

# ***eCom Platform***

## ***Installation Guide for Postal Operators***

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# Table of contents

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<b>About this document</b>	<b>4</b>
Intended audience	4
How to use this manual	4
Overview of the eCom API	4
Architecture	4
<b>Installing the eCom platform</b>	<b>6</b>
Overview	6
Prepare the web server	6
Install and configure eCom API	8
Install and configure eCom Admin	11
<b>Installing the Domestic Postal System (DPS)</b>	<b>12</b>
Overview	12
Install the DPS database	12
Prepare the web server	12
Install and configure the DPS web application	14
Install the DPS Windows service	17
<b>Installing the applications</b>	<b>19</b>
Overview	19
Installing IFS	19
Installing IPS	19
Installing CDS	19

# About this document

This guide explains how to install and configure the eCom API.

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## *Intended audience*

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The guide is intended for use System Administrators and members of the UPU's Postal Technology Centre who are responsible for installing the eCom API.

Installing the eCom API requires familiarity with Windows operating systems, Internet Information Services and SQL Server.

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## *How to use this manual*

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Before you begin installation, first read the introduction to understand the architecture of the eCom API. Then, follow the installation chapters in order.

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## *Overview of the eCom API*

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The eCom API is an eCommerce solution which groups the services and functions of IPS, IFS and CDS. The API enables these services and functions to be integrated into existing eCommerce platforms.

It is designed for either domestic or international use.

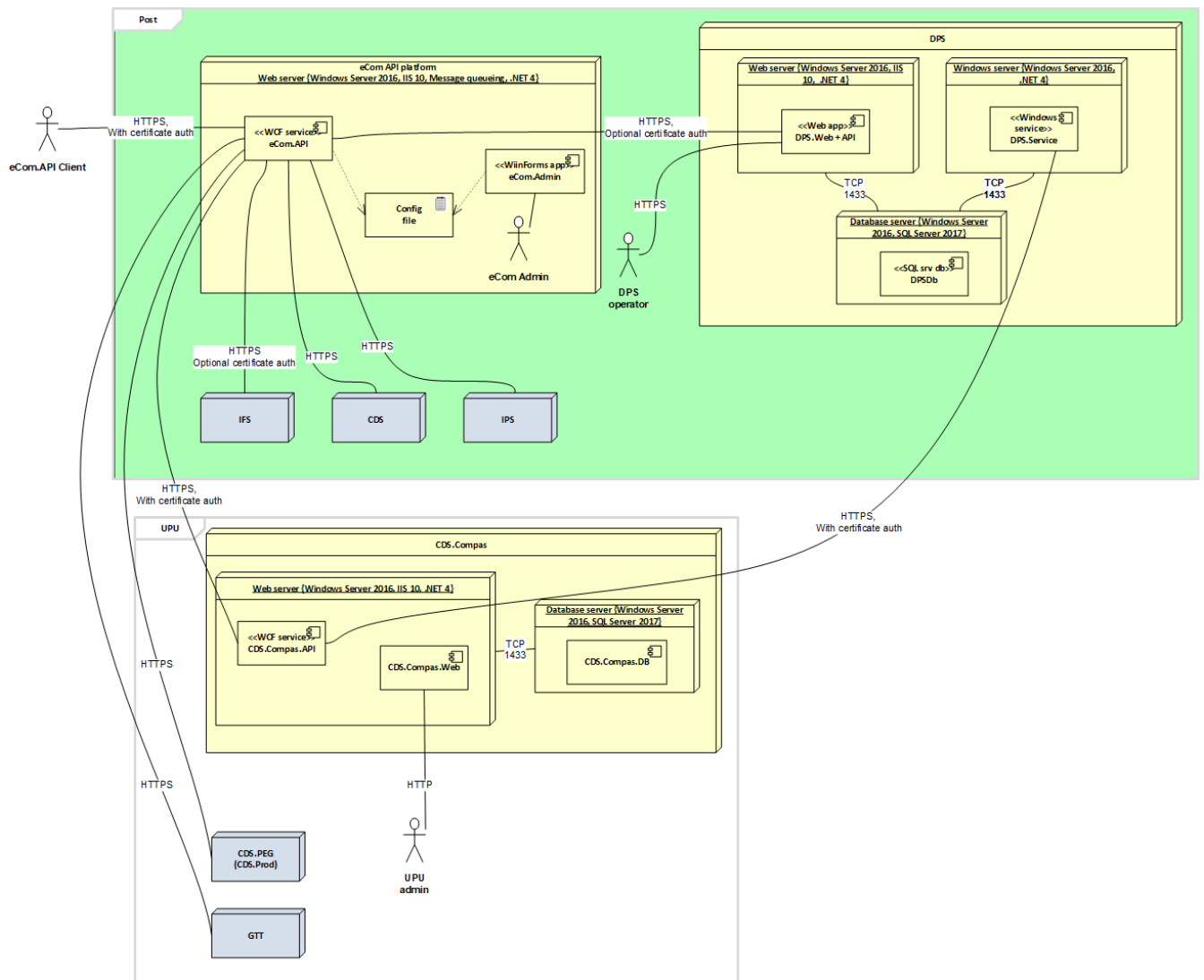
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## *Architecture*

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The e-commerce platform includes a central part hosted at the UPU, and a local part installed at the postal organization. The components to be installed at the postal organization are shown below in green.

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Note that these are the components required for international eCommerce. For domestic eCommerce, IPS and CDS are not needed.

# Installing the eCom platform

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## Overview

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The eCom platform is composed of:

- eCom.API: a WCF web service (SOAP/XML and REST/JSON)
- eCom.Admin: a WinForms application used to configure security and access to the PTC applications

eCom API is a SOAP/REST API to be installed on servers at postal organizations. To install the eCom platform you need to install the following two components on a web server:

- eCom API
- eCom Admin

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## Prepare the web server

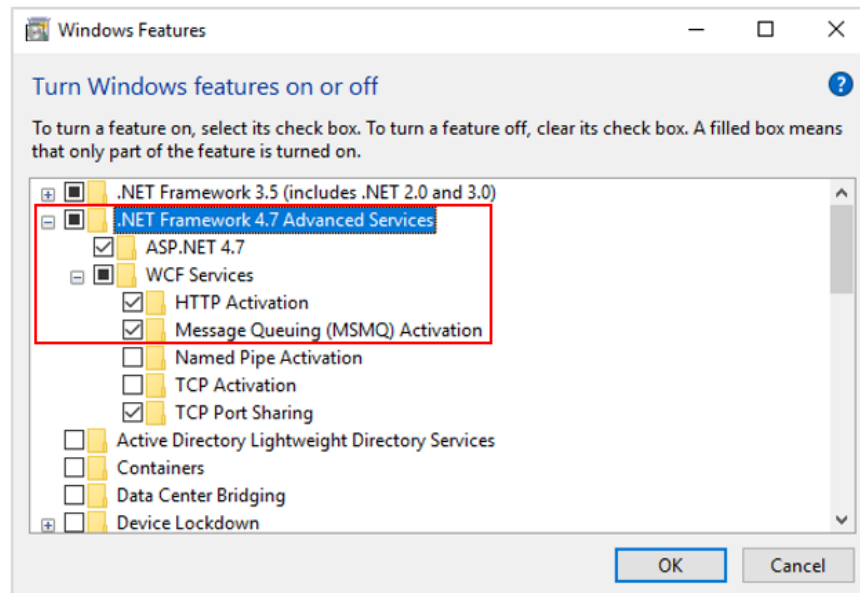
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### Web server requirements

