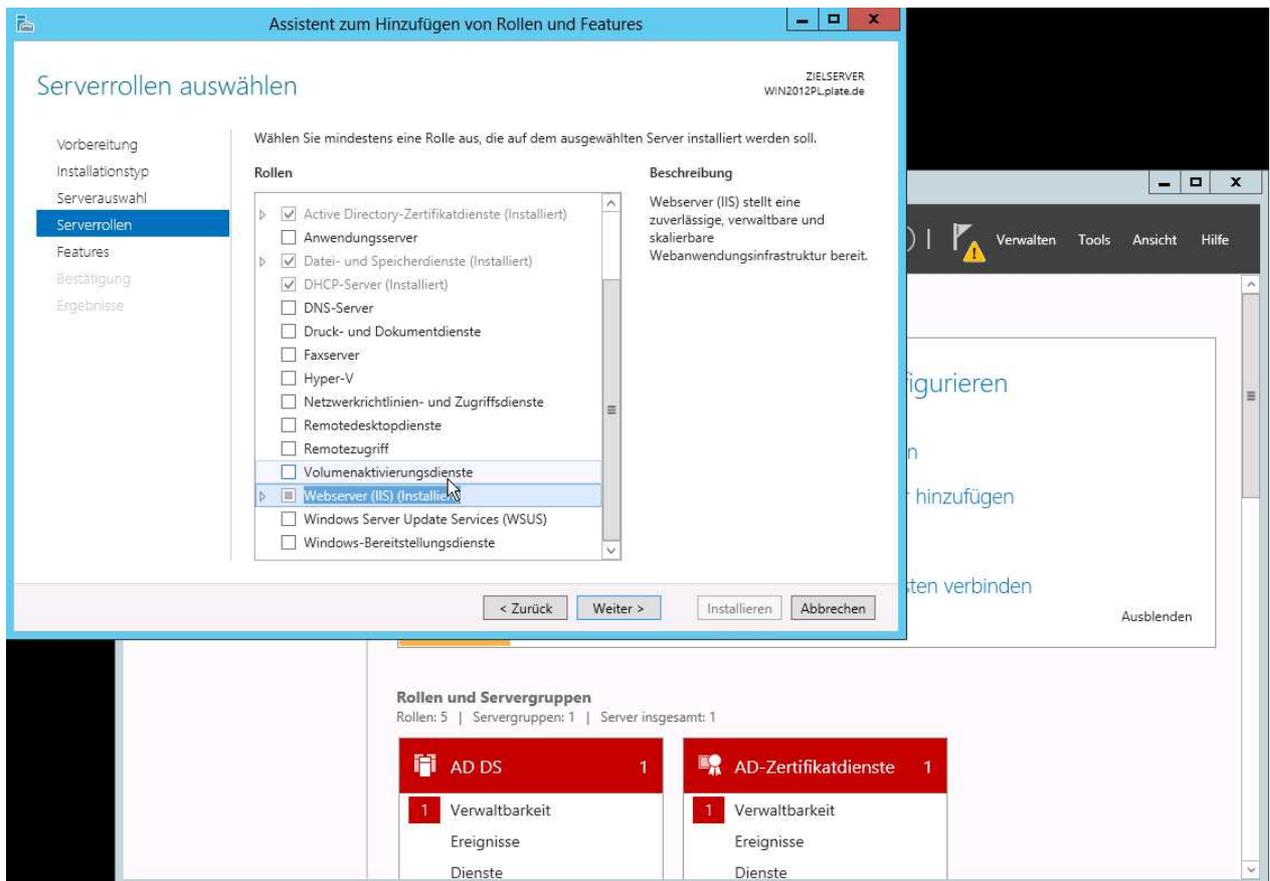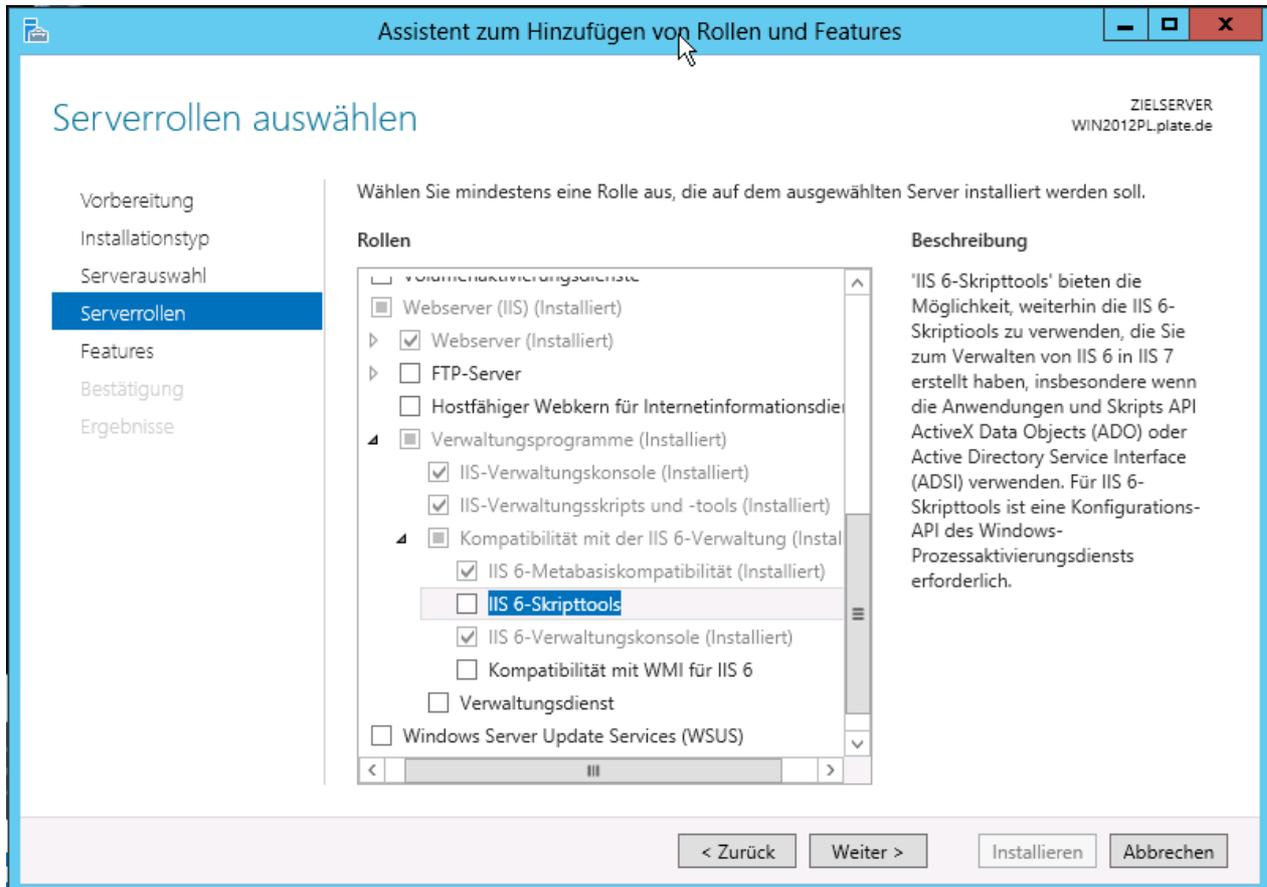

Open the menu item IIS and select the features in accordance with the following screenshot from:

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For ADOplusWeb installing on a system with IIS 7 or greater the IIS6 Management Console and IIS 6 Metabase must be installed, as selected in the screenshot.

Installation of IIS on Windows desktop systems:

The IIS is installed on desktop systems via the Control Panel Programs and Features.

The ADOplusWeb setup takes over the main part of the installation. Depending on the version of IIS after installing minor manual adjustments are required. The adjustments made in IIS Manager administrative console of the Windows installation, or in the Web.config file of ADOplusWeb. This file is located in the install directory.

