

Steps to create a SD WAN Zone

Context

The image shows two screenshots from Fortinet management tools. The left screenshot is from FortiGate VM64 (FW3_254) showing the 'Interfaces' configuration page. It lists physical interfaces port1 through port10 and SD-WAN zones: NEWSWANZONE_port10, SDWAN_port8, SDWAN_Zone, and virtual-wan-link. A text box with an arrow points to the SD-WAN zones, stating: "We can see that Fortigate 'FW3_254' and Fortimanager already have SD WAN Interfaces created".

The right screenshot is from FortiManager Device Manager, showing the 'Device & Groups' view for FW3_254. It displays a tree view of interfaces: Physical (7), Tunneled (1), and SD-WAN Zone (4). The SD-WAN Zone section is expanded, showing SDWAN_Zone, port9, NEWSWANZONE_pi, port10, SDWAN_port8, and port8. A text box with an arrow points to this section, stating: "SDWAN ZONES Interfaces already created".

Name	Type	Members	IP/Netmask	Administrative Access
port1	Physical Interface		172.17.96.180/255.255.254.0	PING HTTPS
port2	Physical Interface		10.0.2.254/255.255.255.0	PING HTTPS SSH HTTP FMG-Access
port3	Physical Interface		0.0.0.0/0.0.0.0	
port4	Physical Interface		0.0.0.0/0.0.0.0	
port5	Physical Interface		0.0.0.0/0.0.0.0	
port6	Physical Interface		0.0.0.0/0.0.0.0	
port7	Physical Interface		0.0.0.0/0.0.0.0	
port8	Physical Interface		0.0.0.0/0.0.0.0	
port9	Physical Interface		0.0.0.0/0.0.0.0	
port10	Physical Interface		0.0.0.0/0.0.0.0	
NEWSWANZONE_port10	SD-WAN Zone	port10	0.0.0.0/0.0.0.0	
SDWAN_port8	SD-WAN Zone	port8	0.0.0.0/0.0.0.0	
SDWAN_Zone	SD-WAN Zone	port9	0.0.0.0/0.0.0.0	
virtual-wan-link	SD-WAN Zone		0.0.0.0/0.0.0.0	

On this case, port 7 does not exist on FMG ADOM Layer

The screenshot displays the FortiGate VM64 management console. The left sidebar shows the navigation menu with 'Interfaces' selected. The main area is split into two panes. The left pane shows the 'Physical Interface' configuration table, and the right pane shows the 'Object Configurations' table under the 'ADOM Layer'.

Physical Interface Configuration Table:

Name	Type	Members	IP/Netmask	Administrative Access
port1	Physical Interface		172.17.96.180/255.255.254.0	PING HTTPS SSH HTTP FMG-Access
port2	Physical Interface		10.0.2.254/255.255.255.0	PING HTTPS SSH HTTP FMG-Access
port3	Physical Interface		0.0.0.0/0.0.0.0	
port4	Physical Interface		0.0.0.0/0.0.0.0	
port5	Physical Interface		0.0.0.0/0.0.0.0	
port6	Physical Interface		0.0.0.0/0.0.0.0	
port7	Physical Interface		0.0.0.0/0.0.0.0	
port8	Physical Interface		0.0.0.0/0.0.0.0	
port9	Physical Interface		0.0.0.0/0.0.0.0	
port10	Physical Interface		0.0.0.0/0.0.0.0	

Object Configurations Table (ADOM Layer):

#	Normalized Interface	Mapping Rule	Created Time
1	any		
2	sslvpn_tun_intf		
3	virtual-wan-link		
4	import_sdwan_po		2020-11-26 11:55:14
5	NEWSDWANZONE	SDWAN Zone	2020-11-26 12:09:08
6	Normalized_Port8	Normalized_Port8	2020-11-26 12:40:54
7	Normalized_port1		2020-11-26 12:00:19
8	SDWAN_Zone	SDWAN Zone	2020-11-26 11:55:14
9	SDWAN_port8	SDWAN Zone	2020-11-26 12:42:55
10	VLAN101	FortiSwitch VLAN Inter	2020-04-16 08:38:00
11	Internal2		2020-11-24 15:38:24
12	Internal3		2020-11-24 15:38:46
13	sdwan_loopback	SDWAN created	2020-04-10 17:41:06
14	vpnmgr_test_hub	VPN manager auto-ger	2020-07-28 07:36:35
15	vpnmgr_test_mes	VPN manager auto-ger	2020-07-28 07:36:35
16	vpnmgr_test_spol	VPN manager auto-ger	2020-07-28 07:36:35

Annotations:

- A green arrow points from the 'ADOM Layer' label to the right pane.
- A green arrow points from the 'port7' row in the left pane to the right pane.
- Text overlay: "We can see port7 does not exist on FMG ADOM Layer" with an arrow pointing to the right pane.
- Text overlay: "(one of the reasons could be that policy package haven't been imported on this Fortimanager yet)" with an arrow pointing to the right pane.

Create Normalized Interface with Per-Device Mapping. We can call it "Normalized_port7" to differentiate with the incoming interfaces

Per-Device Mapping

Mapped Device: FW3_254(root)
 Mapped Interface Name: port7
 Shaping Profile: OFF

OK Cancel

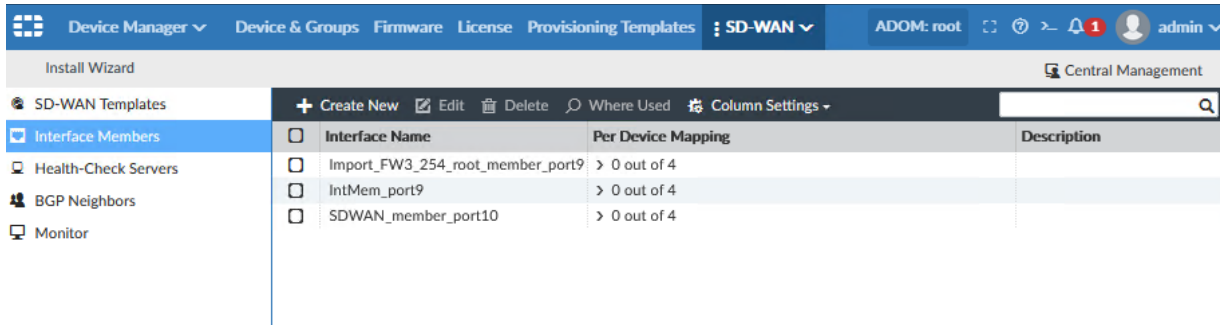
Per-Device Mapping

+ Create New Edit Delete

Mapped Device	Details	Type	Addressing Mode	IP/Netmask
FW3_254(root)	port7	Physical	Manual	0.0.0.0/0.0.0.0

