Deltek ProPricer

Connect for Web Azure Deployment Guide

Contents

Introduction

A REST API (also known as RESTful API) is an application programming interface (API or web API) that conforms to the constraints of REST architectural style and allows for interaction with RESTful web services. REST stands for representational state transfer and was created by computer scientist Roy Fielding.

Connect for Web is a ProPricer™ REST API implementation of the ProPricer API. It allows data to be loaded into ProPricer via an HTTP request with a JSON payload to an internal network exposed URL endpoint.

Requirements and recommendations

Minimum requirements

- Azure account with required permissions to create App Services.
- Windows App Service Plan with the Premium or Isolated plan depending on your workload.
    - The Isolated plan is strongly recommended. It includes improved performance and security features, and is ideal for providing access to company-approved users only.
- Optional: SSL certificate or certificates for custom domains.

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 .

The ZIP packages are available in the Deltek Software Manager (DSM).

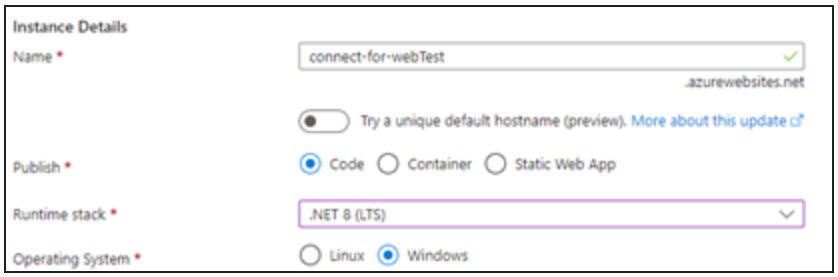
Prerequisites

Configuration

- ProPricer Server hostname and port.
- Connect for Web registration key.

App Service

1. In the Azure Portal, add a Web App (App Service).
2. Enter the Web App name.
3. Select the following settings:
    - Publish: Code
    - Runtime stack: .NET 8 (LTS)
    - Operating System: Windows
    - Region: Select the desired region



Recommendation: Select the same Region where the ProPricer Server is hosted.

4. Click Next.
5. On the Monitoring tab, make sure Enable Application Insights is set to No.
6. Click Next.
7. On the Tags tab, create the desired tags.

8. Click Next.
9. Click Create.

Configuration

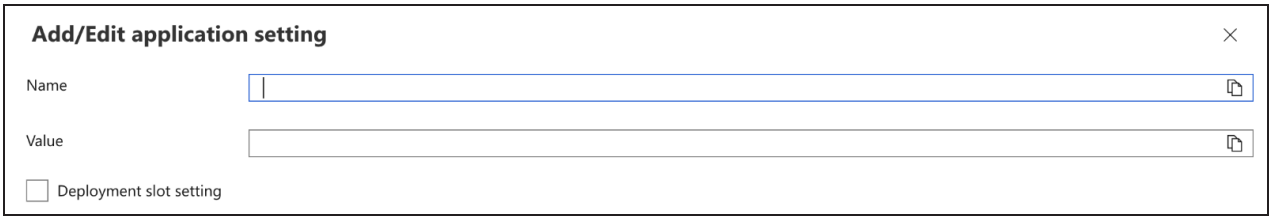
There are two methods for configuring Connect for Web:

- Use the Manager tool or edit appsettings.json in the target folder.
- Use the Configuration option in the Settings section of the App Service in the Azure Portal.

You can use either of these methods or a combination of both. The settings configured in the Azure Portal take precedence over the settings in the appsettings.json file. The recommendation is to use App Service Configuration.

To use App Service Configuration for Connect for Web:

1. In the App Service in the Azure Portal, go to the Settings section and select the Configuration option.
2. On the General Settings tab, click New application setting to create the following settings:



Name	Value	Example
ServerConnection:Host	Your ProPricer 9 Application Server hostname	propricer9.mycompany.us
ServerConnection:Port	Your ProPricer 9 Application Server port	8092
ServerConnection:Key	Your Connect for Web registration key	XYZ11-0A6B61-CD0FGE-12345-ZW9W1A

3. On the General Settings tab, verify or adjust the following settings:
    - Stack: .NET
    - .NET Version: .NET 8
    - Platform: 64 Bit
    - Manage pipeline version: Integrated
    - FTP state: Disabled
    - HTTP version: 1.1
    - Web sockets: Off
    - Always on: On
    - ARR affinity: Off
    - HTTPS Only: On
    - Minimum TLS Version: 1.2
    - Remote debugging: Off
    - Client certificate mode: Ignore
4. Click Save.

Application Logging

Enable application logging to collect diagnostic information from this web app. Logging is optional but highly recommended.

