## **Remove or Modify NetFlow Configuration Using Flexconfig**

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## Introduction

This document describes how to remove or modify the NetFlow configuration on Firepower Threat Defense (FTD) via Firepower Management Center (FMC).

## Prerequisites

### Requirements

Cisco recommends that you have knowledge of these topics:

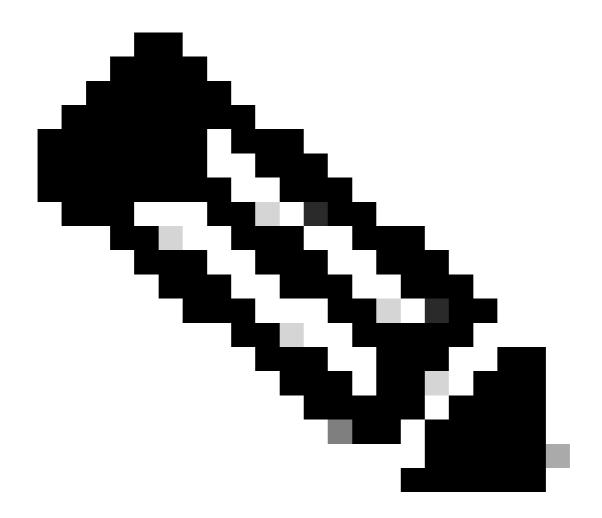
- Knowledge of FMC
- Knowledge of FTD
- Knowledge of the FlexConfig Policy

### **Components Used**

The information in this document is based on these software and hardware versions:

- FTD version less than 7.4
- FMC version less than 7.4

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.



**Note**: Important Note for Firepower Versions 7.2.x: When configuring NetFlow, there is a known Cisco bug ID <u>CSCwh29167</u> where the Flex object reorders, causing deployment to fail due to the class-map not being configured. To address this issue, implement the workaround documented under Cisco bug ID <u>CSCwf99848</u> (duplicate of Cisco bug ID <u>CSCwh29167</u>).

### **Initial Configuration**

```
access-list flow_export_acl extended permit ip any any
!
class-map flow_export_class
match access-list flow_export_acl
!
policy-map global_policy
class flow_export_class
flow-export event-type flow-create destination 192.168.1.5
flow-export event-type flow-denied destination 192.168.1.5
flow-export event-type flow-teardown destination 192.168.1.5
flow-export event-type flow-update destination 192.168.1.5
```

# For configuring these initial configurations, flex config objects used are: 1. Netflow destination text object

Firewall Management Objects / Object Management	Center Overview Analysis	Policies Devices Objects	Integration	
> AAA Server	Text Object			
> Access List		Edit Text Object		0
> Address Pools	Text objects define free-form text strings the	-		or be a list of multiple v
Application Filters		Name:		
AS Path	Name	netflow_Destination		
Cipher Suite List		Description:		e
> Community List	netflow_Destination	This variable defines a single		168.1.5
> Distinguished Name		NetFlow export destination.		
DNS Server Group	netflow_Event_Types	Variable Type		-create -denied
> External Attributes		Multiple	Ŧ	3 ♣ -update
File List	netflow_Parameters			
✓ FlexConfig	Techow_Ferdinetera	1 inside		
FlexConfig Object		2 192.168.1.5		
Text Object		3 2055		
Geolocation				
Interface				
Key Chain				
Network		Allow Overrides		
> ркі				
Policy List		<ul> <li>Override (0)</li> </ul>		
Port				
> Prefix List			Cancel	Save
Route Map				
> Security Intelligence				

Netflow Destination Text Object

### 2. Extended ACL named: flow\_export\_acl

Chiects / Object Managemen	t Center	Overvie	w Analysis Polic	ies Devices Obj	ects Integration		D	leploy Q 🚱
> AAA Server ~ Access List Extended	Extende Edit Exter		ess List Object				Add Extended	d Access List
Standard > Address Pools Application Filters AS Path	Name flaw_expo Entries (1)							Add
Cipher Suite List > Community List > Distinguished Name DNS Server Group	Sequence		Source Any	Source Port Any	Destination Any	Destination Port	Application Any	/ 1
<ul> <li>External Attributes</li> <li>File List</li> <li>FlexConfig</li> <li>FlexConfig Object</li> <li>Text Object</li> <li>Geolocation</li> </ul>	Allow Ox	verrides						
Interface Kay Chain Network > PKI Policy List Port							Cance	el Save

