

**Deltek.ProPricer**

## Connect For Web Windows Deployment Guide

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# Requirements and recommendations

## Minimum requirements

- Microsoft Windows Server 2016 (64 bits).
- Internet Information System 8.0.
- Microsoft SQL Server 2016 (13.x) or later.
- Valid SSL certificate(s) for all websites.
- DNS entry to resolve the fully qualified domain name matching the SSL certificate(s).
- Optional: PFX certificate for encryption of authentication tokens.

## Deployment packages

The .NET runtime is provided by ASP.NET Hosting Bundle. Deployment package includes a Windows x64 platform specific executable.

The zip package is available in the [Deltek Software Manager \(DSM\)](#).

# Install Connect for Web

Download and unzip the Connect for Web zip package to a folder where you want the site (for example, C:\inetpub\Connect for Web).

The ZIP packages are available in the [Deltek Software Manager \(DSM\)](#).

## Prerequisites

### Enable Internet Information Service

1. Open Add Roles and Features.
2. In Roles, make sure Web Server (IIS) is enabled.
3. In Web Server, make sure the following are installed.
  - Default Document
  - Directory Browsing
  - HTTP Errors
  - Static Content
  - HTTP Logging
  - Static Content Compression
  - Request Filtering
  - IIS Management Console
4. Restart the server if required.

## Install the .NET 8 Windows Server Hosting Bundle

Install the .NET 8 Hosting Bundle on the hosting system. The bundle installs the .NET 8 Runtime, .NET 8 Library, and the ASP.NET Core Module. The module allows ASP.NET Core apps to run behind IIS.

1. Go to the [Download .NET 8.0](#) page.
2. In the Run apps - Runtime column, find the row of the latest .NET 8 runtime version desired. Download the installer using the Hosting Bundle link.
3. Run the installer on the server.
4. Restart the system or execute the following commands in a command shell:

```
net stop was /y  
net start w3svc
```

## Installation

1. Open Internet Information Service (IIS) Manager.
2. Create the ProPricer Connect for Web application pool. To create a new pool:
  - Right-click Application Pools, then select Add Application Pool.
  - In the Name field, enter a valid name like ProPricer Connect for Web App Pool.
  - In the .NET CLR version field, select No Managed Code.
  - In the Managed pipeline mode field, select Integrated.
  - Select Start application pool immediately.
  - Click OK to create the application pool.
  - Right-click ProPricer Connect for Web App Pool, then select Advanced Settings.
  - Set Load User Profile to True.
  - Click OK to save the change.
  - Right-click ProPricer Connect for Web App Pool, then select Recycle.
3. Create the ProPricer Connect for Web website.
  - Right-click the Sites folder, then select Add Website.
  - In the Site name field, enter ProPricer Connect for Web.
  - In the Application pool field, select the pool created in previous steps.
  - In the Physical path field, enter or select the path where the ProPricer Connect for Web files will be located. For example, C:\inetpub\Connect for Web.
  - In the Port field, enter a valid port number. For example, 443.
  - In the Host name field, enter a domain and SSL certificate.
  - Click OK to create the website.

Connect for Web requires an SSL certificate.

## Configuration

To configure Connect for Web, use the Config Tool provided in the Configure folder in the target folder or edit appsettings.json and authorization.config.json.

The Config Tool is recommended.

### Configuration Tool

1. Go to the target folder then **Configure** folder.
2. Launch **ConfigTool.exe** application
3. In the **Host** field enter ProPricer 9 server hostname.
4. In the **Port** field enter ProPricer 9 server port (default is 8092).
5. In the **Registration key** field enter ProPricer Connect for Web license key.
6. In the Auth Token section you can edit, add or delete the authentication tokens for Connect for Web.
  - a. The **Authentication Tokens** field is the **username** when sending requests.
  - b. The **Secret field** is the **password** when sending requests. Changing the secret field via the config tool automatically hashes the secret field in the authorization.config.json file.
  - c. The **Expiration** is the last day the token is valid.
  - d. The **Username** field is the ProPricer 9 login name for a ProPricer login type.
  - e. The **Password** field is the ProPricer 9 login name for a ProPricer login type.
  - f. The **Connection Name** field is the ProPricer 9 database connection name.
7. In the **HTTP Method Permissions** field select the permissions for GET, POST, PATCH, and DELETE.

## Enable logging

Connect for Web captures all errors and sends them in the response for every request.

You can send some logs to Windows Event Viewer by adding “EventLog” section to “Logging” section in the appsettings.json:

```
"Logging": {  
  "EventLog": {  
    "LogLevel": {  
      "Default": "Information"  
    }  
  },  
  "LogLevel": {  
    "Default": "Information",  
    "Microsoft.AspNetCore": "Warning"  
  }  
},
```

Reference: <https://learn.microsoft.com/en-us/aspnet/core/fundamentals/logging/?view=aspnetcore-8.0#welog>

You will see entries in the Application logs in Event Viewer. All events are .NET Runtime source in the Event Viewer.

