

# Reference Table System

The PDSA Reference Table system is designed to help you manage your standard foreign key lookup tables such as State Codes, Employee Types, etc. All of your lookup tables will have a standard schema structure. Applications commonly need a set of reference tables for pick-lists items, report descriptions, etc. Instead of creating individual forms to manage each of these, the PDSA Reference Table system already has maintenance screens developed to do this for you.

The benefits of using the PDSA Reference Table system are:

- Don't have to generate classes for each lookup table
- Don't have to have separate add/edit/delete screens for each lookup table
- Only 1 line of code needed to bind to a drop down list or combo box

## Standard Schema

In order to use the PDSA Reference Table system you need to use a specific schema for each of your "Lookup" tables. This schema is presented below:

```
CREATE TABLE [PDSA].[pdsaReferenceTableSample]
(
  [PrimaryKeyId] [int] IDENTITY(1,1) NOT NULL,
  [Display] [nvarchar](50) NOT NULL,
  [DisplayResourceKey] [uniqueidentifier] NULL,
  [Description] [nvarchar](100) NOT NULL,
  [DescriptionResourceKey] [uniqueidentifier] NULL,
  [Code] [nvarchar](16) NOT NULL,
  [CodeResourceKey] [uniqueidentifier] NULL,
  [DisplayOrder] [int] NULL,
  [IsDefault] [bit] NULL,
  [IsActive] [bit] NULL,
  [IsComplete] [bit] NULL,
  [SystemKey] [varchar](50) NULL,
  [InsertName] [nvarchar](50) NOT NULL,
  [InsertDate] [datetime] NOT NULL,
  [UpdateName] [nvarchar](50) NULL,
  [UpdateDate] [datetime] NULL,
  [ConcurrencyValue] [smallint] NULL
)
```

The name of the table can be whatever you want and the name of the Primary Key can be whatever you want. We have a .SQL file that you can use to create your reference table as described in the following section.

So, if you have State Codes you need to keep track of you will create a StateCode table using the above script. Then, if you have Employee Type Codes you need to keep track of you will create a EmployeeType table using the above script.

## Using Reference Tables Step-By-Step

So, let's assume you have a requirement for a customer status table that you need to display in a drop down list on your ASP.NET web form.

Open up the **ReferenceTableSample.sql** file located in the **[PDSAFrameworkInstallFolder]\SqlScripts** folder and put into SQL Management Studio.

Search for **TABLE\_NAME** and replace with **CustomerStatus**.

Run the script to create the table in the database that contains the PDSA tables. Currently, these tables must be in the database where the PDSA tables are located.

Now start your application and select Reference Tables from the Maintenance Menu as shown in Figure 1.

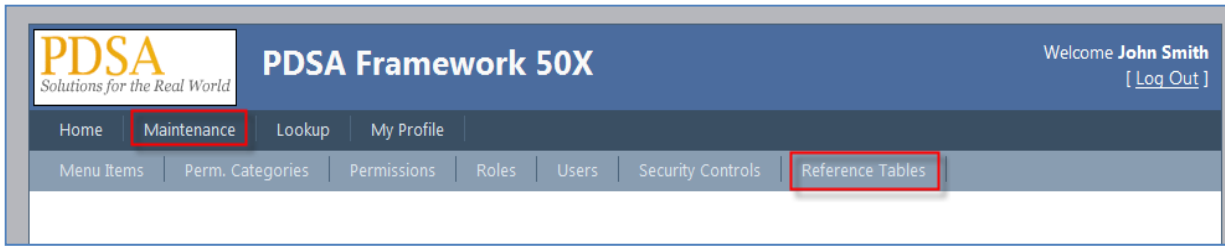


Figure 1: Select Reference Tables from the maintenance menu.

Click on the **Add New Reference Table** icon (Figure 2).

