Step-by-Step Guide for Masking Files on Mount Points Version 2.0

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INTRODUCTION

In earlier versions of Delphix Masking, the only way to mask files was via FTP/SFTP. Starting with Delphix Masking 6.0, we enable users to directly mount and mask files over NFS & CIFS. This should dramatically simplify the process of file masking. For example, it will be possible to mask files on AWS through mounting S3 buckets.

This guide provides a visual aid to the steps needed to create a masking project for files residing in a shared NFS mount.

Please note that this guide is not intended to replace formal training. Please consult the Delphix Masking documentation and knowledge base to get the most up to date information about our product. Delphix also have eLearning available on Masking (please consult your local Delphix contact for more information)

Delphix Masking Documentation: <u>https://maskingdocs.delphix.com/</u> Delphix Masking Knowledge Base: <u>https://support.delphix.com/Delphix_Masking_Engine</u>

THE DEMO LANDSCAPE

You will need the following components:

Component	IP Address in my demo FYI
Delphix Masking Engine 6.0	172.16.55.129
Linux Server	172.16.55.190

PREPARING THE FILES TO BE MASKED

In this demo, we will put some files that we need to mask in a folder. We will then export this folder as an NFS share so that the masking engine can connect to it via NFS.

Capture the IP address of your Linux server (you'll need it later)

```
[delphix@devops ~]$ hostname -I
172.16.55.190 192.168.122.1
```

Create a new directory structure that will contain the source files and the destination target directory that will hold the results of our masked files.

[delphix@devops ~]\$ [delphix@devops ~]\$ mkdir Masking_Demo_Files [delphix@devops ~]\$ mkdir Masking_Demo_Files/Source_Files [delphix@devops ~]\$ mkdir Masking_Demo_Files/Target_Files [delphix@devops ~]\$

Create some files to mask and place them in the newly created "Source_Files" directory. In my demo, I will create 2 csv files delimited with "]". In a later step, we will define the file structure so that our masking engine can understand the field mappings.



CONFIGURING THE NFS SERVER

My Linux demo server is built on CentOS 7. Good instructions for setting up NFS for this OS can be found here: <u>https://www.howtoforge.com/tutorial/setting-up-an-nfs-server-and-client-on-centos-7/</u>. There are the steps I took for my demo server:

Install the NFS server packages

\$ sudo yum install nfs-utils

Enable and start the NFS server service

\$ sudo	systemctl	enable	nfs-server.service
\$ sudo	systemctl	start	nfs-server.service

Edit the file /etc/exports and add the directory to be shared as an NFS export. The IP address we add will limit the share to be only visible accessible from the masking engine. You will also need the userid and groupid associated with the directory you created. In my case the user is delphix (userid 1000) and the group is delphix (groupid 1000)

[delphix@devops Source Files]\$ cat /etc/exports	
/nome/delpn1x/masking6.0.mount 1/2.16.55.129(rw,sync)	
(hame (delighted) (Marching Dame Files 170 16 FF 100 (ms all anothe accounted 1000 another 1000)	
/nome/delpn1x/Masking Demo Files 1/2.16.55.129(rw,all squasn,anonuid=1000,anongid=1000)	

Whenever you update the file /etc/exports, you have run



That should do it for the configuration steps needed on the Linux server...Now let's move on to the Delphix Masking Engine.

FIREWALL RULES AND PORTS

Before heading to your masking engine, make sure you don't have any firewall rules or closed ports that would prevent communication between the Masking Engine and the NFS server. For Linux, Port 111 (TCP and UDP) and 2049 (TCP and UDP) are used for the NFS server.

USING THE MASKING API CLIENT TO DEFINE THE MOUNT POINTS

In the previous steps, we created a Linux NFS export share

'/home/delphix/Masking_Demo_Files". We will now provide to the Masking Engine the information it needs in order to register & connect to this NFS share. For Delphix Masking version 6.0 we can use the Masking API Client to accomplish this.

Additional reading material: <u>https://maskingdocs.delphix.com/Connecting_Data/Managing_Remote_Mounts/#mount-information</u>

Access the Delphix Masking API Client

172.16.55.129/masking/api-client

Initiate the login of the API client to the masking engine.

