

show interfaces (Aggregated Ethernet)

Syntax	<code>show interfaces aenumber</code> <code><brief detail extensive terse></code> <code><descriptions></code> <code><media></code> <code><snmp-index snmp-index></code> <code><statistics></code>
Release Information	Command introduced before JUNOS Release 7.4.
Description	(M Series, T Series, and MX Series routers only) Display status information about the specified aggregated Fast Ethernet or Gigabit Ethernet interface.
Options	<p><code>aenumber</code>—Display standard information about the specified aggregated Fast Ethernet or Gigabit Ethernet interface.</p> <p><code>brief detail extensive terse</code>—(Optional) Display the specified level of output.</p> <p><code>descriptions</code>—(Optional) Display interface description strings.</p> <p><code>media</code>—(Optional) Display media-specific information.</p> <p><code>snmp-index snmp-index</code>—(Optional) Display information for the specified SNMP index of the interface.</p> <p><code>statistics</code>—(Optional) Display static interface statistics.</p>
Required Privilege Level	view
List of Sample Output	<p><code>show interfaces</code> (Aggregated Ethernet) on page 5</p> <p><code>show interfaces brief</code> (Aggregated Ethernet) on page 5</p> <p><code>show interfaces detail</code> (Aggregated Ethernet) on page 5</p> <p><code>show interfaces extensive</code> (Aggregated Ethernet) on page 6</p> <p><code>show interfaces extensive</code> (Aggregated Ethernet with VLAN Stacking) on page 8</p>
Output Fields	Table 1 lists the output fields for the <code>show interfaces</code> (Aggregated Ethernet) command. Output fields are listed in the approximate order in which they appear.

Table 1: Aggregated Ethernet show interfaces Output Fields

Field Name	Field Description	Level of Output
Physical Interface		
Physical interface	Name of the physical interface and state of the interface.	All levels
Enabled	State of the physical interface. Possible values are described in [Unresolved xref] .	All levels
Interface index	Index number of the physical interface, which reflects its initialization sequence.	All levels
SNMP ifIndex	SNMP index number for the physical interface.	detail extensive none

Table 1: Aggregated Ethernet show interfaces Output Fields (*continued*)

Field Name	Field Description	Level of Output
Generation	Unique number for use by Juniper Networks technical support only.	detail extensive
Link-level type	Encapsulation being used on the physical interface.	All levels
MTU	Maximum transmission unit size on the physical interface.	All levels
Speed	Speed at which the interface is running.	All levels
Loopback	Loopback status: Enabled or Disabled . If loopback is enabled, type of loopback: Local or Remote .	All levels
Source filtering	Source filtering status: Enabled or Disabled .	All levels
Flow control	Flow control status: Enabled or Disabled .	All levels
Minimum links needed	Number of child links that must be operational for the aggregate interface to be operational.	All levels
Device flags	Information about the physical device. Possible values are described in [Unresolved xref] .	All levels
Interface flags	Information about the interface. Possible values are described in [Unresolved xref] .	All levels
Current address	Configured MAC address.	detail extensive
Hardware address	Hardware MAC address.	detail extensive
Last flapped	Date, time, and how long ago the interface went from down to up or up to down. The format is Last flapped: year-month-day hours:minutes:seconds timezone (hours:minutes:seconds ago) . For example, Last flapped: 2002-04-26 10:52:40 PDT (04:33:20 ago) .	detail extensive
Input Rate	Input rate in bits per second (bps) and packets per second (pps).	None specified
Output Rate	Output rate in bps and pps.	None specified
Statistics last cleared	Time when the statistics for the interface were last set to zero.	detail extensive
Traffic statistics	Number and rate of bytes and packets received and transmitted on the physical interface. <ul style="list-style-type: none"> ■ Input bytes—Number of bytes received on the interface. ■ Output bytes—Number of bytes transmitted on the interface. ■ Input packets—Number of packets received on the interface ■ Output packets—Number of packets transmitted on the interface. 	detail extensive

Table 1: Aggregated Ethernet show interfaces Output Fields (continued)