Step 1

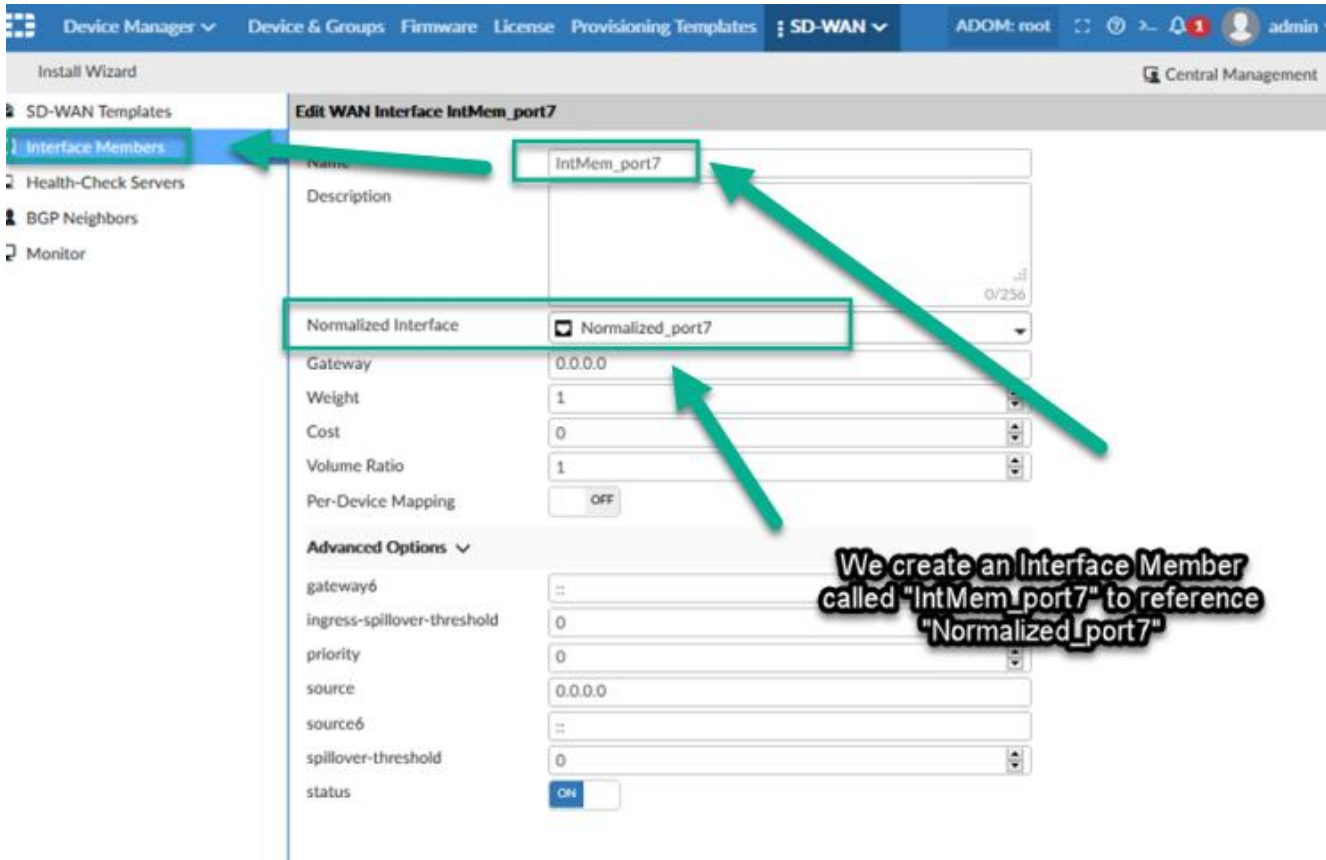
Before



The screenshot shows the 'SD-WAN' configuration page in the 'Install Wizard' section. The 'Interface Members' table is visible, listing three members:

Interface Name	Per Device Mapping	Description
Import_FW3_254_root_member_port9	> 0 out of 4	
IntMem_port9	> 0 out of 4	
SDWAN_member_port10	> 0 out of 4	

Configuration



The screenshot shows the 'Edit WAN Interface IntMem_port7' configuration page. The 'Interface Members' tab is selected in the left sidebar. The configuration fields are as follows:

- Name: IntMem_port7
- Description: (empty)
- Normalized Interface: Normalized_port7
- Gateway: 0.0.0.0
- Weight: 1
- Cost: 0
- Volume Ratio: 1
- Per-Device Mapping: OFF
- Advanced Options:
 - gateway6: ::
 - ingress-spillover-threshold: 0
 - priority: 0
 - source: 0.0.0.0
 - source6: ::
 - spillover-threshold: 0
 - status: ON

We create an Interface Member called "IntMem_port7" to reference "Normalized_port7"

After

Device Manager Device & Groups Firmware License Provisioning Templates SD-WAN ADOM: root admin

Install Wizard Central Management

SD-WAN Templates + Create New Edit Delete Where Used Column Settings

Interface Members

- Health-Check Servers
- BGP Neighbors
- Monitor

<input type="checkbox"/>	Interface Name	Per Device Mapping	Description
<input type="checkbox"/>	Import_FW3_254_root_member_port9	> 0 out of 4	
<input type="checkbox"/>	IntMem_port7	> 0 out of 4	
<input type="checkbox"/>	IntMem_port9	> 0 out of 4	
<input type="checkbox"/>	SDWAN_member_port10	> 0 out of 4	

You can create a new Template or use what is already, in this case we will be using the one that is already assigned to FW3_254 "Import_SD_WAN"

The screenshot shows the SD-WAN provisioning interface. The top navigation bar includes "Device Manager", "Device & Groups", "Firmware", "License", "Provisioning Templates", and "SD-WAN". The user is logged in as "admin" with the role "ADOM: root". The main content area is titled "SD-WAN Templates" and contains a table with the following data:

<input type="checkbox"/>	Name	Assigned to Devices	Interfaces	Description
<input type="checkbox"/>	Import_SDWAN	FW3_254 [root]	Import_FW3_254_root_member_por	

On the left side, there is a sidebar menu with the following items: "Interface Members", "Health-Check Servers", "BGP Neighbors", and "Monitor".

Step 2

Create a new SD-WAN Zone

The screenshot shows the FortiGate SD-WAN configuration interface. The top navigation bar includes 'Device Manager', 'Device & Groups', 'Firmware', 'License', 'Provisioning Templates', and 'SD-WAN'. The user is logged in as 'admin'. The main content area is titled 'Edit Import_SDWAN'. It features a form for 'Name' (Import_SDWAN) and 'Description'. Below the form is a 'Duplication' table with a 'No record found.' message. The 'Interface Members' table is highlighted with a green box around the 'SD-WAN Zone' option. The 'Performance SLA' table lists various SLA configurations. The 'Neighbor' table is also visible at the bottom.