Click login

	Authorize
Masking API	
Schema for the Masking Engine API	
algorithm	Show/Hide List Operations Expand Operation
logging	Show/Hide List Operations Expand Operations
application	Show/Hide List Operations Expand Operations
applicationSettings	Show/Hide List Operations Expand Operations
asyncTask	Show/Hide List Operations Expand Operations
columnMetadata	Show/Hide List Operations Expand Operations
databaseConnector	Show/Hide List Operations Expand Operation
databaseRuleset	Show/Hide List Operations Expand Operations
domain	Show/Hide List Operations Expand Operations
encryptionKey	Show/Hide List Operations Expand Operation
environment	Show/Hide List Operations Expand Operations
execution	Show/Hide List Operations Expand Operation
executionComponent	Show/Hide List Operations Expand Operations
executionEvent	Show/Hide List Operations Expand Operation
sync	Show/Hide List Operations Expand Operations
fileConnector	Show/Hide List Operations Expand Operation
fileDownload	Show/Hide List Operations Expand Operations
fileFieldMetadata	Show/Hide List Operations Expand Operations
fileFormat	Show/Hide List Operations Expand Operations
fileMetadata	Show/Hide List Operations Expand Operations
fileRuleset	Show/Hide List Operations Expand Operation
fileUpload	Show/Hide List Operations Expand Operations
knowledgeBaseInfo	Show/Hide List Operations Expand Operation
login	Show/Hide List Operations Expand Operations
mainframeDatasetConnector	Show/Hide List Operations Expand Operation
mainframeDatasetFieldMetadata	Show/Hide List Operations Expand Operations
mainframeDatasetFormat	Show/Hide List Operations Expand Operation
mainframeDatasetMetadata	Show/Hide List Operations Expand Operations
mainframeDatasetRuleset	Show/Hide List Operations Expand Operations

You can click on the Example Value box to pre-fill the login connection box (it's the box with the white background).

Enter the username and password to connect to your masking engine.

Click the Try it out button.

login		Show/Hide	List Operations	Expand Operations
POST /login			Log in to	the Masking Engine
Response Class (Status 201) Success Model Example Value				θ
{ 'Authorization": "415aac5d-SOME }	E-RANDOM-STRIN	G—af6cf70d	c49e"	6
Response Content Type application/json * Parameters Parameter Value	Description	Parameter Type	Data Type	
{ "username": "admin", "password": "domin", }	object	body	{ "username": "password": }	"maskinguser", "secret123"
Parameter content type: application/json \$				
Response Messages				/
Code E ason	Response Model			Headers
401 Unauthorized access Try it out!				

You should observe a Response Code of 200 (the API call succeeded). Copy the Authorization key as you will need it in the next step.

Response Mess	ages		
HTTP Status Code	Reason	Response Model	Headers
401	Unauthorized a	ccess	
Try it out!	de Response		
Curl			
curl -X POS "usernam "passwor }' 'http:/	Theader 'C e": "Admin", d": "Admin-12 /172.16.55.12	content-Type: application/json'header '/ \\ !9/masking/api/login'	Accept: application/j
Request URL			
http://172.	16.55.129/mas	king/api/login	
Response Body			
{ "Authori }	zation": "d9e	282d07-62fa-4257-b102-abbaeb5fb63b"	
Response Code			
200			

Create a Session with the masking engine using the Authorization Key from the previous step. Enter the key and click the Authorize button.

				Authorize
Masking API Schema for the Masking E	ingine API			
algorithm		Show/Hide List Op	erations	Expand Operations
logging		Show/Hide List Op	erations	Expand Operations
application		Show/Hide List Op	erations	Expand Operations
applicationSettings		Show/Hide List Op	erations	Expand Operations
asyncTask		Show/Hide List Op	erations	Expand Operations
columnMetadata		Show/Hide List Op	erations	Expand Operations
databaseConnector		Show/Hide List Op	erations	Expand Operations
databaseRuleset		Show/Hide List Op	erations	Expand Operations
domain		Show/Hide List Op	erations	Expand Operations
encryptionKey			ins	Expand Operations
environment	Available authorizations		101	Expand Operations
execution	Api key authorization		ins	Expand Operations
executionComponent	name: Authorization in: header		ins	Expand Operations
executionEvent	value: 082468f0-c390-415a-t		ins	Expand Operations
sync	Authorize		ins	Expand Operations
fileConnector	Canad		ins	Expand Operations
fileDownload	Cancer		ins	Expand Operations
fileFieldMetadata		Show/Hide List Op	erations	Expand Operations
file Ferment				

Next step is to register the NFS Mount Point into the Masking Engine.

