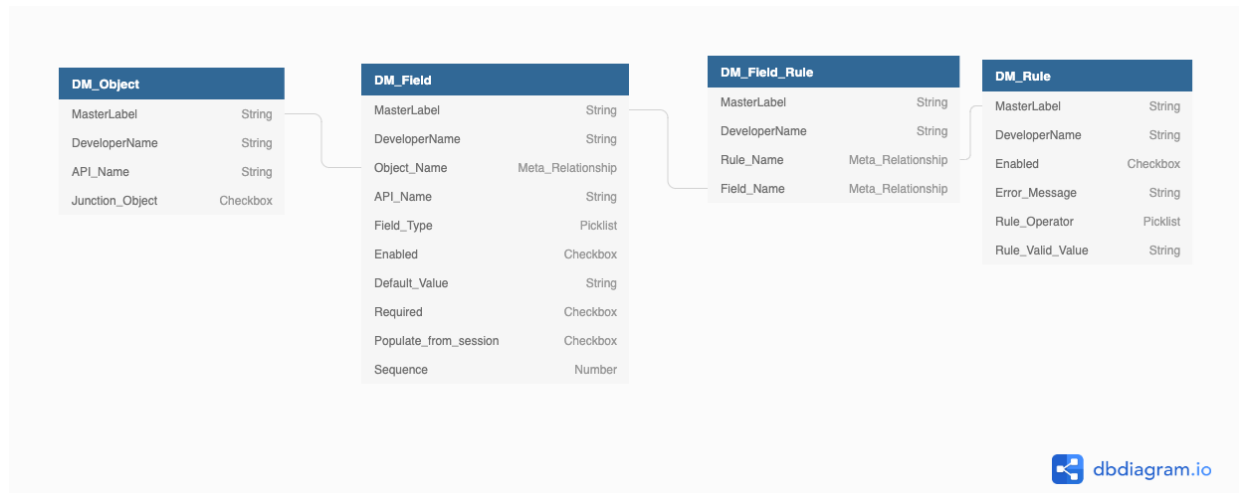


SFDC Data Manager

Introduction

Managing data can be a tedious job! But it doesn't have to be. With the help of a few utilities, managing data in your Salesforce org can be a lot easier. SFDC Data Manager is an app that help you Create and Validate data in your org.

Custom Metadata



DM Object

This is a custom metadata object that represents an actual SObject. While this might seem redundant at first, it is useful to store UI and other important configurations that pertain to this object. This object along with the related *DM Field* make up the backbone of all utilities.

Field Label	API Name	Description
Label	MasterLabel	Standard Label Field for Custom Metadata. Used for UI purposes across all apps.
DM Object Name	DeveloperName	Standard field.
API Name	API_Name__c	The API Name of this SObject.
Junction Object	Junction_Object__c	Is this a junction object? Used by the data validator to retroactively apply rules to lookup fields.

DM Field

This is a custom metadata object that represents an actual SObject Field.

Field Label	API Name	Description
Label	MasterLabel	Standard Label Field for Custom Metadata. Used for UI purposes across all apps.
DM Field Name	DeveloperName	Standard field.
Object Name	Object_Name__c	Metadata Relationship to DM Object.
API Name	Field_API_Name__c	The API Name of this SObject field.
Field Type	Field_Type__c	Picklist of available field types. This is not pulled from the SObject describe to allow for more control in the Data Creator.

Enabled	isEnabled__c	allow for more control in the Data Creator. Kill Switch to prevent this field being used in any apps.
Default Value	Default_Value__c	Specifies a default value for this field, to be used by the Data Creator.
Required	Required__c	Dictates whether this field needs to be populated in the Data Creator. This is not pulled from the SObject describe to allow for more control in the Data Creator.
Populate from session	Populate_From_Session__c	Dictates whether this field is populated by the app at run-time and not inputted by the user. Used by the Data Creator to populate parent/child or Lookup fields.
Sequence	Sequence__c	Used to sequence fields on the UI. Currently only used on Data Creator.

DM Rule

This object is used to setup simple data setup validation rules that may apply to different fields.

