

Difenso for Salesforce



Tutorial

Requirements

1. Enable My Domain

If you would use the Lightning version, you have to active your Domain

- I) [Installation](#)
- II) [Uninstallation](#)
- III) [Use of Service](#)
- IV) [Confirmation message and Error message](#)
- V) [Compatibility](#)
- VI) [Screenshot](#)
- VII) [Report Reader](#)

1) Installation

- 1) Login to your administrator salesforce account
- 2) In security control
 - a) Add the soap API authorization by adding this URL:
`https://your-domain.my.salesforce.com`

When your-domain is the domain or of your organization.

Name the remote: "SOAP_API".

Remote Site Edit Save Save & New Cancel

Remote Site Name SOAP_API

Remote Site URL https://your-domain.my.salesforce.com

Disable Protocol Security ☐ i

Description

Active ☒

Save Save & New Cancel

- b) Add the Difenso Web Service authorization by adding this URL:
`https://dcs-proto.difenso.com/api/v1.0/process`
- Name the remote: "Difenso_Web_Service"

Remote Site Edit Save Save & New Cancel

Remote Site Name Difenso_Web_Service

Remote Site URL https://dcs-proto.difenso.com/api/v1.0/process

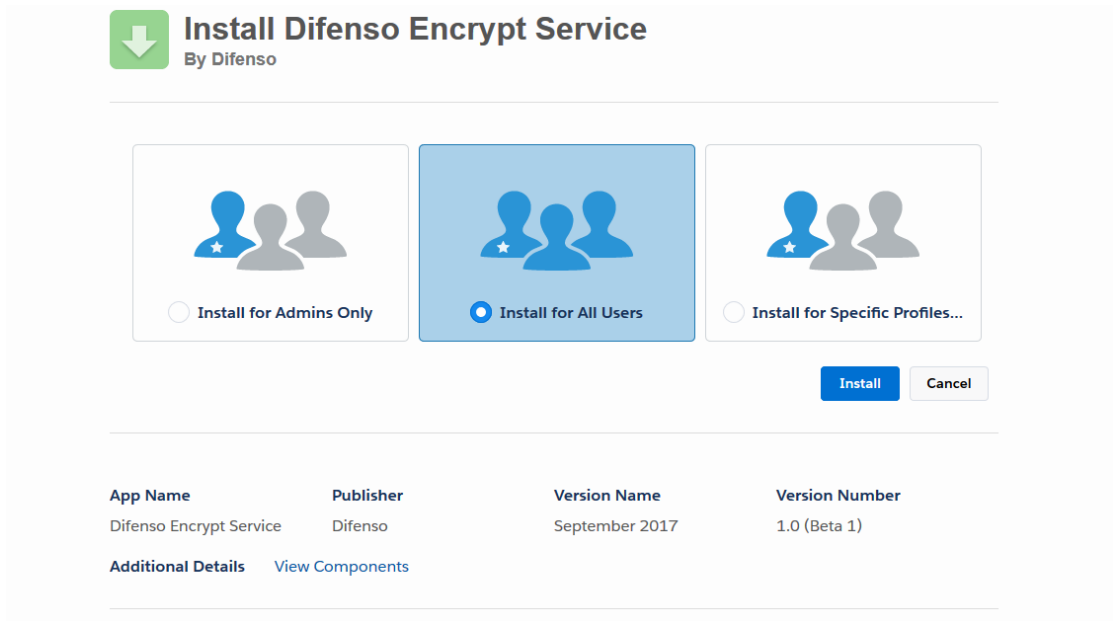
Disable Protocol Security ☐ i

Description

Active ☒

Save Save & New Cancel

3) Install the package (Install for All Users)



The screenshot shows the Salesforce App Store interface for installing the 'Difenso Encrypt Service'. At the top, there is a green download icon and the text 'Install Difenso Encrypt Service By Difenso'. Below this, there are three installation options, each represented by a box with three user icons: 'Install for Admins Only' (unselected), 'Install for All Users' (selected with a blue dot), and 'Install for Specific Profiles...' (unselected). To the right of these options are 'Install' and 'Cancel' buttons. Below the installation options, there is a table with the following information:

App Name	Publisher	Version Name	Version Number
Difenso Encrypt Service	Difenso	September 2017	1.0 (Beta 1)

At the bottom of the table, there are links for 'Additional Details' and 'View Components'.

When the installation is complete, click on Done

4) Keep your email client open.