Create a New SD WAN Zone

ID	Packet Discard Duplication
No record found.	

SD-WAN Member	Interface Member
<input type="checkbox"/> SD-WAN Zone	
<input type="checkbox"/> 1	Import_FW3_254_root_member_port9
<input type="checkbox"/> NEWSDWANZONE_port10	
<input type="checkbox"/> 2	SDWAN_member_port10
<input type="checkbox"/> SDWAN_port8	
<input type="checkbox"/> 3	IntMem_port9

Name	Health-Check Server	Detect Protocol	Failure Threshold	Recovery Threshold
<input type="checkbox"/> Default_AWS	Import_FW3_254_root_I	HTTP	5	10
<input type="checkbox"/> Default_FortiGuard	Import_FW3_254_root_I	HTTP	5	10
<input type="checkbox"/> Default_Gmail	Import_FW3_254_root_I	Ping	5	10
<input type="checkbox"/> Default_Google Search	Import_FW3_254_root_I	HTTP	5	10
<input type="checkbox"/> Default_Office_365	Import_FW3_254_root_I	HTTP	5	10

Neighbor	Interface Member	Performance SLA	SLA
No record found.			

We won't have "IntMem_port7" yet

Device Manager Device & Groups Firmware License Provisioning Templates SD-WAN ADOM: root admin

Install Wizard Central Management

SD-WAN Templates Edit Import_SDWAN CLI Configurations

Interface Members Health-Check Servers BGP Neighbors Monitor

Name Import_SDWAN

Description

SD-WAN Status ON

Duplication

Create New Edit Delete Column Settings

ID Packet Discard Duplication

No record found.

Interface Members

Create New Edit Delete Where Used Column Settings

member_port9

Create New SD-WAN Zone

Name SDWAN_port7

Interface Members Click here to select

Advanced Options

service-sla-t-break cfg-order

Select Entries (Total: 3)

- Import_FW3_254_root_member_port9
- IntMem_port9
- SDWAN_member_port10

OK Cancel

OK Cancel

Default_Office_365 Import_FW3_254_root_I HTTP 5

10
10
10
10
10

We call it "SDWAN_port7", when you try to assign Interface members, we won't have "IntMem_port7" yet, we need to add it on the next step

We just leave it empty

The screenshot shows a network management interface with a top navigation bar containing 'Device Manager', 'Device & Groups', 'Firmware', 'License', 'Provisioning Templates', and 'SD-WAN'. The main content area is titled 'Edit Import_SDWAN' and includes a form for configuration. A modal dialog titled 'Create New SD-WAN Zone' is open in the foreground.

Create New SD-WAN Zone

Name:

Interface Members:

Advanced Options ▾

service-sla-tie-break:

Buttons:

SDWAN_port7 interface will be with no interface members

Interface Members

+ Create New ▾ Edit Delete Where Used Column Settings ▾		
<input type="checkbox"/>	ID	Interface Member
<input type="checkbox"/>	virtual-wan-link	
<input type="checkbox"/>	SDWAN_Zone	
<input type="checkbox"/>	1	Import_FW3_254_root_member_port9
<input type="checkbox"/>	NEWSDWANZONE_port10	
<input type="checkbox"/>	2	SDWAN_member_port10
<input type="checkbox"/>	SDWAN_port8	
<input type="checkbox"/>	3	IntMem_port9
<input type="checkbox"/>	SDWAN_port7	

Step 3

Device Manager ▾ Device & Groups Firmware License Provisioning Templates **SD-WAN** ▾ ADOM: root Central Management CLI Configuration

Install Wizard

SD-WAN Templates Edit Import_SDWAN

Interface Members

Health-Check Servers

BGP Neighbors

Monitor

Name: Import_SDWAN

Description:

SD-WAN Status: ON

Duplication

+ Create New Edit Delete Column Settings

ID	Packet Discard Duplication
No record found.	

Interface Members

+ Create New Edit Delete Where Used Column Settings

SD-WAN Member	Interface Member
<input type="checkbox"/> SD-WAN Zone	
<input type="checkbox"/> SDWAN_ZONE	
<input type="checkbox"/> 1	Import_FW3_254_root_member_port9
<input type="checkbox"/> NEWSDWANZONE_port10	
<input type="checkbox"/> 2	SDWAN_member_port10
<input type="checkbox"/> SDWAN_port8	
<input type="checkbox"/> 3	IntMem_port9
<input checked="" type="checkbox"/> SDWAN_port7	

Performance SLA

+ Create New Edit Delete Where Used Column Settings

Name	Health-Check Server	Detect Protocol	Failure Threshold	Recovery Threshold
<input type="checkbox"/> Default_AWS	Import_FW3_254_root_I	HTTP	5	10

Create a new SDWAN Member

Device Manager Device & Groups Firmware License Provisioning Templates SD-WAN ADOM: root Central Management

Install Wizard

SD-WAN Templates Edit Import_SDWAN

Interface Members Health-Check Servers BGP Neighbors Monitor

Name: Import_SDWAN

Description:

SD-WAN Status: ON

Duplication: + Create New Edit Delete Column Settings -

ID: Packet Discard Duplication

No record found.

Interface Members

Create New SD-WAN Interface Member

Sequence Number: 4

Interface Member: IntMem_port7

SD-WAN Zone: SDWAN_port7

OK Cancel

Associate "Int_Mem_port7" into the new "SD WAN_Port7"

Performance

+ Create New Edit Delete Where Used Column Settings -

Name	Health-Check Server	Detect Protocol	Failure Threshold	Recovery Threshold
Default_AWS	Import_FW3_254_root_I	HTTP	5	10
Default_FortiGuard	Import_FW3_254_root_I	HTTP	5	10
Default_Gmail	Import_FW3_254_root_I	Ping	5	10
Default_Google_Frodo	Import_FW3_254_root_I	HTTP	5	10

SD-WAN Zone (4)

Name	Type	Normalized Interface	Addressing Mode	IP/Netmask
virtual-wan-link	SD-WAN Zone			
SDWAN_Zone	SD-WAN Zone	SDWAN_Zone		
port9	Physical		Manual	0.0.0.0/0.0.0.0
NEWSDWANZONE_port10	SD-WAN Zone	NEWSDWANZONE_port10		
port10	Physical		Manual	0.0.0.0/0.0.0.0
SDWAN_port8	SD-WAN Zone	SDWAN_port8		
port8	Physical		Manual	0.0.0.0/0.0.0.0

Edit Import_SDWAN

Name: Import_SDWAN

SD-WAN Status: ON

Interface Members

ID	Interface Member
virtual-wan-link	
SDWAN_Zone	
1	Import_FW3_254_root_member_port9
2	SDWAN_member_port10
SDWAN_port8	
3	IntMem_port9
SDWAN_port7	
4	IntMem_port7