To view logs in Log stream:

1. In the Azure Portal, go to Monitoring > App Service logs.
2. Enable Application logging (Filesystem).
3. Set Level to Information.
4. Go to Log stream to see the log trace.

To preserve logs to a storage account:

1. In the Azure Portal, go to Monitoring > App Service logs.
2. Enable Application logging (Blob).
3. Set Level to Information.
4. Select the Storage Container to store the logs.
5. Set the Retention Period (Days).

Web Logging

Enable web server logging to collect diagnostic information from the web server. Logging is optional but highly recommended.

To view logs in Log stream:

1. In the Azure Portal, go to Monitoring > App Service logs.
2. Set Web server logging to File System.
3. Enter the Quote (MB).
4. Set the Retention Period (Days).

To preserve web logs:

1. In the Azure Portal, go to Monitoring > App Service logs.
2. Set Web server logging to Storage.
3. Select the Storage to send the logs to.
4. Set the Retention Period (Days).

Recommended TLS/SSL settings

Azure App Service is created with an SSL certificate by default to provide https and a subdomain, like connectforweb.azurewebsites.us.

In the App Service in the Azure Portal, you should verify that the following TLS/SSL settings were selected during configuration:

- HTTPS Only: On
- Minimum TLS Version: 1.2

Optionally, you can configure your own domain in this section, like mysite.mycompany.com.

Authentication

Connect for Web requires authentication to map an existing ProPricer Login to Connect for Web. There are two methods for configuring authentication in Connect for Web:

- Use the configuration tool or
- edit authentication.config.json in the target folder.

Deploy ZIP file using ZipDeployUI

This ZIP file deployment uses the same Kudu service that powers continuous integration-based deployments.

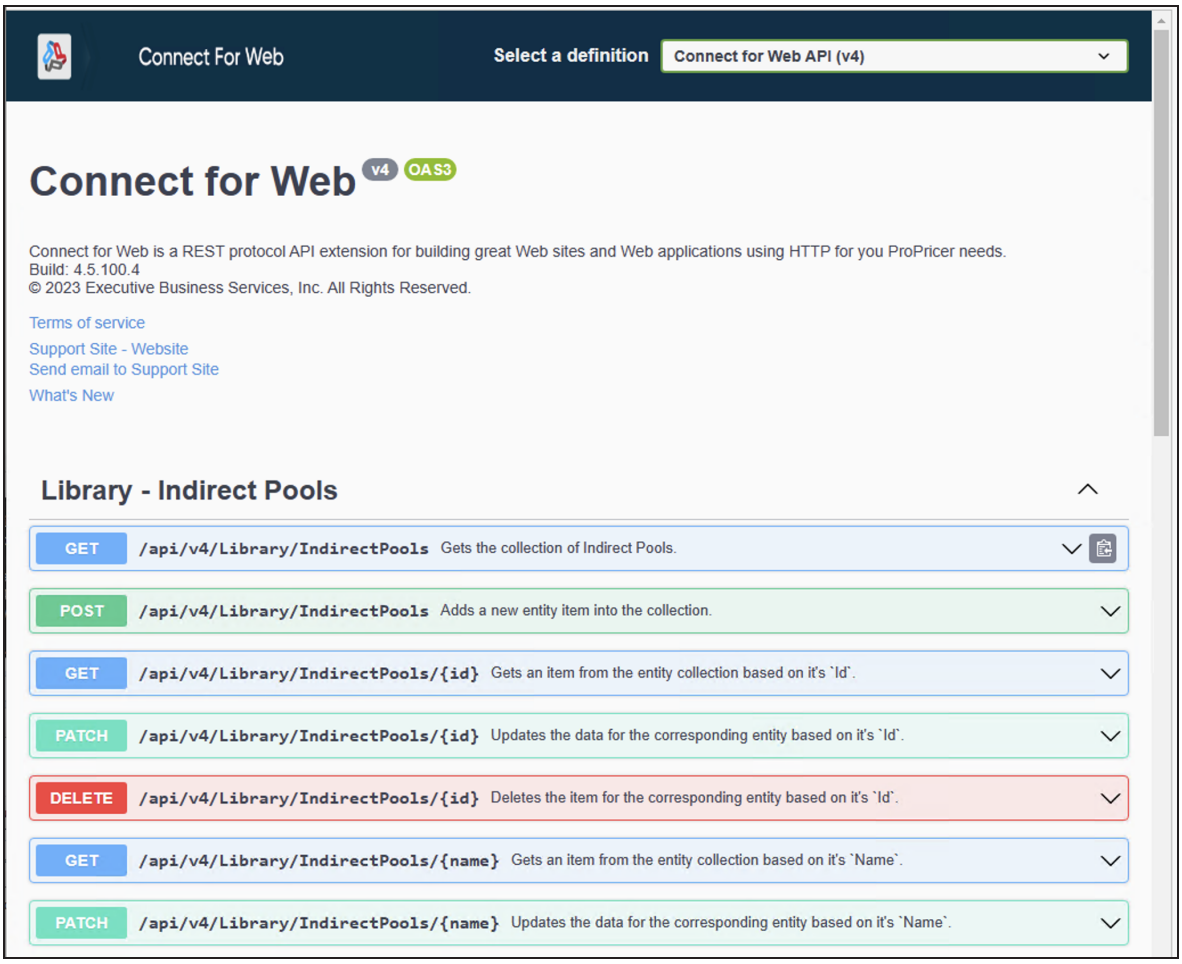
1. Zip the folder. Select all files (not the parent folder), right-click, point to Send to, select Compress (zipped) folder, then name the ZIP file.
2. In the App Service options pane, select Advanced Tools, click Go, expand the Tools menu, then select Zip Push Deploy. Alternatively, in your browser, go to https://<app_name>.scm.azurewebsites.us/ZipDeployUI.
3. Upload the ZIP file by dragging it to the file explorer area on the web page.