- Windows Server 2016
- Internet Information Services (IIS) 10
- .NET 4.7.1

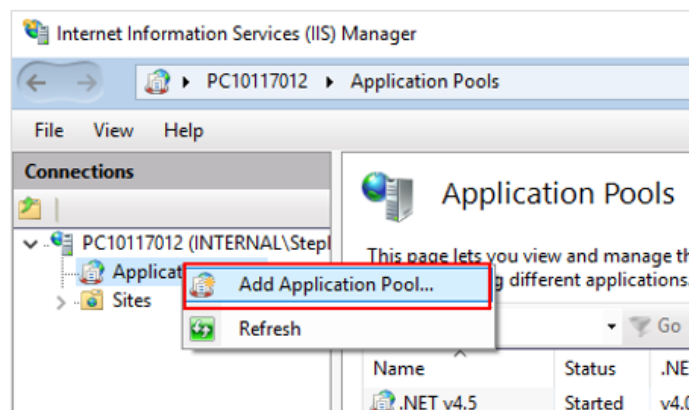
### Configure the web server

1. Install IIS 10, if it is not installed on your server.
2. Enable WCF Services, including HTTP Activation and Message Queuing, using the Windows features configuration.

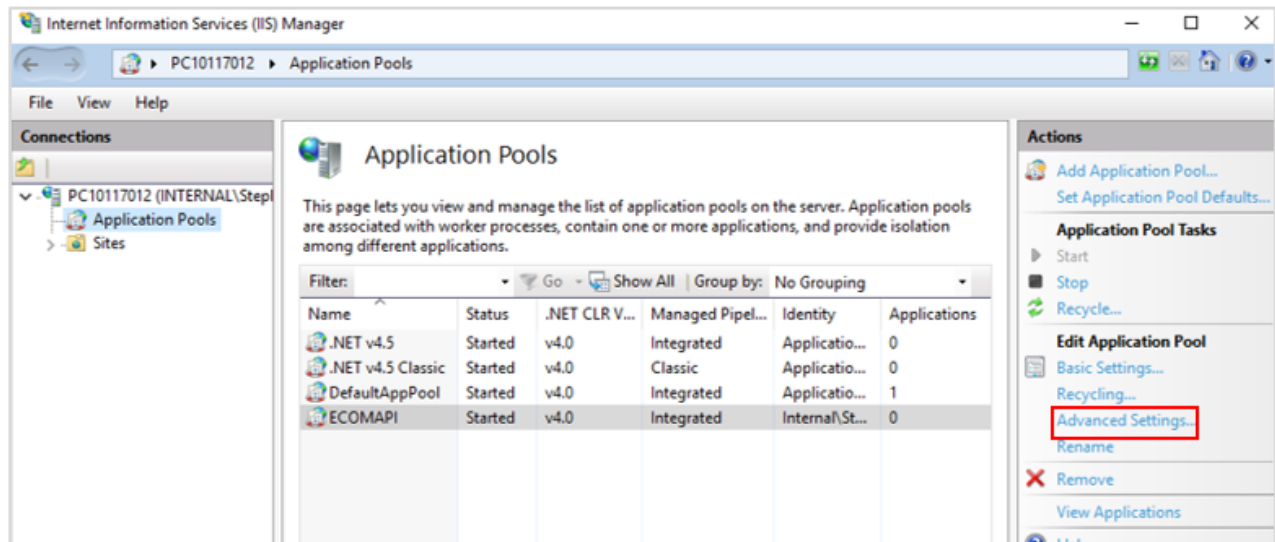


## Create the application pool

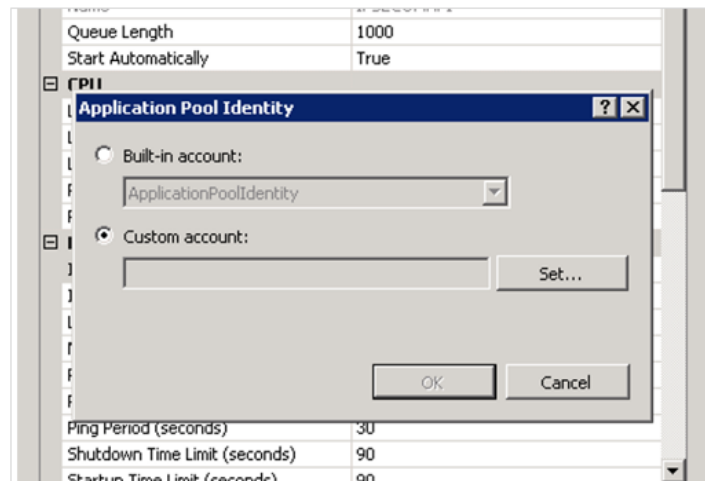
1. Open IIS and click on the web server name to expand it.
2. Create a new application pool by right-clicking on **Application Pools** and selecting **Add Application Pool**.



3. Give the application pool a name, then click **OK** to close the [Add Application Pool](#) dialogue.
4. Select the newly created application pool in the list, then click **Advanced Settings** on the right.



- Click **Identity** in the **Process Model** section, then select the **Custom account** radio button and click **Set....**

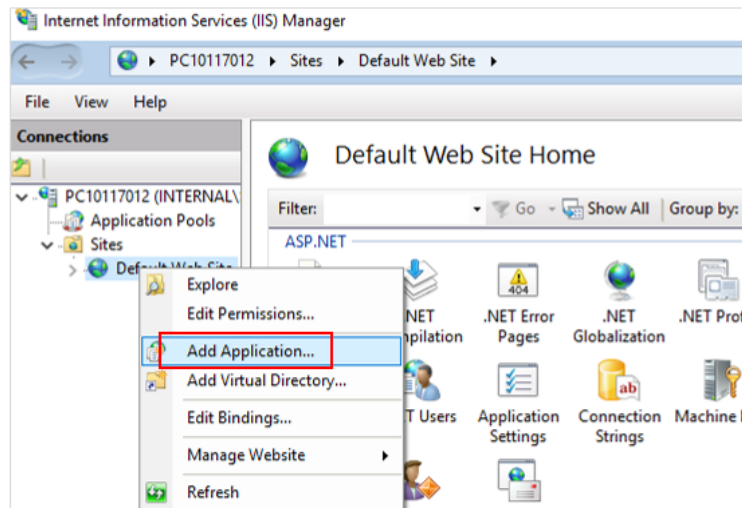


- In the **Set Credentials** window, specify the user name and password of a user that can access **Certificates** under Local Machine and **config.txt** in the \ECOMAPI folder created in the next section.