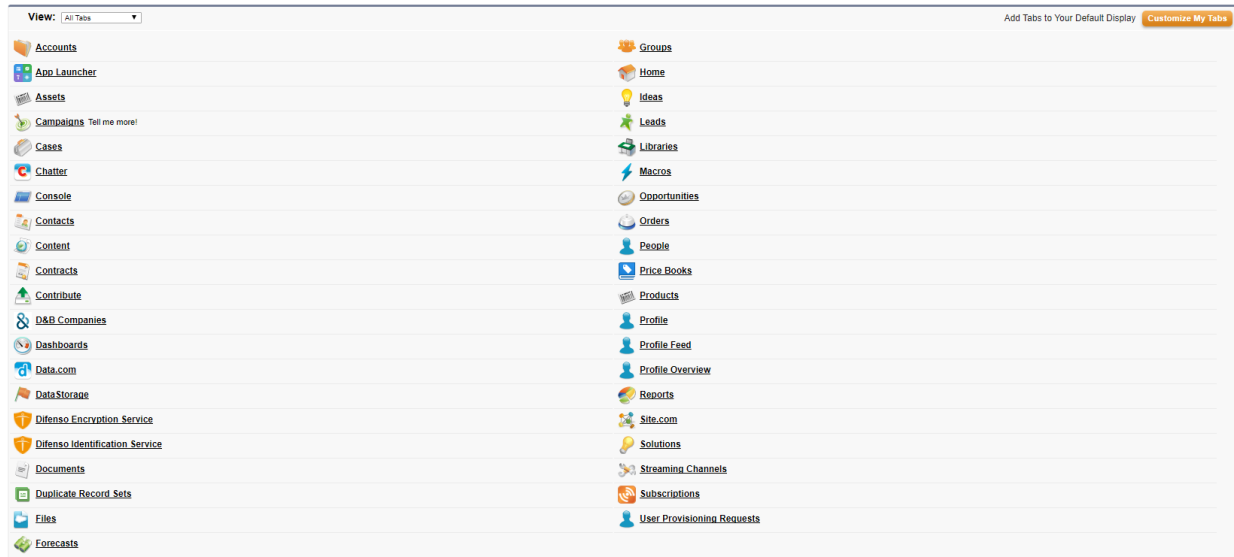
You will receive emails regarding the confirmation of the installations of the encryption procedures for each object.

5) Go to the Tabs of Salesforce

All Tabs

[Help for this Page](#)

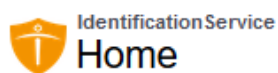
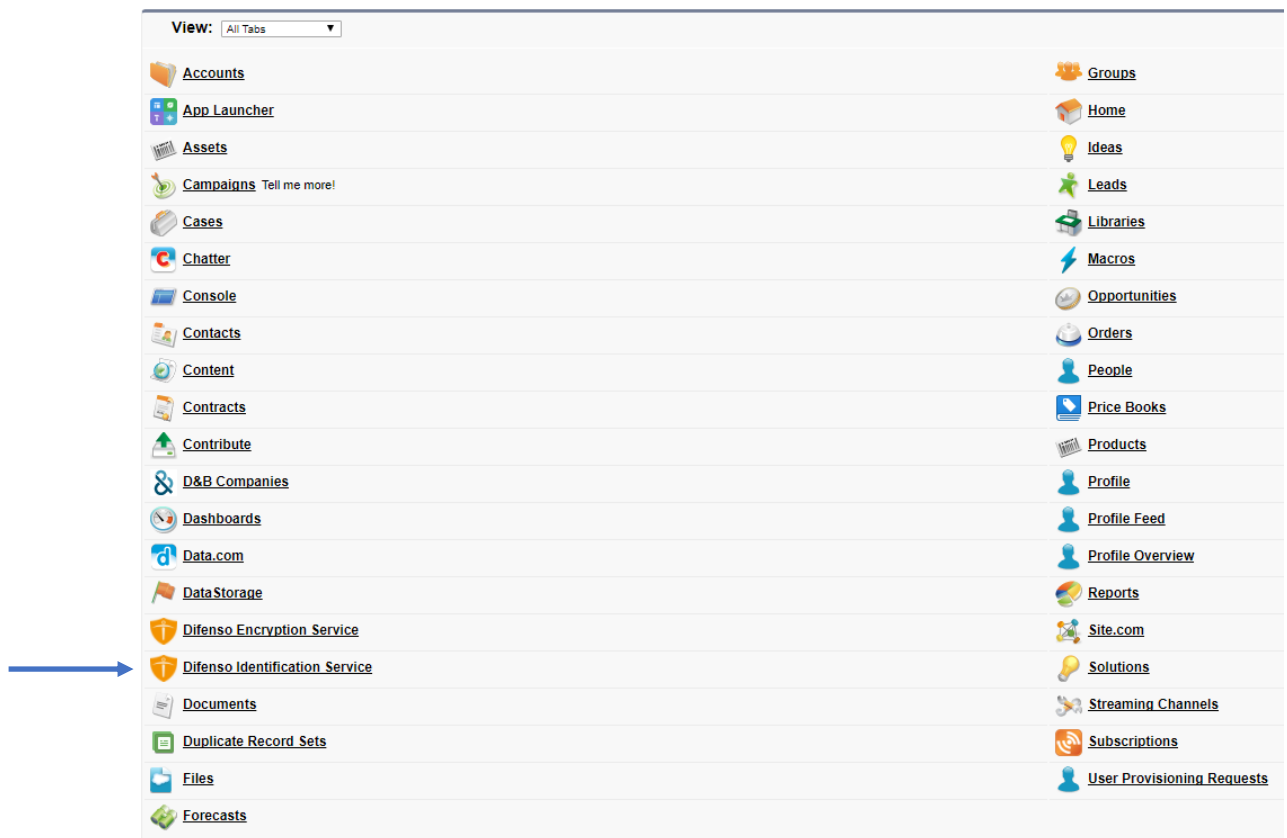
Use the links below to quickly navigate to a tab. Alternatively, you can [add a tab](#) to your display to better suit the way you work.