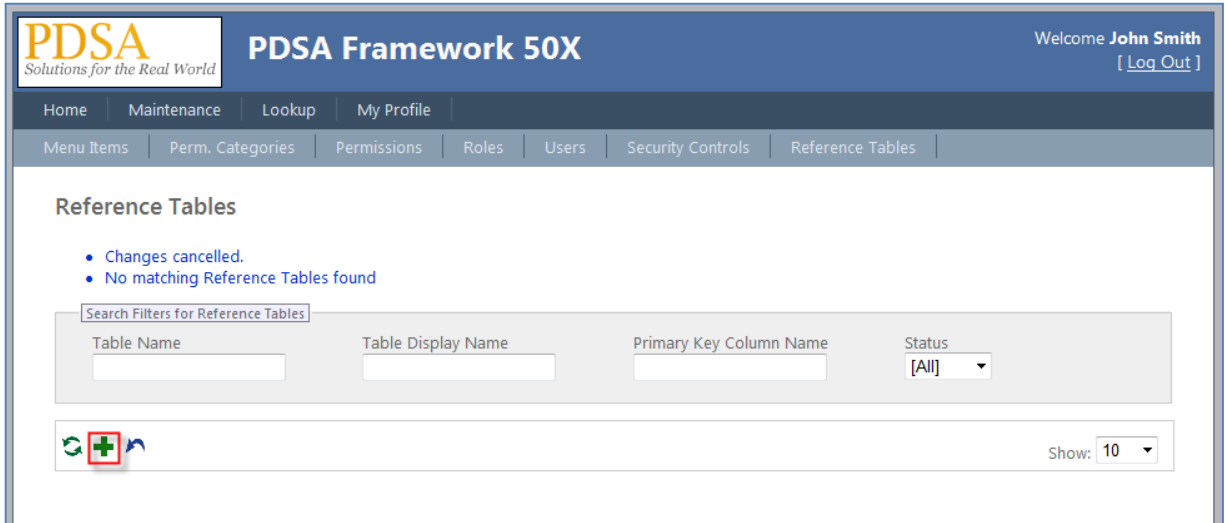


Figure 2: Click Add New Reference Table

Add values to the fields on the Reference Tables page and click on the Save Reference Table icon (Figure 3).

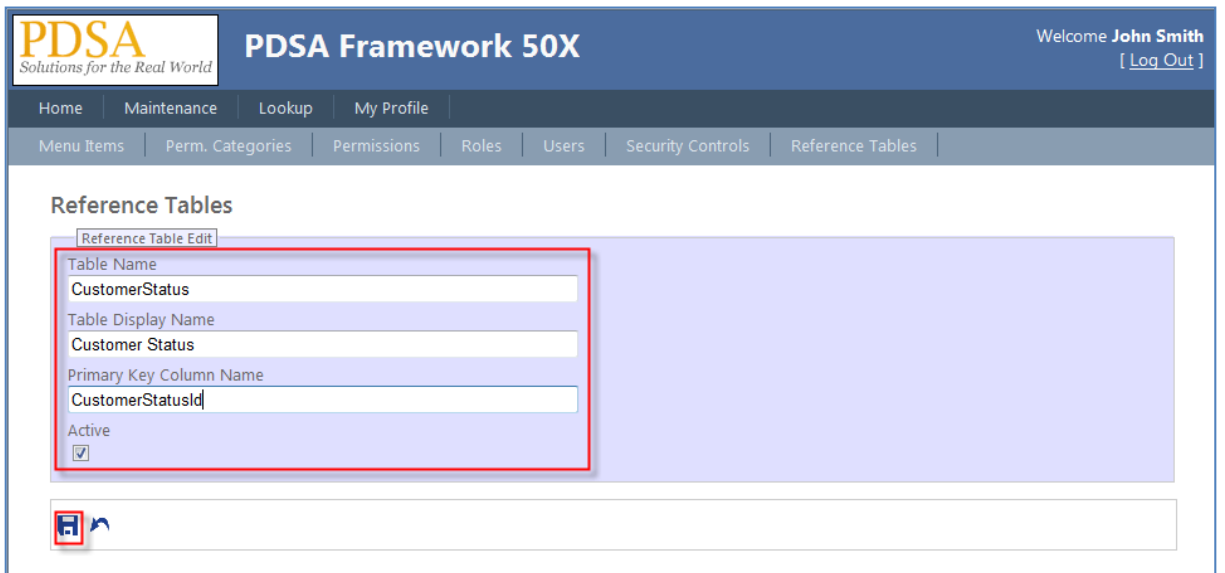


Figure 3: Enter the name of your table and primary key

Table 1 describes what each value that will be entered on this page.