mainframeDatasetRuleset	Show/Hide List Operations Expand Operations	
maskingJob	Show/Hide List Operations Expand Operations	
mountFilesystem	Show/Hide List Operations Expand Operations	
GET /mount-filesystem	Get all mounts	
 POST /mount-filesystem	Create filesystem mount	
DELETE /mount-filesystem/{mountID} Delete filesystem m		
GET /mount-filesystem/{mountID} Get mount		
PUT /mount-filesystem/{mountID}	Update filesystem mount	
PUT /mount-filesystem/{mountID}/connect	Connect filesystem mount	
PUT /mount-filesystem/{mountID}/disconnect	Disconnect filesystem mount	
PUT /mount-filesystem/{mountID}/remount	Remount filesystem mount	

Enter the body payload and click the Try it out button.

mountName: That is the name of mount point you will see in Delphix Masking hostAddress: The IP of the location of the NFS Server (in my case the Linux box) type: I use NFS3 (other options available here, consult the documentation) options: leave empty

connectOnStartup: true (if the Masking Engine reboots, it will try to reconnect)

Response Content 1	ype application/json \$		
Parameters			
Parameter Value			Description
body "moun "host/ "moun "type" "optio "conne }	Name": "demo_nfs_mount", ddress": "172.16.55.190", Path": "Jhome/delphix/Maskir "NFS3", se". "", se". "n", ctOnStartup": true	ıg_Demo_Files",	The filesystem to mount
Parame Response Messag	es	son •) Bespons	a Model
400	Bad request	10000100	
401	Unauthorized access		
404	Not found		
409	Conflict		
Try it out!			

You should observe a Response Code of 200 meaning the registration succeeded.

Notice however the status is showing DISCONNECTED.

Take a note of the mountID result (in my case 3) because you will need it to activate the mount point.

Try it out: Hide Response
Curl
<pre>curl_xypofrbeader '(ontent-Type: application/json'header 'Accept: application/json'header 'Authorization: b' "monthame"."aeeo of a sount" "nostAddress". "172.16.75.1904, \ "montParts". "/home/delphix/Masking_Demo_Files", \ "type": "NFS3"."</pre>
Request URL
http://172.16.55.129/masking/api/mount-filesystem
Response Body
<pre>{ "mountId": 3, "mountName": "demo_nfs_mount", "mountNaddress": "172.16.55.190", "mountPath": "/home/delphix/Masking_Demo_Files", "type": "WFS3", "connectOnStartup": true, "options": "", "status": "DisconNECTED" }</pre>
Response Code
200

Connecting and activating the NFS Mount Point

From the API Client, select the Connect Filesystem Mount

ma	ountFilesystem	Show/Hide List Operations Expand Operations	s
GI	ET /mount-filesystem	Get all mounts	s
PC	/mount-filesystem	Create filesystem moun	ıt
DEL	FTE /mount-filesystem/{mountID}	Delete filesystem moun	it
G	r /mount-filesystem/{mountID}	Get mount by IE)
PL	/mount-filesystem/{mountID}	Update filesystem moun	ıt
	um /mount-filesystem/{mountID}/connect	Connect filesystem moun	ıt
PL	um /mount-filesystem/{mountID}/disconnect	Disconnect filesystem moun	ıt
PL	ut /mount-filesystem/{mountID}/remount	Remount filesystem moun	rt

Enter the mountID generated by the previous step

PUT /mour	nt-filesystem/{mountID}/c	connect			Connect file	system mount
Response Cl Success	lass (Status 200)					0
Model Exam	mple Value					
{ "mountl "hostA "mount" "type" "optio "conner }	Name": "my_mount", kdress": "some.hos Path": "/path/to/m : "NF54", ns": "comma,delimi :ctOnStartup": true	t.com", yy/mount", ted,options,	list",			1.
Response Co Parameters	content Type applicatio	n/json \$	Description	Parameter	Data Tuna	
Parameter	value		Description	Туре	Data Type	
mountID	3		The ID of the mount to connect	path	integer	
Response M	lossages					
HTTP Statu:	IS Reason	Posp	anso Model			Hoodore
Code	Dedason	Hesp	Jise Model			Tieduers
400	Bad request					
401	Not found	155				
Try it out!	Hide Besponse					
Curl			_			
Cult						
curt -X	PUI neader 'Cont	ent-Type: ap	oplication/json	-neader Ad	ссерт: арр	Lication/js
Request URI	ıL					
http://1	72.16.55.129/maski	.ng/api/mount	-filesystem/3/con	nect		
Response Be	lody					
<pre>{ "moun "moun "host "moun "type "conn "opti "stat }</pre>	itId": 3, itName": "demo_nfs_ iXddress": "172.16. itPath": "/home/del %: "NFS3", ectOnStartup": tru ions": "rw,nosuid,r tus": "ACTIVE"	_mount", 55.190", Lphix/Masking Je, hodev,noexec	g_Demo_Files", ,relatime,vers=3,r	size=262144	4,wsize=26	2144,naml€
Response C	ode					
200						
200						

