

# Getting started with Postal Address Verification (PAV)

## Introduction

There are 3 steps to integrating the PAV API into your Visual Studio C# project.

1. Obtain a license key from CDYNE.com
2. Add a PAV service reference into your project
3. Call the PAV address verification method and process the result

## Step 1 – Obtaining a CDYNE License Key

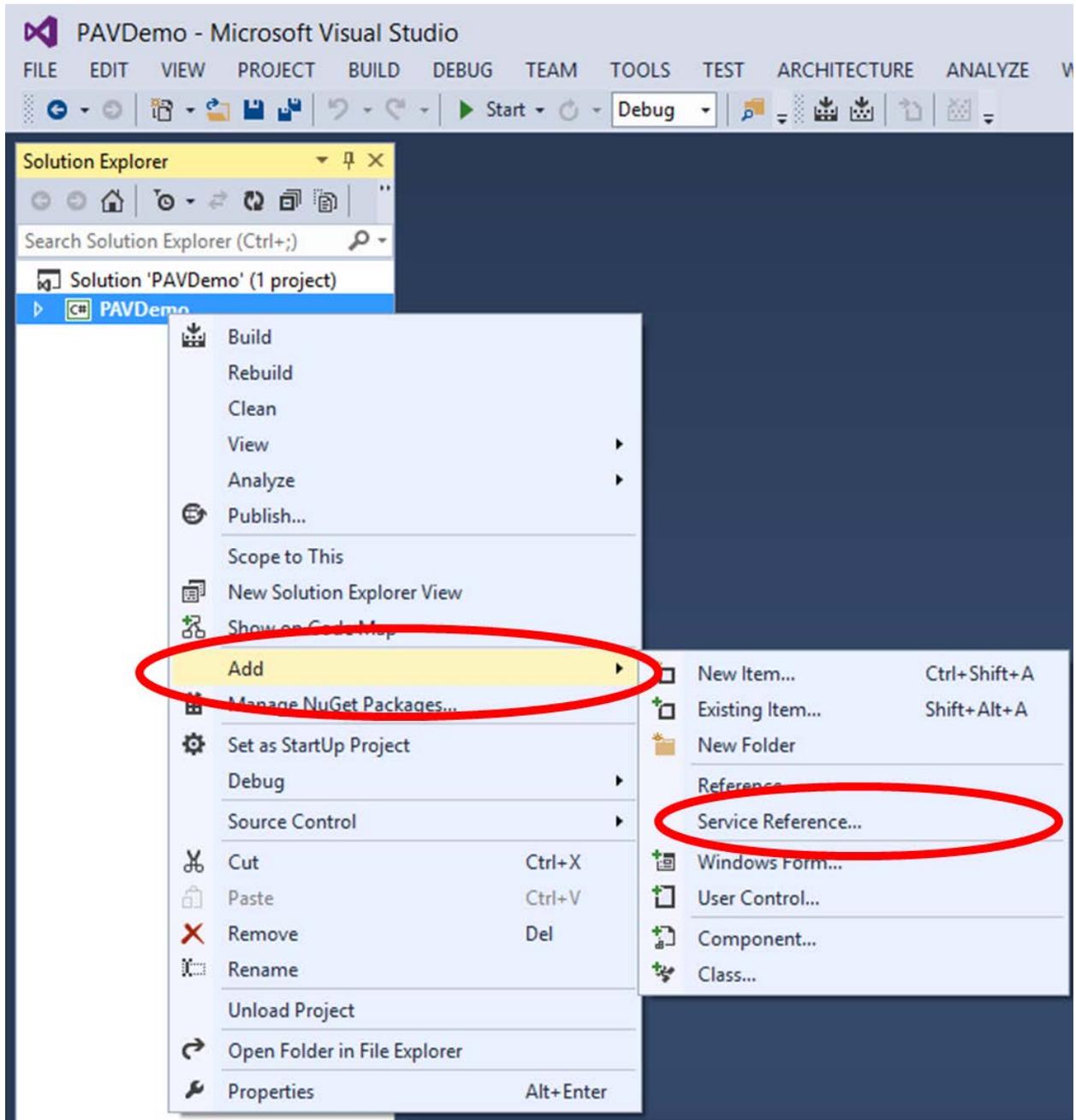
Using your favorite browser, go to <https://secure.cdyne.com/developers/trial-key> and complete the request form.

