



BNT'S
DUPESPREVENTER

BLOCK/WARN

DupesPreventer

Whitepaper



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1. Introducing DupesPreventer

An in-house application to detect Duplicates. While you have many times entered the same information on spreadsheets, realizing it a time-consuming task, sorting and deleting the elements in the list can be more tedious. Therefore, to avoid such duplicity and manual interventions, **BNT's DupesPreventer** is the perfect solution. Designed by our excellent team, the application works to **stop duplicate prospect entry**, web-to-lead, integrated systems. Any duplicate entry is blocked or reported.

BNT's years of distinctive market knowledge and services provide you with solutions that are a must to have to your business solution. We have developed a powerful tool -DupesPreventer which prevents businesses from creating duplicate records. The tool offers exceptional privileges to your organization by enhancing and experiencing easy and convenient implementation after data entry methodology.

Once DupesPreventer is installed and configured it will stop and/or warn end users when they are entering duplicates. Further, it allows matching on any field in Salesforce, including, custom fields. **It detects duplicates to accounts, contacts, leads, along with, "Lead to Contact" and "Lead to Account" and vice versa.**

Salesforce administrators can now create custom configurations based on any fields, including custom fields. However, this works only for a single Insert/Update.



1.1 DupesPreventer Features

DupesPreventer features real-time deduplication capabilities in addition to the following great features:

- Support for Standard Salesforce objects (Lead, Accounts, and Contacts)
- Supports Cross Objects i.e. “Lead to Account”, “Lead to Contact” and vice versa.
- Support for all Salesforce fields, including custom fields.
- Ability to "Bypass user".
- Ability to "Bypass Profile".
- Lightning ready.
- Also, it Allows deduplication by deep filtering the records.
- Ability to reconfigure the existing records based on matching Configuration.
- It is compatible with Developer, Enterprise, Professional and Unlimited Edition.
- All the probable duplicates/Warning can be viewed at once with the help of Standard Salesforce Reports/Dashboards.
- In the case of Mass Insert through Dataloader/Workbench with batch size 1, check the below points.
 - Prevent Insert Case: Exception is recorded in the error file
 - Report Duplicates : Duplicates gets inserted and recorded in the DupesPreventer Application.

2. Getting Started

DupesPreventer can be downloaded from AppExchange and installed directly in the Salesforce platform. It can be installed in both production and sandbox instances. There is absolutely no charge in using this Application.

This application helps to detect Duplicates of Accounts, Contacts, Leads as well as Cross objects “Lead to Contact”, “Lead to Account” and vice versa.





3. Components of DupesPreventer

- DupesPreventer Status Tab
- DupesPreventer Configuration Tab
- DupesPreventer Probable Duplicates
- DupesPreventer Duplicate Warnings



Insights of the above Component's

3.1 DupesPreventer Status Tab

Displays the below Details-

- Administrative Email,
- Status provides you control to activate or deactivate the application functionality.
- Installation Details like the License Subscription Date, License Expiry Data, Remaining days to rene
- Statistics of Standard Objects , which gets Updated on daily basis .

