



# N4 Interface Configuration

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## Feature Summary and Revision History

### Summary Data

**Table 1: Summary Data**

|                                          |                                                          |
|------------------------------------------|----------------------------------------------------------|
| Applicable Product(s) or Functional Area | 5G-UPF                                                   |
| Applicable Platform(s)                   | VPC-SI<br>SMI                                            |
| Feature Default Setting                  | Disabled - Configuration Required                        |
| Related Changes in this Release          | Not Applicable                                           |
| Related Documentation                    | <i>UCC 5G UPF Configuration and Administration Guide</i> |

### Revision History

**Table 2: Revision History**

| Revision Details                                                | Release   |
|-----------------------------------------------------------------|-----------|
| New IEs are supported in UPF in compliance with 3GPP TS 29.244. | 2021.01.0 |
| First introduced.                                               | 2020.02.0 |

## Feature Description

This chapter provides the configuration information to identify a peer node to be an N4 interface, and the configuration to modify N4 parameters in an Sx-Service.

## Configuring N4 Interface

This section describes the following configurations:

- Identifying N4 Interface
- Adding N4-type and Modification of N4 Parameters in Sx Service

### Identifying an N4 Interface

Use the following configuration to identify if a peer node is an N4 interface type.

```
configure
  control-plane-group group_name
    peer-node-id [ ipv4-address ipv4_address | ipv6-address ipv6_address ]
  interface n4
  end
```

#### NOTES:

- To enable the **n4 interface** CLI command, you need the **require upf** CLI command on the UPF, which depends on the UPF license.
- [ **ipv4-address** *ipv4\_address* | **ipv6-address** *ipv6\_address* ] :  
**ipv4-address** *ipv4\_address*: Specifies the IPv4 address of the peer node.  
**ipv6-address** *ipv6\_address*: Specifies the IPv6 address of the peer node.
- **interface n4**: Identifies the N4 interface.

### Modification of N4-type Parameters in an Sx Service

Use the following configuration to modify N4-type parameters in an Sx Service.

```
configure
  context context_name
    sx-service service_name
      n4 [ max-retransmissions max_retransmission_value |
retransmission-timeout-ms timeout_value ]
    end
```

#### NOTES:

- **n4**: Allows modifications to N4 parameters.

- [ **max-retransmissions** *max\_retransmission\_value* | **retransmission-timeout-ms** *timeout\_value* ]:  
**max-retransmissions** *max\_retransmission\_value* Configures maximum retries for Sx control packets. *max\_retransmission\_value* must be an integer in the range of 0 to 15. The default value is 4.  
**retransmission-timeout-ms**: Configures the control packet retransmission timeout in Sx in milliseconds. *timeout\_value* must be an integer in the range of 1000 to 20000 milliseconds. The timeout value must be configured in steps of 100; for example: 1000, 1100, 1200, and so on. The default value is 5000 milliseconds.

## Statistics

This section provides information on show commands and their output available in support of this feature.

### show control-plane-group

The output of this command displays the following fields for this feature:

- Interface Type – This field indicates if the peer interface is N4. It is not displayed for non-N4 interfaces.

### show sx-service all

The output of this command displays the following fields for this feature:

- N4
  - N4 Retransmission Timeout
  - N4 Maximum Request Retransmission

### show subscribers user-plane-only all

The output of this command displays the following fields for this feature:

- Interface
  - N4

### show user-plane-service statistics all

The output of this command displays the following fields for this feature:

- N4 interface-type PDNs
  - Active
  - Setup
  - Released

### show subscribers user-plane-only seid number pdr all

The output of this command displays the following fields for this feature:

```
show subscribers user-plane-only callid number pdr full all
```

- Associated-QFIs

## **show subscribers user-plane-only callid number pdr full all**

The output of this command displays the following fields for this feature:

- QoS Flow Identifier