We have now executed all the required steps to register the NFS share into the Masking engine.

We can now proceed to create our masking project and run it.

PROVIDING THE FLAT FILE FORMAT TO DELPHIX MASKING

Remember the files we created earlier... We need to define the structure to Delphix Masking. It's very easy to do.

```
[delphix@devops Source_Files]$ pwd
/home/delphix/Masking_Demo_Files/Source_Files
[delphix@devops Source_Files]$
[delphix@devops Source_Files]$ cat GoT.csv
12345|Emilia|Clark|The Mother of Dragons
67890|Sophie|Turner|The Queen of Winterfell
65324|Kit|Harrington|Commander of the Night Watch
72663|Lena|Headley|Queen of the Seven Kingdoms
[delphix@devops Source Files]$
```

Create a file containing the name of the fields in the delimited flat file (you can create this file on your local desktop)



Connect to the Masking Engine



Load the file as a new file format type in Delphix Masking

Go to Settings and then Select File Formats

LPHIX MASKIN	G		
vironments 1	Monitor Sche	eduler Settings	Admin
Home > Settings > Dor	nains		
Setting: Domains	S		
Setting: Domains Algorithms	Name	Own	er Masking Metho
Setting: Domains Algorithms Domains	Name ACCOUN	Own IT_NO Syste	er Masking Metho em ACCOUNT SL
Setting: Domains Algorithms Domains Profiler		Own NT_NO Syste IT_TK Syste	er Masking Metho am ACCOUNT SL am NULL SL
Algorithms Algorithms Profiler Roles	S Name Accoun Accoun Addres	NT_NO Syste NT_TK Syste S Syste	er Masking Metho am ACCOUNT SL am NULL SL am ADDRESS LINE
Algorithms Domains Profiler Roles Custom Algorithms	S Name Accoun Addres Addres	VT_NO Syste NT_TK Syste S Syste S_LINE2 Syste	er Masking Metho em ACCOUNT SL em NULL SL em ADDRESS LINE em ADDRESS LINE

Click Import Format

ome > Settings > File Format Settings ile Formats				Import Format
Algorithms	ID	Name	Туре	Delete
Domains	1	FileFormatExampleDelimited.txt	delimitedFile	0
Profiler				
Roles				
Custom Algorithms				
File Formats				

From the Import File Format dialogue box, select "Delimited File" as the Import Format Type, then click on "Select" and load the format file we just created. Finish this step by clicking Save.

Import File Format	
Import Format Type	
Delimited File	•
Import Fields Select	
FileFormatDemo.txt Remove	No file chosen
	No file chosen Cancel Save

CREATING THE MASKING PROJECT

nvironments	Monitor	Scheduler	Settings Adm	in Aud	it 🗧			
	-							
Home > Environment	s							
Enviror	ments			+ Add	Environme	nt 🙂	Import En	nvironment
			0					
Search			Search				Add A	pplication
Search Environment ID	Application *	Environment	Search Purpose	No of Jobs	Edit	Export	Add A	Delete
Search Environment ID	Application *	Environment	Search Purpose Tokenize/Re-Identify	No of Jobs	Edit	Export	Add A	Delete
Search Environment ID	Application *	Environment	Search Purpose Tokenize/Re-Identify Go to top of page	No of Jobs 2	Edit	Export	Add Aj	Delete

Navigate to Environment and Add a new Application

Choose a name for your Application and click

Add Applic	ation	1
Application Nam	e	
DemoApp		
	Cancel	Save
	Cancel	Save

Its best practice for file masking to read the source files from one location and save the masked files into another location. We call that "On-The-Fly Masking".