DupesPreventer Credential

Administrative Email

noreply@salesforce.com

Activate DupesPreventer

☐

Administrator Email

Edit

Status Detail

DupesPreventer Status

Installation Details

License Subscription Date: 12/26/2019

Status: Active

License Expiry Date: 12/25/2020

Remaining Days to Renew: 337

DupesPreventer Today

Statistics on Daily Basis

Lead

Lead Blocked/Total: 0

Lead Warnings Reported/Total: 0

Account

Account Blocked/Total: 0

Account Warnings Reported/Total: 0

Contact

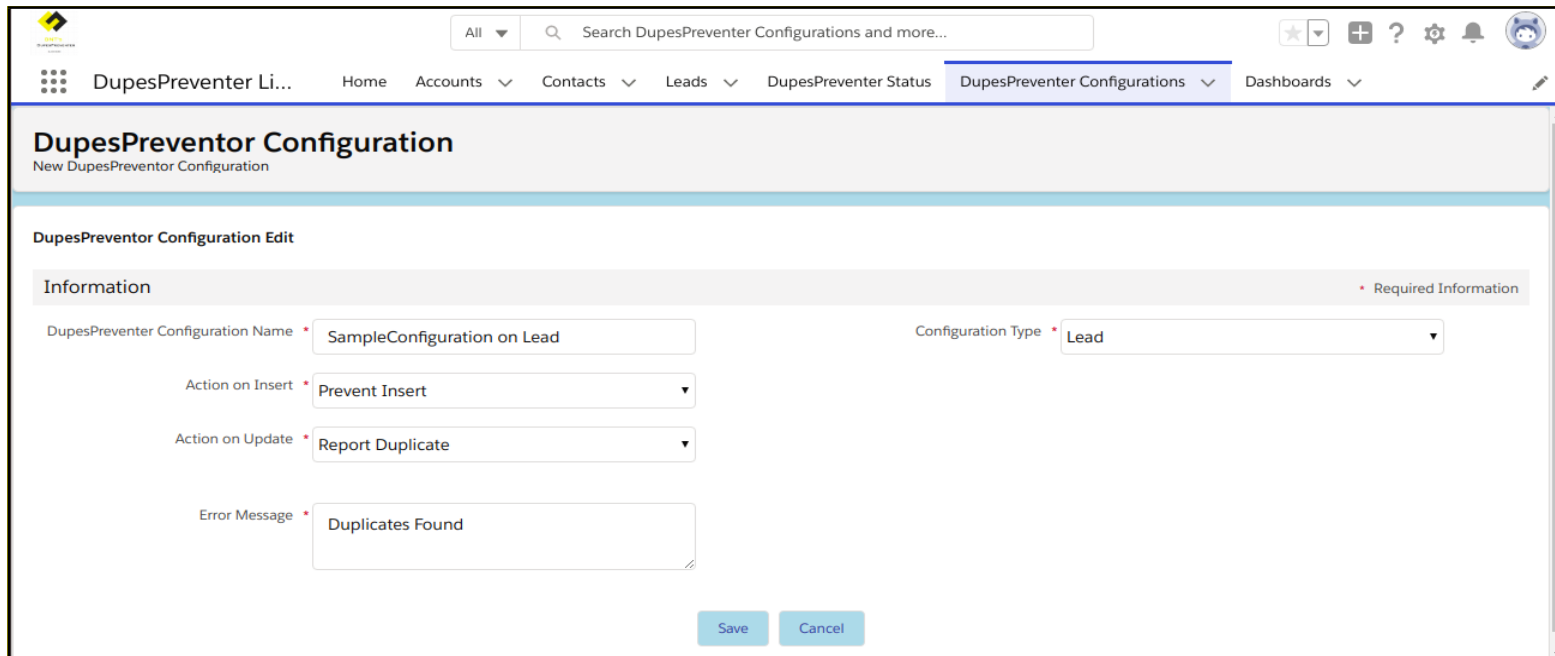
Please Note: If the “**Activate DupesPreventer**” is unchecked then the DupesPreventer app does not work for the org.



3.2 DupesPreventer Configuration Tab

- Post Installation, For DupesPreventer's Functionality to work, the initial step will be to configure a new configuration and setting the action as per the requirement.
- So the Administrator can start with the creation of the Configurations defining the matching criteria for detecting duplicates and also define the actions that should be taken when duplicates are detected.
- Multiple configurations can be created for the same object.
- Different actions can be taken for Inserts and Updates for inserting or updating records on the sObjects.
- Duplicates to Lead, Contact, Account, 'Lead to Contact' and 'Lead to Account' can be created.

The Below Image show DupesPreventer's Configuration Detail Page



The screenshot displays the 'DupesPreventer Configuration' page within a Salesforce-like interface. The page title is 'DupesPreventer Configuration' with a subtitle 'New DupesPreventor Configuration'. The navigation bar includes 'Home', 'Accounts', 'Contacts', 'Leads', 'DupesPreventer Status', 'DupesPreventer Configurations' (selected), and 'Dashboards'. The main content area is titled 'DupesPreventor Configuration Edit' and contains an 'Information' section with a 'Required Information' indicator. The form fields are as follows:

Field	Value
DupesPreventer Configuration Name *	SampleConfiguration on Lead
Configuration Type *	Lead
Action on Insert *	Prevent Insert
Action on Update *	Report Duplicate
Error Message *	Duplicates Found

At the bottom right of the form are 'Save' and 'Cancel' buttons.

3.2.1 DupesPreventer Configurations's Fields

DupesPreventer configuration Name: This is the name of the configuration.

Configuration Type : This is the Configuration Type which indicates on which Subjects user has to find duplicate records. Users may select any standard Subject such as Lead, Account, Contact, 'Lead To Account' or 'Lead To Contact'. Each subject user can create a maximum number of 30 Configuration. For Example: 'Lead', 'Lead To Account', 'Lead To Contact', these all configuration is considered for 'Lead'. Suppose there is 'Lead': 10, 'Lead To Account':10, 'Lead To Contact':10. So the maximum number of configuration count reaches to 30 for single standard 'Lead' subject.

Action on Insert : Action available on Insert.

- Prevent Insert: This action support end-user to prevent duplicate records for inserting.
- Report Duplicate: This action support end-user to insert duplicate records with Warnings.
- No Action: This action supports the end-user to insert records without any action.

Action on Update : Action's available on Update is as follows.

- Prevent Update: This action support end-user to prevent duplicate records for updating.



- Report Duplicate: This action support end-user to update duplicate records with Warnings.
- No Action: This action supports the end-user to insert records without any action.

Configuration Number: This is an auto-generated Number.

Error Message: This is the Error message in which the end-user will be shown when a record is blocked.

Activate: This Activate checkbox is used for activation of the DupesPreventer configuration.

Reconfiguration Required: Reconfiguration Required checkbox helps to generate duplicates logic codes for the existing records for which DupePreventer was not executed for any reason.


Points To Be Noted :

- After the creation of the Configuration, check on the Activate Checkbox. In case the checkbox is not checked the Application will ignore that configuration for any insert/update of standard objects.