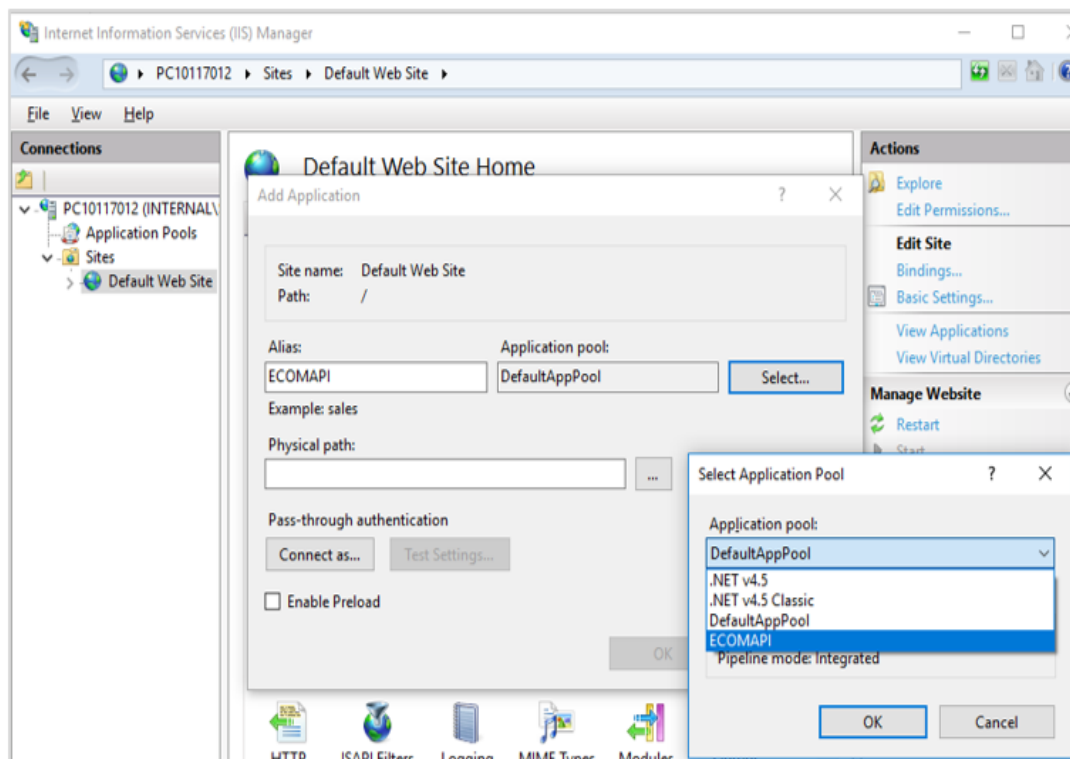
## Install and configure eCom API

- Create a new folder on your web server for the eCom API files (normally under C:\inet-pub\wwwroot) with a recognizable name, such as **ECOMAPI**. Copy the files from the API distribution folder into the folder you created.
- In IIS, right-click **Sites\Default Web Site** and select **Add Application**.