The screenshot shows a web browser window with the address bar containing <https://secure.cdyne.com/developers/trial-key>. The page header includes the CDYNE logo, phone number (1-800-984-3710), and login fields. The main content area is titled "Get an API Trial Key" and features a dropdown menu with "Postal Address Verification" selected. Below this is a "Contact Info" section with input fields for "First name" and "Last name".

## Step 2 – Add a PAV Service Reference to your project

In order to call the PAV API, you'll need to add a service reference into your project.

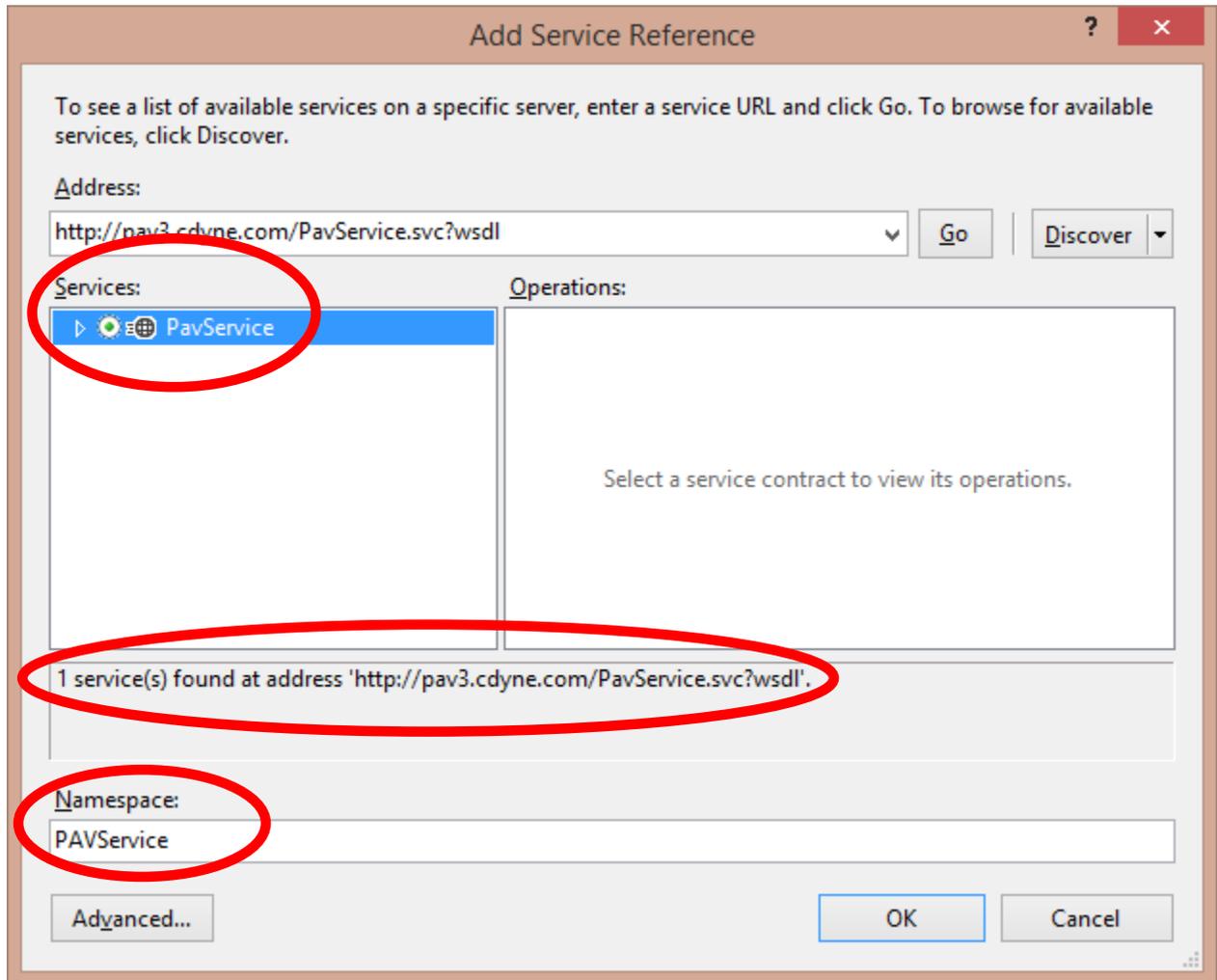
2.1 Open your Visual Studio project, right-click on the project, and select the Add > Service Reference option as shown in the diagram below.