Start the installation by executing the setup file ADOplusWeb.msi.
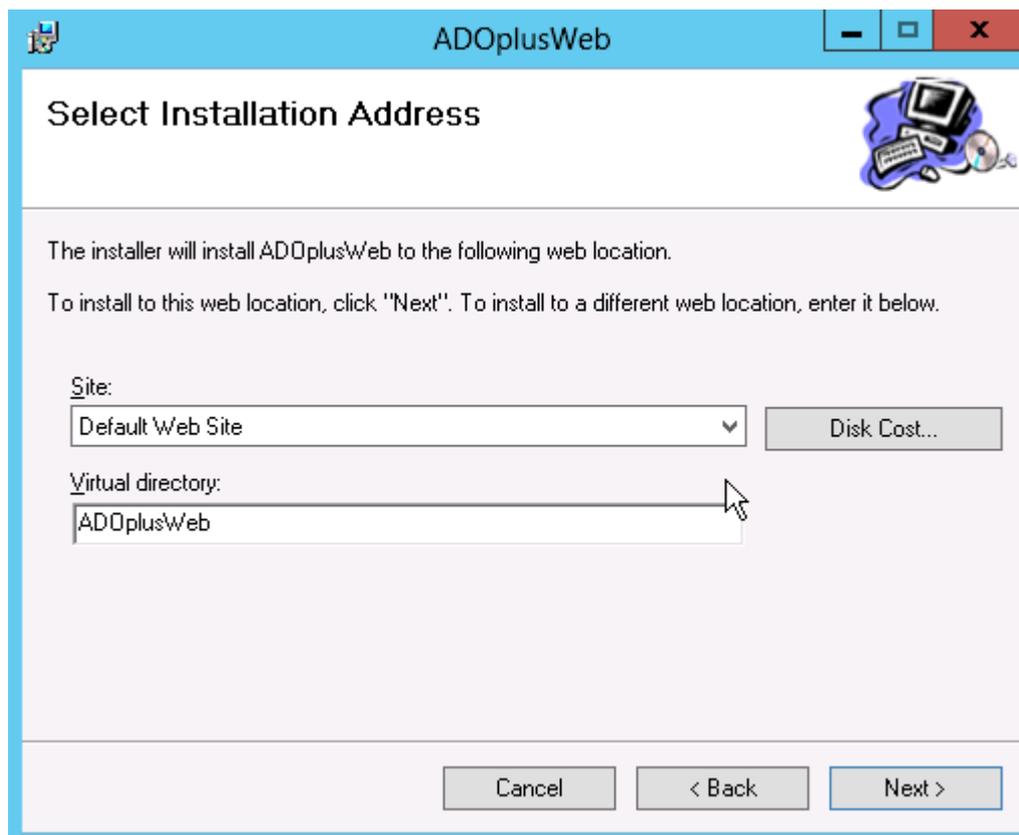
The software installation is by default done into a virtual directory in the default IIS website. The directory name is by default ADOplusWeb. The installation location in the file system is wwwroot the system partition in the inetpub \. These parameters can be adjusted during installation.
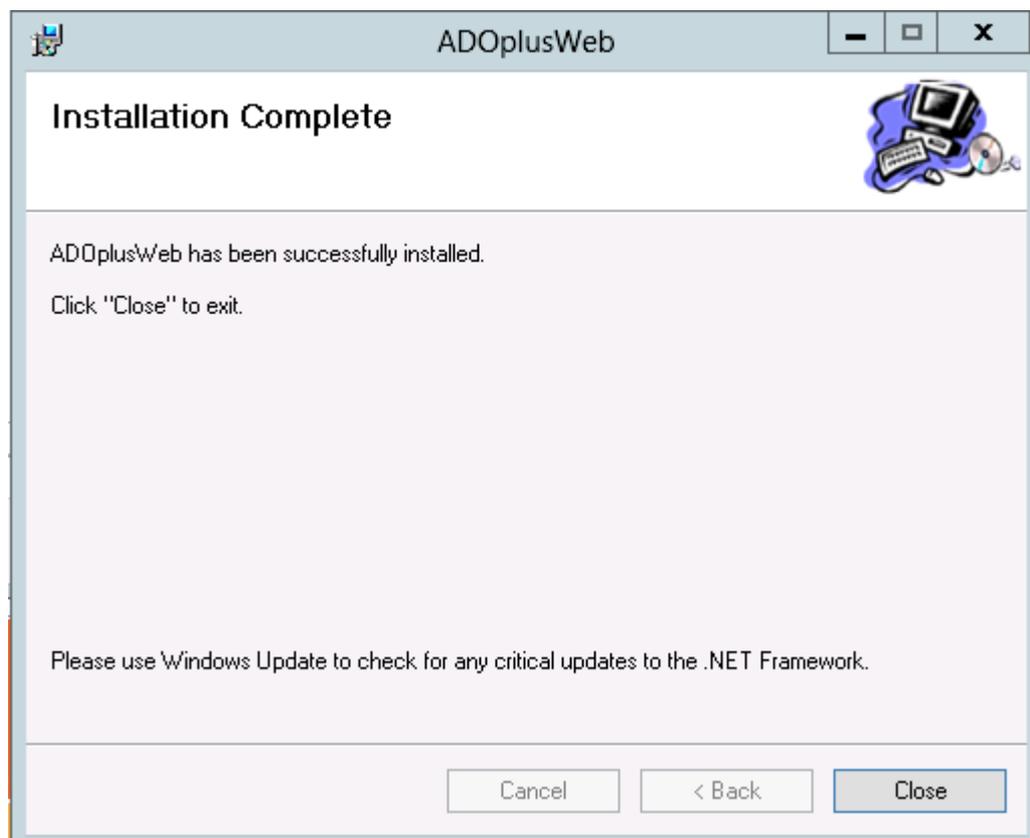
