

Designing Database Applications - A Quick Start Guide

A Quick Start Guide

Introduction to Designing Database Applications

This Quick Start Guide will help you getting started with WOLF and will walk you through the steps of building your first WOLF Database Application. This Guide will use the “Basic Contact Manager” Application to illustrate this process.

Step 1: Creating a Database Application in your WOLF Account

- Login to your WOLF Account at <http://www.wolfframeworks.com/signup.asp>
- After logging in, click the “Add a new Application” button on the “My Account” page.
- On the “Add an Application” page, give the details of the new Application. Let us name your Software-as-a-Service Database Application as “Basic Contact Manager” and specify the “Super User Details”. Once the details are specified, click the “Submit Form” button at the bottom of the page.

Super User: The Super User is the Administrator of the Application. The Super User can access Design Environment to design the Application and the Run Environment to create Folders, manage Roles and Add Users to the Application.

- You will see the “Basic Contact Manager” in the List of Applications in your “My Account” Page Click the “Design” button next to the “Basic Contact Manager” to launch the Design Environment and start designing the SaaS Application.
- Use the “Super User” credentials to log into the Design Environment of the Database Application.

Step 2: Designing the “Basic Contact Manager”

You are now logged into the Designer of the “Basic Contact Manager”.

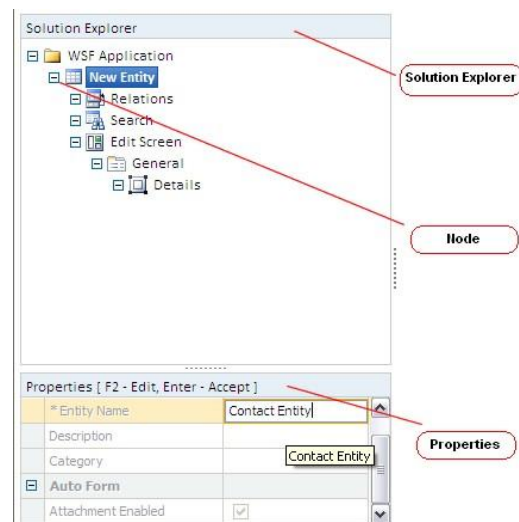
Let us first define the requirements for the Application. This is the most important step before you start designing.

- The “Basic Contact Manager” will have a form to store the Contact details such as Title, First Name, Last Name and Phone Number.
- It will have an end user who can enter, edit or delete the contact information.
- The Application will consist of a Search Screen that allows filtering of Contacts based on the First Name and the Last Name.

WOLF Designer: This is a browser-based, point and click environment which has ready controls to design and develop a WOLF SaaS Application. Different WOLF Controls help you in the development process of your Application.

We will only require the WOLF Entity Designer and the WOLF Navigation Designer Controls for building this online Software-as-a-Service Database Application called “Basic Contact Manager”.

Tip: If a Node is expandable (such as the Entity Node) there will be a “+” side beside it. Clicking on the “+” sign will expand the selected Node and allow you to see the Sub Nodes present under it.



Caution: While using the online Designer, remember to **“Save”** and **“Publish”** after every change. A Save updates recent changes made to the currently selected Node and its Sub Nodes. A Publish performs an implicit Save and makes the changes reflect in the Run Environment of the Application.

The **“Save”** and **“Publish”** buttons are present in the toolbar on the top part of the Designer. Also, right clicking on a node presents the **“Save”** and **“Publish”** options where applicable.

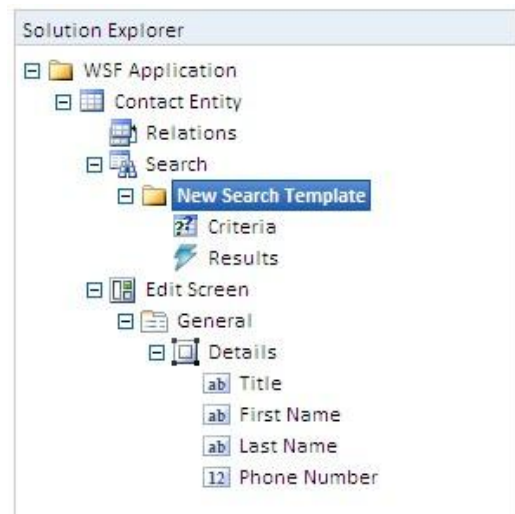
Step 2-1: Creating an Entity with Fields