To prepare for that, we created 2 directories under "/home/delphix/":

Source_Files will contain all the files we want to mask

Target_Files will be where Delphix masking will store the files once they are masked (this way we do not alter the source files and can repeat the masking process with consistent results)

Let's first create the Environment that will be used to identify where are the source files

Select Add Environment, an give it the name "File_SRC_Env" and pick 'Mask' as the purpose

Home > Environment	ments	•		+ Add	Environme	nt 🚺	Import En	vironment
learch			Search				Add A	oplication
Environment ID	Application *	Environment	Purpose	No of Jobs	Edit	Export	Сору	Delete
1	test	dev	Tokenize/Re-Identify	2	1	Ø	ъ	0
			Go to top of page					
Environments Monito	r Scheduler Settings	Admin Audit					DEL	PHI

Add Environment
Application Name
DemoApp
Environment Name
File_SRC_Env
Purpose
Mask
Enable Approval Workflow
Cancel Save Save & View

Click on the Environment Name we just created

Home > Environments Environments Search Search			+ Add E	+ Add Environment				
Environment ID	Application *	Environment	Purpose	No of Jobs	Edit	Export	Сору	Delete
6	DemoApp	File_SRC_Env	Mask	0	1	1	ъ	8
			Go to top of pa	ge				

Select Connector

Environments	Monitor Scheo	luler Settings	Admin	Audit	
Overview	Connector	Rule Set	Inventory	,	
Home > Environments	C_Env				Q Profile Mask
Environment					
Name Purpose Application Name Approval workflor	File_SRC_Env Mask DemoApp V Disabled				

Click on Create Connection

Home > Environments	s > File SBC Env > Connector	r	16			
File_SR	C_Env				+ Crea	te Connectio
Connector ID	Connector		Meta Data Source	Туре	Edit	Delete

Enter these values: Type = File – Delimited Connection Name = name of your choice (I use "Conn_Source") Coneection Mode = Filesystem Mount Point Mount Name = the name of the mount you created earlier using the Masking API Client. In my example I specify the subdirectory containing the source files I want to mask.

Before hitting Save, test the connection

Create Connection	
Туре	
File - Delimited	
Connection Name	Mount Name
Conn_Source	demo_nfs_mount
Connection Mode	Path Under Mount
Filesystem Mount Point	/Source_Files
	Remote Path 172.16.55.190:/home/delphix/Masking_Demo _Files/Source_Files
Test Connection	Cancel Save

We're done with the creation of our source environment. Now let's build the destination environment...

Click on the bread crumb "Environment"



Click "Add Environment", then create your new target environment by giving it this time the name "File Dest Env" and click "Save & View"

Enviroi	nments					
Search			Search			
Environment ID	Application *	Environment	Purpose	No of Jobs	Edit	Expo

Add Environment	
Application Name	
DemoApp	•
Environment Name	
File_Dest_Env	
Purpose	
Mask	•
Enable Approval Workflow	
Cancel Save	Save & View

Create a new connection

Overview	Connector	Rule Set	Inventory			
Home > Environme	nts > File_Dest_Env > Connecto	r			+ Crea	ate Connection
Connector ID	Connector		Meta Data Source	Туре	Edit	Delete
* indicates an extens	ion to included connectors					
Environments Moni	tor Scheduler Settings Admin	Audit			D	= I Р Н I

Enter these values:

Type = File – Delimited

Connection Name = name of your choice (I use "Conn_Target")

Coneection Mode = Filesystem Mount Point

Mount Name = the name of the mount you created earlier using the Masking API Client. In my example I specify the subdirectory containing where I want Delphix to save the files once they are masked.

Create Connection	
Туре	
File - Delimited	•
Connection Name	Mount Name
Conn_Target	demo_nfs_mount
Connection Mode	Path Under Mount
Filesystem Mount Point	/Target_Files
	Remote Path
	172.16.55.190:/home/delphix/Masking_Demo _Files/Target_Files
Test Connection	Cancel Save

Next click on Rule Set

Overview	Connector	Rule Set	Inventory		
Home > Environments	<pre>> File_Dest_Env > Connector st_Env</pre>			+ 0	Create Connection
		\			
Connector ID	Connector	1	Meta Data Source	Туре	Edit Delete

Click Create Rule Set

Overview	Connector	Rule Set	Inventory	
Home > Environments >	> File_Dest_Env > Rule Set		_	Create Rule Set
Search		Search		

Give your Rule Set a name and pick the Connector we just created.