The successful installation displays the above screen window. Now start from the Server Manager IIS Manager:
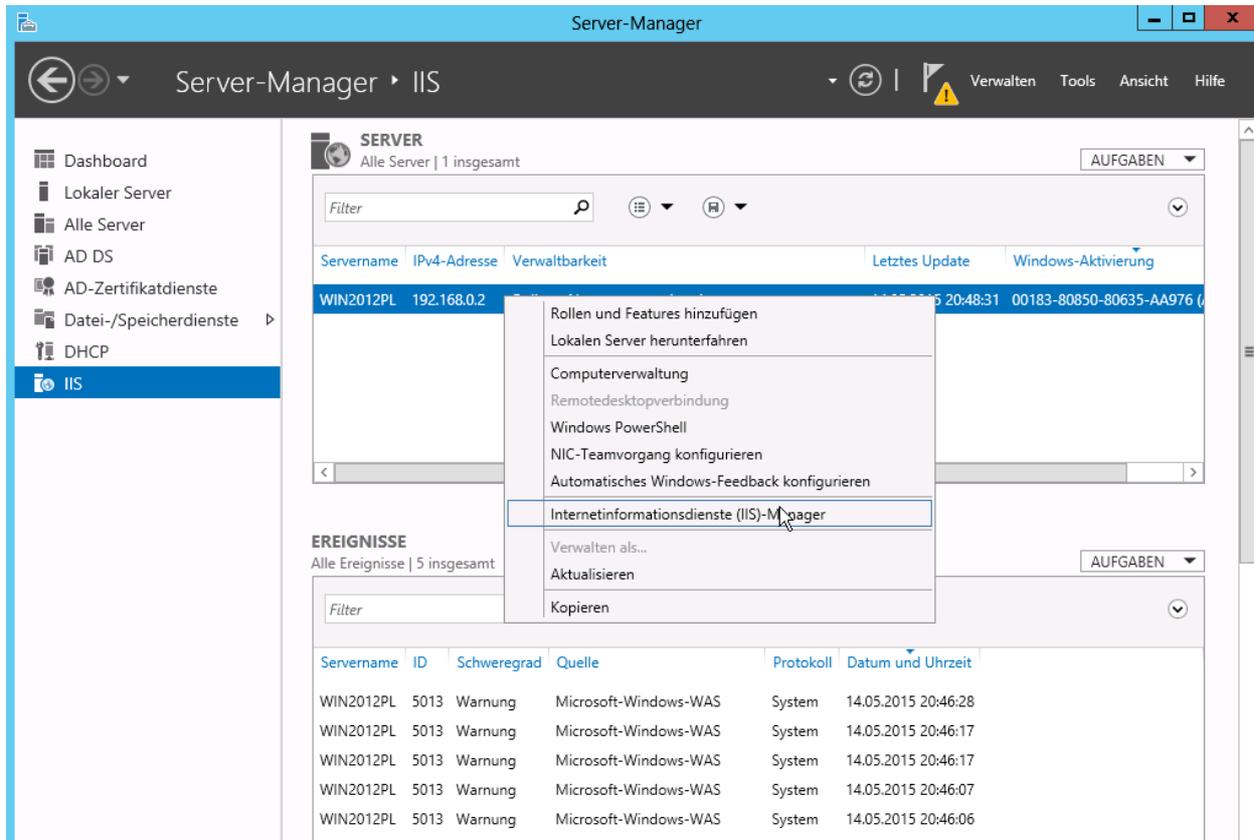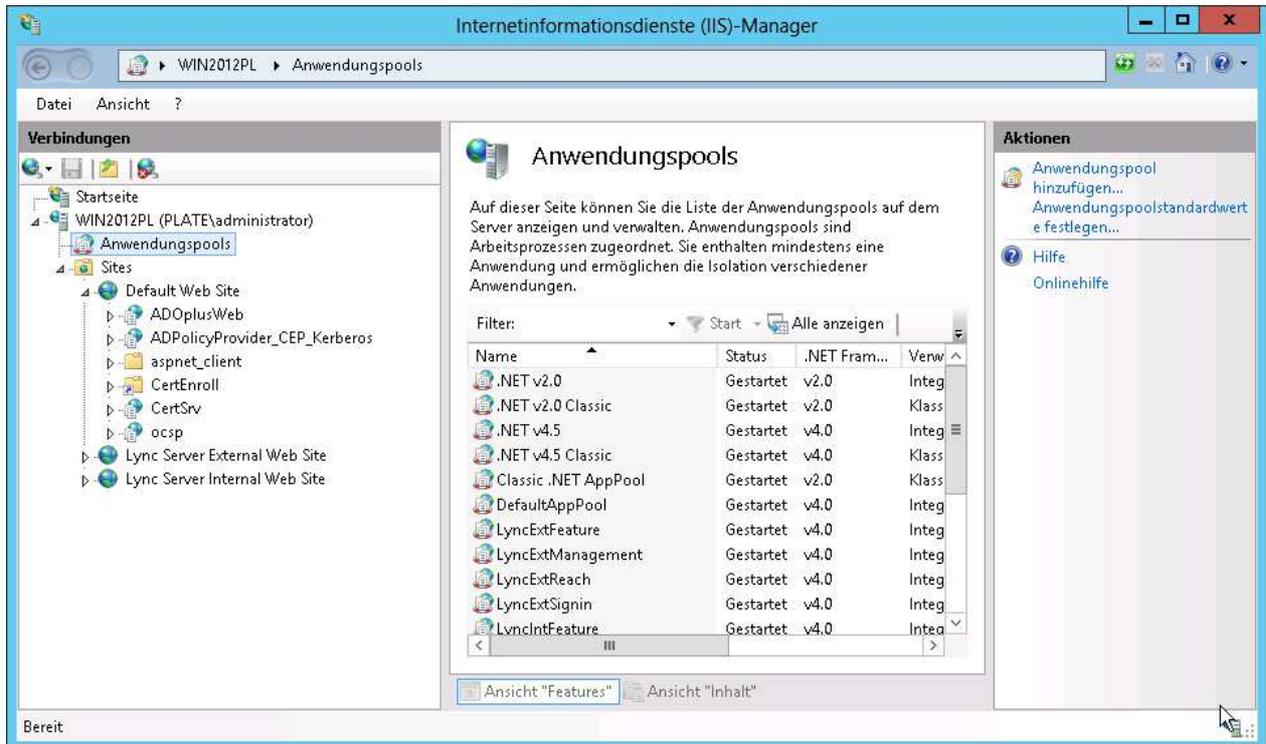
In the screenshot you see the ADOplusWeb application in the IIS Default Web Site now. Above the sites you see the existing IIS application pool. A Web application requires an application pool for its execution. An application pool is associated with (an identity) a service account.