Performance SLA

Name	Health-Check Server	Detect Protocol	Failure Threshold	Recovery Threshold
Default_AWS	Import_FW3_254_root_J	HTTP	5	10
Default_FortiGuard	Import_FW3_254_root_I	HTTP	5	10
Default_Gmail	Import_FW3_254_root_I	Ping	5	10
Default_Google Search	Import_FW3_254_root_J	HTTP	5	10
Default_Office_365	Import_FW3_254_root_J	HTTP	5	10

We won't see yet SD WAN_port7 inside Device Layer of "FW_254"

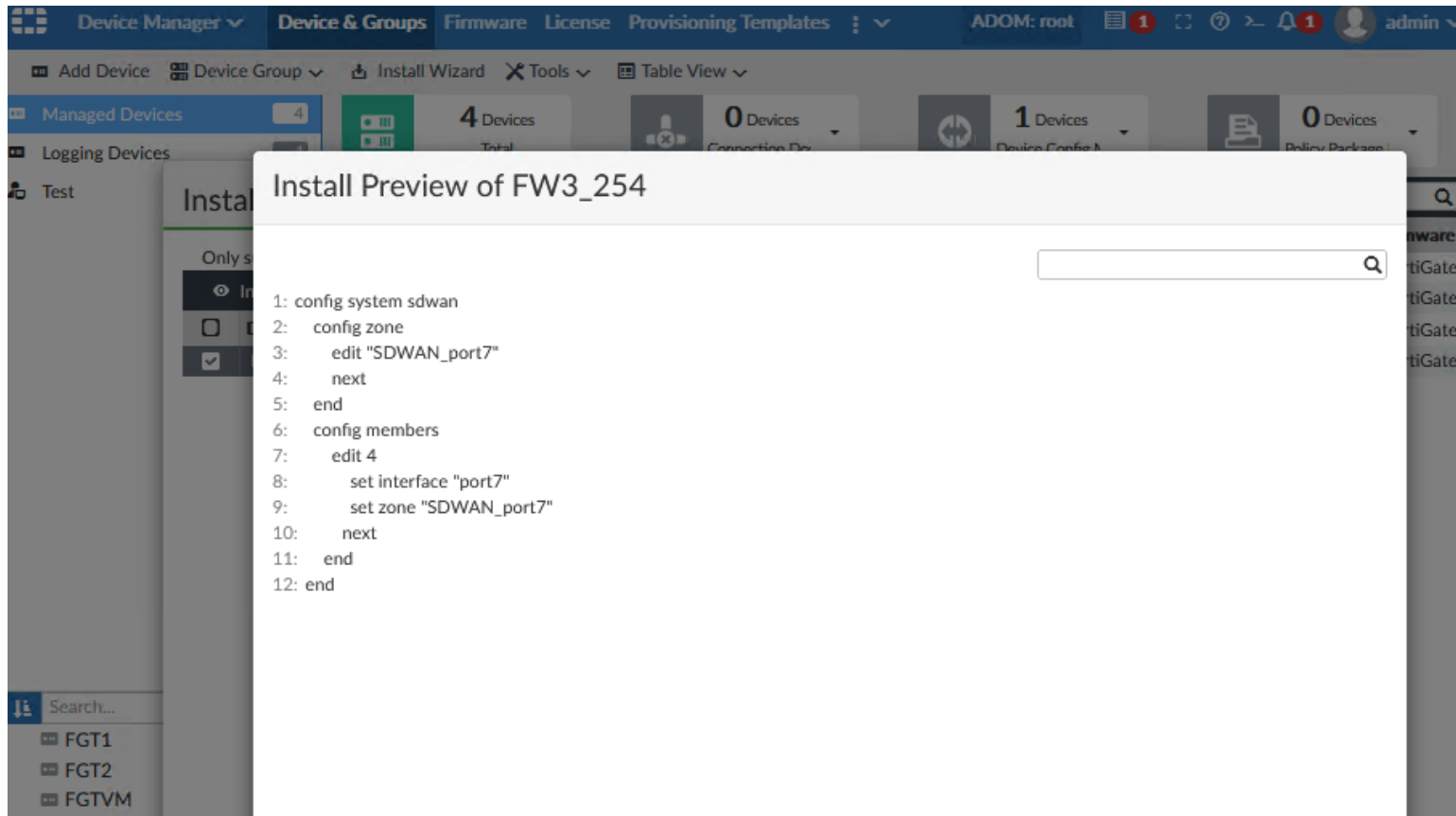
However modified status on device layer for FGT "FW3_254" is detected

Managed Devices

Device Name	Config Status	System Template	Policy Package Status	Firmware
FGT1	Unknown		Never installed	FortiGate
FGT2	Unknown		Never installed	FortiGate
FGTVM	Unknown		Never installed	FortiGate
FW3_254	Modified		Never installed	FortiGate

Step 4

When we see install preview, we notice Fortimanager will trigger the interface



The screenshot displays the FortiManager web interface. A modal dialog box titled "Install Preview of FW3_254" is open, showing a list of configuration steps. The background interface includes a top navigation bar with "Device Manager", "Device & Groups", "Firmware", "License", and "Provisioning Templates". Below this, there are tabs for "Managed Devices" (4), "Logging Devices", and "Test". A search bar is visible at the bottom left of the interface.

```
1: config system sdwan
2:  config zone
3:    edit "SDWAN_port7"
4:    next
5:  end
6:  config members
7:    edit 4
8:      set interface "port7"
9:      set zone "SDWAN_port7"
10:   next
11:  end
12: end
```

FortiGate VM64 FW3_254

Dashboard

Security Fabric

Network

Interfaces

DNS

Packet Capture

SD-WAN Zones

SD-WAN Rules

Performance SLA

Static Routes

Policy Routes

RIP

OSPF

BGP

Multicast

System

Policy & Objects

Security Profiles

VPN

User & Authentication

WiFi & Switch Controller

Log & Report

FortiGate VM64

Name	Type	Members	IP/Netmask	Administrative Access
Physical Interface 10				
port1	Physical Interface		172.17.96.180/255.255.254.0	PING HTTPS SSH HTTP FMG-Access
port2	Physical Interface		10.0.2.254/255.255.255.0	PING HTTPS SSH HTTP FMG-Access
port3	Physical Interface		0.0.0.0/0.0.0.0	
port4	Physical Interface		0.0.0.0/0.0.0.0	
port5	Physical Interface		0.0.0.0/0.0.0.0	
port6	Physical Interface		0.0.0.0/0.0.0.0	
port7	Physical Interface		0.0.0.0/0.0.0.0	
port8	Physical Interface		0.0.0.0/0.0.0.0	
port9	Physical Interface		0.0.0.0/0.0.0.0	
port10	Physical Interface		0.0.0.0/0.0.0.0	
SD-WAN Zone 5				
NEWSWANZONE_port10	SD-WAN Zone	port10	0.0.0.0/0.0.0.0	
SDWAN_port7	SD-WAN Zone	port7	0.0.0.0/0.0.0.0	
SDWAN_port8	SD-WAN Zone	port8	0.0.0.0/0.0.0.0	
SDWAN_Zone	SD-WAN Zone	port9	0.0.0.0/0.0.0.0	
virtual-wan-link	SD-WAN Zone		0.0.0.0/0.0.0.0	