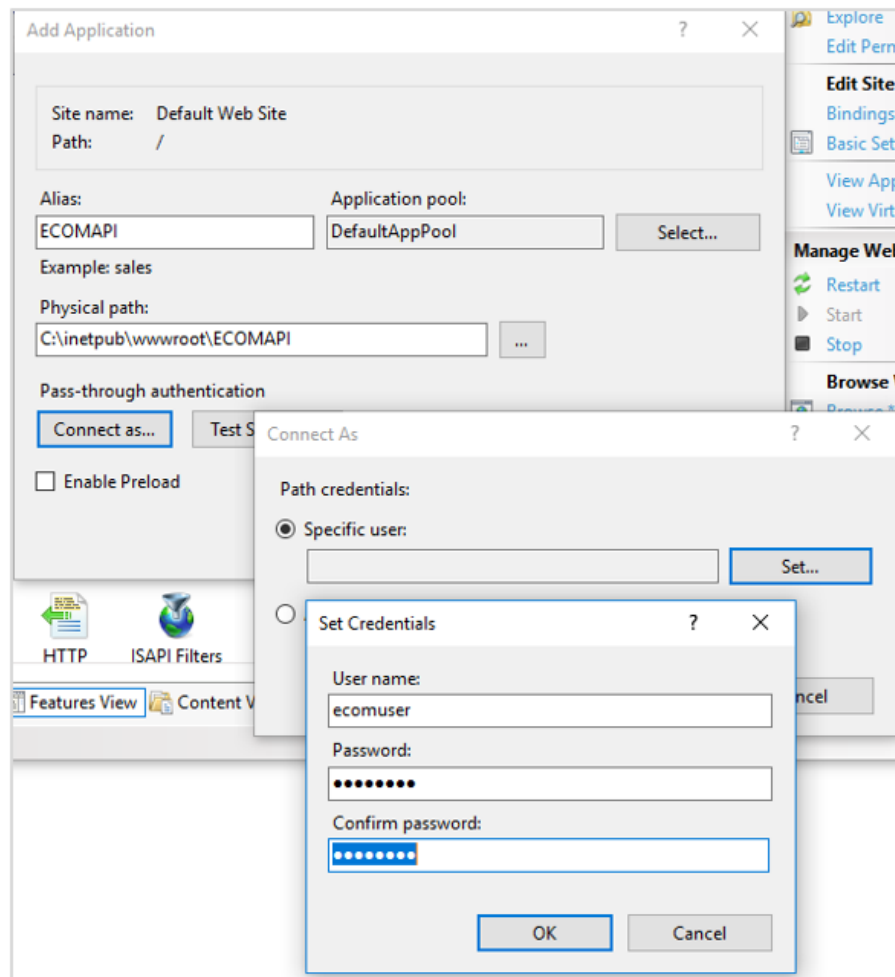




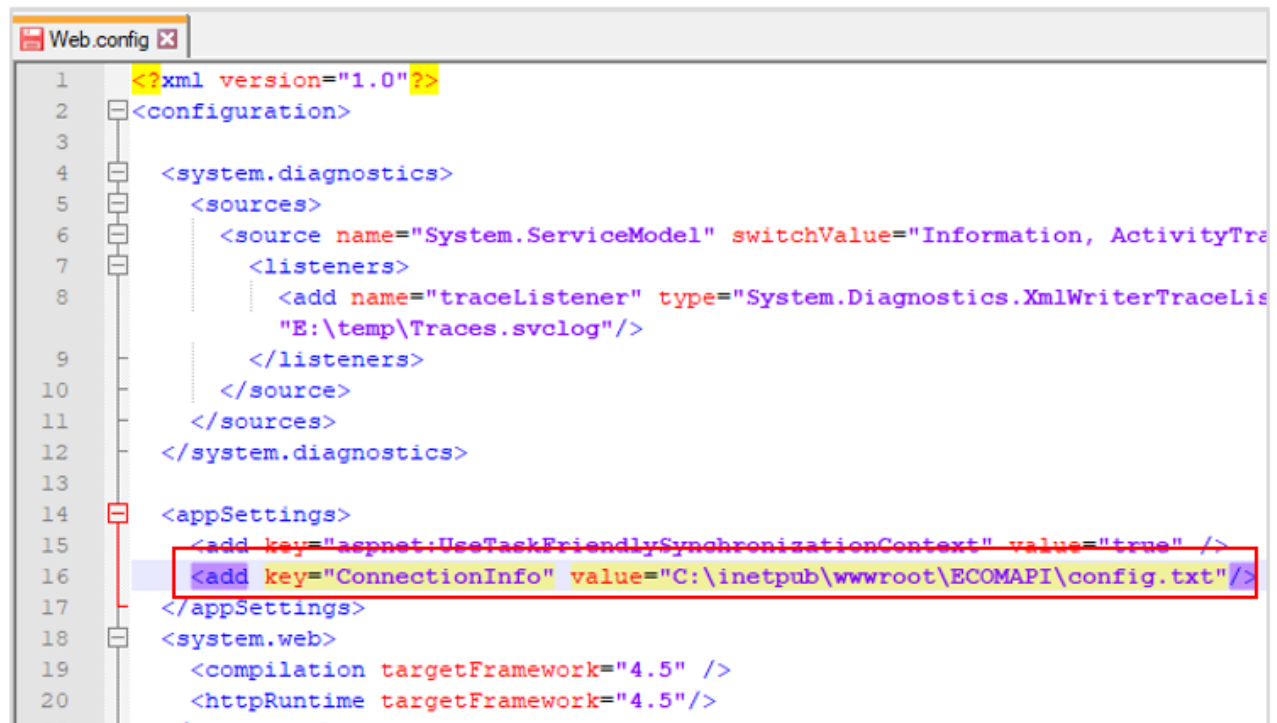
3. Give the application a name (**Alias**) and click **Select....** Select the application pool created in [Configure the application pool](#) from the **Application pool** drop-down list and click **OK**.



4. Set the **Physical path** to the location of the folder you created in Step 1.
5. Click **Connect as...**, then select the **Specific user** radio button and click **Set....**



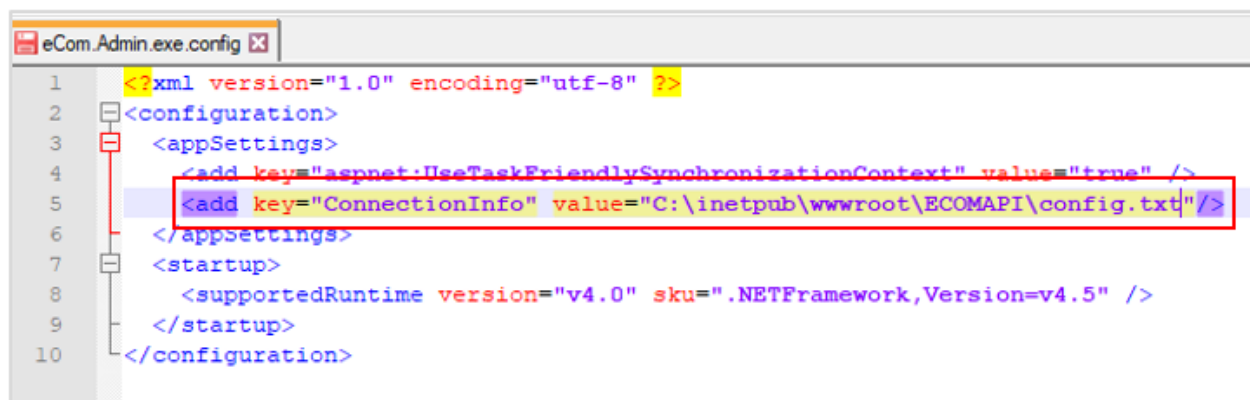
6. Specify a user name and password with access to the folder created in step 1, then accept the changes and return to the main IIS window.
7. From the API folder you created (in our example, C:\inetpub\wwwroot\ECOMAPI), open file [web.config](#) and change **ConnectionInfo** to the path to the **config.txt** file, such as in the following example:



```
1 <?xml version="1.0"?>
2 <configuration>
3
4   <system.diagnostics>
5     <sources>
6       <source name="System.ServiceModel" switchValue="Information, ActivityTrac
7         <listeners>
8           <add name="traceListener" type="System.Diagnostics.XmlWriterTraceLis
9             "E:\temp\Traces.svolog"/>
10        </listeners>
11      </source>
12    </sources>
13  </system.diagnostics>
14
15  <appSettings>
16    <add key="aspnet:UseTaskFriendlySynchronizationContext" value="true" />
17    <add key="ConnectionInfo" value="C:\inetpub\wwwroot\ECOMAPI\config.txt"/>
18  </appSettings>
19
20  <system.web>
21    <compilation targetFramework="4.5" />
22    <httpRuntime targetFramework="4.5"/>
23  </system.web>
24</configuration>
```

## Install and configure eCom Admin

1. Create a new folder on your web server for the eCom Admin files (e.g. C:\ECOMADMIN) and copy the files from the eCom Admin distribution folder into the folder you created.
2. From the directory you created in the previous step (in our example, C:\ECOMADMIN), open file eCom.Admin.exe.config and change **ConnectionInfo** to the path to the eCom API **config.txt** file, such as in the following example:



```
1 <?xml version="1.0" encoding="utf-8" ?>
2 <configuration>
3   <appSettings>
4     <add key="aspnet:UseTaskFriendlySynchronizationContext" value="true" />
5     <add key="ConnectionInfo" value="C:\inetpub\wwwroot\ECOMAPI\config.txt"/>
6   </appSettings>
7   <startup>
8     <supportedRuntime version="v4.0" sku=".NETFramework,Version=v4.5" />
9   </startup>
10</configuration>
```

# *Installing the Domestic Postal System (DPS)*

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## *Overview*

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To install DPS you need to install the following components:

- DPS database
- DPS Web application
- DPS Windows service

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## *Install the DPS database*

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To install the DPS database, restore the database backup (DPSTDb.bak) from the DPS distribution.