When being installed ADOplusWeb is assigned to the Default Application Pool. This setting must be adjusted.

In IIS 7 or later the Application Pool Classic .NET AppPool must be selected. In this application pool then the feature **Enable 32-bit Applications** must be set to **true** (on 64 Bit OS, see screenshot below). Likewise, an AD account must set instead of the default identity Applicationpoolidentity here, especially when using the software in Enterprise Edition.

The following screenshot shows the advanced settings of an application pool.

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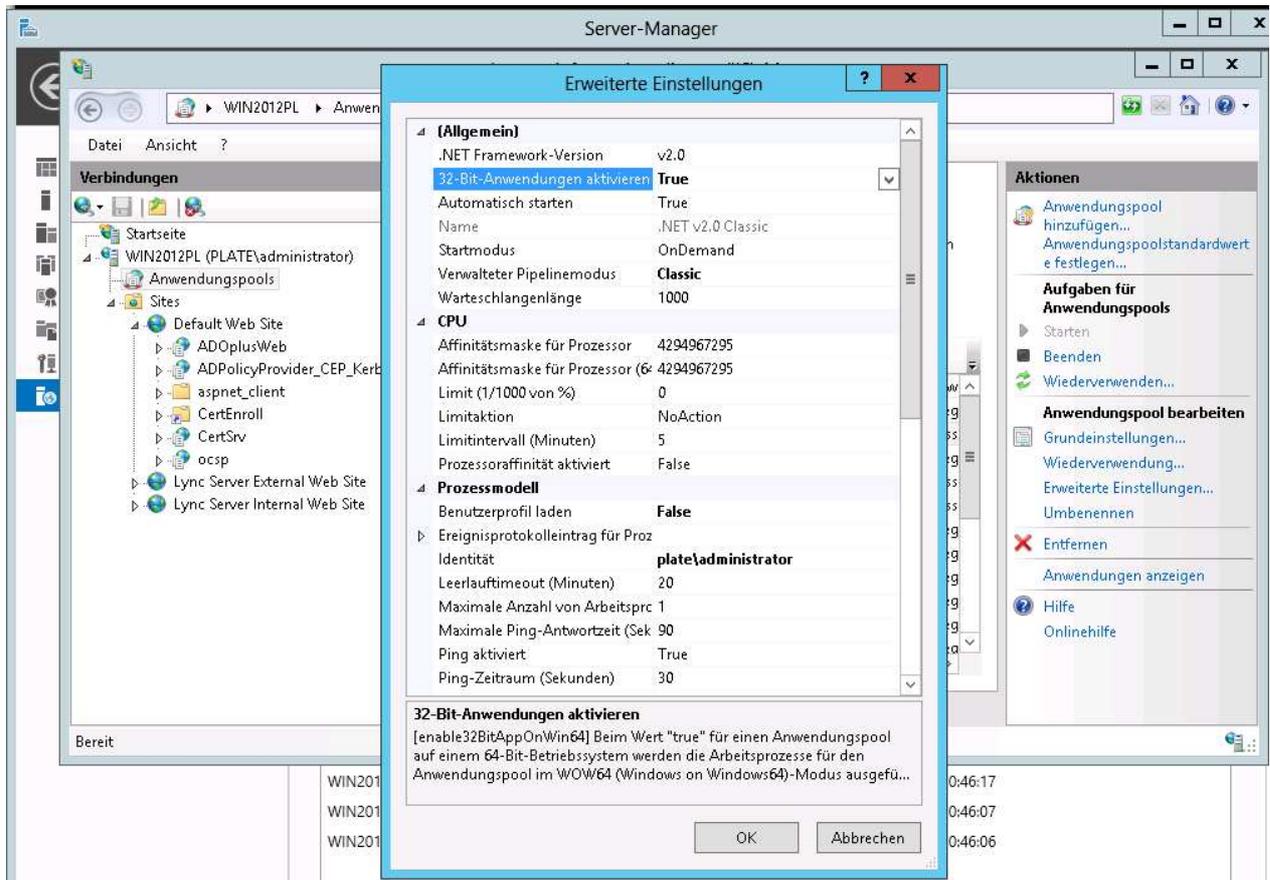
Important adjustments are:

.NET Framework Version: 2.0

Enable 32-bit applications: true

Managed Pipeline Mode: Classic

It can also easily be created an own Application Pool for ADOplusWeb. This Pool then must also support 32-bit applications and use the Managed Pipeline Mode Classic.

The Application Pool configured now the ADOplusWeb site must be assigned too. Click with the right mouse button on the entry ADOplusWeb and select Manage Application, and then Advanced Settings. You can now assign the configured application pool.This documentation describes the settings that have to be done.

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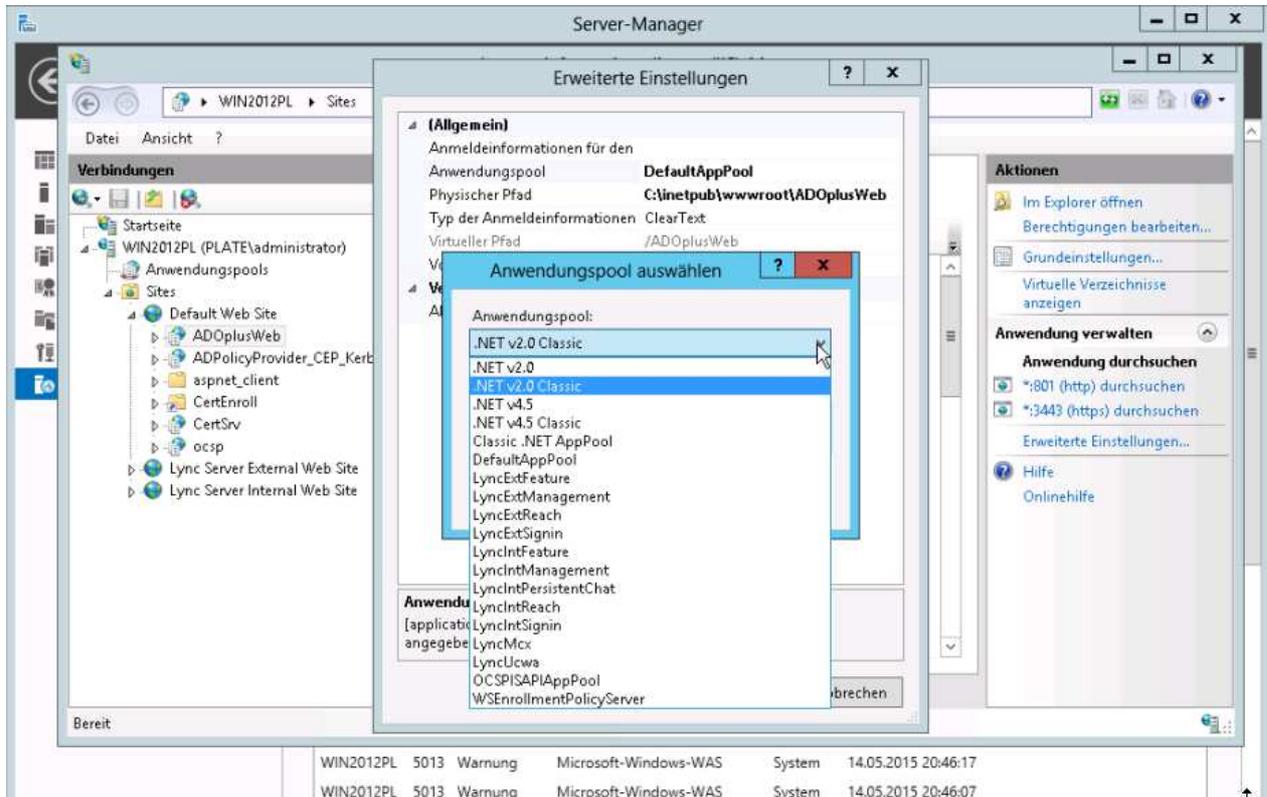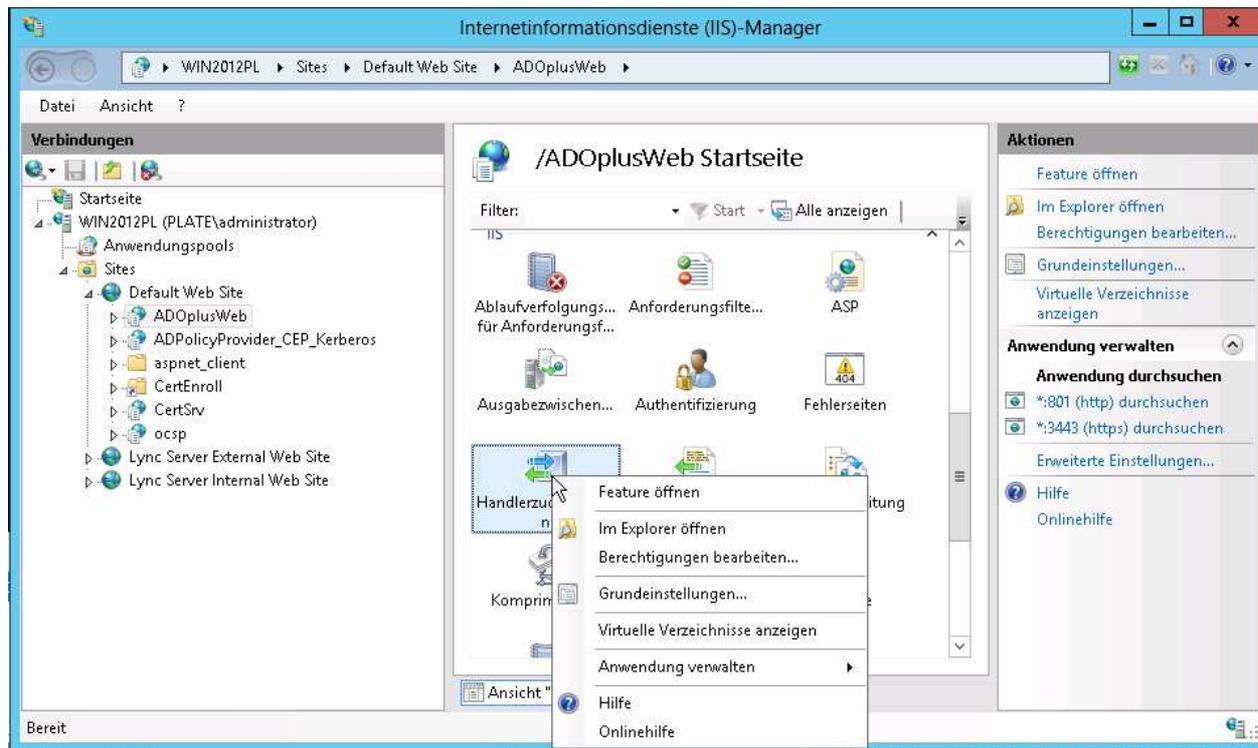
Click with the right mouse button on the icon Handler Mappings. Then click inside the windows right off button and then select Add mapping scripts.