6) Choose the tab Identification Service

All Tabs

Use the links below to quickly navigate to a tab. Alternatively, you can [add a tab](#) to your display to better suit the way you work.

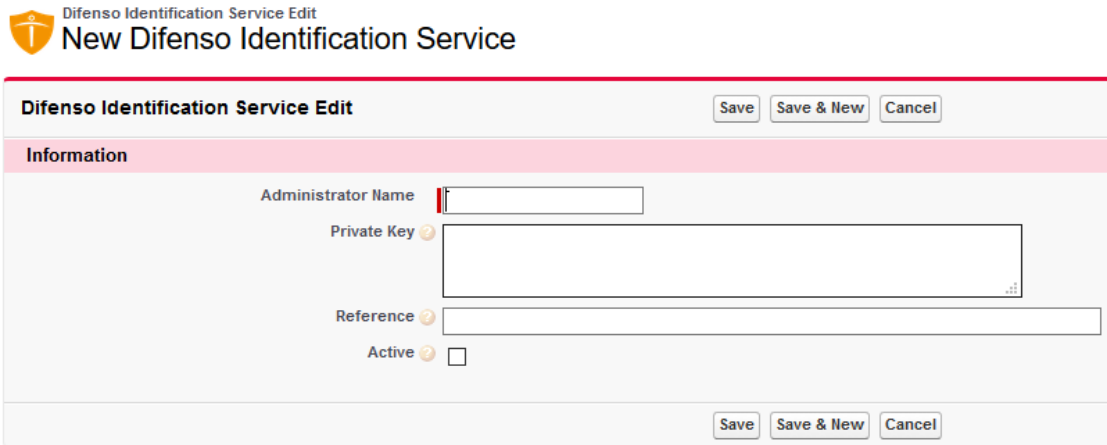


View: [Edit](#) | [Create New View](#)

Recent IdentificationService

No recent records. Click Go or select a view from the dropdown to display records.

7) Click on New and fill the fields



Difenso Identification Service Edit Save Save & New Cancel

Information

Administrator Name

Private Key 

Reference 

Active  ☐

Save Save & New Cancel

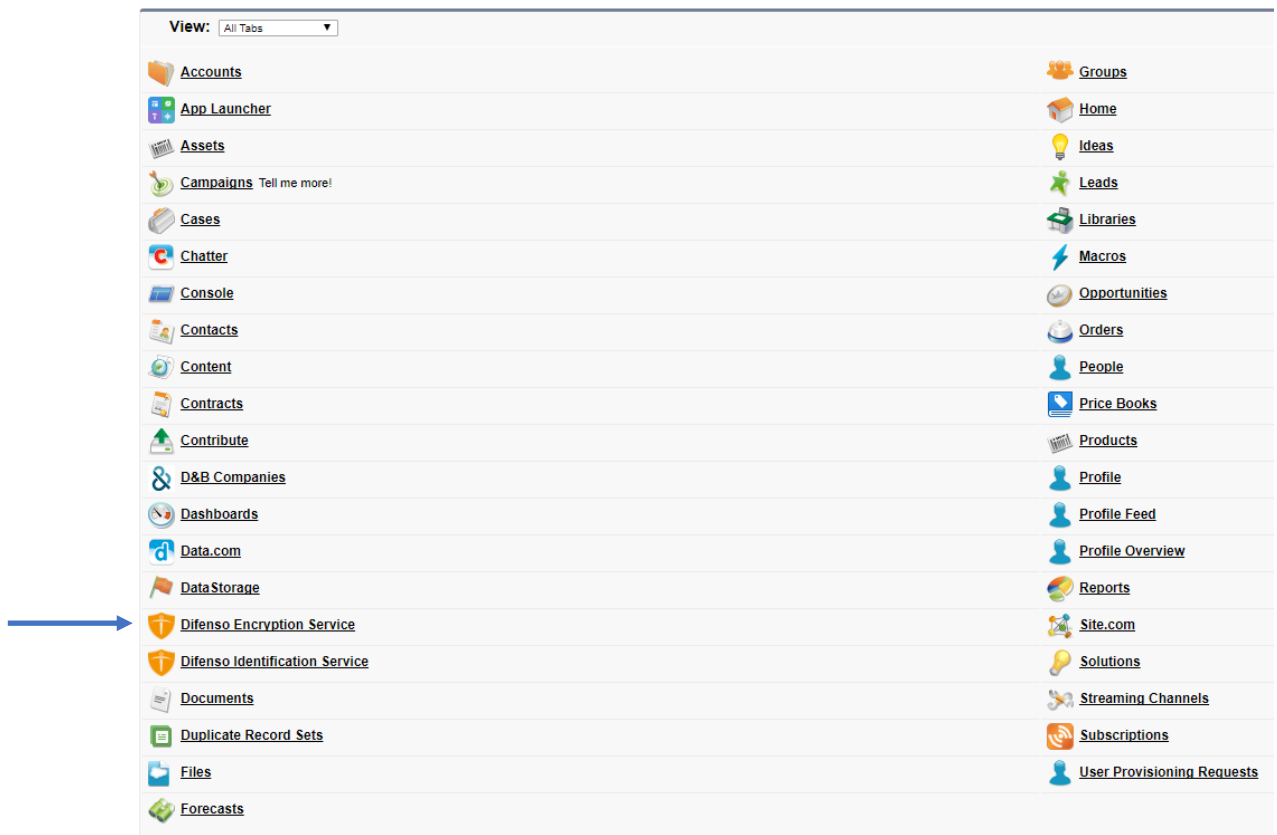
- Administrator Name: Your name
- Private key: The private Key should be in RSA's [PKCS #8 \(1.2\) Private-Key Information Syntax Standard](#) form. The value cannot exceed 4 KB.
- Reference of the Key
- Set the key to be Active (Only one key could be Active)