Device Manager

Device & Groups

Firmware

License

Provisioning Templates

ADOM: root

admin

Add Device

Device Group

Install Wizard

Tools

Table View

Managed Devices

4 Devices Total

0 Devices Connection Do

0 Devices Device Config t

0 Devices Policy Package

Logging Devices

Test

Edit

Delete

Import Policy

Install

More

Column Settings

Device Name	Config Status	System Template	Policy Package Status	Firmwa
FGT1	Unknown		Never installed	FortiGa
FGT2	Unknown		Never installed	FortiGa
FGTVM	Unknown		Never installed	FortiGa
FW3_254	Synchronized		Never installed	FortiGa

Search...

- FGT1
- FGT2
- FGTVM
- FW3_254

Device layer is sync with Fortigate

Special notes

1 This is the way it looks on Fortigate, as you notice SDWAN Zone is not a simple interface

The image displays two screenshots of the FortiGate VM64 management interface. The left screenshot shows the 'Bandwidth' section with two donut charts for 'Download' and 'Upload' traffic, and a table listing interfaces and their bandwidth usage. The right screenshot shows the 'Interfaces' configuration page, listing physical and SD-WAN interfaces.

Bandwidth Usage Table (Left Screenshot):

Interfaces	Gateway	Cost	Download	Upload
virtual-wan-link				
SDWAN_Zone				
port9	0.0.0.0	0	10.84 kbps	0 bps
NEWSWANZONE_port10				
port10	0.0.0.0	0	10.84 kbps	0 bps
SDWAN_port8				
port8	0.0.0.0	0	10.84 kbps	0 bps
SDWAN_port7				
port7	0.0.0.0	0	10.84 kbps	0 bps

Interfaces Configuration Table (Right Screenshot):

Name	Type	Members	IP/Netmask	Administrative Acc
Physical Interface 10				
port1	Physical Interface		172.17.96.180/255.255.254.0	PING HTTPS SSH HTTP FMG-Access
port2	Physical Interface		10.0.2.254/255.255.255.0	PING HTTPS SSH HTTP FMG-Access
port3	Physical Interface		0.0.0.0/0.0.0.0	
port4	Physical Interface		0.0.0.0/0.0.0.0	
port5	Physical Interface		0.0.0.0/0.0.0.0	
port6	Physical Interface		0.0.0.0/0.0.0.0	
port7	Physical Interface		0.0.0.0/0.0.0.0	
port8	Physical Interface		0.0.0.0/0.0.0.0	
port9	Physical Interface		0.0.0.0/0.0.0.0	
port10	Physical Interface		0.0.0.0/0.0.0.0	
SD-WAN Zone 5				
NEWSWANZONE_port10	SD-WAN Zone	port10	0.0.0.0/0.0.0.0	
SDWAN_port7	SD-WAN Zone	port7	0.0.0.0/0.0.0.0	
SDWAN_port8	SD-WAN Zone	port8	0.0.0.0/0.0.0.0	
SDWAN_Zone	SD-WAN Zone	port9	0.0.0.0/0.0.0.0	
virtual-wan-link	SD-WAN Zone		0.0.0.0/0.0.0.0	

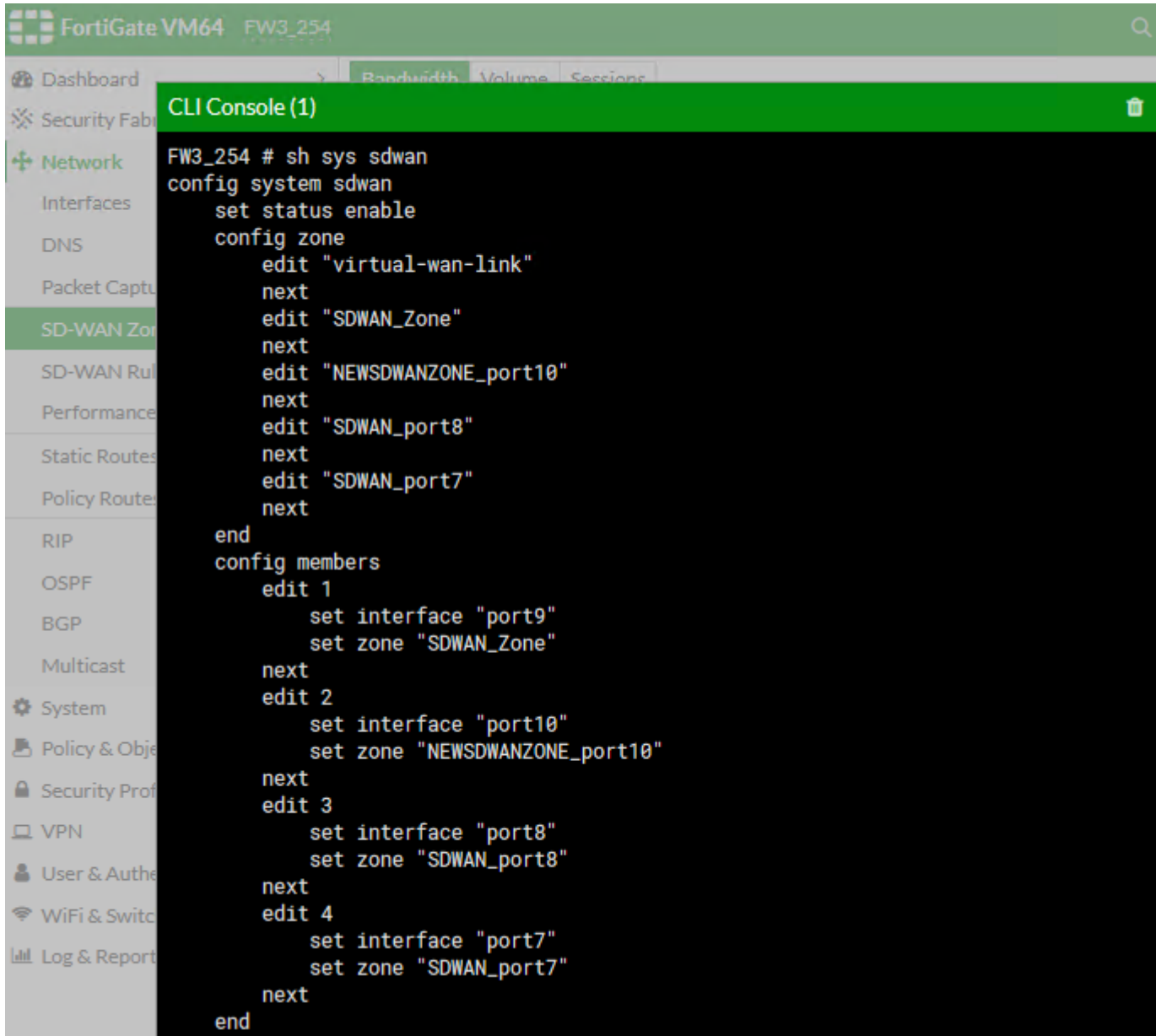
It cannot be seen on config sys interface