Field Name	Description
TableName	Database.schema.tablename. For example: PDSASamples.dbo.CustomerStatus
TableDisplayName	A user-friendly that will appear in the UI for the user.
PrimaryKeyColumnName	The name of the field you used for the primary key. This is typically TABLE_NAMEId. For example: CustomerStatusId.
IsActive	Used as alternative to deletion of values.

Table 1: The fields to be entered when creating a new reference table entry

Now select **Lookup Tables** from the **Lookup Menu** (Figure 4).

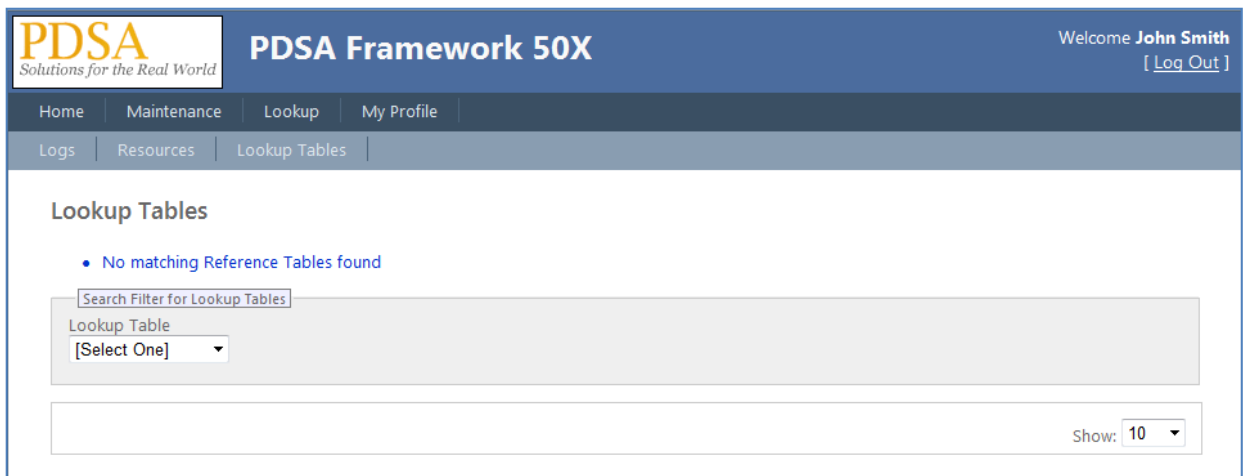


Figure 4: Select Lookup Tables from the Lookup Menu

Select the appropriate table name in the Lookup Table list and click on the Add New Lookup Table Record icon (Figure 5).