And press Save.

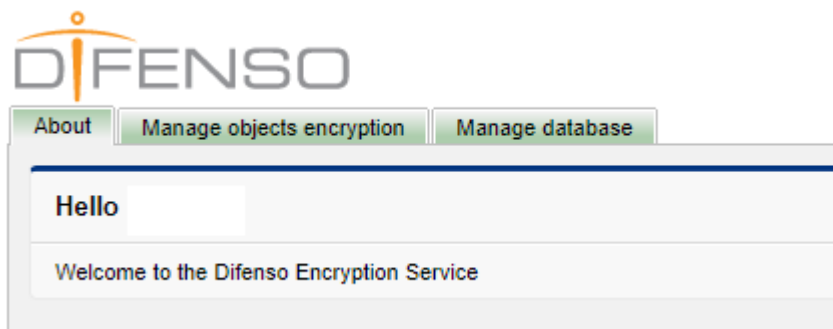
8) Go back to the Salesforce Tab and choose Difenso Encryption Service

All Tabs

Use the links below to quickly navigate to a tab. Alternatively, you can [add a tab](#) to your display to better suit the way you work.



You will see this page:



9) In this page select the tab Manage database

The screenshot shows the DIFENSO application interface with the 'Manage database' tab selected. The page title is 'Environnement in order to manage the database'. It contains a red warning message: 'This table contains meta data about which fields of an object will be encrypted. It is impossible to touch this page when objects have already been encrypted, if you want to refresh this information you must launch the decryption process of your organization.' Below this, there are instructions: 'Do your choice and press OK', 'Choice number 1 : Add data', and 'Choice number 2 : remove the data'. A dropdown menu labeled 'Your choice' is set to '-None-'. There is an 'OK' button and a 'Status :' label.

10) Choice Add Data and Press the button OK to Add encryption information(metadata)

The status should be: The data has been added to the database

This screenshot shows the same 'Manage database' tab, but the 'Your choice' dropdown is now set to 'Add the data'. The 'Status :' label now displays 'The data has been added to the database' in blue text. The red warning message is still present.

11) In this page select the tab Manage objects encryption

The screenshot shows the DIFENSO application with the 'Manage objects encryption' tab selected. The page title is 'Control the encryption of your objects'. It features a dropdown menu labeled 'Choose the object that you would encrypt' with 'AcceptedEventRelation' selected. Below this is a 'Choose the object' button.

12) Adding Encryption process

Choose your object that you want to encrypt and press Choose the Object
You have to do the following actions for each object to be encrypted.

13) A list of the possible fields will appear

The screenshot shows the DIFENSO web application interface. At the top, there is a navigation bar with three tabs: "About", "Manage objects encryption", and "Manage database". The "Manage objects encryption" tab is active. Below the navigation bar, the main content area is titled "Control the encryption of your objects". Under this title, there is a section "Choose the object that you would encrypt" with a dropdown menu showing "Account". Below the dropdown is a button labeled "Choose the object". Underneath, there is a blue link that says "Please select the fields that would encrypt". Below this link, it says "You have selected the object: Account". A list of fields follows, each with an unchecked checkbox: Name, BillingStreet, BillingCity, BillingState, BillingCountry, ShippingStreet, ShippingCity, ShippingState, ShippingCountry, Phone, Fax, AccountNumber, Website, Description, Site, Tradestyle, NaicsDesc, and SicDesc. At the bottom of the list is a "Save" button. Below the "Save" button, the word "Saved" is displayed.