Lightning View

- In case of '**LIGHTNING MODE**' any modification is done to an existing configuration, the Reconfiguration Required Checkbox is automatically Checked and the "Reconfigure" Component becomes Visible, which indicates that "Reconfigure" Component has to be clicked to rebuild the code logic based on the new changes.








DupesPreventer Configuration
TestLead

[Customize Page](#) | [Edit Layout](#) | [Printable View](#) | [Help for this](#)

[DupesPreventer Configure Rules \[1\]](#) | [DupesPreventer Configure Filters \[0\]](#) | [DupesPreventer Probable Duplicates \[0\]](#) | [DupesPreventer Duplicate Warnings \[0\]](#) | [Activity History \[0\]](#)

DupesPreventer Configuration Detail

[Edit](#) [Delete](#) [Clone](#) [Reconfigure Codes](#)

DupesPreventer Configuration Name	TestLead	Owner	 TestOrg_DP [Change]
Configuration Type	Lead	Activate	 <input checked="" type="checkbox"/>
Action on Insert	 Report Duplicate	Reconfiguration Required	 <input checked="" type="checkbox"/>
Action on Update	 Report Duplicate		
Configuration Number	1		
Error Message			

Classic View

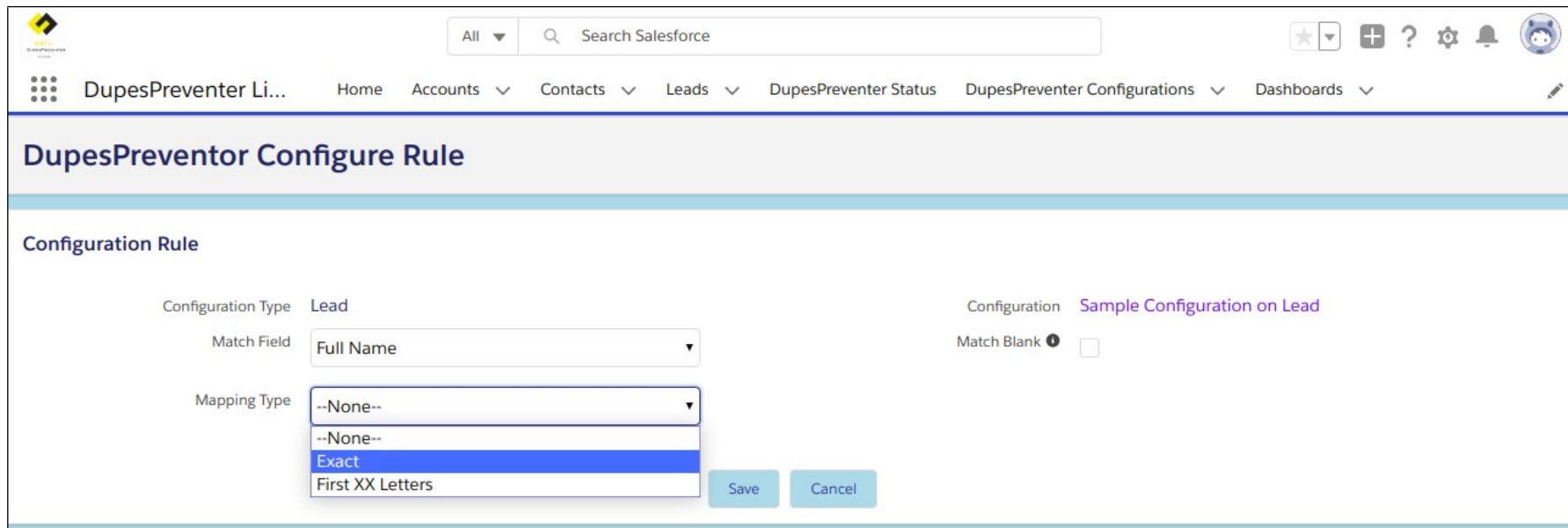
- In case of '**CLASSIC MODE**' any modification is done to an existing configuration, the Reconfiguration Required Checkbox is automatically Checked and the "Reconfigure" button becomes Visible, which indicates that "Reconfigure" button has to be clicked to rebuild the code logic based on the new changes.

- Whenever the “Reconfigure” Component/ Button is clicked the below process gets executed asynchronously.
 - Deleting Existing Codes.
 - Building New Codes Using the Batch Apex Codes:
 - A message appears to reconfirm the Reconfiguration.
 - An email will be sent to the admin after the reconfiguration process has been completed.
 - Any configuration is activated only when there are some rules specified for that configuration. So do not forget to add the rules.

3.2.2 Dupe-Preventer Rules Detail

Configuration rules determine what fields will be used to identify matches, and how the fields will be matched. All fields that are included in the configuration rules must be populated and must match (based on the mapping type used) for a record to be identified as a duplicate by that configuration. Multiple Rules for a configuration work as ‘AND’, so all fields included in the rules has to match for the configuration to be triggered.

In the given example, the user wants to detect the duplicate based on the exact match of Full Name.