When deployment is in progress, an icon in the top-right corner shows the progress percentage. The page also shows verbose messages for the operation below the explorer area. When it is finished, the last deployment message should say Deployment successful.

Alternatively, use az webapp deployment source config-zip to deploy the ZIP file using Azure CLI, or the Publish-AzWebApp cmdlet to deploy the ZIP file using PowerShell.

Test

Open your browser and go to https://<your-connect-for-web-hostname>. You should see a response like this.



Common errors

Server Error in '/' Application. Could not load file or assembly

On the General Settings tab, make sure the .NET Version is .NET 8 and Platform is 64 Bit.

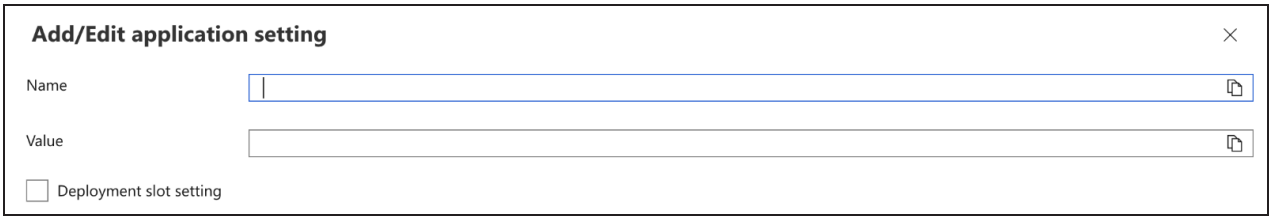
Virtual Network

Make sure Connect for Web has access to your ProPricer 9 Application Server. It is recommended that they are on the same Virtual Network (VNet). Also, make sure Connect for Web WebAPI has access to Connect for Web, preferably on the same Virtual Network.

Upgrade Connect for Web

The zip packages are available in the Deltek Software Manager (DSM).

1. Download the Connect for Web package.
2. If upgrading from Connect for Web version version 3.4.103.1 (or earlier), use App Service Configuration for Connect for Web:
    - In the App Service in the Azure Portal, go to the Settings section and select the Configuration option.
    - On the General Settings tab, click New application setting to create the following settings:



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ServerConnection:Key	Your Connect for Web registration key	XYZ11-0A6B61-CD0FGE-12345-ZW9W1A

3. On the General Settings tab, verify or adjust the following settings:
    - .NET Version: .NET 8
4. Deploy using ZipDeployUI

Deploy the ZIP file downloaded from the Deltek Software Manager(DSM) when all the settings are in the Configuration options of the App Service.

In the App Service options pane, select Advanced Tools, click Go, expand the Tools menu, then select Zip Push Deploy. Alternatively, in your browser, go to https://<app_name>.scm.azurewebsites.us/ZipDeployUI.

5. Upload the ZIP file by dragging it to the file explorer area on the web page.

When deployment is in progress, an icon in the top-right corner shows the progress percentage. The page also shows verbose messages for the operation below the explorer area. When it is finished, the last deployment message should say Deployment successful.

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References

- Azure App Service
  https://azure.microsoft.com/en-us/services/app-service
- Deploy your app to Azure App Service with a ZIP or WAR file
  https://docs.microsoft.com/en-us/azure/app-service/deploy-zip
- National clouds
  https://docs.microsoft.com/en-us/azure/active-directory/develop/authentication-national-cloud#azure-ad-authentication-endpoints
- Quickstart: Register an application with the Microsoft identity platform
  https://docs.microsoft.com/en-us/azure/active-directory/develop/quickstart-register-app