Flow Export ACL

3. Class-map and Service policy used to apply this class map with flow export destination

1			11.2		-		-			
Cojects / Object Manager		Edit FlexConfig Object						0	💕 🌣 🕜 admin 🔹	diado SECUR
> AAA Server > Access List	Flex	Name: Netflow_Event_FlexObject	]					at	Q netflow	×
Address Paols	FlexCo	Description:								
Application Filters		Create and configure a NetFlow export destination.								
AS Path	Nam									
Cipher Suite List	Netflo	Copy-pasting any rich text might	nt introduce line brea	ks while generating CL	I. Please verify the	CLI before deplo	syment.	5 let	low export destination.	B o E
> Community List	netrio	Insert 🔻   🖽   Deployn	ent: Everytime		Type:	Append	*	LAGD.	tow export deschadon.	¶∎ Q 🗑
> Distinguished Name	Netflo	class-map flow_export_class						NetF	low export destination.	§/₹
DNS Server Group	Netflo	match access-list \$flow_export	_acl					bal s	ettings back to default val	¶a Q ≣
External Attributes	Netflo	## event-types: any subset of policy-map global policy	{all, flow-create	, flow-denied, flow	-teardown, flow	-update)		t rice	stination.	<b>6</b> Q ≅
File List	THE DEC	class flow_export_class #foreach ( Sevent type in Se	etflow Event Type	5)						
✓ FlexConfig	Netflo	flow-export event-type Seven	t_type_destinatio	n \$netflow_Destinat	ion.get(1)			1 clos	stination.	<u></u> ∎/¥
FlexConfig Object	Netflo							NetF	low export destination.	5/9
Text Object	Netflo							ior N	etFlow export.	<b>Γ</b> α ⊒
Geolocation	140010									
Interface		▼ Variables								
Key Chain		Name	Dimension	Default Value	Property	Override	Description			
Network					(Type:Name)					
> ркі		netflow_Event_Types	MULTIPLE	[all, flow-create,	FREEFORM:	false	This variable provides the glo	_		
Policy List		netflow_Destination	MULTIPLE	[inside, 192.168	FREEFORM:	false	This variable defines a single			
Port		flow_export_acl	SINGLE	flow_export_aci	EXD_ACL:fl	false				
> Prefix List								- 11		
Route Map								7 of	7 rows I< < Page 1	of 1 > >  C'

Class map and Service policy

### 4. Flow export destination

Firewall Management		Edit FlexConfig Object						0	🤇 🗳 🚳 admin 🔹 🔅	inco SECUR
<ul> <li>AAA Server</li> <li>Access List</li> <li>Address Paols</li> <li>Application Filters</li> </ul>	Flex FlexCt	Neme: Netflow_Add_Destination_Copy Description: Create and configure a NetFlow export destination.							ct Q netflow	×
AS Path Cipher Suite List Community List	Nam Netfic	Copy-pasting any rich text might i	introduce line break	s while generating CLI.		CLI before deplo	yment.		NetFlow export destination.	<b>F</b> ∎ Q ⊕
<ul> <li>Distinguished Name</li> <li>DNS Server Group</li> </ul>	Netfic	## destination: interface_nameid flow-export destination Smetflow	destination_ip	udp_port (0) Scetflow_Destin	ation.get(1) 5	netflow_Destina	tion.get(2)		NetFlow export destination.	5∎ / € 18 q €
External Attributes File List	Netfic								t destination.	<b>B</b> Q ∰
<ul> <li>FlexConfig</li> <li>FlexConfig Object</li> <li>Text Object</li> </ul>	Nettic								NetFlow export destination.	电/章
Geolocation	Netfic								or NetFlow export.	¶ <b>a</b> Q ∰
Key Chain Network		<ul> <li>Variables</li> <li>Name</li> </ul>	Dimension	Default Value	Property (Type:Name)	Override	Description			
> PKI Policy List		netflow_Destination	MULTIPLE	[inside, 192.168	FREEFORM:	false	This variable defines a single			
Port Prefix List Parts Man										
Route Map									7 of 7 rows K < Page 1	of $1 > >   \mathbb{C}'$

