

CRM Solutions For Microsoft Dynamics 365

Solutions are a group of components that can be exported and imported into any CRM environment. It may work best for developers to create a solution and make changes within a Sandbox or non-live environment prior to exporting it to a Production instance.

Microsoft Dynamics 365 out of the box functionalities come with pre-configured entities, such as – Leads, Contact, Accounts, and Email, etc. As for the solution component, there are many items that are customizable.

After the Solution is created you may create different Entities with customized components. Some of the existing Entities would then come with Forms, Views, Fields, and Dashboards, etc. The purpose of a solution component is to keep track of what is customized using what are called managed or unmanaged solutions.

Exporting a solution provides you with two different options. Exporting a managed or unmanaged solution is different. An unmanaged solution essentially allows you or the new user to make changes to the solution after you have already imported the new solution. With a managed solution, this essentially locks in those certain changes you have made. Every time these are imported, those changes cannot be changed and allows you to lock those in.

Create an Entity in Microsoft CRM :

An entity is used to model and manage business data in CRM. Contacts, Cases, Accounts, Leads, Opportunities, Activities, etc. are all entities which hold data records. Conceptually, a CRM entity is equivalent to a database table. Entity in Microsoft CRM is like a database table which has a set of attributes and each attribute represents a data item of a particular type. In Microsoft CRM, we have three types of Entities, they are System entities, business entities and Custom entities.

Entity Relationships in Microsoft Dynamics CRM

Entity Relationships in Microsoft Dynamics CRM is the ability to relate an entity to itself, which is referred as *self-referential*. Relationships are user friendly and don't need to be a database administration expert to configure relationships between entities. Microsoft Dynamics CRM supports the following relationships :

- 1:N relationships (one to many).
- N:1 relationships (many to one).
- N:N relationships (many to many).

1:N (one to many) Relationships in Microsoft Dynamics CRM

Entity Relationship defines how records can be related to each other in the database. Adding a lookup field to an entity creates a new 1:N (one-to-many) relationship between the two entities. With the lookup field, One parent record is associated to many child records. Basically it forms the parent-child relationships. A parent object can have many child's objects but a child object must have only one parent object.

N:1(Many to One) Relationships in Microsoft Dynamics CRM.

With an N:1 relationship, the primary entity is the one you select. Therefore, the entity you are customizing is the related entity.

Example :- if you want a Contact entity to have multiple Account entities associated with it, you apply an N:1 relationship to the Account entity.

N:N (Many to many) Relationships in Microsoft Dynamics CRM.

With an N:N relationship, there is not one primary entity and another secondary or related entity; rather, they both act as both types.

Example:- you might want to have one Contact entity related to many Account entities or one Account related to many Contact entities. You might, for instance, have a Contact with a new person who works for two companies, and each company might have many Contact entities apart from this one.

Let's walk through how to create a solution:

Creating a solution:

1. Open the necessary environment you have and navigate to the URL.

Ex: <https://yourorganization.com.dynamics.com>

2. Within the navigation bar, click on Settings.

3. Lastly, click Solutions underneath the Customizations heading.



4. After clicking on the New button, a solution form will be displayed. The following is an example of what the solution form should look like.

5. Now you may create the display name and enter in the Version Number dependent on your organizations need.

The screenshot shows the 'Solution: New Solution' form. The left sidebar contains a tree view with 'Information' and 'Components' sections. The 'Information' section is expanded, showing a list of components: 'Entities', 'Option Sets', 'Client Extensions', 'Web Resources', 'Processes', 'Plug-In Assemblies', 'Sdk Message Processing St...', 'Service Endpoints', 'Dashboards', 'Reports', 'Connection Roles', 'Article Templates', 'Contract Templates', 'Email Templates', 'Mail Merge Templates', 'Security Roles', 'Field Security Profiles', 'Routing Rule Sets', 'Record Creation and Upda...', 'SLAs', and 'Apps'. The main area is titled 'General' and contains the following fields:

- Display Name ***: A text input field.
- Name ***: A text input field.
- Publisher ***: A text input field.
- Configuration Page**: A text input field with a file icon.
- Version ***: A text input field.
- Description**: A large text area.
- Installation Details**: A section containing:
 - Installed On**: A date picker.
 - Package Type**: A dropdown menu with 'Unmanaged' selected.

At the bottom, there is a 'Marketplace' link.

Finally, you should know some things before using Dynamics 365 CRM solutions. If you have a managed solution within a Sandbox environment and that was removed, you will run into the issue of not being able to make original changes. So, if there is any doubt, please remember to export both a managed and unmanaged solution.