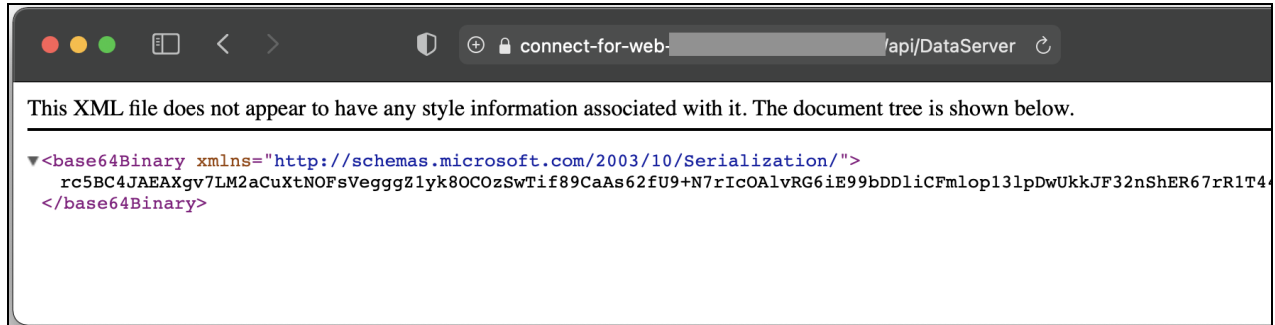
Reference: <https://github.com/dotnet/runtime/issues/80724>

## References

- Host ASP.NET Core on Windows with IIS. <https://docs.microsoft.com/en-us/aspnet/core/host-and-deploy/iis/?view=aspnetcore-8.0>

## Test

Open your browser and go to <http://localhost:58092/api/DataServer>. You should see some special characters.



## Common errors

### 500.119

User in the application pool cannot read web.config. To fix this, assign permissions to the folder where the Connect for Web files are located (for example, C:\inetpub\Connect For Web).

### ProPricer license activation error

For Windows workstation operating systems (for example, Windows 10), if you receive an error related to activating a ProPricer license, edit the Website settings to run the site. Click Connect As, then select the same user in the application pool.

### HTTP Error 503 – The service is unavailable

The service is unavailable when the application pool of the corresponding web application is stopped, disabled, or paused. It may also be unavailable when the given user identity of the application pool is invalid due to an expired password or is locked.

<https://blogs.msdn.microsoft.com/webtopics/2010/02/17/a-not-so-common-root-cause-for-503-service-unavailable/>

<https://stackoverflow.com/questions/13322937/http-error-503-the-service-is-unavailable>

## Bad Request – Request header too long

“HTTP Error 400. The size of the request header is too long.”

While using Windows authentication, this error may appear instead of the Connect for Web application. It is the result of the user being a member of many Active Directory user groups.

To fix this:

1. Open Windows Registry Editor and go to:

```
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\HTTP\Parameters
```

2. Increase the settings for the `MaxFieldLength` and the `MaxRequestBytes` registry entries on the server so that the user's request headers do not exceed these values. For example:

```
"MaxRequestBytes"=dword:01000000
```

```
"MaxFieldLength"=dword:0000ffff
```

<https://docs.microsoft.com/en-us/troubleshoot/iis/http-bad-request-response-kerberos>

<http://www.grouppolicy.biz/2013/06/how-to-configure-iis-to-support-large-ad-token-with-group-policy/>

## Maximum registration attempts exceeded

You will receive this error if the Connect for Web license is invalid when you try to connect to ProPricer CE.

To fix this:

1. Make sure you have a valid key configured in the `appsettings.json` file.
2. Make sure the key hasn't expired.
3. If the key is concurrent, make sure the key has been added on ProPricer Server Manager.

## Firewall

Your firewall must allow inbound connections to the port you selected for the PP9 Connect for Web website (for example, 443).

# Upgrade Connect for Web

Before upgrading from Connect for Web version 3.4.103.1 (or earlier) to version 3.5.100.0 (or later), [download and install the .NET 8 Hosting Bundle](#).

The zip packages are available in the [Deltek Software Manager \(DSM\)](#).

1. Download and unzip the Connect for Web package.
2. Using IIS Manager:
  - Stop the Connect for Web website.
  - Stop Connect for Web's application pool.
3. Using Windows Explorer, navigate to the folder for the Connect for Web website.
4. For Connect for Web version 3.4 or earlier, back up the web.config file.
5. For Connect for Web version 3.5 or later, back up the appsettings.json file.
6. Remove everything in the folder.
7. Copy all extracted files to the website's folder inside C:\inetpub. For example, C:\inetpub\Connect for Web.
8. Edit appsettings.json file to complete the configuration or use the ConfigTool in the Configure folder.

```
"ServerConnection": {  
  "Host": "your-propricer-hostname",  
  "Port": 8092,  
  "Key": "your-connect-for-web-key"  
}
```

9. Using IIS Manager:
  - Start Connect for Web's application pool.
  - Start the Connect for Web website.