



Add it Show it Plan It •Table/Page Mgmt Studio-->Connect MinistryPlatform-->Tables Name Type/Length •Table-->Right Click-->Design •Is it Required? Add the custom field as the last row • Pick a page, edit the page, save in Column Name Description the change •Save The Table Vertical Placement • Editing the description is safest

EXAMPLE SCENARIO:

We want to know that every Attribute added to our system is reviewed and approved.

We will add "_Approved" as a read-only, custom bit field to the Attributes page.

We will create a process that assigns a "get approval" task to "John Smith" each time an attribute is added.

When he completes the task the attribute will automatically have the _Approved bit field set to true by the Process record.

We will ask Think Ministry to add the field to our database because we are "cloud hosted" and do not currently have root level access to our SQL Server.

We will create the Process in MinistryPlatform ourselves because we know how (or want to learn).

What Table/Page Will Contain This Custom Field?

•What record will this data in this field further describe? (Ex. Contacts.Employer Name)

What Will You Name This Custom Field?

- Proper case, singular, specific (Ex. Contacts.Current_School)
- •As short as possible (Ex. Contacts.Bulk Email Opt Out)
- •No spaces or special characters (Ex. Participant_Milestones.Followed_Up)
- •Start with one underscore to make it "read only" in MP to all users. (ex. Events._Web_Approved)
- •Start with two underscores to make it "Hidden" in MP to all users. (ex. Contacts. Age)

What Field Type Will You Assign The Custom Field?

- •This decision is critical. It will determine data validation, data formatting, and give the end user the right "pick list"
- •Consult general SQL Server documentation for what each field type means
- Nvarchar is best for text (supports chinese/spanish character sets)
- •INT is required for Foreign Keys in MP

Will End Users Be Required To Add A Value To This Custom Field?

- •In SQL Server "required" is referred to as "Not Nullable". That means that null values are not allowed.
- •MP follows SQL Server. If the field is nullable, it is not required.
- •By default in SQL Server new fields are nullable (not required) and this is best practice for custom fields.
- •WARNING: Do not make custom fields required unless you establish a default value. Applications that insert data into that table will break if you add a reugired field without a default.

What Is The Purpose Or Description Of This Custom Field?

• Adding an SQL Server Description property to your custom field will introduce help text into MP.

Where will you place your field on the page vertically?

- •The default is at the end of the existing list of fields.
- •WARNING: Drag it up or down as needed. Saving a table with re-ordered fields will DROP AND RECREATE the table.

Warnings, Tips & Tricks For Custom Fields

- **Tip**: Integer Foreign keys are needed for "drop down lists". Making a custom field into a Foreign Key is not covered here. Foreign Keys are added in Management Studio in the standard manner for an SQL Server relationship. IF you want a drop down of values not already present in MinistryPlatform a custom page may need to be created first.
- **Tip**: Bit fields are most commonly added as "not nullable" with a default value of "0" (aka. False).
- **Tip**: There is a special type of "bit" field called the dp_Separator:Bit. This field can be added to provide a header/separator between fields on a large form (ex. Events.Public_Website_Settings)
- **Tip**: By default, you can't save a table in SQL Server Management Studio's Designer if fields were re-ordered. This is because the table has to be dropped and recreated. This is fairly safe to do, but the more data you have the longer it takes. Go to Tools -> Options -> Designers and "uncheck" the option titled "prevent saving changes that require table re-creation".
- Tip: Computed fields are supported, but should be read-only. So, start their name with an underscore. Contacts.__Age is an example.
- **DEVELOPER NOTE**: The API does not know this field exists until you recycle the application pool.
- Warning: If you are re-ordering fields on a table always make a backup of the entire database first and do this after hours.
- Warning: never delete or rename any field. Errors may result unless care is taken to find views, pages, stored procedures & application using that field.
- Warning: never add or edit a table in your MinistryPlatform database that starts with "dp_". Those tables are the "guts" of MinistryPlatform.

Did you know?

- Every MinistryPlatform church has dozens of custom fields! We add those when we import your data. Most of them are hidden fields that store the foreign identifier from your legacy database.
- Adding a custom field is so easy that you should always combine this request with some other professional service request. It will take us
 less than 15 minutes to add a custom field and our minimum professional service charge is one hour.
- As far as MinistryPlatform (the application) is concerend, all fields are custom fields except those on tables with names that start with "dp_". The only exception is the Contacts table. This means you can expect Assign, Export, Advanced Search, Audit Log and Security Roles to treat custom fields just like other fields.
- Applications like Check-in, Portal, MobileTools, Reports & Core Tools will simply ignore custom fields.

SQL Server Field Types in MinistryPlatform

Text Field Types

- varchar(n)
 - o If "n" is 4000 or over = WYSIWYG (HTML Capable)
 - o If "n" is 256 or less then = small text box
- nvarchar(n)
 - If "n" is 4000 or over = WYSIWYG (HTML Capable)
 - o If "n" is 256 or less then = small text box
- char(n)
- nchar(n)
- text/ntext
 - o Not recommended, use varchar or nvarchar instead
 - o WYSIWYG (HTML Capable)

Date Fields Types

- date
- time
- datetime

Numeric Fields Types

- tinyint
- smallint
- real
- float
- decimal
- numeric
- bigint

Money Field Types

- money
- smallmoney

Special Field Types

- bit
- varbinary
- binary
- dp_Email: varchar(255) Custom
- uniqueidentifier
- dp_Separator:Bit Custom, Add a header/separator to the page

Foreign Keys (Int)

• Foreign Keys Store the primary key of a record on another table or even on the same table. Required for drop down lists.

Unsupported Field Types

- image
- xml
- sql variant
- hierarchyid
- geometry
- geography
- datetime2
- datetimeoffset