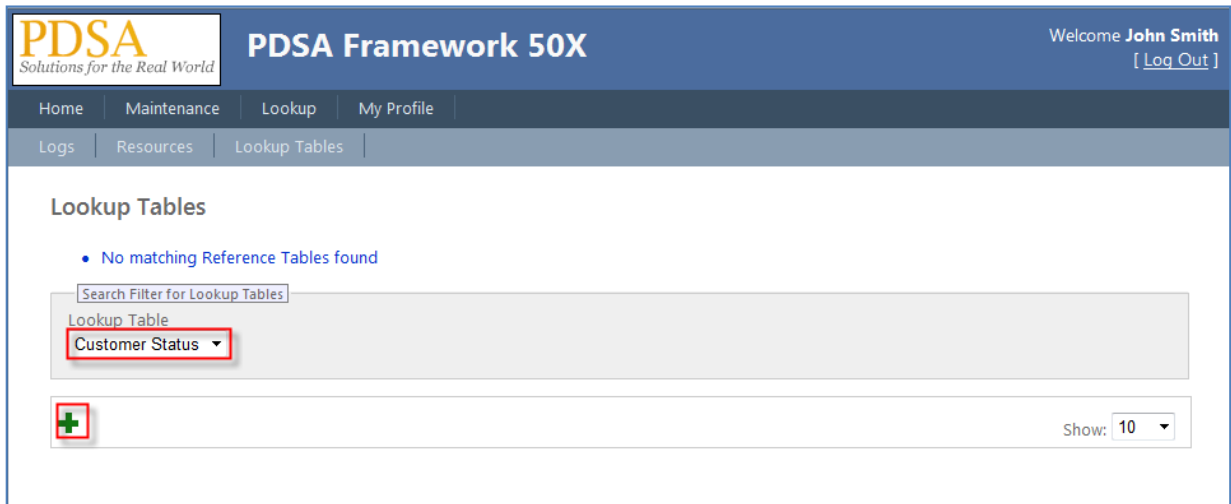


Figure 5: Choose your Lookup table from the drop down list.

Add values to the fields on the Lookup Tables page and click on the Save Lookup Table icon (Figure 6).

The screenshot shows the PDSA Framework 50X web application interface. The top navigation bar includes 'Home', 'Maintenance', 'Lookup', and 'My Profile'. Below this, there are tabs for 'Logs', 'Resources', and 'Lookup Tables'. The main content area is titled 'Lookup Tables' and contains a 'Reference Table Edit' form. The form fields are as follows:

- Display:** Active
- Description:** Customer has purchased products or services within the last 365 days.
- Code:** ACT
- System Key:** PUR
- Display Order:** 1
- Default:**
- Active:**
- Complete:**

At the bottom of the form, there is a 'Save' icon (a floppy disk) and a 'Cancel' icon (a blue arrow).

Figure 6: Enter your lookup information.

Table 2 describes the values you will enter on this page.

Field Name	Description
Display	Value the user will see.
Description	Annotation describing the Display value.
Code	Shortened value for quick reference.
System Key	Used to identify subsets of values within one Lookup Table.
Display Order	Identifies display position of value.
Default	Identifies value to set initially. Also identifies value as first value in a workflow.
IsActive	Used as alternative to deletion of values.
Complete	Identifies value as last value in a workflow.

Table 2: The fields to be entered when creating a new reference table entry

You can continue to add new Lookup Table records by clicking on the Add New Lookup Table Record icon (Figure 7).

The screenshot shows the PDSA Framework 50X web application interface. At the top, there is a navigation bar with 'Home', 'Maintenance', 'Lookup', and 'My Profile'. Below that, a secondary navigation bar includes 'Logs', 'Resources', and 'Lookup Tables'. The main content area is titled 'Lookup Tables' and displays a message 'Changes saved.' followed by a search filter for 'Lookup Tables' with a dropdown menu set to 'Customer Status'. Below the search filter, a table lists one record found. The table has columns for Action, Display, Description, Code, System Key, Display Order, Default, Active, and Complete. The single record shows 'Active' status, a description 'Customer has purchased products or services within the last 365 days.', and various system parameters.



Action	Display	Description	Code	System Key	Display Order	Default	Active	Complete
 	Active	Customer has purchased products or services within the last 365 days.	ACT	PUR	1	True	True	False

Figure 7: Your completed entry.

## Using the PDSA Reference Tables

After you have created your entries, you can now add code in your page to fill up a drop down list. Below is the code you will use:

```
using PDSA.ReferenceTable.Web;

PDSAReferenceTableWeb rt = new PDSAReferenceTableWeb();

rt.BindValues(ddlCustStatus, "CustomerStatus");
```

## Samples

For a complete and thorough demonstration of the power of the PDSA Reference Table System in a Web application, please refer to the following sample application.

**[InstallFolder]\Samples\WebForms\PDSAReferenceTableWebSample.sln**

# Summary

The PDSA Reference Table system provides an easy to use method to maintain reference table values within a PDSA Framework generated application. In addition, there is a robust collection of methods supporting reference table uses in business applications.