Since we want to use File Name Pattern matching, enter the regular expression as following:

.*\.csv

Create Rule Set		
ick a connector to list its Tables/Files. Check one or more Tables/Files to select them or inclusion in the Rule Set. To remove the Table/file, deselect it.	Search Use * to match any characters.	Clear
lame	Selected: 0	
RS_Files_Movies	No tables or files found	
onnector		
Conn_Target		
ile Name Patterns		
Read 0		
V.891		
		× 1
		\sim
	Colore All	Connal

We must specify the format of the file that we will be masking. For this select the green pen to Edit the Rule Set, followed by the green pen next to the file

Search						
	Meta Data Source	Туре	Edit	Refresh/Save	Сору	Delete
	File	delimitedFile	1	N/A	Ъ	0
	Search	Search Meta Data Source File	Search Meta Data Source Type File delimitedFile	Meta Data Source Type Edit File delimitedFile	Search Meta Data Source Type Edit Refresh/Save File delimitedFile N/A	Search Meta Data Source Type Edit Refresh/Save Copy File delimitedFile N/A C

Select again the red pencil to edit the property for the file format matching the pattern ".*\.csv"

Home > Environments > File_Dest_Env > Rule Set > RS_Files_Movies File_Dest_Env Search Search	Edit Rule Set
Rule Set Name RS_Files_Movies	
File or Pattern	Edit Delete
.*\.csv	/ 0
	1 - 1 of 1 items
Ge to top of page	

Then with the Edit File panel up, pick the following:

File Format: pick the name for the file format we loaded earlier>

End of Record: Pick "LF terminated (Unix)

Delimiter: Pick "|" – this is for my example. Your delimiter could be different off course

Edit File
Connector
Conn_Target
File or Pattern
.*\.csv
File Format
FileFormatGOT.txt
End Of Record
LF terminated (Unix)
Delimiter
I
Text Enclosure
Cancel Save

Navigate to the Inventory tab. Notice that no algorithms are assigned... Let's mask the first and last name. Click on the green pencil to the right of First_Name.

Overview	Cor	nector	Rule S	Set	Inventory				
ome > Environments >	File_Dest_	Env > Invento	ory > RS_Files_Movie	es 🚺 Imp	ort 🕂 Expe	ort 📔 Re	ecord Types	📝 Defin	e Field
RS_Files	s_M	ovie	S	RS_Files_Mo Filter E	vies All Fields	Masked	Fields Auto		User
Select Rule Set		Record Ty	/pe: All Records						
RS_Files_Movies	•	Туре	ID	Position	Method	Domain	Algorithm	Edit	Dele
RS_Files_Movies	¥	Type ASCII	ID First_Name	Position 2	Method	Domain	Algorithm	Edit	Dele
RS_Files_Movies Filter Contents Search By Name	•	Type ASCII ASCII	ID First_Name ID	Position 2 1	Method	Domain	Algorithm	Edit	Dele C
RS_Files_Movies Filter Contents Search By Name Search Alphabetically	• y •	Type ASCII ASCII ASCII	ID First_Name ID Last_Name	Position 2 1 3	Method	Domain	Algorithm	Edit	Dele

Assign FIRST_NAME as the Domain and FIRST_NAME_SL as the Algorithm

ield Name	Record Type		
ieid Name	Record type		
First_Name	All Records	*	
omain	Position		
FIRST_NAME	* 2		
lgorithm	Length		
FIRST NAME SL	0		
D Method	Notes		
Auto	-		
			1
			_

Repeat the same process for the LAST_NAME

Edit	
Field Name	Record Type
Last_Name	All Records *
Domain	Position
LAST_NAME	• 3
Algorithm	Length
LAST NAME SL	• 0
ID Method	Notes
Auto	*
	#
	Cancel Save