The screenshot displays the FortiGate VM64 configuration interface. On the left, the CLI console shows the output of the command 'FW3_254 # sh sys interface', listing various interfaces and their configurations. On the right, the 'Interfaces' configuration page is visible, showing a table of interfaces and their associated settings.

```
FW3_254 # sh sys interface
name      Name      IP Subnet      MTU  Mode  Admin  Oper  Type  Status
-----
port1    drop      0.0.0.0/0.0.0.0 172.17.96.189 255.255.254.0 up    disable physical enable
port2    static   0.0.0.0/0.0.0.0 10.0.2.254 255.255.255.0 up    disable physical enable
port3    static   0.0.0.0/0.0.0.0 0.0.0.0/0.0.0.0 up    disable physical enable
port4    static   0.0.0.0/0.0.0.0 0.0.0.0/0.0.0.0 up    disable physical enable
port5    static   0.0.0.0/0.0.0.0 0.0.0.0/0.0.0.0 up    disable physical enable
port6    static   0.0.0.0/0.0.0.0 0.0.0.0/0.0.0.0 up    disable physical enable
port7    static   0.0.0.0/0.0.0.0 0.0.0.0/0.0.0.0 up    disable physical enable
port8    static   0.0.0.0/0.0.0.0 0.0.0.0/0.0.0.0 up    disable physical enable
port9    static   0.0.0.0/0.0.0.0 0.0.0.0/0.0.0.0 up    disable physical enable
port10   static   0.0.0.0/0.0.0.0 0.0.0.0/0.0.0.0 up    disable physical enable
ssl_root static   0.0.0.0/0.0.0.0 0.0.0.0/0.0.0.0 up    disable tunnel  enable
```

Name	Type	Members	IP/Netmask	Administrative Access
Physical Interface				
port1	Physical Interface		172.17.96.180/255.255.254.0	PING HTTPS SSH HTTP FMG-Access
port2	Physical Interface		10.0.2.254/255.255.255.0	PING HTTPS SSH HTTP FMG-Access
port3	Physical Interface		0.0.0.0/0.0.0.0	
port4	Physical Interface		0.0.0.0/0.0.0.0	
port5	Physical Interface		0.0.0.0/0.0.0.0	
port6	Physical Interface		0.0.0.0/0.0.0.0	
port7	Physical Interface		0.0.0.0/0.0.0.0	
port8	Physical Interface		0.0.0.0/0.0.0.0	
port9	Physical Interface		0.0.0.0/0.0.0.0	
port10	Physical Interface		0.0.0.0/0.0.0.0	
SD-WAN Zone				
NEWSWANZONE_port10	SD-WAN Zone	port10	0.0.0.0/0.0.0.0	
SDWAN_port7	SD-WAN Zone	port7	0.0.0.0/0.0.0.0	
SDWAN_port8	SD-WAN Zone	port8	0.0.0.0/0.0.0.0	
SDWAN_Zone	SD-WAN Zone	port9	0.0.0.0/0.0.0.0	
virtual-wan-link	SD-WAN Zone		0.0.0.0/0.0.0.0	

They belong to configuration of new cli syntax



The image shows a screenshot of the FortiGate VM64 CLI console. The console title is "CLI Console (1)". The user has entered the command "sh sys sdwan" and the output shows the configuration for the SD-WAN system. The configuration includes setting the status to enable, creating a zone named "SDWAN_Zone", and adding four members (1, 2, 3, 4) with their respective interfaces and zones.

```
FW3_254 # sh sys sdwan
config system sdwan
  set status enable
  config zone
    edit "virtual-wan-link"
    next
    edit "SDWAN_Zone"
    next
    edit "NEWSDWANZONE_port10"
    next
    edit "SDWAN_port8"
    next
    edit "SDWAN_port7"
    next
  end
  config members
    edit 1
      set interface "port9"
      set zone "SDWAN_Zone"
    next
    edit 2
      set interface "port10"
      set zone "NEWSDWANZONE_port10"
    next
    edit 3
      set interface "port8"
      set zone "SDWAN_port8"
    next
    edit 4
      set interface "port7"
      set zone "SDWAN_port7"
    next
  end
end
```

2 Once you use port7 on Fortigate you will see it free on Fortigate, but on Fortimanager you will see it only under SD WAN Zone interface

The image shows two screenshots side-by-side. The left screenshot is from the FortiGate VM64 interface, showing a table of physical interfaces. Port 7 is highlighted in yellow, indicating it is free. The right screenshot is from the FortiManager interface, showing a table of interfaces. Port 7 is listed as a physical interface, but it is also associated with an SD-WAN Zone, which is highlighted in yellow.

Name	Type	Members	IP/Netmask	Administrative Access
port1	Physical Interface		172.17.96.180/255.255.254.0	PING HTTPS SSH HTTP FMG-Access
port2	Physical Interface		10.0.2.254/255.255.255.0	PING HTTPS SSH HTTP FMG-Access
port3	Physical Interface		0.0.0.0/0.0.0.0	
port4	Physical Interface		0.0.0.0/0.0.0.0	
port5	Physical Interface		0.0.0.0/0.0.0.0	
port6	Physical Interface		0.0.0.0/0.0.0.0	
port7	Physical Interface		0.0.0.0/0.0.0.0	
port8	Physical Interface		0.0.0.0/0.0.0.0	
port9	Physical Interface		0.0.0.0/0.0.0.0	
port10	Physical Interface		0.0.0.0/0.0.0.0	
NEWSWANZONE_port10	SD-WAN Zone	port10	0.0.0.0/0.0.0.0	
SDWAN_port7	SD-WAN Zone	port7	0.0.0.0/0.0.0.0	
SDWAN_port8	SD-WAN Zone	port8	0.0.0.0/0.0.0.0	
SDWAN_Zone	SD-WAN Zone	port9	0.0.0.0/0.0.0.0	
virtual-wan-link	SD-WAN Zone		0.0.0.0/0.0.0.0	

However, when you try to create a policy package will have the same behavior. Port7 will not be free to assign

The image shows a screenshot of the FortiManager interface, specifically the 'Create New Firewall Policy' configuration page. The 'Outgoing Interface' dropdown menu is open, showing a list of interfaces. 'SDWAN_port7' is highlighted in yellow, indicating it is not free for assignment. The 'Interface' dropdown menu is also open, showing a list of interfaces, with 'SDWAN_port7' highlighted in yellow.