Configure the script assignment according to the following screenshots.

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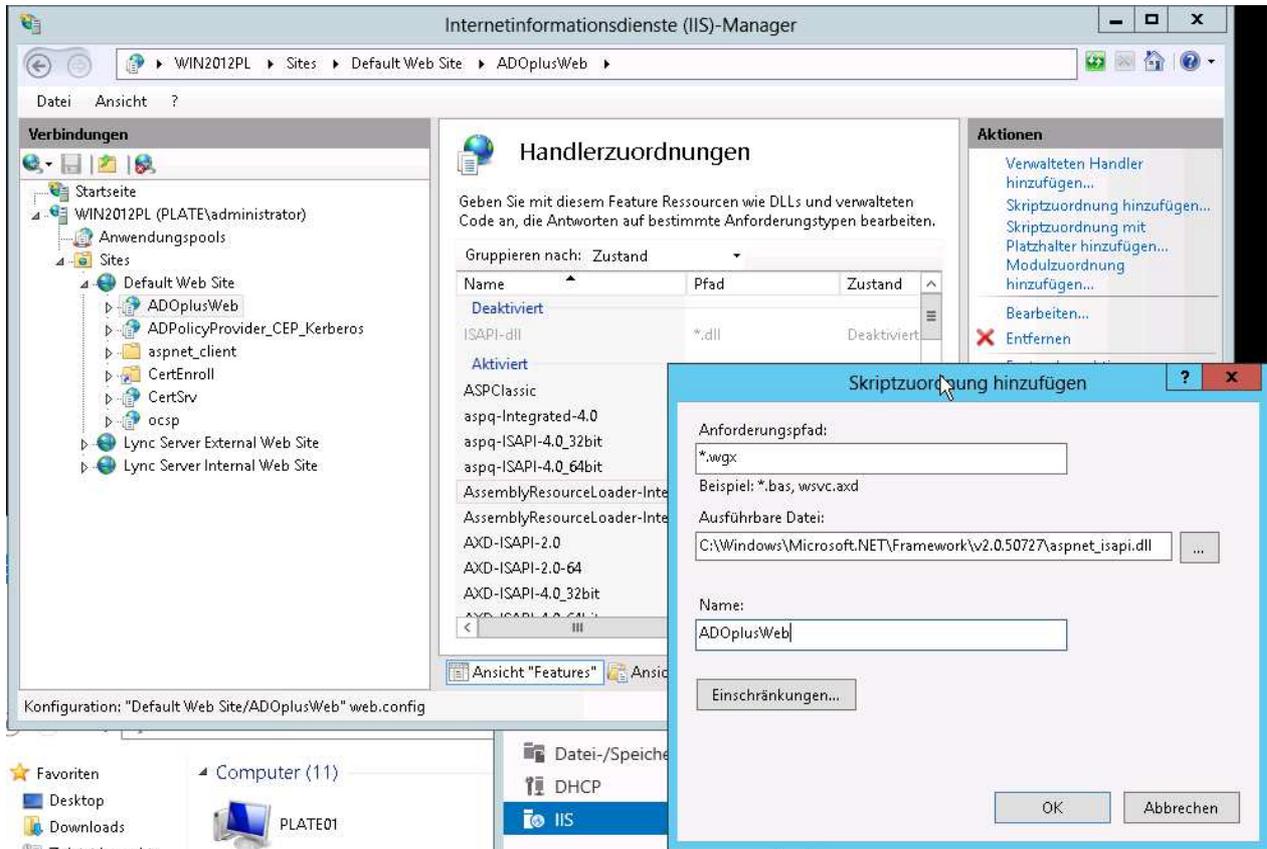
File system permissions

The identity in the selected application pool must have the directory read and write access to read and write configuration files in the ADOplusWeb directory. You can also simply give full access to the user.

When using the Enterprise Edition of ADOplusWeb this identity needs only read and write access to the SQL server databases with which ADOplusWeb is connected.

Setting the language

By default ADOplusWeb is installed in German on German systems, on the other language versions, the English version is installed. The selected language can be changed by adjusting the Web.Config file.