Field Label	API Name	Description
Label	MasterLabel	Standard Label Field for Custom Metadata. Used for UI purposes across all apps.
DM Rule Name	DeveloperName	Standard field.
Enabled	isEnabled__c	Used to disable the rule from being used.
Error Message	Error_Message__c	The Error message to be shown if the rule fails
Rule Operator	Rule_Operator__c	Picklist of commonly used rule operators. (Equals, Greater than, Less than etc)
Rule Valid Value	Rule_Valid_Value__c	The value to compare the field value against.

DM Field-Rule

This object is a junction object to connect a *DM Field* to a *DM Rule*.

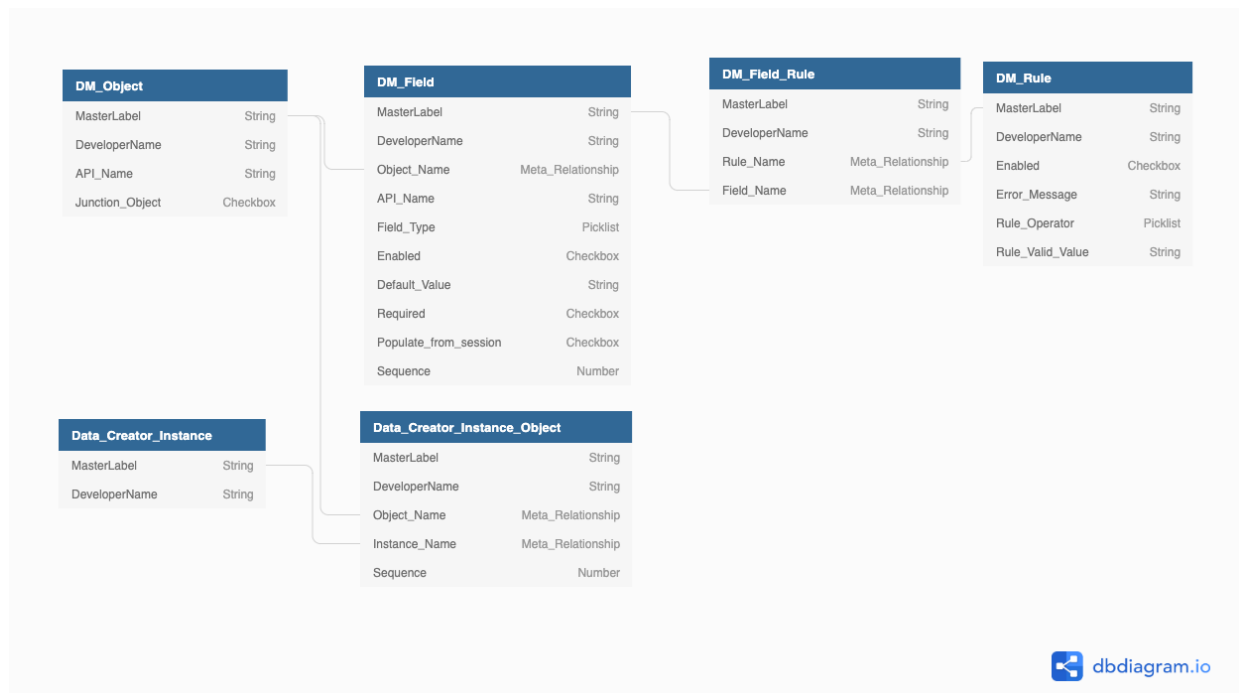
Field Label	API Name	Description
Label	MasterLabel	Standard Label Field for Custom Metadata. Used for UI purposes across all apps.
DM Field-Rule Name	DeveloperName	Standard field.
Field Name	Field_Name__c	Metadata Relationship to DM Field.
Rule Name	Rule_Name__c	Metadata Relationship to DM Rule.

Data Creator

Introduction

The Data Creator is a metadata driven utility that helps you create flows to create simple and complex data. It aims to help you create data across multiple objects with the fewest clicks. If setup correctly, it can help reduce data creation times exponentially while also allowing the user to populate fields that are relevant in the flow.