DupesPreventor Configure Rule

Configuration Rule

Configuration Type: Lead

Match Field: Full Name

Mapping Type: --None-- (dropdown menu open showing: --None--, Exact, First XX Letters)

Configuration: Sample Configuration on Lead

Match Blank: ☐

Save Cancel

Adding New Rule: for adding new rules simply click on New DupePreventer Configuration Rule.

Configuration Type: Will be auto-populated with the Configuration Type as selected on Configuration Details and cannot be updated.

Match Field: Select the field to match on. ALL fields EXCEPT long text area and multi-select picklist fields are available for matching, including custom fields. (not understood)

Mapping types: Mapping types will determine how a field is evaluated as a match. There are two types of Mapping available.

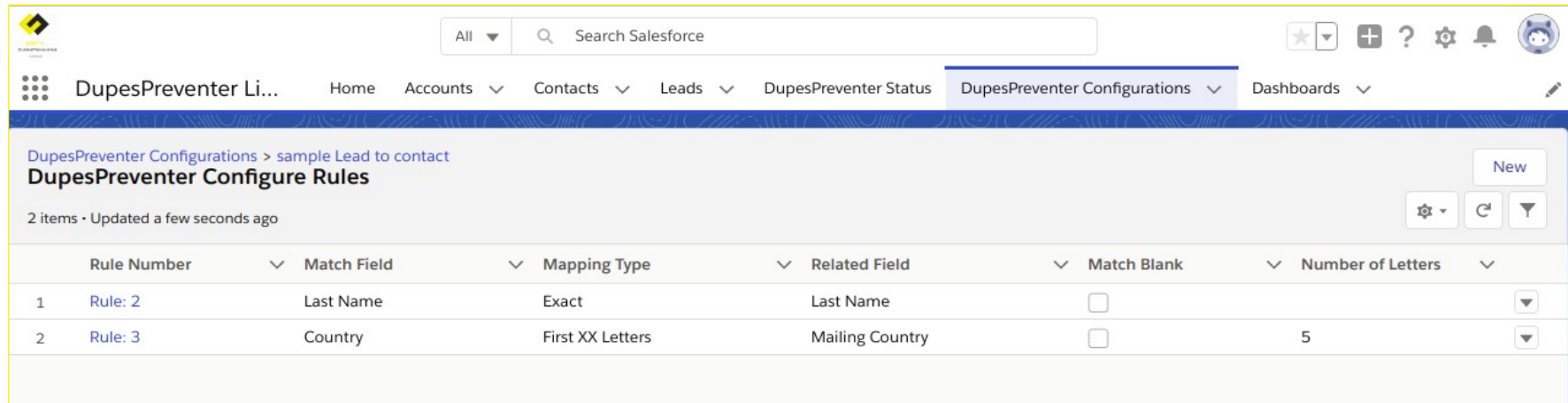


- **Exact**: Exact mapping means whatever match field is selected, for those match field DupePreventer is working.
- **First XX Letter**: When a user selects First XX Letter, then the Number of Letter pop up is opened for entering numeric digit from 0-9.
Eg: If the user entered 2 numbers in Number of Letters, then DupePreventer works for finding duplicate records from the first 2 digits.
- **Match Blank**: By default, blank fields are not matched against each other. If this option is checked then two blanks fields will be matched
- **Lead to Contact and Lead to Account Rules:**

Lead to Contact and Lead to Account rules:

With Lead to Contact or Lead to Account Configuration, a Lead Match Field and a Contact or Account Match Field needs to be specified. The Contact or Account Match Field will be displayed as a Related Field in the Configuration Rule.

When the configuration type is on Lead to Account / Lead to Contact, then there is a requirement of mapping a “Lead Record ID” field of Lead to “Lead Record ID” field of Account and Contact. Please refer to the below image.



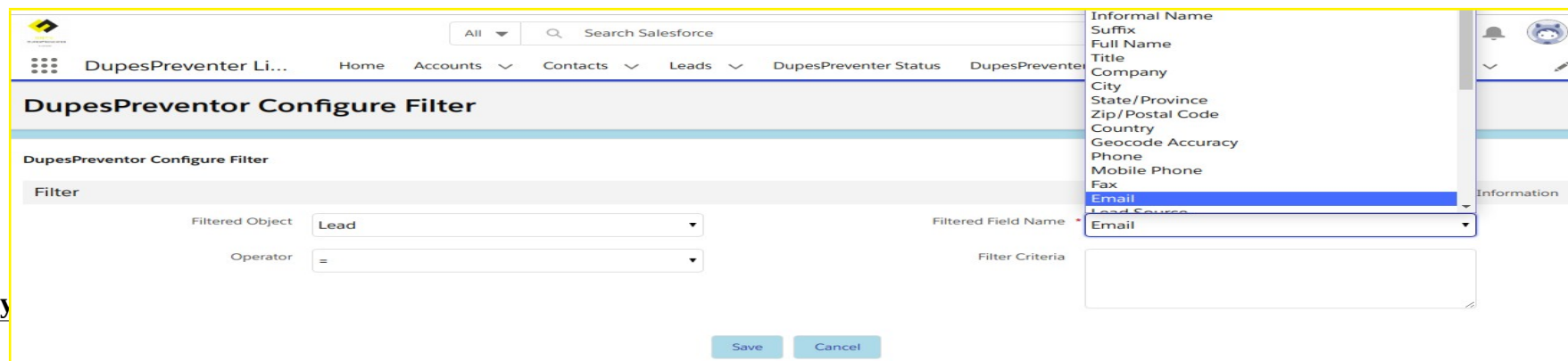
Rule Number	Match Field	Mapping Type	Related Field	Match Blank	Number of Letters
1	Last Name	Exact	Last Name	<input type="checkbox"/>	
2	Country	First XX Letters	Mailing Country	<input type="checkbox"/>	5