Field Name	Field Description	Level of Output
Input errors	<p>Input errors on the interface:</p> <ul style="list-style-type: none"> ■ Errors—Sum of incoming frame aborts and FCS errors. ■ Drops—Number of packets dropped by the input queue of the I/O Manager ASIC. If the interface is saturated, this number increments once for every packet that is dropped by the ASIC's RED mechanism. ■ Framing errors—Number of packets received with an invalid frame checksum (FCS). ■ Runts—Number of frames received that are smaller than the runt threshold. ■ Giants—Number of frames received that are larger than the giant threshold. ■ Policed discards—Number of frames that the incoming packet match code discarded because they were not recognized or not of interest. Usually, this field reports protocols that the JUNOS Software does not handle. ■ Resource errors—Sum of transmit drops. 	detail extensive
Output errors	<p>Output errors on the interface. The following paragraphs explain the counters whose meaning might not be obvious:</p> <ul style="list-style-type: none"> ■ Carrier transitions —Number of times the interface has gone from down to up. This number does not normally increment quickly, increasing only when the cable is unplugged, the far-end system is powered down and then up, or another problem occurs. If the number of carrier transitions increments quickly (perhaps once every 10 seconds), the cable, the far-end system, or the PIC is malfunctioning. ■ Errors—Sum of the outgoing frame aborts and FCS errors. ■ Drops—Number of packets dropped by the output queue of the I/O Manager ASIC. If the interface is saturated, this number increments once for every packet that is dropped by the ASIC's RED mechanism. ■ MTU errors—Number of packets whose size exceeded the MTU of the interface. ■ Resource errors—Sum of transmit drops. 	detail extensive
IPv6 transit statistics	<p>Number of IPv6 transit bytes and packets received and transmitted on the physical interface if IPv6 statistics tracking is enabled.</p> <ul style="list-style-type: none"> ■ Input bytes—Number of bytes received on the interface. ■ Output bytes—Number of bytes transmitted on the interface. ■ Input packets—Number of packets received on the interface. ■ Output packets—Number of packets transmitted on the interface. 	detail extensive
Queue counters	<p>CoS queue number and its associated user-configured forwarding class name.</p> <ul style="list-style-type: none"> ■ Queued packets—Number of queued packets. ■ Transmitted packets—Number of transmitted packets. ■ Dropped packets—Number of packets dropped by the ASIC's RED mechanism. 	detail extensive
Logical Interface		
Logical interface	Name of the logical interface.	All levels
Index	Index number of the logical interface (which reflects its initialization sequence).	detail extensive none

Table 1: Aggregated Ethernet show interfaces Output Fields *(continued)*

Field Name	Field Description	Level of Output
SNMP ifIndex	SNMP interface index number of the logical interface.	detail extensive none
Generation	Unique number for use by Juniper Networks technical support only.	detail extensive
Flags	Information about the logical interface. Possible values are described in [Unresolved xref] .	All levels
VLAN-Tag	The TPID and VLAD identifier.	All levels
Demux	IP demultiplexing (demux) value that appears if this interface is used as the demux underlying interface. The output is one of the following: <ul style="list-style-type: none"> ■ Source Family Inet ■ Destination Family Inet 	detail extensive none
Encapsulation	Encapsulation on the logical interface.	All levels
Statistics	Information about the number of packets, packets per second, number of bytes, and bytes per second on this aggregate interface. <ul style="list-style-type: none"> ■ Bundle—Information about input and output bundle rates. ■ Link—(detail and extensive only) Information about specific links in the aggregate, including link state and input and output rates. ■ Marker Statistics—(detail and extensive only) Information about 802.3ad marker protocol statistics on the specified links. <ul style="list-style-type: none"> ■ Marker Rx—Number of valid marker PDUs received on this aggregation port. ■ Resp Tx—Number of marker response PDUs transmitted on this aggregation port. ■ Unknown Rx—Number of frames received that either carry the slow protocols Ethernet type value (43B.4) but contain an unknown protocol data unit (PDU), or are addressed to the slow protocols group MAC address (43B.3) but do not carry the slow protocols Ethernet type. ■ Illegal Rx—Number of frames received that carry the slow protocols Ethernet type value (43B.4) but contain a badly formed PDU or an illegal value of protocol subtype (43B.4). 	detail extensive none
<i>protocol-family</i>	Protocol family configured on the logical interface. Possible values are described in [Unresolved xref] .	brief
Protocol	Protocol family configured on the logical interface. Possible values are described in [Unresolved xref] .	detail extensive none
MTU	Maximum transmission unit size on the logical interface.	detail extensive none
Generation	Unique number for use by Juniper Networks technical support only.	detail extensive
Route Table	Routing table in which the logical interface address is located. For example, 0 refers to the routing table inet.0.	detail extensive
Flags	Information about protocol family flags. Possible values are described in [Unresolved xref] .	detail extensive none