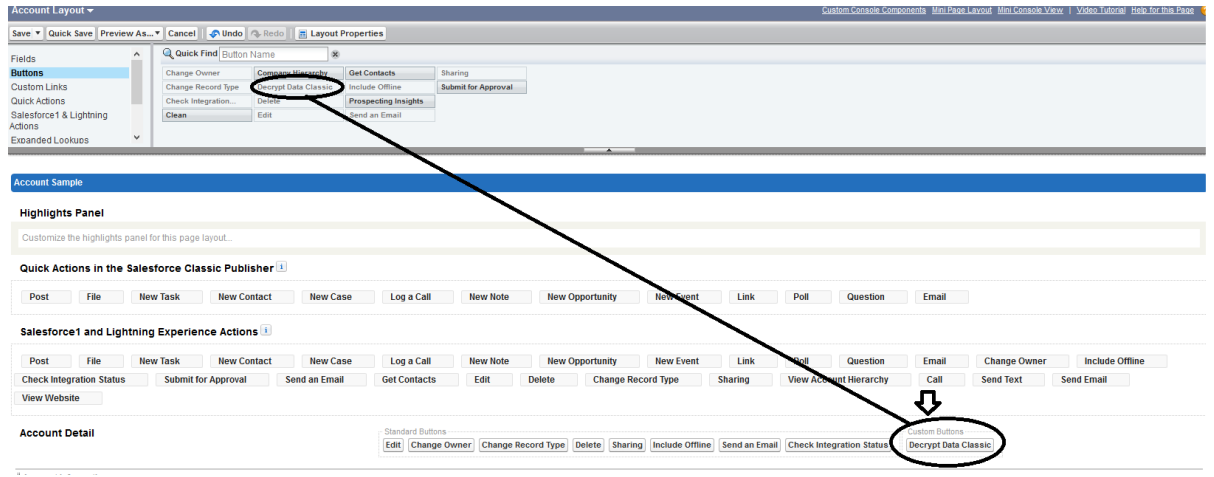
Check them and press Save.

When you will press the save button, you will have to wait for a confirmation email before proceeding to the next step

14) Configuration of the visual for the button decrypt

If your version is classic:

- a) Go to the layout of your object and add the Decrypt Data Classic Button



If your version is lightning:

- a) Create a new Action on your object and link it to our Decrypt Component for Lightning.

Label Name should be: Decrypt Data Lightning

Account Actions New Action

Enter Action Information

Object Name: Account

Action Type: Lightning Component

Lightning Component: Difenso:DecryptComponentForLightning

Height: 250px

Standard Label Type: --None--

Label: Decrypt Data Lightning

Name: Decrypt_Data_Lightning

Description:

Icon: [Change Icon](#)

- b) Add this Action to the layout of your object

Account Layout

Save Quick Save Preview As... Cancel Undo Redo Layout Properties

Quick Find: Salesforce Lightning Experience Actions

Fields Buttons Custom Links Quick Actions Salesforce Lightning Experience Actions Expanded Lookups

Call Change Owner Change Record Type Check Integration... File Get Contacts Include Offline Link Log a Call Mobile Smart Actions New Account New Case New Contact New Event New Group New Lead New Note New Opportunity New Task Poll Post Question Send an Email Send Email Submit for Approval View Account Hier... View Website

Label View Website Name: WebsiteHighlightAction Action Type: Productivity (highlight) Action This item is currently in use (click to locate)

Account Sample

Highlights Panel Customize the highlights panel for this page layout...

Quick Actions in the Salesforce Classic Publisher

Post New Task New Contact New Case Log a Call New Note New Opportunity New Event Link Poll Question Email

Salesforce Lightning Experience Actions

Decrypt Data Lightning Post File New Task New Contact New Case Log a Call New Note New Opportunity New Event Link Poll Question Email Change Owner Include Offline Check Integration Status Submit for Approval Send an Email Get Contacts Edit Delete Change Record Type Sharing View Account Hierarchy Call Send Text Send Email View Website

15) Manage users profile:

The Data Storage Object, the Identification-Service Object and the Difenso Encryption Service Page must be visible and editable only for the administrator.

The user will use the key to call the Difenso Web Service without observe, read or modify it.

This key will be used to authenticate this one with our service, it is not for the encryption procedure.

II) Uninstallation

1) Login to your administrator salesforce account

2) Keep your Email client open

You will receive emails regarding the confirmation of the uninstallation of the encryption procedures for each object.