- **Rule Limits:** DupePreventer limits the total number of rules for a per configuration to a total of 10.
 1. Account configuration rule count is the total number of rules for all active Account and Lead to Account configuration.
 2. Contact configuration rule count is the total number of rules for all active Contact and Lead to Contact configuration.
 3. Lead configuration rule count is the total number of rules for all active Lead, Lead to Contact and Lead to Account configuration.

3.2.3 Dupe-Preventer Configuration Filters

- Filters are commonly used to satisfy specific field conditions and are Optional. If filters are specified then configuration would work according to that. The filter is specifically used for user records.
- Multiple Filters can be specified, but if specified all filters has to be satisfied for a configuration to work on a record.
- All multiselect is represented in Text Field separated by a comma to allow multiple entries. The values will be filtered based on the 'OR' condition for that field.

3.2.3.1 Filtered Object and Filtered Field



DupesPreventor Configure Filter

DupesPreventor Configure Filter

Filter

Filtered Object: **Lead**

Operator: **=**

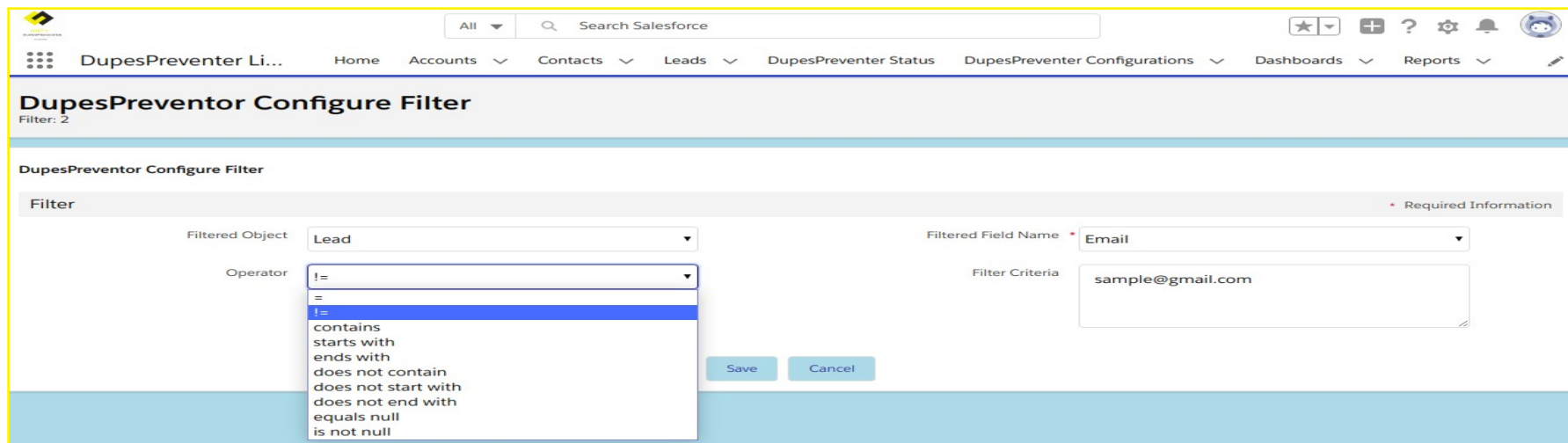
Filtered Field Name: **Email**

Filter Criteria:

Save **Cancel**



3.2.3.2 Filter Operator's



DupesPreventor Configure Filter
Filter: 2

DupesPreventor Configure Filter

Filter * Required Information

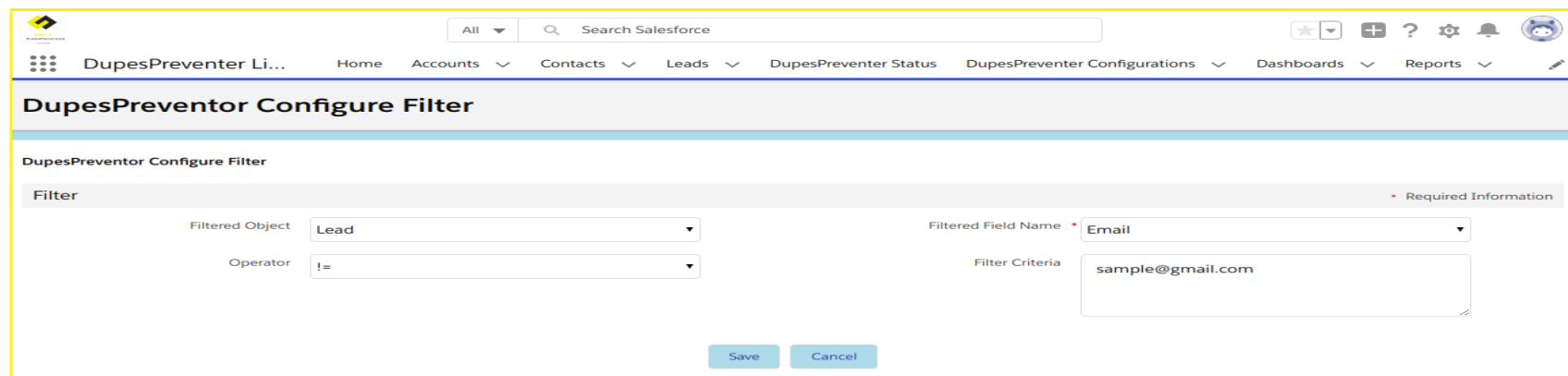
Filtered Object:

Operator:

Filtered Field Name:

Filter Criteria:

3.2.3.3 Filter Criteria:

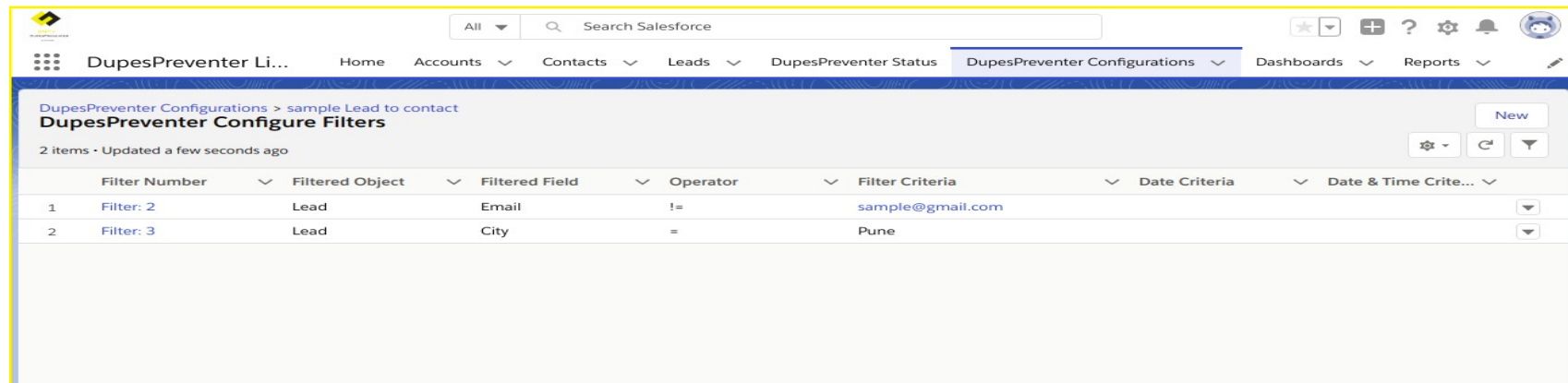


The screenshot displays the 'DupesPreventor Configure Filter' page within a Salesforce interface. The page title is 'DupesPreventor Configure Filter'. Below the title, there is a section labeled 'Filter'. The 'Filter' section contains the following fields:

- Filtered Object:** A dropdown menu with 'Lead' selected.
- Operator:** A dropdown menu with '!= ' selected.
- Filtered Field Name:** A dropdown menu with 'Email' selected. A red asterisk indicates this is required information.
- Filter Criteria:** A text input field containing 'sample@gmail.com'.

At the bottom of the 'Filter' section, there are two buttons: 'Save' and 'Cancel'.

3.2.3.4 Filter List



Filter Number	Filtered Object	Filtered Field	Operator	Filter Criteria	Date Criteria	Date & Time Crite...
1	Filter: 2	Lead	Email	!=	sample@gmail.com	
2	Filter: 3	Lead	City	=	Pune	

3.3 DupesPreventer Probable Duplicates

Probable Duplicate is a related list that shows the records that have been identified as potential duplicates.

- **DupePreventer Probable Duplicate Name:** This is a unique name for every probable duplicate.
- **DupePreventer Duplicate Warning:** Link back to the warning that lists all the potential duplicates to this record based on
- **Configuration Type:** Configuration Type that triggers the probable duplicate and warning.
- **DupePreventer Configuration:** A link to the Configuration that triggered the warning. Can click on this link to go directly to the Configuration and review the matching rules.
- **DupePreventer Code:** The logic that was created based on the scenario rules which was the basis for identifying the duplicate.
- **Object Type:** The type of Object that was matched (Lead/Contact or Account).
- **Duplicate Record:** A link to the specific Account/Contact or Lead record this duplicate is related to. Can click on this link to go directly to the actual Account/Contact or Lead.
- **LeadID / AccountID / ContactID:** This ID belongs to the duplicate records of particular sObject.