Table 1: Aggregated Ethernet show interfaces Output Fields *(continued)*

Field Name	Field Description	Level of Output
Mac-Validate Failures	Number of MAC address validation failures for packets and bytes. This field is displayed when MAC address validation is enabled for the logical interface.	detail extensive none
Addresses, Flags	Information about address flags. Possible values are described in [Unresolved xref] .	detail extensive none
Destination	IP address of the remote side of the connection.	detail extensive none
Local	IP address of the logical interface.	detail extensive none
Broadcast	Broadcast address of the logical interface.	detail extensive none
Generation	Unique number for use by Juniper Networks technical support only.	detail extensive

show interfaces
(Aggregated Ethernet)

```
user@host> show interfaces ae0
Physical interface: ae0, Enabled, Physical link is Up
  Interface index: 153, SNMP ifIndex: 59
  Link-level type: Ethernet, MTU: 1514, Speed: 300mbps, Loopback: Disabled,
  Source filtering: Disabled, Flow control: Disabled, Minimum links needed: 1
  Device flags   : Present Running
  Interface flags: SNMP-Traps 16384
  Current address: 00:05:85:8b:bf:f0, Hardware address: 00:05:85:8b:bf:f0
  Last flapped   : Never
  Input rate      : 0 bps (0 pps)
  Output rate     : 0 bps (0 pps)

Logical interface ae0.0 (Index 72) (SNMP ifIndex 60)
  Flags: SNMP-Traps 16384 Encapsulation: ENET2
  Statistics          Packets          pps          Bytes          bps
  Bundle:
    Input :              0              0              0              0
    Output:              0              0              0              0
  Protocol inet, MTU: 1500
  Flags: None
  Addresses, Flags: Is-Preferred Is-Primary
    Destination: 10.100.1/24, Local: 10.100.1.2, Broadcast: 10.100.1.255
```

show interfaces brief
(Aggregated Ethernet)

```
user@host> show interfaces ae0 brief
Physical interface: ae0, Enabled, Physical link is Up
  Link-level type: Ethernet, MTU: 1514, Speed: 300mbps, Loopback: Disabled,
  Source filtering: Disabled, Flow control: Disabled
  Device flags   : Present Running
  Interface flags: SNMP-Traps 16384

Logical interface ae0.0
  Flags: SNMP-Traps 16384 Encapsulation: ENET2
  inet 10.100.1.2/24
```