Flow export Destination

#### 5. Then Added these two objects in flex config policy and deployed:

Firewall Management Center Devices / Flexconfig Policy Editor	c	Overview	Analysis	Policies	Devices	Objects	Integration		Deploy	۹ (	<b>°</b>	🙆 admin 🔻	and SECUR
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Available FlexConfig C FlexConfig Object		# Nam				Description							
V User Defined													
"à EEM-Script										1			
J EEM-Script-Removal								Selec	cted Prepend P	lexConfi	95		
"a flow_export_class													
To Netflow_Add_Destination_Copy													
J Netflow_Delete_Destination_Copy													
Netflow_Event_FlexObject		"9 Selecte	d Append Fl	lexConfigs									
✓ System Defined		# Nam	10			Description							
"à Default_DNS_Configure		1 Netfl	cw_Add_Desti	ination_Copy		Create and conf	gure a NetFlow export destination.						۵. 🗑
a Default_Inspection_Protocol_Disable		2 Netfl	cw_Event_Flex	Object		Create and conf	gure a NetFlow export destination.						٩.
"å Default_Inspection_Protocol_Enable													
*a DHCPv6_Prefx_Delegation_Configure													
"à DNS_Configure													
"9 DNS_UnConfigure													

FlexConfig Policy

## **Remove NetFlow Configurations**

Step 1: Delete the flex objects from the flex policy.

Firewall Management Center	Overview	Analysis	Policies	Devices	Objects	Integration			Deploy	۹	େ 🍤	🙆 admin 🕶	and SECUR
FTD01-FP											Preview	Config	ieve Cance
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Available FlexConfig C FlexConfig Object	# Na	me			Description								
✓ User Defined													
JF AAAdummy													
"à EEM-Script													
J EEM-Script-Removal													
"à flow_export_class													
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✓ System Defined	# Na	me			Description								
"å Default_DNS_Configure													
3 Default_Inspection_Protocol_Disable													
"å Default_Inspection_Protocol_Enable													
"å DHCPv6_Prefx_Delegation_Configure													
"9 DHCPv6_Prefx_Delegation_UnConfigure							Selected	d Append FlexConfigs					
"à DNS_Configure							Selected	a repend Placeonings					
P DNS_UnConfigure													

Delete existing flexconfig

Step 2: Deploy the policy. From the command line, we would see that removed configurations are:

```
access-list flow_export_acl extended permit ip any any
!
class-map flow_export_class
match access-list flow_export_acl
!
policy-map global_policy
class flow_export_class
flow-export event-type flow-create destination 192.168.1.5
flow-export event-type flow-denied destination 192.168.1.5
flow-export event-type flow-teardown destination 192.168.1.5
flow-export event-type flow-update destination 192.168.1.5
```

Whereas, configuration which is not removed is:

flow-export destination Inside 192.168.1.5 2055

Step 3: To remove this, we need to create a flex object with Type 'prepend' and adding the configuration:

no flow-export destination Inside 192.168.1.5 2055

Constant Center Objects / Objects / Object Management	Edit FlexConfig Object	0
> AAA Server Flex > Access List > Address Pools FlexCo Application Filters	Name: AAAdummy Description:	
AS Path Nam Cipher Suite List AAAd > Community List	Copy-pasting any rich text might introduce line breaks while generating CLI. Please verify the CLI before deployment.     Insert ▼        Deployment: Once ▼ Type: Prepend ▼	
Distinguished Name     Defau     DNS Server Group     External Attributes	no flow-export destination Inside 192.168.1.5 2055	
File List Defau Y FlexConfig DHCP FlexConfig Object DHCP		
Text Object DNS_ Geolocation		

Delete flex config destination

Step 4: Under flex policy call the newly created prepend object in Step 3 and deploy the policy.

