



# Maximum Receive Unit Configuration Support

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## Feature Summary and Revision History

### Summary Data

Applicable Product(s) or Functional Area	<ul style="list-style-type: none"> <li>• P-GW</li> <li>• SAE-GW</li> <li>• S-GW</li> </ul>
Applicable Platform(s)	ASR 5500
Feature Default	Disabled - Configuration Required
Related Changes in This Release	Not Applicable
Related Documentation	<ul style="list-style-type: none"> <li>• <i>Command Line Interface Reference</i></li> <li>• <i>P-GW Administration Guide</i></li> <li>• <i>SAEGW Administration Guide</i></li> <li>• <i>S-GW Administration Guide</i></li> </ul>

### Revision History

Revision Details	Release
First introduced.	21.24

## Feature Description

Prior to MRU Configuration support, the Maximum Receive Unit (MRU) setting was equal to the Maximum Transmission Unit (MTU).

When the MTU of eNB on the S1-U interface was increased to 2000 bytes but no changes were made on the MTU on S1-U interface on SAE-GW, packets were received at SAE-GW with size more than 1500 bytes. This resulted into those packets getting dropped at the S1-U interface on the SAE-GW with **Lport\_MRU\_exceeded** exception. This was affecting UEs that were trying to set up IKE Tunnels.

This Configure MRU feature allows you to configure MRU separately from MTU.

## How It Works

To handle MRU independently of MTU, changes are made in Network Processing Unit (NPU), NPUSIM, NPUMGR, and CLI.

## Configuring the MRU Feature

This section describes how to configure the MRU of the IP interface along with MTU using the **ip mtu** keyword under interface configuration.

## Configuring MRU

To configure the MTU and MRU in the Ethernet Interface Configuration mode, use the following sample configuration.

```
config
  context context_name
    interface interface_name broadcast
      ip mtu mtu_size [ mru mru_size ]
    end
```

### NOTES:

- **ip mtu mtu\_size**: Specify the MTU size. *mtu\_size* must be an integer in the range of 5762048 bytes.
- **mru mru\_size**: Specify the MRU size. *mru\_size* must be an integer in the range of 5762048 bytes.
- Use the **no ip mtu** command to disable the MTU configuration.
- The maximum configurable value for MTU is 2048 bytes.. If MTU is not configured, the default value is 1500 bytes.
- MRU attribute is optional and when it is not configured, MRU is set to the same value as MTU.
- MRU optional attribute is not applicable to VPC-DI and VPC-SI platforms. This attribute is only visible on ASR 5500.
- On CUPS or ICUPS, the following error is displayed you when you try to configure MRU on an interface.

Failure: Configure MRU Feature is not supported when ICUPS/CUPS is enabled!

- Although the product allows configuring asymmetric MTU and MRU values on the same interface is not advised as it may result into undesirable behavior on the network.

### Configuring the MRU Feature when no MTU is specified

MTU = default MTU, MRU = default MTU

For example:

```
configure
  interface SGi-VLAN400
    logical-port-statistics
    ip address 172.26.96.3 255.255.255.248
    ipv6 address 2600:300:2030:1104::3/64 secondary
    bfd interval 300 min_rx 300 multiplier 3
  #exit
#exit
```

### Configuring the MTU Feature when no MRU is specified

MRU = Configured MTU for backward compatibility. MRU = MTU = 1970 bytes.

For example:

```
configure
  interface SGi-VLAN400
    logical-port-statistics
    ip address 172.26.96.3 255.255.255.248
    ipv6 address 2600:300:2030:1104::3/64 secondary
    ip mtu 1970
    bfd interval 300 min_rx 300 multiplier 3
  #exit
```

### Configuring the MTU Feature when both MTU and MRU are specified

MTU = default MTU, MRU = default MTU

For example:

```
configure
  interface SGi-VLAN400
    logical-port-statistics
    ip address 172.26.96.3 255.255.255.248
    ipv6 address 2600:300:2030:1104::3/64 secondary
    ip mtu 1600 mru 1700
    bfd interval 300 min_rx 300 multiplier 3
  #exit
```

## Verifying the Configured MRU

The output of the is enhanced to display the configured MRU value.

For example:

```
[EPC2]26k1-chassis# config
[EPC2]26k1-chassis(config)# context EPC2
[EPC2]26k1-chassis(config-ctx)# interface TO-EPC2-SGW-INGRESS
[EPC2]26k1-chassis(config-if-eth)# ip mtu 1500 mru 1970
```

```
[EPC2]26kl-chassis(config-if-eth)# end
[EPC2]26kl-chassis# show ipv6 interface
Intf Name: TO-EPC1-SGW-INGRESS
Intf Type: Broadcast
Description:
VRF: None
IP State: UP (Bound to 5/20 vlan id 190, 802.1P prior 0, ifIndex 85196802)
Router Advertisement: disabled MTU: 1500 MRU: 1970
IPv6 Link-Local Address: fe80::d272:dcff:fea3:8543/64
IPv6 Global Unicast Address: 2001::1:21/64
L3 monitor LC-port switchover: Disabled
Number of Secondary Addresses: 5
IPv6 Address: 2001::1:31/64
IPv6 Address: 2001::1:205/64
IP Address: 10.10.10.21 Subnet Mask: 255.255.255.0
IP Address: 10.10.10.31 Subnet Mask: 255.255.255.0
IP Address: 10.10.10.200 Subnet Mask: 255.255.255.0
```

**NOTES:**

- Use the **show ipv6 interface** command to verify if the Configurable MTU configuration is enabled or disabled.
- **no ip mtu**: Disables the Configurable MTU configuration.