Change the setting:

 <globalization requestEncoding="utf-8" responseEncoding="utf-8" />

To:

  **<globalization   requestEncoding="utf-8"   responseEncoding="utf-8"   uiCulture="en"
culture="en-US"
/>**

First start of ADOplusWeb

To   start   the   application   you   launch   a   browser   and   select   the   website:

http://Name_or_IP_of_Server/ADOplusWeb/ADOplus.wgx

Then, the browser displays the login screen and you can log in. To register, use an activated
AD account.
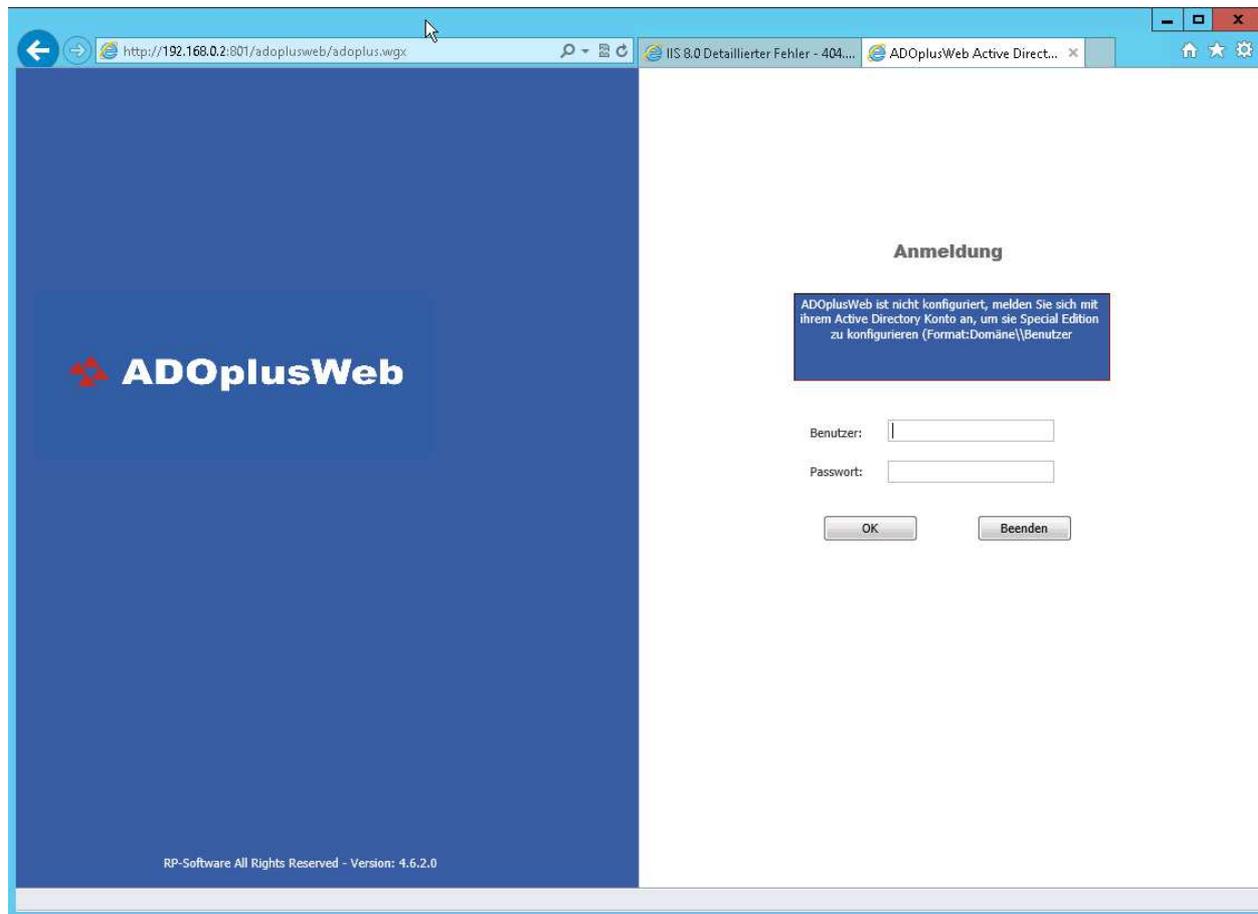
Then an input screen shows the configuration found by ADOplusWeb your ADs. Choose a different domain controller, or other AD-base, if desired. Check in the configuration for validity.
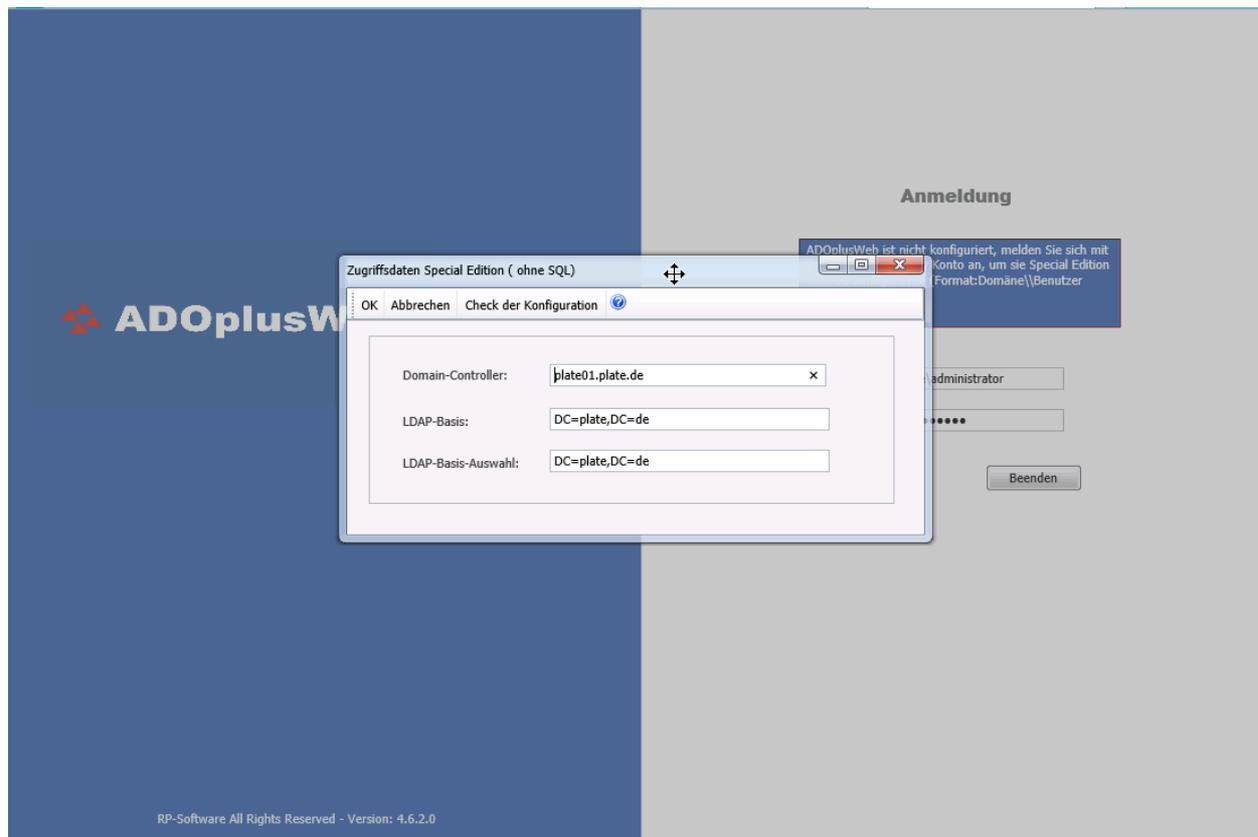
ADOplusWeb is now fully configured in the Standard Edition.