- For the **“Basic Contact Manager”**, we will only need a single Entity. Create an Entity by clicking on the **“Add a new Entity”** button. You can access the context specific help in the right side of the Designer that will guide you through the design process.
- Once the Entity is created, you can start defining the Properties of the Entity from the **“Properties”** section. All the **“Properties”** sections use grids. Press **“F2”** to edit a property and **“Enter”** to accept. It is mandatory to specify a name for your Entity. We will name this Entity- **“Contact Entity”**. Remember to **“Publish”** after specifying a name for your Entity.
- Expand the **“Entity”** node and proceed to the **“Edit Screen”** node. Expand the **“Edit Screen”** node and you will see a **“General node”** inside it. This is a Tab of the Edit Screen. Expand the **“General node”** to see the **“Details”** node. This is a Section inside the Tab. You can add fields for the Entity **“Contact Entity”** in this Section. Right click on the Details node, select **“New”** and choose the field type from a large number of field types in WOLF.
- After adding a field, give it a name from the **“Properties”** section. The **“Basic Contact Manager”** will consist of four fields: Title, First Name, Last Name and Phone Number. Press the **“Publish”** button after adding fields to your Entity.

Tip: In the **“Properties”** section, press **“F2”** to edit a property and press **“Enter”** to finalize the changes. If you are unsure about any change, press **“Esc”** to exit.

Step 2-2: Creating a Search Screen and Navigation Item for the Entity

- The Search Screens allow listing as well as filtering of the records of an Entity. Now that our Entity is ready, let us add a Search Screen to the Entity, which will allow inline editing and mouse operations for users. To create a new Search Screen, right click on the Search node, select **“New”** and then **“New Search Screen”**.
- Provide an appropriate name to the Search Template from the **“Properties”** section and expand the node to see the **“Criteria”** and **“Results”** node inside it. Press the **“Publish”** button after giving a name to the Search Screen.
- Right click on the **“Criteria”** node, select **“New”** and select the field of the Contact Entity which you wish to use as criteria for filtering the records of the Contact Entity. For our database application, let us choose First Name and Last Name fields as Search Criteria.
- Right click on the **“Results”** node, select **“New”** and select the field of the Contact Entity which you wish to display in the Results table. You can optionally display all the fields of the Entity in the Results table. The Results table lists the records of the Contact Entity and in case a Search criterion is applied, it lists the records satisfying the criteria. Press the **“Publish”** button after adding fields in the Criteria and Results nodes.
- Publishing the Search Screen automatically creates a Navigation Item linked to the Search Screen. The Navigation item has the same name as the Search Screen. For instance, if the Search Screen is named **“Contact List”**, the Navigation Item will have the same name.



Step 3: Creating Users for your SaaS Application

- a. Now that we are done creating a basic Entity, a Search Screen and a Navigation Item to access the Entity Screen, let us create Users of the Application using the Run Environment. You can access the Run Environment from the Designer by clicking on **“Run App”** button found in the Designer toolbar.



Alternatively, you can access the Run from the “My Account” page by clicking the **“Run”** button next to the Application. Use the “Super User” credentials to login to the Run environment.

Tip: You can access the Designer and Run environments by using the Application URL.

For the Application Designer: [http://run.wolfframeworks.com/design/?appid=\[Application ID\]](http://run.wolfframeworks.com/design/?appid=[Application ID])

For the Application Run: [http://run.wolfframeworks.com/?appid=\[Application ID\]](http://run.wolfframeworks.com/?appid=[Application ID])

[Application ID] is the unique identifier of the Application. For instance: 123DDDD_a131 is the unique identifier for an Application.

For Example: http://run.wolfframeworks.com/design/?appid=123DDDD_a131 is the Application URL to access the Designer of the Application with the unique identifier 123DDDD_a131

- b. The Super User can create Folders; manage Roles and Add Users to the Database Application in the Run environment. Click the **“Manage Users”** button to start creating Users for the Application.
- c. Click the **“New”** button in the Search Screen to create a new User.
- d. Fill the fields in the “General” tab of the form. All fields that are marked **“*”** are mandatory. To choose the “Default Folder”, click the **ellipsis button**, a popup with the Folder list appears, press the **“Find Now”** button in the toolbar to see the list of Folders, choose **“Solution Root”** and press the **“Use this option”** from the toolbar. After filling the form, press the “Save” button from the popup toolbar.

We have now created a User with the name “Demo User” and a set of login credentials.

Folder: Every Database Application has a Root Folder which holds all the data and Role-User security rights specific to the Application. A Folder is a possible ‘Tenant’ for a Multi-tenant Software-as-a-Service Application.