	ntory > RS_Files_M	Movies	Import	+ Export	Record Types	🎢 Defin	e Fields
		Filt	er By: 🔼	l Fields Maske	d Fields Auto		User
Record	Type: All Records						
Туре	ID	Position *	Method	Domain	Algorithm	Edit	Dele
ASCII	ID	1				/	8
ASCII	First_Name	2	Mask	FIRST_NAME	FIRST NAME SL	1	8
ASCII	Last_Name	3	Mask	LAST_NAME	LAST NAME SL	1	8
ASCII	Simple_Text	4				/	8
	Record Type ASCII ASCII ASCII ASCII	Record Type: All Records Type ID ASCII ID ASCII First_Name ASCII Last_Name	Image: Second Systems Image: Second Systems Record Type: All Records Filt Type ID Position A ASCII ID 1 ASCII First_Name 2 ASCII Last_Name 3 ASCII Simple Text 4	Record Type: All Records Type ID Position ^ Method ASCII First_Name 2 Mask ASCII Last_Name 3 Mask ASCII Simple Text 4	Internet Second Seco	Provides Import + Export Excord Types Import Filter By: All Fields Masked Fields Auto Record Type: All Records Type ID Position * Method Domain Algorithm ASCII ID 1 ID ASCII First_Name 2 Mask FIRST_NAME FIRST NAME SL ASCII Last_Name 3 Mask LAST_NAME LAST NAME SL ASCII Simple Text 4	Record Type: All Records Type ID Position + Method Domain Algorithm Edit ASCII First_Name 2 Mask FIRST_NAME FIRST NAME SL Image: Content of the second secon

Great work! All you now have to do is create a masking job and run it.

Navigate back to the Overview tab and select Mask

Overview	Connector	Rule Set	Inventory	
lome > Environments	File_Dest_Env			\sim
File_De	st_Env			
				Q Profile Mask
				Q Profile Mask
Environment				Q Profile Mask
Environment Name	File_Dest_Env			Q Profile Mask
Environment Name Purpose	File_Dest_Env Mask			Q Profile
Environment Name Purpose Application Name	File_Dest_Env Mask DemoApp			Q Profile

Give your job a name, select 'On-The-Fly' as a Masking Method and pick the Rule Set you created earlier. Specify the Source Environment and Source Connector then click Save.

Create Mask	ing Job	
Job Name		Feedback Size
Mask_Movie_Actors	3	
Masking Method		0
On-The-Fly	٣	Comments
Target: File_Dest_Er	IV	
Multi Tenant		
Rule Set		Email
RS_Files_Movies	٣	serge@delphix.com
Source Environmen	it	
File_SRC_Env	*	
Source Connector	-	
Conn_Source	٣	
No. of Streams		
1		
Min Memory	Max Memory	
In MB	In MB	
If Nonconforming D	ata is encountered	
Stop job on first o	ccurrence	

Start the masking job by clicking on the blue play button

Job ID 🔻	Name	Rule Set	Completed	Status	Action	Edit	Delete
5	Mask_Movie_Actors	RS_Files_Movies		Created	0		0

The status will change to Running

Job ID 🔻	Name	Rule Set	Completed	Status	Action	Edit	Delete
5	Mask_Movie_Actors	RS_Files_Movies		O Running		1	8

When masking is completed, the status will change to Succeeded

Job ID 🔻	Name	Rule Set	Completed	Status	Action	Edit	Delete
5	Mask_Movie_Actors	RS_Files_Movies	2020-04-21 05:22	★ Succeeded	0	/	8

Now validate that masking did its job.... Look at the before and after and validate that First_Name and Last_Name on the csv files got masked!

File 007.csv

Before	After
/home/delphix/Masking_Demo_Files/Source_Files [delphix@devops Source_Files]\$ cat 007.csv 12345 Daniel Craig Skyfall 67890 Pierce Brosnan GoldenEye 65324 Sean Connery You Only Live Twice 72663 Roger Moore Moonraker	<pre>/home/delphix/Masking_Demo_Files/Target_Files [delphix@devops Target_Files]\$ cat 007.csv 12345 Janel Bunyan Skyfall 67890 Genoveva Cutting GoldenEye 65324 Vernie Bristed You Only Live Twice 72663 Roy Berkeley Moonraker</pre>

File GoT.csv

Before	After
/home/delphix/Masking_Demo_Files/Source_Files	/home/delphix/Masking_Demo_Files/Target_Files
[delphix@devops Source_Files]\$ cat GoT.csv	[delphix@devops Target_Files]\$ cat GoT.csv
12345 Emilia Clark The Mother of Dragons	12345 Maria Banvard The Mother of Dragons
67890 Sophie Turner The Queen of Winterfell	67890 Corina Redden The Queen of Winterfell
65324 Kit Harrington Commander of the Night Watch	65324 Eddie Stapleton Commander of the Night Watch
72663 Lena Headley Queen of the_Seven Kingdoms	72663 Anabel Sellick Queen of the Seven Kingdoms

Congratulations, you have taken your first steps in file masking on NFS mount points.