Firewall Management Center Devices / Flexconfig Policy Editor	c	Verview Analysis	Policies	Devices	Objects	Integration		Deploy C	6	¢ 0	admin •	cisco SEC	CURE
FTD01-FP Enter Description									Pre	view Co		iave Ca ay Assignmen	ancel nts (1)
		Selected Prepend	FlexConfigs										
Available FlexConfig C FlexConfig Object		# Name			Description								
✓ User Defined		1 AAAdummy										Q	Ū.
"J AAAdummy													
"à EEM-Script													
-9 EEM-Script-Removal													
"a Netflow_Add_Destination_Copy													
.9 Netflow_Delete_Destination_Copy ** Netflow_Event_FlexObject		. Selected Append	FlexConfigs										
✓ System Defined		# Name			Description								
To Default_DNS_Configure													
oğ Default_inspection_Protocol_Disable													

Add this under flex config policy

Step 5: Delete that prepend object from the flex policy and deploy again.

Firewall Management Center Devices / Flexconing Policy Editor	Ow	rview A	unalysis	Policies	Devices	Objects	Integration	n		Deploy	۹	େ ୍	🙆 ad	min • 🔐	SECURE
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*a flow_export_class *a Netflow_Add_Destination_Copy															
" Netflow_Event_FlexObject	_9	Selected Ap	ppend Flex	Configs											
✓ System Defined		Name				Description									
a Default_DNS_Configure															
" Default_Inspection_Protocol_Disable  Default_Inspection_Protocol_Enable									Selected Appen	d FlexConfigs					

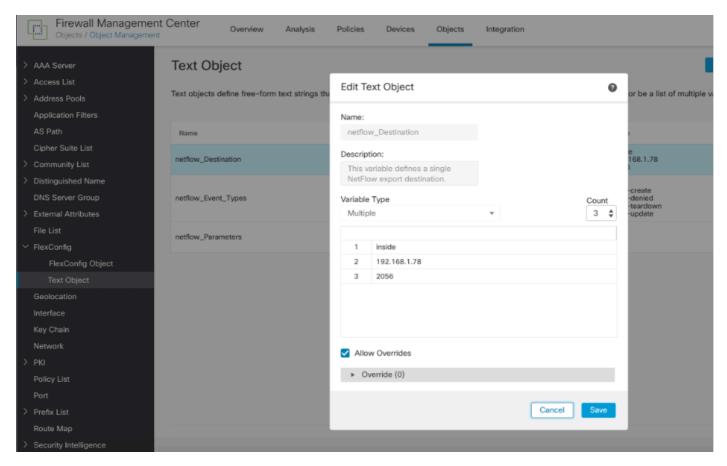
Delete the prepend object

All the flow-export related configuration gets removed now.

## Modify the existing NetFlow Configurations

Step 1: Edit the Text object created for Netflow Destination. Change the required parameters IP, Interface name or Port.

Example: We changed the IP and port from (192.168.1.5, 2055) to (192.168.1.78, 2056)



Netflow destination text object

Step 2: Deploy the policy. You would see the changes are reflected as expected but along with the old Netflow destination config:

```
access-list flow_export_acl extended permit ip any any
!
class-map flow_export_class
match access-list flow_export_acl
!
policy-map global_policy
class flow_export_class
flow-export event-type flow-create destination 192.168.1.78
flow-export event-type flow-denied destination 192.168.1.78
flow-export event-type flow-teardown destination 192.168.1.78
flow-export event-type flow-update destination 192.168.1.78
!
flow-export destination Inside 192.168.1.78 2056
flow-export destination Inside 192.168.1.5 2055
```

Step 3: To remove this, you need to create a flex object with Type 'prepend' and adding the configuration:

[	Firewall Management Center Objects / Object Management	Edit FlexConfig Object						
	AAA Server Flex Access List Address Pools FlexC Application Filters AS Path Nam Cipher Suite List AAAc	AAAdummy Description: Copy-pasting any rich text might in		s while generating CLI.			ment.	
	Community List	Insert 🔻 🔛 Deployment	Once		<ul> <li>Type:</li> </ul>	Prepend		*
	Distinguished Name Defau DNS Server Group Defau External Attributes Defau File List Defau FlexConfig Object Defau FlexConfig Object DHCP Text Object DHCP Geolocation DNS	no flow-export destination Inside	192.168.1.5 20	55				
	interface	▼ Variables						
	Key Chain EEM-	Name	Dimension	Default Value	Property (Type:Name)	Override	Descripti	on
	EEM-			No records to dis				
	PKI			IND records to dis	рау			
	Policy List Eigrp							
	Port Eigrp							
	Prefix List							
	Route Map							
	Security Intelligence							Cancel

Delete netflow destination

Step 4: Under flex policy call the newly created prepend object in Step 3 and deploy the policy.

Firewall Management Center Devices / Flexconing Policy Editor	Overview Analysis Policies Devices Objects Integration Deploy Q 📀 🌣 🕢 adm	in • dials SECURE
FTD01-FP	Preview Config	Save Cancel
		Policy Assignments (1)
	* Selected Prepend FlexConfigs	
Available FlexConfig C FlexConfig Object	# Name Description	
×		
V User Defined	1 AAAdummy	۹.
JI AAAdummy		
"à EEM-Script		
.9 EEM-Script-Removal		
"à flow_export_class		
Netflow_Add_Destination_Copy		
"     Netflow_Delete_Destination_Copy	_9 Selected Append FlexConfigs	lected Prepend FlexConfigs
*a Netflow_Event_FlexObject		
V System Defined	# Name Description	
*# Default_DNS_Configure	1 Netflow_Add_Destination_Copy Create and configure a NetFlow export destination.	् 🗑
Default_Inspection_Protocol_Disable	2 Netflow_Event_FlexObject Create and configure a NetFlow export destination.	۹ 🗑
* DHCPv6_Prefix_Delegation_Configure		
.P DHCPv6_Prefix_Delegation_UnConfigure		
"à DNS_Configure		
.9 DNS_UnConfigure		

Add to Prepend Flex Config

Step 5: Delete that prepend object from the flex policy and deploy again.

Firewall Management Center Devices / Flexconfig Policy Editor	Overview Analysis Policies Devices Objects Integration	Deploy 🔍 🥥 🔅 🙆 admin 🕶 🖏 SECURE
FTD01-FP Enter Description		Preview Config Save Cancel
		Policy Assignments (1)
	Selected Prepend FlexConfigs	
Available FlexConfig C FlexConfig Object	# Name Description	
V User Defined		
J AAAdummy		
"à EEM-Script		
.9 EEM-Script-Removal		Selected Prepend FlexConfigs
"à flow_export_class		
a Netflow_Add_Destination_Copy		
.9 Netflow_Delete_Destination_Copy		
*a Netflow_Event_FlexObject		
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Default_Inspection_Protocol_Disable     Default_Inspection_Protocol_Enable	2 Netflow_Event_FlexObject Creste and configure a NetFlow export destination.	् 🗑
"DHCPv6_Prefix_Delegation_Configure		
-9 DHCPv6_Prefix_Delegation_UnConfigure		
BDNS_Configure		
"9 DNS_UnConfigure		

Delete the Prepend FlexConfig

NetFlow related configuration got modified successfully.

```
access-list flow_export_acl extended permit ip any any
!
flow-export destination Inside 192.168.1.78 2056
!
class-map flow_export_class
match access-list flow_export_acl
!
policy-map global_policy
class flow_export_class
flow-export event-type flow-create destination 192.168.1.78
flow-export event-type flow-denied destination 192.168.1.78
flow-export event-type flow-teardown destination 192.168.1.78
flow-export event-type flow-update destination 192.168.1.78
```

### **Related Documents**

https://www.cisco.com/c/en/us/support/docs/quality-of-service-qos/netflow/216126-configure-netflow-secure-event-logging-o.html