DupesPreventer Probable Duplicate
Dupe-30

Related

Details

DupesPreventer Probable Duplicates Name
Dupe-30

DupesPreventer Duplicate Warning
[Warning: 8](#)

DupesPreventer Configuration
[use case](#)

Configuration Type
Lead

Code
10|pune

Duplicate Record
[sample sample lead1 at GOV](#)

LeadId
00Q6g000001aCAQEA2

AccountId

Object Type ⓘ
Lead

Account

Lead
[sample sample lead1](#)

Contact

DupesPreventer Configuration
use case

DupesPreventer Probable Duplicates (5)

New

DUESPVENTER PROBABLE DUPLICATE: DUPESPVENTER PROBABLE DUPLICATES NAME

[Dupe-25](#)

[Dupe-26](#)

[Dupe-30](#)

[Dupe-31](#)

[Dupe-32](#)

[View All](#)

DupesPreventer Duplicate Warnings (2)

New

DUESPVENTER DUPLICATE WARNING NO.

[Warning: 6](#)

[Warning: 8](#)




3.4 DupesPreventer Duplicate Warnings

Warnings are created in Dupe Preventer when a Probable duplicate has been detected for a particular Configuration and the "Match on Insert/Update Action" is set to "Report Duplicate" in Configuration details. Warnings will be created for each Configuration that triggers a Probable duplicate.

Therefore, it is possible to have multiple warnings generated for one insert/update. Below are the Warnings Fields

- **Dupe-Preventer Duplicate Warnings Name:** Unique Name assigned to each warning.
- **Configuration Type:** The Configuration type that triggered the warning.
- **Code:** This code is for particular duplicate records.
- **Dupe-Preventer Configuration:** A link to the Configuration that triggered the warning. Can click on this link to go directly to the Configuration and review the matching rules.
- **Triggering Action:** Message shown to indicate Prevent Insert and Update



DupesPreventer Duplicate Warning
Warning: 8


Related

Details

DupesPreventer Duplicate Warning No.
Warning: 8


Configuration Type
Lead


Code
10|pune

Created By
 TestOrg DP, 1/27/2020, 1:40 AM

DupesPreventer Configuration
[use case](#)

Triggering Action ⓘ
Duplicate Found on Update

Last Modified By
 TestOrg DP, 1/27/2020, 1:40 AM



DupesPreventer Configuration
use case

DupesPreventer Probable Duplicates (5)

New

DUPESPREVENTER PROBABLE DUPLICATE: DUPESPREVENTER PROBABLE DUPLICATES NAME

Dupe-25

Dupe-26

Dupe-30

Dupe-31

Dupe-32

View All

DupesPreventer Duplicate Warnings (2)

New

DUPESPREVENTER DUPLICATE WARNING NO.

Warning: 6

Warning: 8

3.5 Bypass User / Bypass Profile:

DupesPreventer's 'ByPass User / ByPass Profile' allows admin to Bypass the blocking functionality of DupesPreventer Application for a user or for a profile.

3.6 Granting of Permission Sets:

By Default DupesPreventer Application is downloaded for Admin users however, you can change and download it for other users too. But in that case, the admin has to assign the '**Read-only**' access to the other profile in case the Admin wants that user's operations to be blocked or warned for Duplicate records. Further, if the admin wishes to give the visibility and accessibility of DupesPreventer Application to the other users then the admin can assign the '**Read Write**' permission set.

The Application comes with two different types of permission set both for Classic & Lightning.

- Read Only
- Read/Write

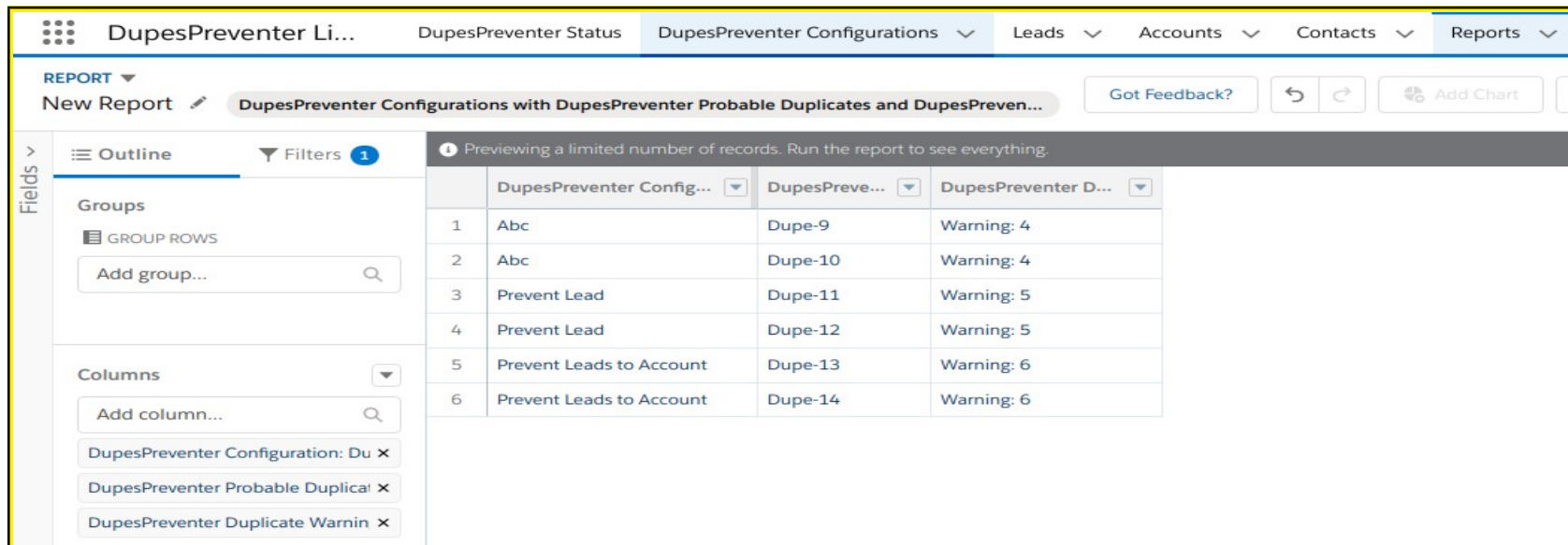
Read/Write Permission Set:- This permission set gives the visibility and accessibility of DupesPreventer Application to users other than administrator.