3) You have to do the following actions for each encrypted object

If you are in classic version

a) Go to the layout of your object and remove the Decrypt Data Classic button

If you are in lightning version

a) Remove the Action Decrypt Data Lightning (Button) from your layout

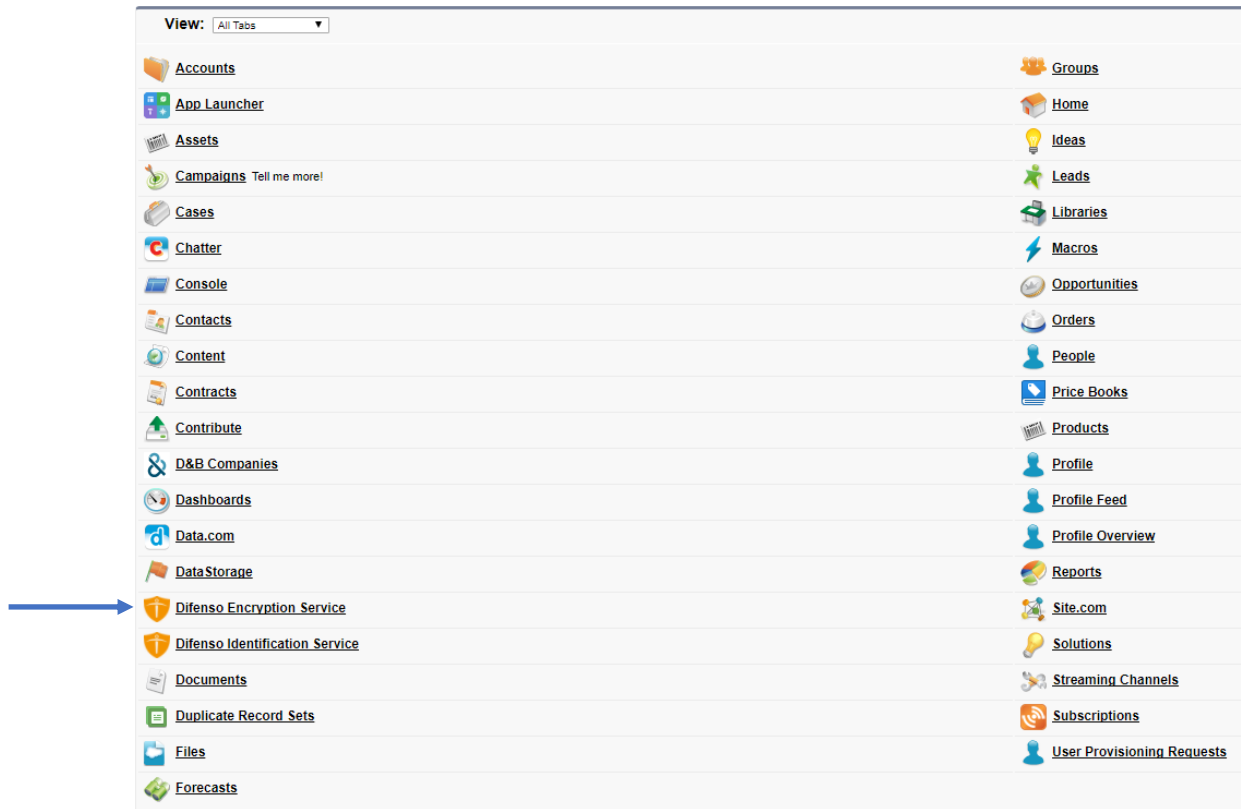
b) Delete the Action Decrypt Data Lightning

4) When you have finished to do the step 3 for each object, go to the next step

5) Go to the page Difenso Encryption Service (From the salesforce Tab)

All Tabs

Use the links below to quickly navigate to a tab. Alternatively, you can [add a tab](#) to your display to better suit the way you work.



6) In this page select the tab 'Manage objects encryption'



7) Removing the encryption process for each object:

- a) Choose the Object and press Choose the Object
- b) A list of the possible fields will appear, uncheck them and press Save
- c) When you will press the save button, you will have to wait for a confirmation email before proceeding to the next step



About Manage objects encryption Manage database

Control the encryption of your objects

Choose the object that you would encrypt

Account

Choose the object

Please select the fields that would encrypt

You have selected the object: Account

- ☒ Name
- ☐ BillingStreet
- ☐ BillingCity
- ☐ BillingState
- ☐ BillingCountry
- ☐ ShippingStreet
- ☐ ShippingCity
- ☐ ShippingState
- ☐ ShippingCountry
- ☒ Phone
- ☒ Fax
- ☐ AccountNumber
- ☐ Website
- ☒ Description
- ☐ Site
- ☐ Tradestyle
- ☐ NaicsDesc
- ☐ SicDesc

Save

Saved

- 8) When you have finished to removing the encryption procedure for each object, go to the next step
- 9) In this page select the tab Manage database
- 10) Choice Remove Data and Press the button OK to remove encryption information(metadata)



The Status should be: The data has been removed from the database

- 11) Uninstall package

III) Use of service

Encryption

The use is transparent to the user.

When a user creates a new record / update an existing record and press the button save of Salesforce, the fields which should be encrypted are replaced by the word:

1) “Encrypting...”

When it is a new record

2) “Updating...”

When the user updates an existing record

3) “Error”

When an error has occurred.

You will receive a mail with the error description

When the data is ready (the encryption process is done), an update of the encrypted fields will happen.

Decryption

When you consult a card with encrypted fields you will have a button to decrypt these data.

If your version is the classic salesforce version, you will have a JavaScript button that will open a popup with the decrypted data.

If your version is the lightning salesforce version, you will have an Action button that will open a Lightning component with the decrypted data.