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## *Prepare the web server*

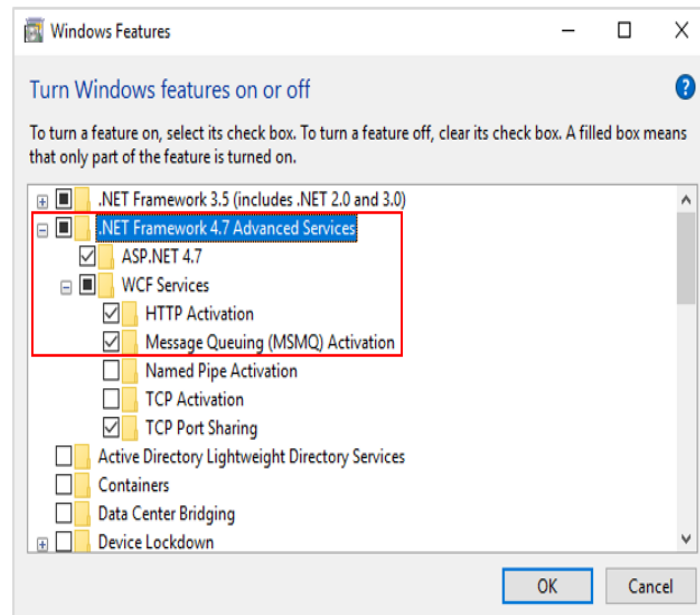
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### **Web server requirements**

- Windows Server 2016
- Internet Information Services (IIS) 10
- .NET 4.7.1

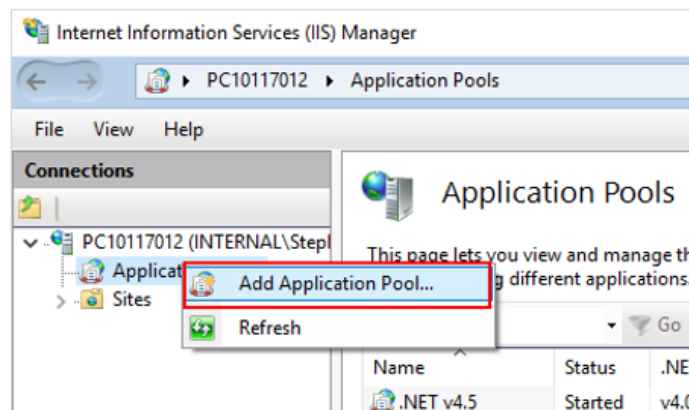
### **Configure the web server**

1. Install IIS 10, if it is not installed on your server.
2. Enable WCF Services and HTTP Activation using the Windows features configuration. **[not needed?]**

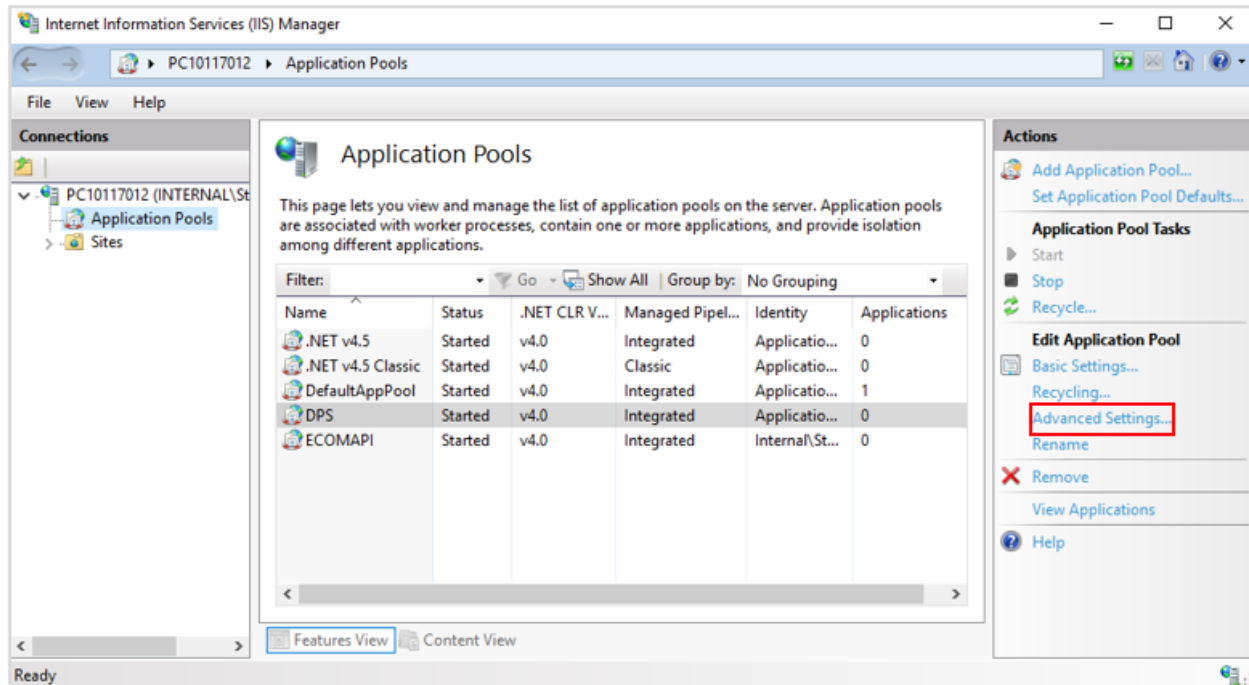


## Create the application pool

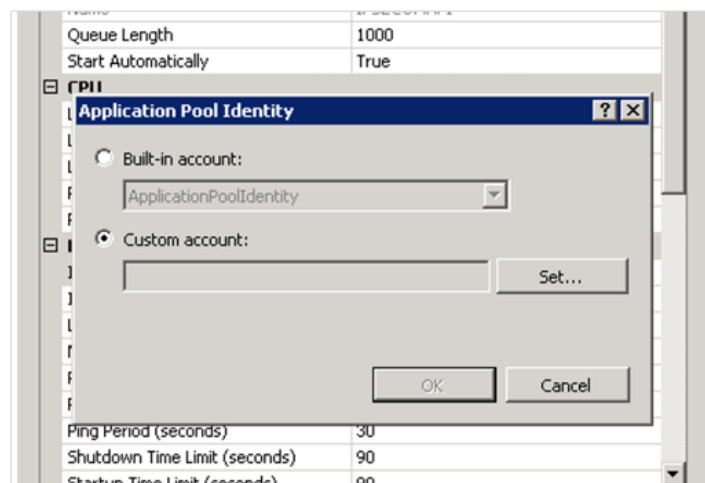
1. Open IIS and expand the server name.
2. Create a new application pool by right-clicking on **Application Pools** and selecting **Add Application Pool**.