BONUS

When trying to install policy package always check as a normal situation, Interfaces should be associated to the Fortigate where you need to install policy package.

For example even we have already configure SDWAN_port7 on fortigate using Device Layer, when you try to install policy package you need to make sure what is the status of your SDWAN Interfaces on Policy Layer.

If you are trying to install a policy package and you receive a error like

```
Copy device global objects
```

```
Vdom copy failed:  
error 0 - invalid value
```

```
Copy objects for vdom root
```

The screenshot shows the FortiGate GUI with the 'Policy Packages' tab selected. A table of policies is visible, including 'SDWAN Policies' and 'internet'. A modal window titled 'Re-install Policy Package - default' is open, showing a table with columns 'Device', 'Policy Package', and 'Validation'. The entry for device 'FW3_254[root]' and policy package 'default' shows a 'Copy Failed' status. A 'View Install Log' dialog is also open, displaying the error message: 'Copy device global objects', 'Vdom copy failed: error 0 - invalid value', and 'Copy objects for vdom root'.

Device	Policy Package	Validation	
<input type="checkbox"/>	FW3_254[root]	default	Copy Failed Log Zone Validation Failed Details

```
Copy device global objects  
Vdom copy failed:  
error 0 - invalid value  
Copy objects for vdom root
```

The ideal scenario you will have the option to choose your interface to create an association

The screenshot shows a network management interface with a 'Validation Details' dialog box. The dialog contains the following information:

The following ADOM interfaces have no mapping. All ADOM interfaces should be mapped before continue with installation.

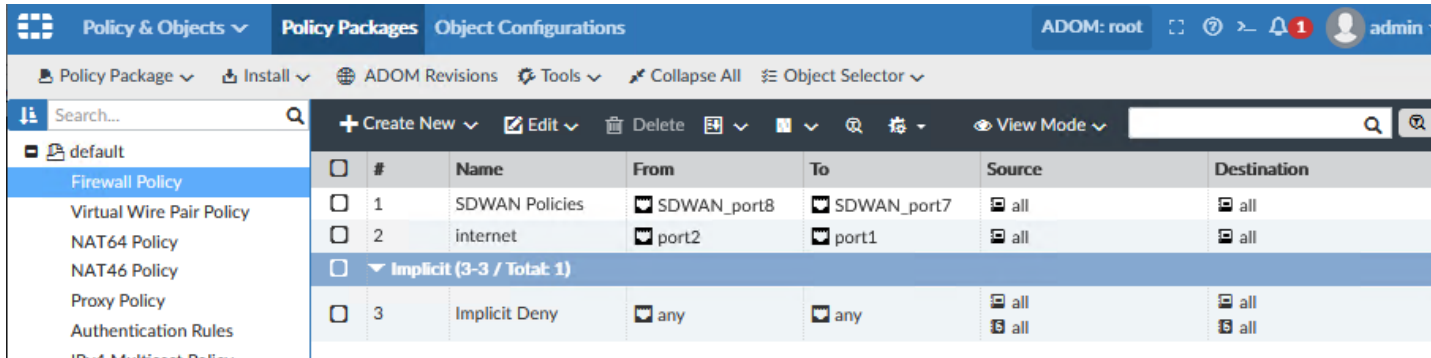
Device Name	Unmapped Interface	Device Interface
FW3_254[root]	SDWAN_port7	None NEWSWANZONE_port10 SDWAN_Zone SDWAN_port7 SDWAN_port8

The 'Device Interface' dropdown menu is open, showing the following options:

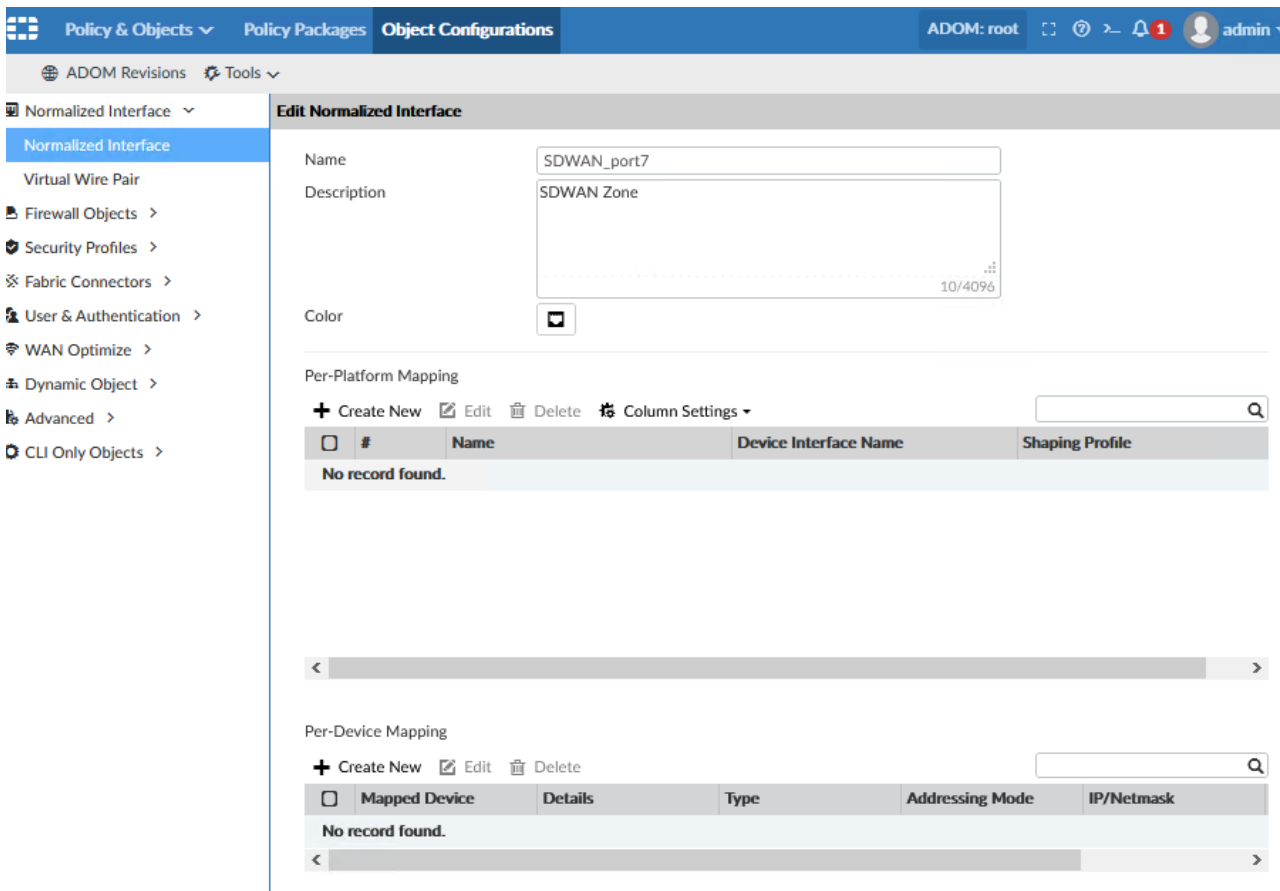
- None
- NEWSWANZONE_port10 (SD-WAN Zone)
- SDWAN_Zone (SD-WAN Zone)
- SDWAN_port7 (SD-WAN Zone) - Selected
- SDWAN_port8 (SD-WAN Zone)

Buttons at the bottom of the dialog: Next > (disabled), Cancel (disabled).