Enabling the Enterprise Edition is done by copying the file to the web directory SQL.DAT the Standard Edition and deleting or renaming the existing SE.DAT file.

Licensing of ADOplusWeb

To activate your ADOplusWeb installation, simply copy the license file into the ADOplusWeb installation directory.

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Configuration of the application

Enterprise version

In the Enterprise version ADOplusWeb uses the same SQL database as ADO++. This database is created by an ADO++ installation, eg. installed on the server with IIS, where ADOplusWeb is installed. The ADOplusWeb program users are also created in the SQL database by starting the ADO++-instance. ADOplusWeb (with the identity of the Applicationpool) has to connect to the SQL Server to read and write the ADO++ database (name: ADAD). To configure the ADOplusWeb access to the SQL server, the file SQL.Dat must be copied from the ADO++ directory to the ADOplusWeb directory.

Standard Edition

In the Standard Edition just start ADOplusWeb in the browser and log in with your Active Directory account to the ADOplusWeb console. If the login is successful, ADOplusWeb now offers a configuration window in which the Active Directory connection data needs to be confirmed or can be set. If possible choose here from a domain controller from the AD site where the Exchange servers are located in.

ADOplusWeb installation on a server running Exchange 2010 or 2007

ADOplusWeb is a 32-bit application. On an IIS with Exchange, 64-bit Web applications (ECP, OAB, Autodiscover) are installed by default with Exchange. ADOplusWeb as a 32-bit application, switches the IIS to 32 Bit. This leads to the following event entries and application pool shutdown at the start of ADOplusWeb.

- Event ID: 2280, Source: IIS-W3SVC-WP, "The Module DLL C:\Windows\system32\RpcProxy\RpcProxy.dll failed to load. The data is the error."
- Event ID: 5139, Source: WAS, "A listener channel for protocol 'http' in worker process '11776' serving application pool 'DefaultAppPool32bit' reported a listener channel failure. The data field contains the error number."
- Event ID: 5002, Source: WAS, "Application pool 'DefaultAppPool32bit' is being automatically disabled due to a series of failures in the process(es) serving that application pool."

This problem occurs because when you switch an Application Pools to 32-bit this sets the entire IIS7 on 32 Bit,   not only the appropriate Application Pool. Since RpcPdroxy.dll only supports 64-bit, now the error occurs. The problem cannot be changed when the 32-bit application uses its own web site. The RpcProxy.dll comes with Exchange 2007, Exchange 2010, 2013, or the Terminal Services Gateway.

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To solve the problem, the appropriate dll files are to be excluded in the **applicationHost.config**. The config file is in the directory:

"C:\Windows\System32\inetsrv\config".

In this file the setting <**globalModules**> must be changed:

<add name="PasswordExpiryModule"
image="C:\Windows\system32\RpcProxy\RpcProxy.dll" />

To:

<add name="PasswordExpiryModule"
image="C:\Windows\system32\RpcProxy\RpcProxy.dll" preCondition="bitness64" />

Do the same adaptation with the following lines **(add preCondition="bitness64")**:

<add name="kerbauth"
image="C:\Program Files\Microsoft\Exchange Server\V14\Bin\kerbauth.dll"
preCondition="bitness64" />

<add name="exppw"
 image="C:\Program Files\Microsoft\Exchange
Server\V14\ClientAccess\Owa\auth\exppw.dll" />

In this file area <**isapiFilters**> the settings must be changed:

From:

<filter name="Exchange OWA Cookie Authentication ISAPI Filter" path="C:\Program
Files\Microsoft\Exchange Server\ClientAccess\owa\auth\owaauth.dll"
enabled="true"/>

To:

<filter name="Exchange OWA Cookie Authentication ISAPI Filter" path="C:\Program
Files\Microsoft\Exchange Server\ClientAccess\owa\auth\owaauth.dll" enabled="true"
preCondition="bitness64" />

From:

<filter   name="Exchange   ActiveSync   ISAPI   Filter"   path="C:\Program
Files\Microsoft\Exchange Server\ClientAccess\sync\bin\AirFilter.dll" enabled="true" />

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To:

<filter name="Exchange ActiveSync ISAPI Filter" path="C:\Program Files\Microsoft\Exchange Server\ClientAccess\sync\bin\AirFilter.dll" enabled="true" preCondition="bitness64" />

If the error remains, please check the envent viewer and add bitness64 to the mentioned dlls.

After these changes, the applicationpool must be restarted.