IV) Confirmation message and Error messageErrors Messages

Event: Add the process of encryption on an object x
Error: Unauthorized endpoint
Hi, There was a problem to add the encryption process on the object: x Error: IO Exception: Unauthorized endpoint, please check Setup->Security->Remote site settings. endpoint = https://your-domain.my.salesforce.com/services/Soap/m/38.0 If the problem persists please contact us. Thank you

Event: Add the process of encryption on an object x
Error: General error
Hi, There was a problem to add the encryption process on the object: x Do the manipulation again. If the problem persists, please contact us. Thank you

Event: Add the process of encryption on an object x
Error: There is no information or missing information in the database about this object: x
Hi, There was a problem: There is no information or missing information in the database about this object: x You have to add the metadata to our database "data_storage" Go to the Salesforce tab "Difenso Encryption Service" and then inside choose our tab "Manage database" Select the option Add the data and press OK If the problem persists please contact us. Thank you

Event: Remove the process of encryption on an object x

Error: Unauthorized endpoint

Hi,
 There was a problem to remove the encryption process on the object: x
 Error: IO Exception: Unauthorized endpoint, please check Setup->Security->Remote site settings. endpoint = https://your-domain.my.salesforce.com/services/Soap/m/38.0
 If the problem persists please contact us.
 Thank you

Event: Remove the process of encryption on an object x

Error: The decrypt button is somewhere in a layout of this object

Hi,
 There was a problem to remove the encryption process on the object: x
 Error: Error occurred processing component x.Difenso__DecryptButtonData. The custom button or link you have tried to delete is currently being referenced elsewhere in Salesforce. Please delete the reference before deleting the button or link. (DELETE_FAILED).
 If the problem persists please contact us.
 Thank you

Event: Remove the process of encryption on an object x

Error: There is an encryption process according to the meta database but there are no components installed. Anyway, the database has just been cleared of the problem

Hi,
 There was no encryption process on the object: x
 If the problem persists please contact us.
 Thank you

Success messages

Event: Add a process of encryption on an object x

Hi, The encryption process on the object: x, was added successfully Thank you

Event: Remove the process of encryption on an object x
--

Hi, The encryption process on the object: x, was removed successfully Thank you

V) Compatibility

The service supports all fields that are longer than 40 except the following fields that are not accepted:

EMAIL, ID, BOOLEAN, REFERENCE, PICKLIST, INTEGER, DOUBLE, CURRENCY, DATE.

However, if you want to encrypt a special field such as the email field, you can create a new custom email field without limitation (without validation check) and then activate the encryption procedure on it.

For this version, the encryption service is working only for the following Objects:

Account, Contact, Opportunity, Custom Object Test

VI) ScreenshotScreenshot Classic version

Account Information Required Information

Account Owner	Test Difenso	Rating	--None--
Account Name	BANK055	Phone	+33145608090
Encrypted Account Name	CREDIT MUNICIPAL	Fax	+33145608090
Parent Account		Website	www.credit-municipal.fr
Account Number	12342	Ticker Symbol	44
Account Site	PARIS	Ownership	--None--
Type	--None--	Employees	3500
Industry	--None--	SIC Code	45
Annual Revenue	125 300 560		

Address Information Copy Billing Address to Shipping Address

Billing Street	BOULEVARD SAINT HONORE	Shipping Street	BOULEVARD SAINT HONORE
Billing City	PARIS	Shipping City	PARIS
Billing State/Province	Ile de France	Shipping State/Province	Ile de France
Billing Zip/Postal Code	75001	Shipping Zip/Postal Code	75001
Billing Country	FRANCE	Shipping Country	FRANCE

Additional Information

Customer Priority	--None--	SLA	--None--
SLA Expiration Date	28/07/2017 12809/2017	SLA Serial Number	58468468
Number of Locations	5	Upsell Opportunity	--None--
Active	--None--		

Description Information

Description

Protect your data

[Save](#) [Save & New](#) [Cancel](#)

Account Detail

Account Owner: [Test Difenso \(Change\)](#)

Account Name: BANK055 [\(View Hierarchy\)](#)

Encrypted Account Name: AEUfMEaXen7ip2i-NT1-94p2p2j0L41sF9D2x0D9h1k

Parent Account: AEUfMGd0pe1Fwou2g8BLPF4N88=

Account Number: AEUfMAF4v0NHSGp8gHsl4v1Ws=

Account Site: Customer - Direct

Type: Apparel

Annual Revenue: 125 300 560 €

Billing Address: AEUfMDYAJE-Cv83VFO9h43-BYalleVhrROGOUng2BhO0
AEUfMOM3kg3n8i559N0MUJ2N5w= AEUfMGA1qWPKMF1EXVH8SEJY= 75001
AEUfMInp2MaMqU0KZxCSHs9=

Customer Priority: High

SLA Expiration Date: 28/07/2017

Number of Locations: 5

Active: No

Created By: Test Difenso, 28/09/2017 17:07

Description: AEUfMGBULUEq4vqZ8FmuVWFIV9hHJDiKpwCLJmTPaDpL

Custom Links: [Billing](#)

Rating: Hot

Phone: AEUfMIPR8doTimsCpUB/SMM=

Fax: AEUfMAJ3rR9Cvoh-WD/S74hg=

Website: <http://AEUfMJCmR5JWf0c4ZCpOnT11E8K0GaBLTZ8Y>

Ticker Symbol: 44

Ownership: Private

Employees: 3 500

SIC Code: 45

Shipping Address: AEUfMAYd3pRg0ePlnn0rQFORU+eggYVhY0q218d5S4w
AEUfMPgt1scG2hwh7ZE+1Jb4= AEUfMUTHBqWYF4FyeHJ1WFE0= 75001
AEUfMDGG09N0MmdE59N88=20Q=