Additional Custom Metadata Types



Data Creator Instance

Field Label	API Name	Description
Label	MasterLabel	Standard Label Field for Custom Metadata. Used for UI purposes across all apps.
Data Creator Instance Name	DeveloperName	Standard field.

Data Creator Instance-Object

Field Label	API Name	Description
Label	MasterLabel	Standard Label Field for Custom Metadata. Used for UI purposes across all apps.
Data Creator Instance - Object Name	DeveloperName	Standard field.
Instance Name	Instance_Name__c	Metadata Relationship to Data Creator Instance
Object Name	Object_Name__c	Metadata Relationship to DM Object.
Sequence	Sequence__c	Used on the UI to sequence individual object forms.

Instances

- The Data Creator is able to handle multiple 'flows' that are configured to create different kinds of data.
- An instance can be defined as a group of related/unrelated DM Objects (Which are really SObjects) that a user can create data for on a single screen. Data Creator instances are setup by creating custom metadata records for the Data Creator Instance object and subsequently creating Data Creator Instance-Object records to single/multiple DM Objects that you wish to include in this instance.
- Examples of flows could include:
 - Account - Contact flow

- Account - Contact - Opportunity - Opportunity Lines flow
- These flows can co-exist on separate lightning pages to allow the end user to create different shapes of data.

CRUD/FLS Enforcement

The Data Creator enforces all Create permission on all objects and fields that are to be inserted. The user is expected to have these permissions, else an error is thrown indicating what permissions are lacking. The user will not be allowed to insert partially created data. If permissions are not updated, they would have to clear their session and start over.

Auto-Save

The Data Creator application is able to save your work as you work. The auto-save is triggered every time you switch across tabs. This data is stored in different custom objects (DC Session, DC Object Data and DC Record Data). Your past work will automatically be retrieved when you leave and return to the app.

Note: The user also has the option to manually trigger a save by hitting the 'Save Draft' button in the header.