- The administrator can assign Read/Write access to any user.
- With the help of Read/Write permission set, user's will be able to configure DupesPreventer on any sObject like 'Lead/Account/'Contact' as well as on Cross sObject like 'Lead-Account' or 'Lead-Contact'.
- However, there is a limitation with these Permission set that the user does not get the full accessibility like the administrator i.e. the user will not be able to access the admin's configurations and settings. So in case, the Admin wants to further extend the users accessibility he/she can create additional permission set with '**View All**' & '**Modify All**' permissions on standard sObjects like 'Lead', 'Account' & 'Contact' and assign it to the other user. Now the application works for the other user just like it would work for an administrator.

Read Only Permission Set:- This permission set allows the user's DML operations on standard objects to be blocked or warned for Duplicate records based on the configurations created by the administrator. Further, the user can also see all the duplicates records in the related lists. For the related list, the user has to edit the page Layout and add the '**DupesPreventer Probable Duplicates**' object.

3.7 Reports

If the Administrator wish to see all the duplicate records and Dupespreventer details at one place he can navigate to the standard salesfore reports tab and can create and run a report to view all the details report such as the duplicates records , warnings , configuration details etc.



Previewing a limited number of records. Run the report to see everything.

	DupesPreventer Config...	DupesPreve...	DupesPreventer D...
1	Abc	Dupe-9	Warning: 4
2	Abc	Dupe-10	Warning: 4
3	Prevent Lead	Dupe-11	Warning: 5
4	Prevent Lead	Dupe-12	Warning: 5
5	Prevent Leads to Account	Dupe-13	Warning: 6
6	Prevent Leads to Account	Dupe-14	Warning: 6

Probable Duplicates and Warnings report

DupesPreventer Li... DupesPreventer Status DupesPreventer Configurations ▾ Leads ▾ Accounts ▾ Contacts ▾ Reports ▾

REPORT ▾
New DupesPreventer Configurations Report **DupesPreventer Configurations** [Got Feedback?](#) [↶](#) [↷](#) [Add Chart](#) [Save & Run](#) [Save ▾](#) [Close](#) [Run](#)

Outline **Filters 1**

Groups
GROUP ROWS
[Add group...](#)

Columns
[Add column...](#)
DupesPreventer Configuration: Du x
Configuration Number x
Activate x
Error Message x

Previewing a limited number of records. Run the report to see everything.

	DupesPreventer Configuration: DupesPreventer Configuration Name ▾	Configuration Number ▾	Activate ▾	Error Message ▾
1	E	6	<input checked="" type="checkbox"/>	-
2	Abc	5	<input type="checkbox"/>	-
3	Prevent Lead	4	<input type="checkbox"/>	record present
4	TestLead	1	<input checked="" type="checkbox"/>	-
5	Prevent Leads to Account	8	<input checked="" type="checkbox"/>	Record already present
6			3	

Configuration Report

DupesPreventer Li... DupesPreventer Status DupesPreventer Configurations Leads Accounts Contacts Reports

REPORT New Report **DupesPreventer Configurations with DupesPreventer Configure Rules** Got Feedback? Add Chart Save & Run

Fields Outline Filters 1

Groups

GROUP ROWS

Add group...

Columns

Add column...

DupesPreventer Configuration: Du x

DupesPreventer Configure Rule: R x

Configuration Number x

Configuration Type x

Activate x

Previewing a limited number of records. Run the report to see everything.

	DupesPreventer Configur...	DupesPreventer ...	Configuration Number	Configuration Type	Activate
1	Prevent Leads to Account	Rule: 11	8	Lead to Account	<input checked="" type="checkbox"/>
2	TestLead	Rule: 5	1	Lead	<input checked="" type="checkbox"/>
3	Prevent Lead	Rule: 6	4	Lead	<input type="checkbox"/>
4	Abc	Rule: 7	5	Account	<input type="checkbox"/>
5	E	Rule: 10	6	Lead	<input checked="" type="checkbox"/>
6					3

Rules Report