3. Give the application pool a name, then click **OK** to close the [Add Application Pool](#) dialogue.
4. Select the newly created application pool in the list, then click **Advanced Settings** on the right.



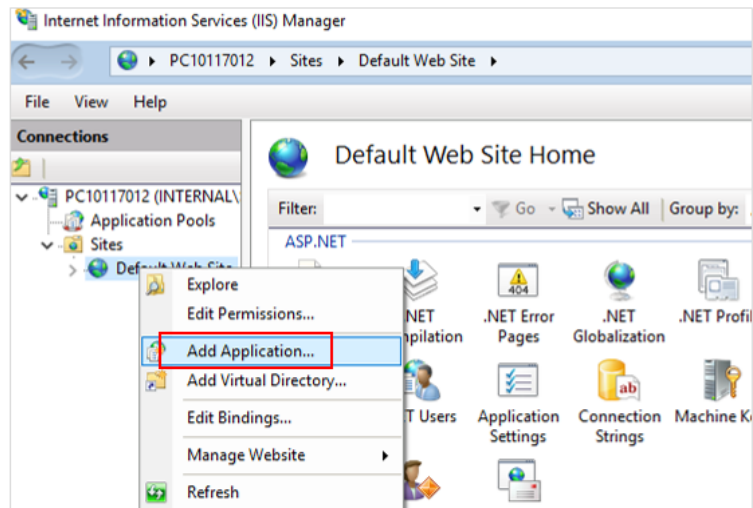
- Click **Identity** in the **Process Model** section, then select the **Custom account** radio button and click **Set....**



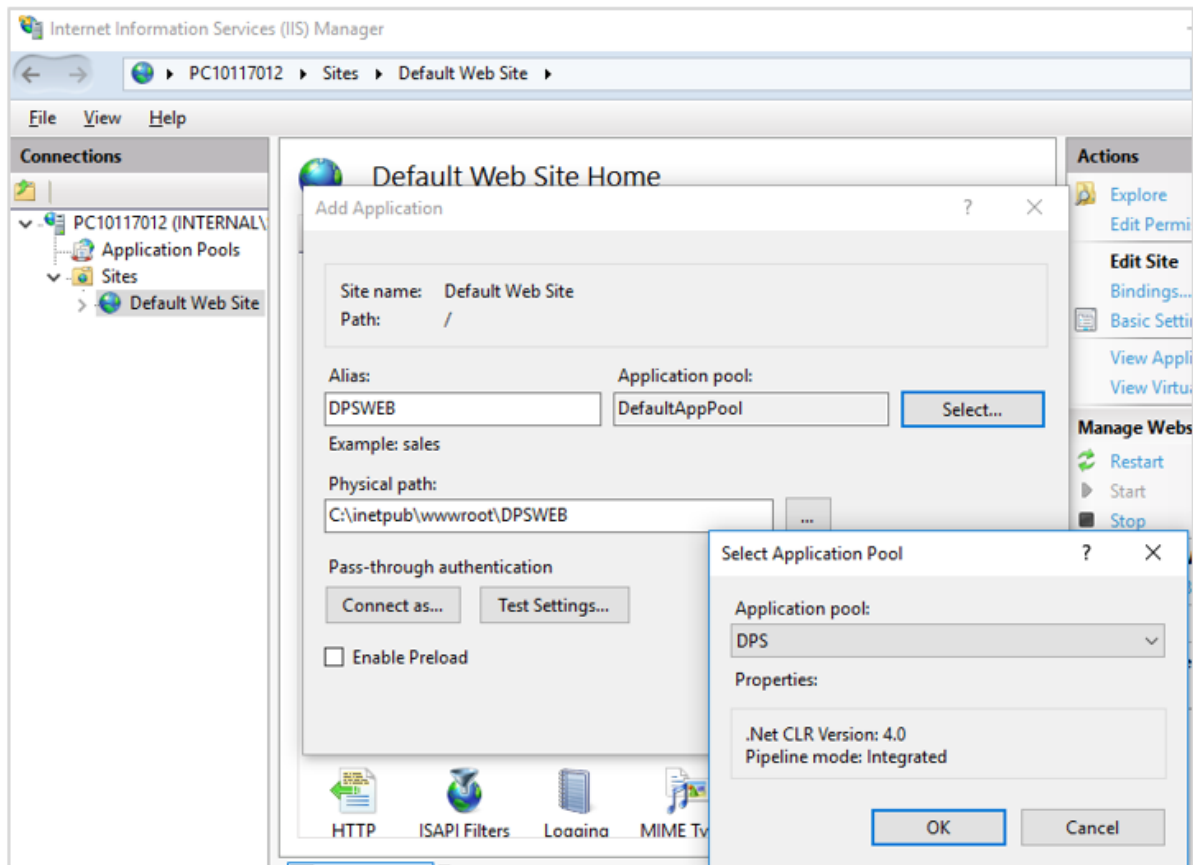
- In the **Set Credentials** window, specify the user name and password of a user with **dbowner** rights on the DPS database and access rights to **Certificates** under Local Machine.