2.2 Enter the URL for the PAV Service - <http://pav3.cdyne.com/PavService.svc?wsdl> and Click the 'Go' button.

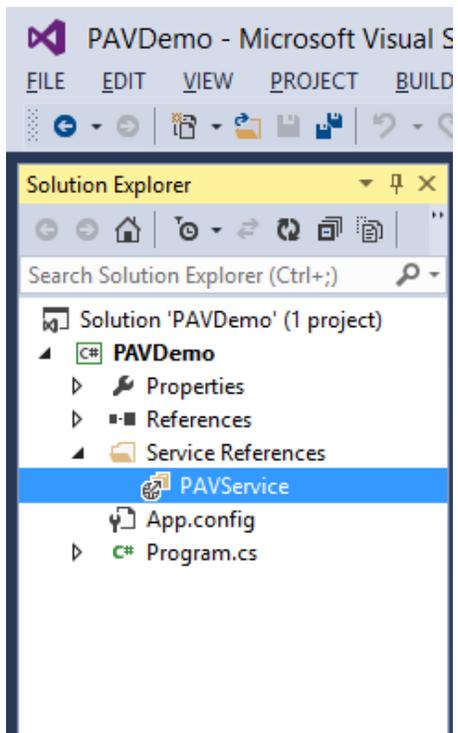
The screenshot shows a dialog box titled "Add Service Reference". At the top, there is a help icon (?) and a close icon (X). Below the title bar, there is a text area with the following text: "To see a list of available services on a specific server, enter a service URL and click Go. To browse for available services, click Discover." Below this text is an "Address:" label followed by a text input field containing the URL "http://pav3.cdyne.com/PavService.svc?wsdl". To the right of the input field is a "Go" button, which is circled in red. Further to the right is a "Discover" button with a dropdown arrow. Below the "Address:" field are two empty table-like structures labeled "Services:" and "Operations:". At the bottom of the dialog, there is a "Namespace:" label followed by a text input field containing "ServiceReference1". At the very bottom, there are three buttons: "Advanced...", "OK", and "Cancel".

Once the wizard has successfully contacted the PAV service, the service will be displayed in the 'Services' column and a success message will be displayed.



(Optional) You can change the Namespace to something appropriate for your project.

2.3 Click 'OK' and the service will be added to your project as shown below.



### Step 3 – Call the PAV Address Verification method

3.1 Create an instance of the PavServiceClient and call the desired method (as shown in the example below)

```
using System;
using System.Text;
using PAVDemo.PAVService;           // Add the reference to the service namespace

namespace PAVDemo
{
    class Program
    {
        const string MyLicenseKey = @"YOUR_LICENSE_KEY_HERE";

        static void Main(string[] args)
        {
            // Open the connection to the PAV Service by creating a PAVServiceClient
            var pavclient = new PavServiceClient("pavsoap");

            // Call PAVService.VerifyAddress
            Address response = pavclient.VerifyAddress(
                "CDYNE Corporation",
                "505 Independence Parkway",
                "Suite 300",
                "",
                "Chesapeake",
                "VA",
                "23320",
                MyLicenseKey );

            // Process the response from the PAV service
            StringBuilder sb = new StringBuilder();
            sb.AppendLine(response.FirmNameOrRecipient);
            sb.AppendLine(response.PrimaryAddressLine);
            sb.AppendLine(response.SecondaryAddressLine);
            sb.AppendLine(response.CityName +
                " " + response.StateAbbreviation +
                " " + response.ZipCode);
            Console.WriteLine(sb.ToString());

            Console.ReadKey();
        }
    }
}
```

The complete technical reference for the PAV API can be found here - [http://wiki.cdyne.com/index.php/Postal\\_Address\\_Verification](http://wiki.cdyne.com/index.php/Postal_Address_Verification)