



## **BlueField-3 Jumbo MTU Not Working**

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## Problem

Ping failed with packet size greater than 1500/4000 after configuring jumbo MTU.

## Solution

Jumbo MTU is supported starting from the following kernel version:

	Release
Upstream	VM kernel: 4.18.0-193.el8.x86_64 VM Linux version supports big MTU after 4.11.
Ubuntu	DOCA_2.5.0_BSP_4.5.0_Ubuntu_22.04
Virtnet	v1.7 or v1.6.26

The following steps configure jumbo MTU:

1. Change the MTU of uplink representor (or bond) from the BlueField Arm OS:

```
# echo 9216 > /sys/bus/pci/devices/0000:03:00.0/net/p0/mtu
```

2. Restart virtio-net-controller from the BlueField Arm OS:

```
# systemctl restart virtio-net-controlle
```

3. Change the corresponding device MTU on BlueField Arm OS. For example, for the first VF on the first PF, run:

```
# virtnet modify -p 0 -v 0 device -t 9216
```

4. Reload the virtio driver from the guest OS:

```
# modprobe -rv virtio-net && modprobe -v virtio-net
```

5. Verify the VQs' MTU configuration is correct on BlueField Arm OS:

```
# virtnet query -p 0 -v 0 --dbg_stats | grep jumbo_mtu  
"jumbo_mtu": 1  
"jumbo_mtu": 1
```

6. Change the MTU of the virtio-net interface from the guest OS:

```
# echo 9216 >  
/sys/bus/pci/devices/0000:af:00.2/virtio0/net/enp175s0f2/mtu
```

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