show interfaces detail
(Aggregated Ethernet)

```
user@host> show interfaces ae0 detail
Physical interface: ae0, Enabled, Physical link is Up
  Interface index: 153, SNMP ifIndex: 59, Generation: 36
  Link-level type: Ethernet, MTU: 1514, Speed: 300mbps, Loopback: Disabled,
  Source filtering: Disabled, Flow control: Disabled, Minimum links needed: 1
```

```

Device flags   : Present Running
Interface flags: SNMP-Traps 16384
Current address: 00:05:85:8b:bf:f0, Hardware address: 00:05:85:8b:bf:f0
Last flapped   : Never
Statistics last cleared: Never
Traffic statistics:
Input bytes :                0                0 bps
Output bytes :                0                0 bps
Input packets:                0                0 pps
Output packets:                0                0 pps
Queue counters:      Queued packets  Transmitted packets      Dropped packets

0 best-effort                7375                7375                0
1 expedited-fo                0                  0                0
2 assured-forw                0                  0                0
3 network-cont               2268                2268                0

Logical interface ae0.0 (Index 72) (SNMP ifIndex 60) (Generation 18)
Flags: SNMP-Traps 16384 Encapsulation: ENET2
Statistics      Packets      pps      Bytes      bps
Bundle:
  Input :        0          0          0          0
  Output:        0          0          0          0
Link:
  fe-0/1/0.0
    Input :        0          0          0          0
    Output:        0          0          0          0
  fe-0/1/2.0
    Input :        0          0          0          0
    Output:        0          0          0          0
  fe-0/1/3.0
    Input :        0          0          0          0
    Output:        0          0          0          0
Marker Statistics:  Marker Rx      Resp Tx      Unknown Rx      Illegal Rx
fe-0/1/0.0          0          0          0          0
fe-0/1/2.0          0          0          0          0
fe-0/1/3.0          0          0          0          0
Protocol inet, MTU: 1500, Generation: 37, Route table: 0
Flags: Is-Primary, Mac-Validate-Strict
Mac-Validate Failures: Packets: 0, Bytes: 0
Destination: 10.100.1/24, Local: 10.100.1.2, Broadcast: 10.100.1.255,
Generation: 49

```

```

show interfaces extensive
(Aggregated Ethernet) user@host> show interfaces ae0 extensive
Physical interface: ae0, Enabled, Physical link is Up
Interface index: 153, SNMP ifIndex: 59, Generation: 36
Link-level type: Ethernet, MTU: 1514, Speed: 300mbps, Loopback: Disabled,
Source filtering: Disabled, Flow control: Disabled, Minimum links needed: 1
Device flags   : Present Running
Interface flags: SNMP-Traps 16384
Current address: 00:05:85:8b:bf:f0, Hardware address: 00:05:85:8b:bf:f0
Last flapped   : Never
Statistics last cleared: Never
Traffic statistics:
Input bytes :                60                0 bps
Output bytes :                0                0 bps
Input packets:                1                0 pps

```

```

Output packets:          0          0 pps
Input errors:
  Errors: 0, Drops: 0, Framing errors: 0, Runts: 0, Giants: 0,
  Policed discards: 0, Resource errors: 0
Output errors:
  Carrier transitions: 0, Errors: 0, Drops: 0, MTU errors: 0,
  Resource errors: 0
Queue counters:      Queued packets  Transmitted packets      Dropped packets

0 best-effort          7375          7375          0
1 expedited-fo          0          0          0
2 assured-forw          0          0          0
3 network-cont         2268          2268          0

```

Logical interface ae0.0 (Index 72) (SNMP ifIndex 60) (Generation 18)

Flags: SNMP-Traps 16384 Encapsulation: ENET2

Statistics	Packets	pps	Bytes	bps
------------	---------	-----	-------	-----

Bundle:

Input :	1	0	60	0
---------	---	---	----	---

Output:	0	0	0	0
---------	---	---	---	---

Link:

fe-0/1/0.0

Input :	0	0	0	0
---------	---	---	---	---

Output:	0	0	0	0
---------	---	---	---	---

fe-0/1/2.0

Input :	0	0	0	0
---------	---	---	---	---

Output:	0	0	0	0
---------	---	---	---	---

fe-0/1/3.0

Input :	1	0	60	0
---------	---	---	----	---

Output:	0	0	0	0
---------	---	---	---	---

Marker Statistics:	Marker	Rx	Resp	Tx	Unknown	Rx	Illegal	Rx
--------------------	--------	----	------	----	---------	----	---------	----