If not you need to confirm what is the status of all your interfaces being used on policy package



In this case, we identify “SDWAN_port7” does not have neither Per Platform nor Per device mapping



If we added Per Platform means that all your Fortigates VM will be using the same configuration of SDWAN_port7. (Normally this is not very common since user may need to have different configurations on interfaces)

The screenshot displays the FortiGate web interface. The top navigation bar includes 'Policy & Objects', 'Policy Packages', and 'Object Configurations'. The user is logged in as 'ADOM: root' and 'admin'. The left sidebar shows a tree view with 'Normalized Interface' selected. The main panel is titled 'Edit Normalized Interface' and shows the configuration for 'SDWAN_port7'. The 'Name' field is 'SDWAN_port7' and the 'Description' is 'SDWAN Zone'. Below this is a 'Per-Platform Mapping' section with a table that currently contains no records. A modal dialog box titled 'Create New Per-Platform Mapping' is open in the foreground, with 'Matched Platform' set to 'FortiGate-VM64' and 'Mapped Interface Name' set to 'SDWAN_port7'. The dialog has 'OK' and 'Cancel' buttons at the bottom.

Edit Normalized Interface

Name: SDWAN_port7
Description: SDWAN Zone
Color: [Color Picker]
10/4096

Per-Platform Mapping

+ Create New | Edit | Delete | Column Settings

#	Name	Device Interface Name	Shaping Profile
No record found.			

Create New Per-Platform Mapping

Matched Platform: FortiGate-VM64
Mapped Interface Name: SDWAN_port7

OK | Cancel

Normalized Interface

Edit Normalized Interface

Normalized Interface

- Virtual Wire Pair
- Firewall Objects >
- Security Profiles >
- Fabric Connectors >
- User & Authentication >
- WAN Optimize >
- Dynamic Object >
- Advanced >
- CLI Only Objects >

Name: SDWAN_port7

Description: SDWAN Zone

Color:

Per-Platform Mapping

+ Create New Edit Delete Column Settings

#	Name	Device Interface Name	Shaping Profile
1	FortiGate-VM64	SDWAN_port7	

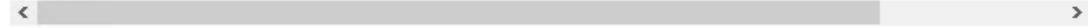


Per-Device Mapping

+ Create New Edit Delete

Mapped Device	Details	Type	Addressing Mode	IP/Netmask
---------------	---------	------	-----------------	------------

No record found.



If you select this policy package should not be without any errors (since for this example was already on sync but we modify SDWAN_port7 to generate a common issue)

The screenshot shows a network management interface with a 'Reinstall Preview of Selected Devices' dialog box. The dialog box contains a search bar, a device name 'FW3_254', and a message: 'There is no configuration change when compared to the remote device.' The background shows a table of policy configurations.

#	Name	From	To	Source	Destination
1	SDWAN Policies	SDWAN_port8	SDWAN_port7	all	all
2	internet	port2	port1	all	all

If instead of adding per platform you prefer to select the Per Device Mapping, you need to make sure “SDWAN_port7” is already available on Device layer as we see it on the left

The screenshot displays the Fortinet FortiManager interface. On the left, the 'Device & Groups' pane shows a list of interfaces for device FW3_254. The 'SDWAN_port7' interface is highlighted. On the right, the 'Edit Normalized Interface' pane shows the configuration for 'SDWAN_port7'. A 'Per-Device Mapping' dialog box is open, showing a list of available interfaces for mapping to the selected device.

Name	Type	Normalized Interface	Addressing Mode	IP/Netmask
Physical (6)				
port1	Physical	port1	DHCP	172.17.96.1
port2	Physical	port2	Manual	10.0.2.254
port3	Physical		Manual	0.0.0.0/0.0.0.0
port4	Physical		Manual	0.0.0.0/0.0.0.0
port5	Physical		Manual	0.0.0.0/0.0.0.0
port6	Physical		Manual	0.0.0.0/0.0.0.0
Tunnel (1)				
ssl.root (SSL VPN Interf	Tunnel		Manual	0.0.0.0/0.0.0.0
SD-WAN Zone (5)				
virtual-wan-link	SD-WAN Zone			
SDWAN_Zone	SD-WAN Zone	SDWAN_Zone		
port9	Physical		Manual	0.0.0.0/0.0.0.0
NEWSWANZONE_port10	SD-WAN Zone	NEWSWANZONE_port10		
port10	Physical		Manual	0.0.0.0/0.0.0.0
SDWAN_port8	SD-WAN Zone	SDWAN_port8		
port8	Physical		Manual	0.0.0.0/0.0.0.0
SDWAN_port7	SD-WAN Zone			
port7	Physical		Manual	0.0.0.0/0.0.0.0

Per-Device Mapping Dialog:

- Mapped Device: FW3_254(root)
- Mapped Interface Name: None
- Shaping Profile: (empty)
- Available Interfaces for Mapping:
 - NEWSWANZONE_port10 (SD-WAN Zone)
 - SDWAN_Zone (SD-WAN Zone)
 - SDWAN_port7 (SD-WAN Zone)** (Selected)
 - SDWAN_port8 (SD-WAN Zone)

If you have pending changes they will appear, if policy is exactly the same you will see them on install preview

The screenshot shows the FortiGate Policy Packages management interface. A dialog box titled "Reinstall Preview of Selected Devices" is open, displaying a search bar and a message: "There is no configuration change when compared to the remote device." The background shows the "Create New Firewall Policy" form with fields for Name and Incoming Interface (set to "any").

The left screenshot shows the "Managed Devices" table with columns for Name, Type, Normalized Interface, Addressing Mode, and IP/Network. The right screenshot shows the "Install Wizard" interface with a table of device installation status.

Device Name	Config Status	System Template	Policy Package Status	Firmware
FGT1	Unknown		Never installed	FortiGate
FGT2	Unknown		Never installed	FortiGate
FGTVM	Unknown		Never installed	FortiGate
FW3_254	Synchronized		default	FortiGate