SLA: Gold

SLA Serial Number: 58468468

Upsell Opportunity: Maybe

Last Modified By: Test Difenso, 28/09/2017 17:07

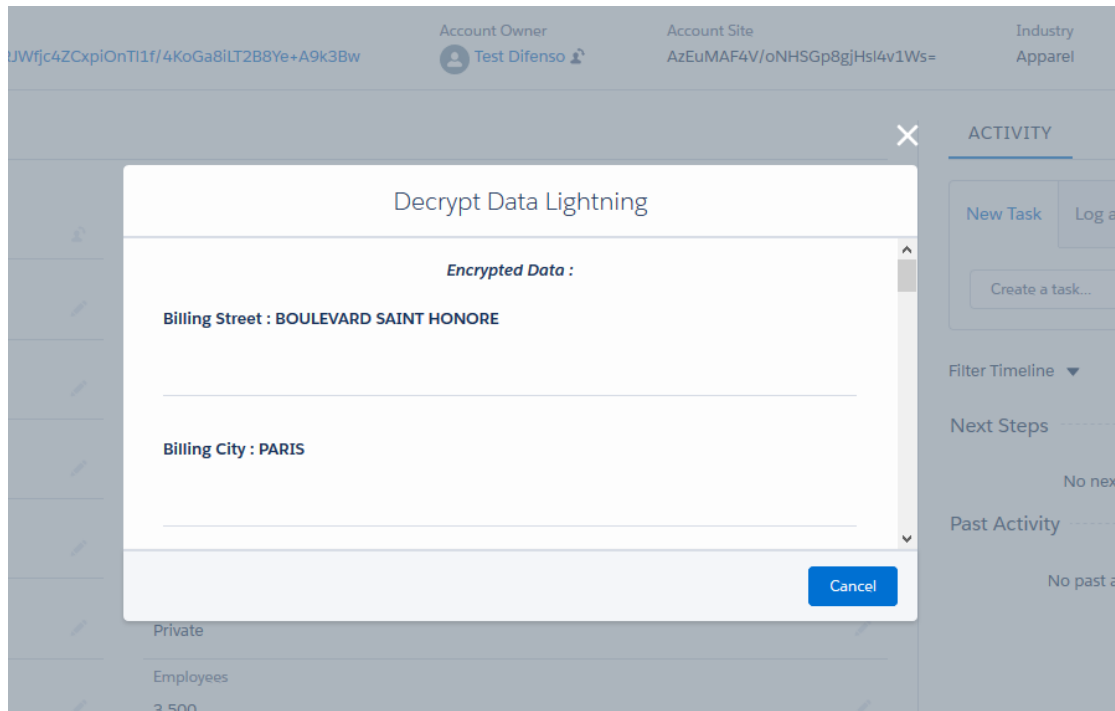
Contacts

[New Contact](#) [Merge Contacts](#)

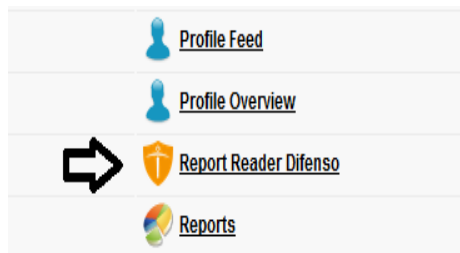
No records to display.

Difenso secure view for the classic version:

Screenshot Lightning version

Difenso secure view for the Lightning version:

VII) Report Reader



In this section you could read your saved report even if some fields are encrypted.



Report Reader Difenso

Please write your report name and press ok:

To read your report follow these steps:

- 1) Go to the Salesforce tab report
- 2) Generate your report and press Save
- 3) Go to the tab Report Reader Difenso
- 4) Write the exactly name of your report (The name is unique) and press ok
- 5) You will see your report, all the fields should be decrypted

Report Reader Difenso

Please write your report name and press ok:

Salutation	First Name	Last Name	Title	Mailing Street	Mailing City	Mailing State/Province	Mailing Zip/Postal Code	Mailing Country	Phone	Mobile	Fax	Email	Account Owner	Account Name
Mr.	Dudu	Paro	-	12 rue lepetit	Paris	Ile de France	98789	France	+33147986586	+33647986588	+33147986590	dudu.paro@lafarge.com	Test Difenso	BANK006
-	Pedro	Piu	DEV	12 rue leiu	Paris	Ile de France	98789	France	+33147986586	+33647986588	+33147986590	dudu.paro@lafarge.com	Test Difenso	BANK006
-	Pxc	saul	President	58 rue solice	Paris	Ile de France	98456	France	+33147986580	+33647986580	+3314798659002	pxc@isau.com	Test Difenso	BANK007
-	Edi	Durant	Dev	15 rue iop	Paris	Ile de France	98456	France	+33147986580	+33647986588	+3314798659002	edi@dedu.com	Test Difenso	BANK007
-	Boiu	pauy	President	59 poju hy	Paris	Ile de France	98456	France	+331479865868	+336479865888	+331479865902	bo@beba.com	Test Difenso	BANK007