fe-0/1/0.0		0		0		0		0
------------	--	---	--	---	--	---	--	---

fe-0/1/2.0		0		0		0		0
------------	--	---	--	---	--	---	--	---

fe-0/1/3.0		0		0		0		0
------------	--	---	--	---	--	---	--	---

Protocol inet, MTU: 1500, Generation: 37, Route table: 0

Flags: None

Addresses, Flags: Is-Preferred Is-Primary

Destination: 10.100.1/24, Local: 10.100.1.2, Broadcast: 10.100.1.255,

Generation: 49

**show interfaces
extensive (Aggregated
Ethernet with VLAN
Stacking)**

```

user@host> show interfaces ae0 detail
Physical interface: ae0, Enabled, Physical link is Up
  Interface index: 155, SNMP ifIndex: 48, Generation: 186
  Link-level type: 52, MTU: 1518, Speed: 2000mbps, Loopback: Disabled, Source
  filtering: Disabled,
  Flow control: Disabled, Minimum links needed: 1, Minimum bandwidth needed: 0
  Device flags   : Present Running
  Interface flags: SNMP-Traps Internal: 0x4000
  Current address: 00:12:1e:19:3f:f0, Hardware address: 00:12:1e:19:3f:f0
  Last flapped   : Never
  Statistics last cleared: Never
Traffic statistics:
  Input bytes :                2406875                40152 bps
  Output bytes :               1124470                22056 bps
  Input packets:                 5307                  5 pps
  Output packets:               13295                 21 pps
IPv6 transit statistics:
  Input bytes :                0
  Output bytes :                0
  Input packets:                0
  Output packets:               0
Input errors:
  Errors: 0, Drops: 0, Framing errors: 0, Runts: 0, Giants: 0, Policed discards:
0, Resource errors: 0
Output errors:
  Carrier transitions: 0, Errors: 0, Drops: 0, MTU errors: 0, Resource errors:
0
Ingress queues: 4 supported, 4 in use
Queue counters:      Queued packets  Transmitted packets      Dropped packets

  0 best-effort                0                859777                0
  1 expedited-fo                0                  0                0
  2 assured-forw                0                  0                0
  3 network-cont                0                  0                0

Egress queues: 4 supported, 4 in use
Queue counters:      Queued packets  Transmitted packets      Dropped packets

  0 best-effort                0               1897615                0
  1 expedited-fo                0                  0                0
  2 assured-forw                0                  0                0
  3 network-cont                0               662505                0

Logical interface ae0.451 (Index 69) (SNMP ifIndex 167) (Generation 601)
Flags: SNMP-Traps VLAN-Tag [ 0x8100.451 ] Encapsulation: VLAN-VPLS
Statistics      Packets      pps      Bytes      bps
Bundle:
  Input :          289          0        25685        376
  Output:         1698          4       130375       3096
Link:
  ge-1/2/0.451
    Input :          289          0        25685        376
    Output:           0          0           0           0
  ge-1/2/1.451

```



```

      Input :          0          0          0          0
      Output:        1698          4        130375        3096
Marker Statistics:  Marker Rx      Resp Tx      Unknown Rx      Illegal Rx
ge-1/2/0.451          0          0          0          0
ge-1/2/1.451          0          0          0          0
Protocol vpls, MTU: 1518, Generation: 849, Route table: 3
Flags: Is-Primary

```

```

Logical interface ae0.452 (Index 70) (SNMP ifIndex 170) (Generation 602)
Flags: SNMP-Traps VLAN-Tag [ 0x8100.452 ] Encapsulation: VLAN-VPLS
Statistics      Packets      pps      Bytes      bps
Bundle:
  Input :        293          1        26003        1072
  Output:       1694          3       130057        2400
Link:
  ge-1/2/0.452
    Input :        293          1        26003        1072
    Output:       1694          3       130057        2400
  ge-1/2/1.452
    Input :          0          0          0          0
    Output:          0          0          0          0
Marker Statistics:  Marker Rx      Resp Tx      Unknown Rx      Illegal Rx
ge-1/2/0.452          0          0          0          0
ge-1/2/1.452          0          0          0          0
Protocol vpls, MTU: 1518, Generation: 850, Route table: 3
Flags: None

```

...

Published: 2009-07-16