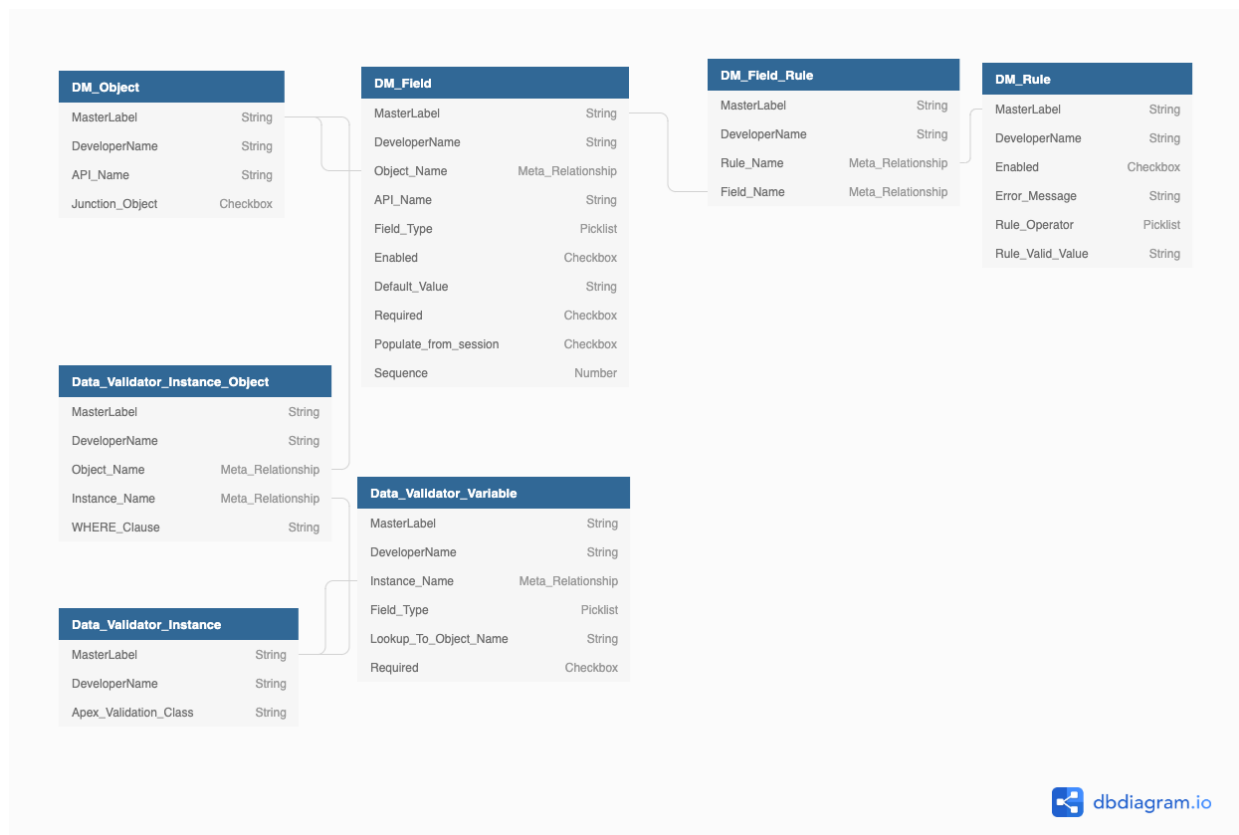
Error Handling

Any exceptions occurring as a part of the flow will be listed in the browser console. This is currently being worked on further to enable the admin to debug simple issues. For now, browser console is the only way to view un-handled exceptions.

Data Validator

Introduction

Additional Custom Metadata Types



Data Validator Instance

Field Label	API Name	Description
Label	MasterLabel	Standard Label Field for Custom Metadata. Used for UI purposes across all apps.
Data Validator Instance Name	DeveloperName	Standard field.
Apex Validation Class	Apex_Validation_Class__c	The name of the apex class that needs to be invoked for validating this instance.

Data Validator Variable

Field Label	API Name	Description
Label	MasterLabel	Standard Label Field for Custom Metadata. Used for UI purposes across all apps.
Data Validator Variable Name	DeveloperName	Standard field.
Field Type	Field_Type__c	Picklist of available field types. This helps determine the type of input box created
Instance Name	Instance_Name__c	Metadata Relationship to Data Validator Instance. The instance that this variable is available for.
Lookup To Object Name	Lookup_To_ObjectName__c	Simple String field to allow for autoFill in the case of lookup fields.
Required	Required__c	This variable is required from the user to process validation for this instance.

Data Validator Instance-Object

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Field Label	API Name	Description
Label	MasterLabel	Standard Label Field for Custom Metadata. Used for UI purposes across all apps.
Data Validator Instance Name	DeveloperName	Standard field.
Instance Name	Instance_Name__c	Metadata Relationship to Data Validator Instance.
Object Name	Object_Name__c	Metadata Relationship to DM Object
WHERE Clause	WHERE_Clause__c	The WHERE Clause (without the word WHERE) to retrieve records from the DM Object using Data Validator Variables that belong to the instance.

Instances

- The Data Validator is able to handle multiple validation instances in a single org. As an admin, you are able to create multiple validator lightning pages that validate different data.
- An instance can be defined as a group of related/unrelated DM Objects (Which are really SObjects) that are related in some form or would ideally need to be looked at when something breaks.

Variables

- The Data Validator works by first querying data from all objects that are under the instance.
- Querying this data sometimes requires filters to limit the data that is queried from the database.
- To build filters, we need the filter criteria which is provided by the user at runtime. This data can be captured by using Data Validator Variables.
- To create a new data point to be provided by the user at run-time, create a Data Validator Variable custom metadata record. Make sure to attach the right Data Validator Instance to the record. This variable can also be marked required, if it is critical for running the validation.
- Once a variable is created by creating a Data Validator Variable custom metadata record, it can be used in the WHERE clause field on a Data Validator Instance-Object record by enclosing the it within **{{<MasterLabel of Data Validator Variable>}}**
 - Example WHERE Clauses:
 - *Id IN (SELECT AccountId FROM Contact WHERE Id = :{{contactSFID}})*
 - *Id = {{contactSFID}}*