- e. Proceed to the “Entity Data Access” tab to give this User access to the “Contact Entity”. Press **“F2”** to edit the Entity cell, choose the **“Contact Entity”** from the list and press **“Enter”** to finalize the changes. For choosing the **“Default Folder”** use the process described in the previous step. Additionally, let us check the **“Edit”** and **“Delete”** checkboxes allowing the User to have View, Edit and Delete access for the “Contact Entity” data.
- f. Proceed to the “Navigation/Menu Access” to give the User access to the “Contact List” Navigation/Menu. Press **“F2”** to edit the Navigation/Menu Name, choose the “Contact List” menu from the list and press **“Enter”** to finalize the changes.
- g. We are done giving access privileges to the User and we can close the “User Roles” window.

User: The User created here is the end user of a WOLF Database Application having a specified set of security and access permissions to use the Application. When accessing the Run environment, this User will be presented with the End User interface of the Application.

Tip: After creating a User, you can sign in using the user's credentials using any of the previously discussed methods:

1. Clicking the "Run" button in the "My Account" page
2. Using the "Run App" button in the Designer toolbar
3. Using the URL of the Application Run

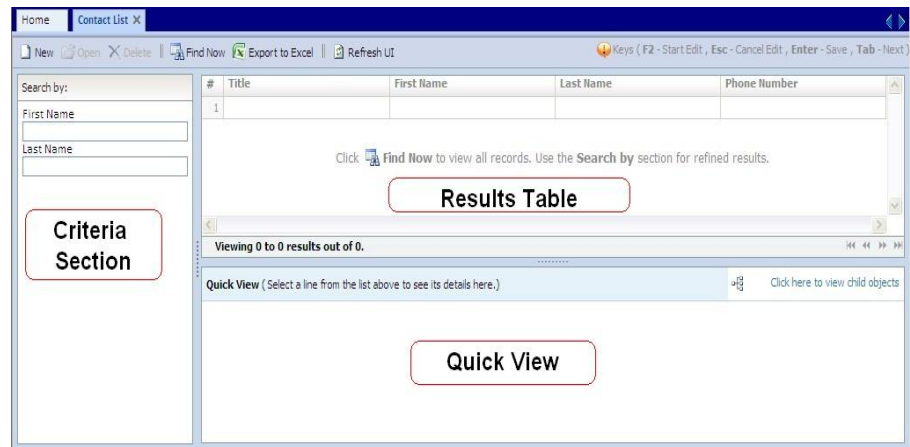
Step 4: Using the Application as the newly created user

- a. To access the SaaS Application as the new User, first logout of the Run environment as the Super User and login as the newly created user.
- b. On successfully logging in, we will be presented with the Splash Screen of the Application which displays items accessible to the new User. Click on the **"All Navigation Items"** button in the top left corner and then click on the "Contact List" menu to open it.

Note: We can recall from Step 2, that the "Contact List" menu is linked to the Search Screen of the "Contact List" Entity. In Step 3, Demo User has been given access to "Contact Entity" as well as the "Contact List" Navigation Item.

- c. The Search Screen contains three sections: criteria section, results table and quick view. As per the design of "Basic Contact Manager", First Name and Last Name can be used as filtering criteria. The Results Table displays Entity records and can be used for inline editing and mouse operations.

- d. Use the Search Screen toolbar to add, edit or delete records to the "Contact Entity". Click **"New"** to open the Edit Screen of the "Contact Entity" and add a new record.
- e. After adding data to the fields of the "Contact Entity" Edit Screen (form) use one of the Save options from the form toolbar to save the record.



Tip: You can also add attachments to Entity records by using the "Add Attachment" option in the form toolbar. After adding the details of the record, click "Save". Then click "Add Attachment" and choose the attachment from your local machine.

- f. Results Table lists the records of the "Contact Entity". Adding, Editing and Deleting of Entity records can be done from the toolbar or directly from the Results Table. The "Quick View" section gives a preview of the currently selected record in the Results Table.
- g. You can also filter records based on the First Name and Last Name. After specifying the criteria, press the **"Find Now"** button from the toolbar.
You can also export the record details to an Excel spreadsheet by using the **"Export to Excel"** option from the toolbar.

For More Information

For more information about WOLF products and services, call the WOLF Sales Information Center at +1 (703)-953-1053 (US) or +91 80 4207 5425 (India). To access information using the World Wide Web, go to: <http://www.wolfframeworks.com>