## Install and configure the DPS web application

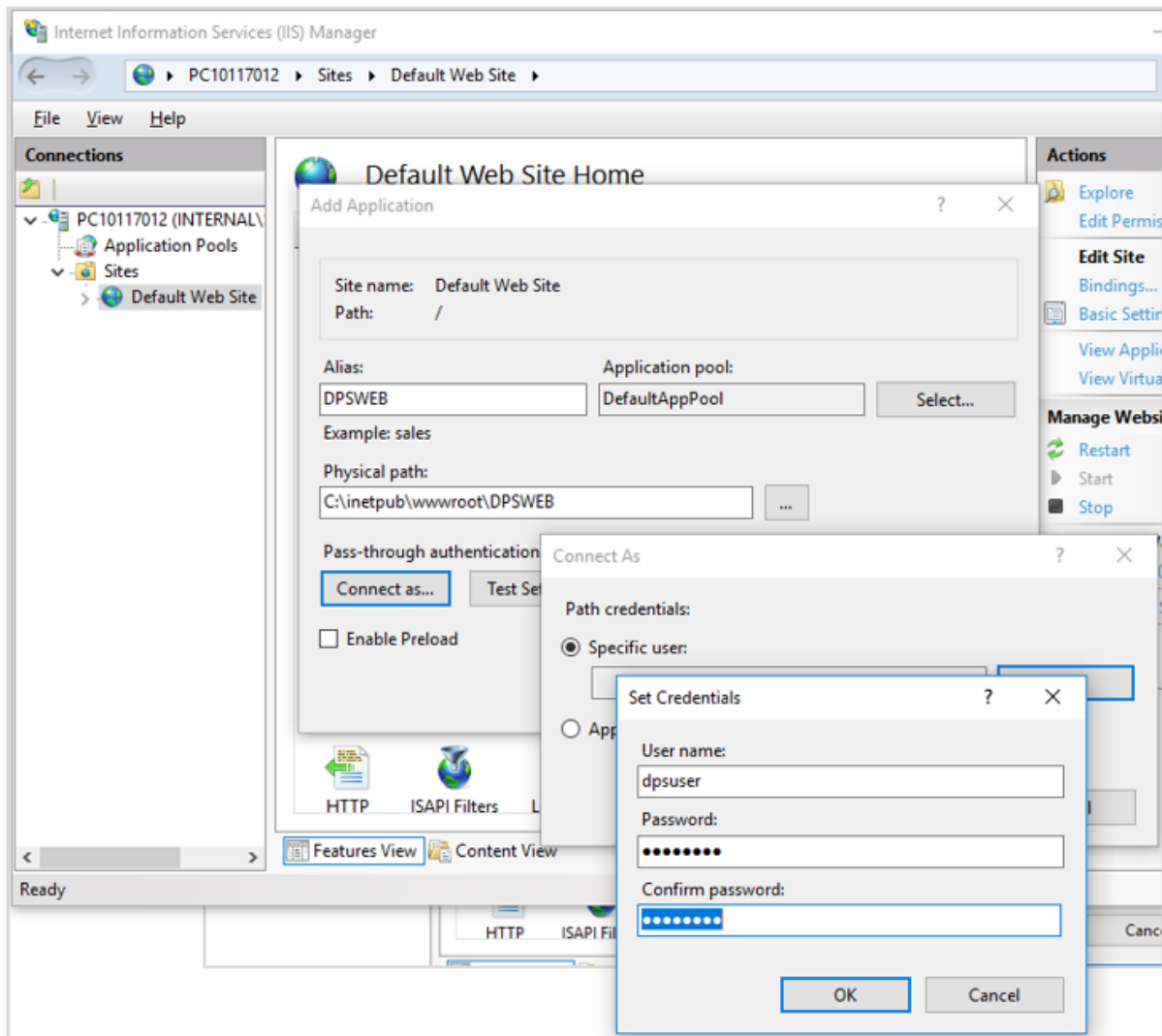
- Create a new folder on your web server for the DPS files ( normally under C:\inet-pub\wwwroot) with a recognizable name, such as **DPSWEB**. Copy the files from the DPS Web distribution folder into the folder you created.
- In IIS, right-click on **Sites\Default Web Site** and select **Add Application**.



3. Give the application a name (**Alias**) and click **Select...**. Select the application pool created in [Configure the application pool](#) from the **Application pool** drop-down list and click **OK**.

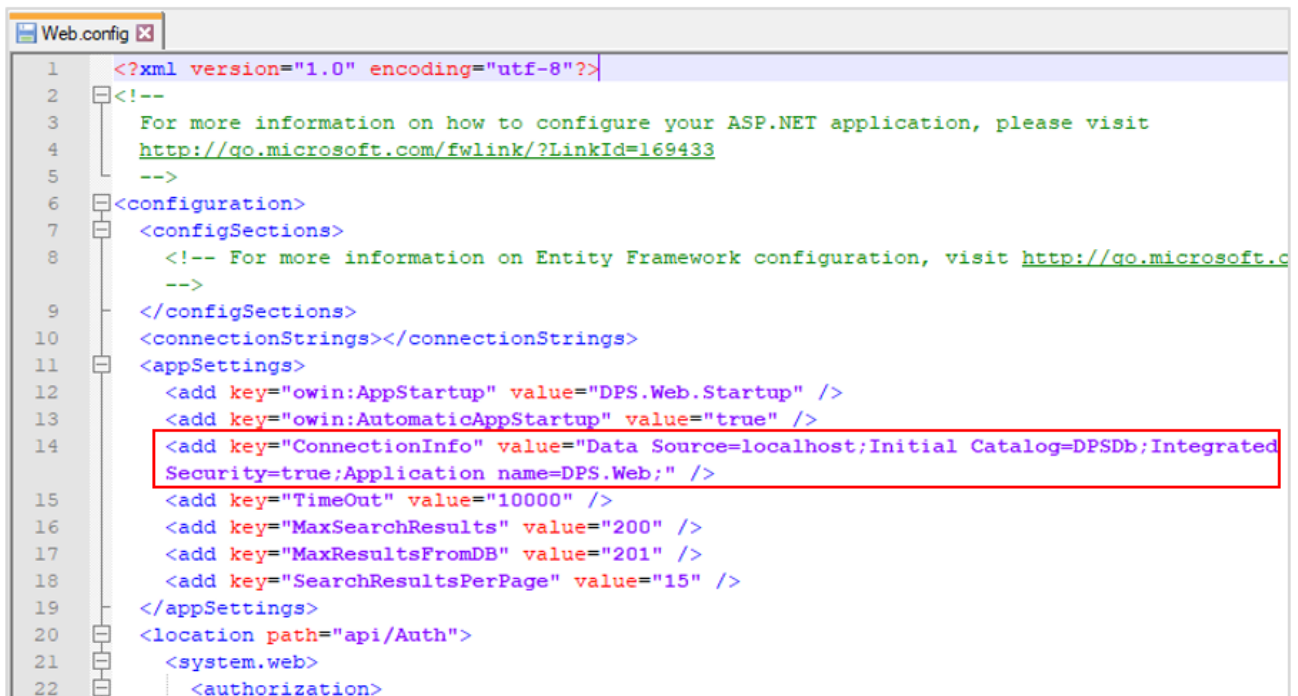


4. Set the **Physical path** to the location of the folder you created in Step 1. Click **Connect as...**, then select the **Specific user** radio button and click **Set...**



5. Specify a user name and password with access to the folder created in step 1, then accept the changes and return to the main IIS window.
6. From the DPS web application folder you created (in our example, C:\inetpub\wwwroot\DPSWEB), open file [web.config](#) and change the **ConnectionInfo** to connect to the DPS database, such as in the following example:



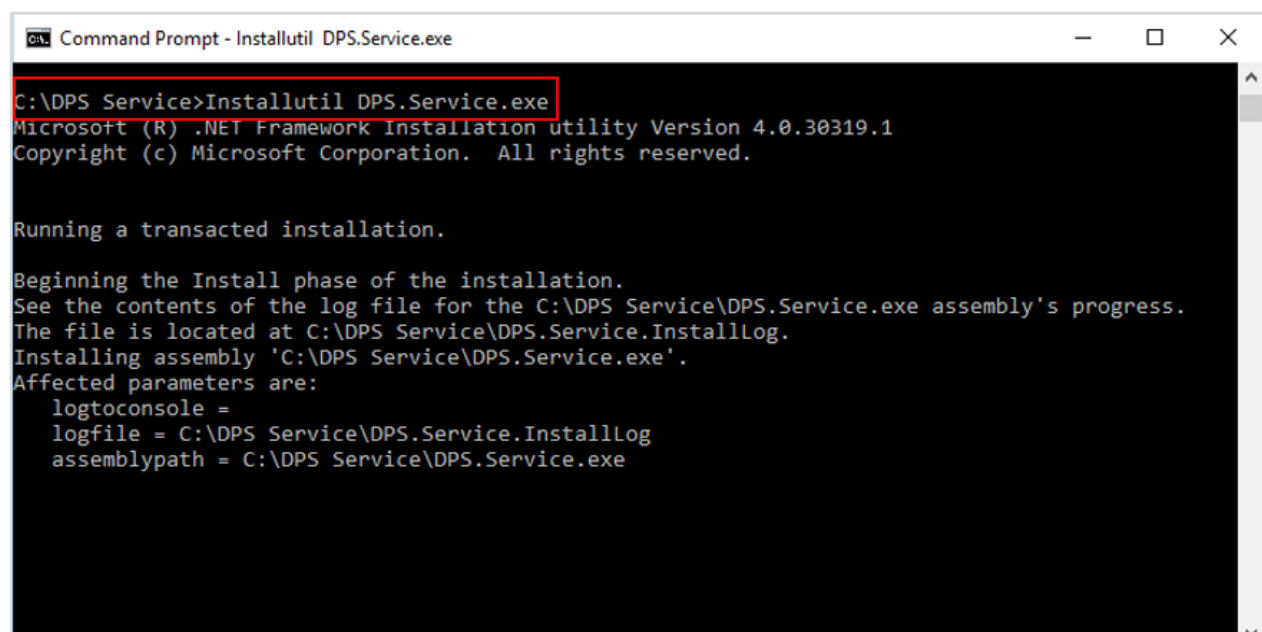


```
1 <?xml version="1.0" encoding="utf-8"?>
2 <!--
3 For more information on how to configure your ASP.NET application, please visit
4 http://go.microsoft.com/fwlink/?LinkId=169433
5 -->
6 <configuration>
7 <configSections>
8 <!-- For more information on Entity Framework configuration, visit http://go.microsoft.com/fwlink/?LinkId=169433 -->
9 </configSections>
10 <connectionStrings></connectionStrings>
11 <appSettings>
12 <add key="owin:AppStartup" value="DPS.Web.Startup" />
13 <add key="owin:AutomaticAppStartup" value="true" />
14 <add key="ConnectionInfo" value="Data Source=localhost;Initial Catalog=DPSDb;Integrated Security=true;Application name=DPS.Web;" />
15 <add key="Timeout" value="10000" />
16 <add key="MaxSearchResults" value="200" />
17 <add key="MaxResultsFromDB" value="201" />
18 <add key="SearchResultsPerPage" value="15" />
19 </appSettings>
20 <location path="api/Auth">
21 <system.web>
22 <authorization>
```

## Install the DPS Windows service

### Windows server requirements

- Windows Server 2016
  - .NET 4.7.1
1. Create a DPS Service folder on the Windows server and copy the DPS service files to it.
  2. Open the Windows command prompt and run the following install command in the DPS Service folder:



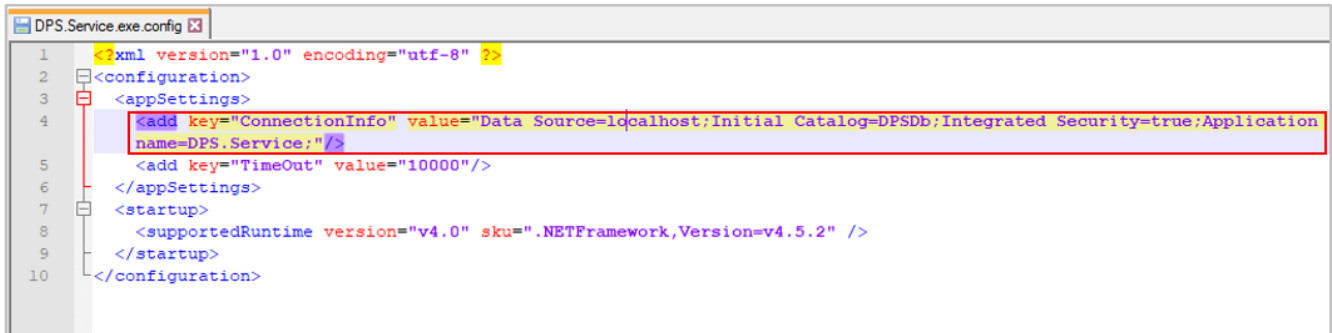
```
Command Prompt - Installutil DPS.Service.exe

C:\DPS Service>Installutil DPS.Service.exe
Microsoft (R) .NET Framework Installation utility Version 4.0.30319.1
Copyright (c) Microsoft Corporation. All rights reserved.

Running a transacted installation.

Beginning the Install phase of the installation.
See the contents of the log file for the C:\DPS Service\DPS.Service.exe assembly's progress.
The file is located at C:\DPS Service\DPS.Service.InstallLog.
Installing assembly 'C:\DPS Service\DPS.Service.exe'.
Affected parameters are:
  logtoconsole =
  logfile = C:\DPS Service\DPS.Service.InstallLog
  assemblypath = C:\DPS Service\DPS.Service.exe
```

3. Choose a login that can access Certificates under Local Machine and has dbowner rights on the DPS database.
4. From the DPS service folder you created, open file `DPS.Service.exe.config` and change the **ConnectionInfo**, such as in the following example:



```
1 <?xml version="1.0" encoding="utf-8" ?>
2 <configuration>
3   <appSettings>
4     <add key="ConnectionInfo" value="Data Source=localhost;Initial Catalog=DPSDb;Integrated Security=true;Application
5       name=DPS.Service;" />
6     <add key="TimeOut" value="10000" />
7   </appSettings>
8   <startup>
9     <supportedRuntime version="v4.0" sku=".NETFramework,Version=v4.5.2" />
10  </startup>
11 </configuration>
```

# *Installing the applications*

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## *Overview*

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In order to use the eCom API for international eCommerce, you need to install the following applications:

- IFS
- IPS
- CDS

If you plan to use the API for domestic eCommerce, you only need to install IFS.

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## *Installing IFS*

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For instructions on installing IFS, see the [IFS Installation Guide](#).

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## *Installing IPS*

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For instructions on installing IPS, see the [IPS Installation Guide](#).

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## *Installing CDS*

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For instructions on installing IFS, see the [CDS Installation Guide](#).