

Comware V7 Ifmgr NETCONF XML API Data Reference

Revision Record

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Ifmgr/Interfaces

This table contains basic interface information.

XML structure

```
<Ifmgr>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Name></Name>
      <AbbreviatedName></AbbreviatedName>
      <PortIndex></PortIndex>
      <ifTypeExt></ifTypeExt>
      <ifType></ifType>
      <Description></Description>
      <AdminStatus></AdminStatus>
      <OperStatus></OperStatus>
      <ConfigSpeed></ConfigSpeed>
      <ActualSpeed></ActualSpeed>
      <ConfigDuplex></ConfigDuplex>
      <ActualDuplex></ActualDuplex>
      <LinkType></LinkType>
      <PVID></PVID>
      <InetAddressIPv4></InetAddressIPv4>
      <InetAddressIPv4Mask></InetAddressIPv4Mask>
      <PhysicalIndex></PhysicalIndex>
      <MAC></MAC>
      <PortLayer></PortLayer>
      <ForwardingAttributes></ForwardingAttributes>
      <Loopback></Loopback>
      <MDI></MDI>
      <ConfigMTU></ConfigMTU>
      <ActualMTU></ActualMTU>
      <ConfigBandwidth></ConfigBandwidth>
      <ActualBandwidth></ActualBandwidth>
      <SubPort></SubPort>
```

```

    <ForceUP></ForceUP>
  </Interface>
</Interfaces>
</Ifmgr>

```

Table description

Item	Description
Feature name	Ifmgr
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	N/A
Name	Full name of an interface	N/A	String. Length: 2 to 47 characters.	N/A
AbbreviatedName	Abbreviated name of an interface	N/A	String. Length: 2 to 47 characters.	N/A
PortIndex	Port index	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
ifTypeExt	Interface extension type	N/A	Unsigned integer.	For more information, see Table 2 .
ifType	Interface type	N/A	Unsigned integer.	Additional values for ifType are assigned by the Internet Assigned Numbers Authority (IANA), through updating the syntax of the IANA ifType textual convention.
Description	Interface description	N/A	String. Length: 1 to 255 characters.	N/A
AdminStatus	Interface administration status	N/A	Enumeration: 1—Administratively up. 2—Administratively down.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
OperStatus	Interface operation status	N/A	Enumeration: 1—up. 2—down. 3—testing. 4—unknown. 5—dormant. 6—notPresent. 7—lowerLayerDown.	For more information, see Table 1 .
ConfigSpeed	Configured speed of an interface, in kbps	N/A	Each bit represents a speed As follows: 1—Auto 2—10Mbps 4—100Mbps 8—155Mbps 16—622Mbps 32—1Gbps 64—2Gbps 128—2.5Gbps 256—4Gbps 512—8Gbps 1024—10Gbps 2048—16Gbps 4096—20Gbps 8192—40Gbps 16384—100Gbps	Examples: 32—Speed is 1000Mbps. 37—Auto-negotiation mode, and negotiation values are 100Mbps and 1000Mbps.
ActualSpeed	Actual speed of an interface, in kbps	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$.	Applicable to only Ethernet interfaces.
ConfigDuplex	Configured duplex mode of an interface	N/A	Enumeration: 1—Full. 2—Half. 3—Auto.	Applicable to only Ethernet interfaces.
ActualDuplex	Actual duplex mode of an interface	N/A	Enumeration: 1—Full. 2—Half. 3—Auto.	Applicable to only Ethernet interfaces.
LinkType	VLAN type of an interface	N/A	Enumeration: 1—Access. 2—Trunk. 3—Hybrid.	Applicable to only Layer 2 interfaces.
PVID	Port VLAN ID (PVID) of an interface	N/A	Unsigned integer. Value range: 1 to 4094.	Applicable to only Layer 2 interfaces.

Column name	Column description	Column type	Data type and restrictions	Remarks
InetAddressIPv4	Primary IPv4 address of an interface	N/A	String, dotted decimal notation.	N/A
InetAddressIPv4Mask	Primary IPv4 address mask of an interface	N/A	String, dotted decimal notation.	N/A
PhysicalIndex	Entity index of an interface	N/A	Unsigned integer.	Applicable to only Physical interfaces.
MAC	MAC address of an interface	N/A	Six groups of two hexadecimal digits, hyphen-separated.	N/A.
PortLayer	Port layer of an interface	N/A	Enumeration: 1—Layer 2 2—Layer 3	N/A
ForwardingAttributes	Forwarding attributes of an interface	N/A	Bit mask: 1: Broadcast 2: Non-Broadcast Multi-Access 4: Loopback 8: P2P 16: Multicast 32: Network Management Interface	Applicable to only Layer 3 interfaces.
Loopback	Loopback test	N/A	Enumeration: 0—No loopback 1—Internal 2—External	Applicable to only interfaces of Ethernet and AUX.
MDI	MDI mode of an interface	N/A	Enumeration: 1—MDI-II (straight-through cable) 2—MDI-X (crossover cable) 3—MDI-AUTO (auto-sensing)	Applicable to only Layer 2 Ethernet interfaces.
ConfigMTU	Configured MTU of an interface	N/A	Unsigned integer.	Applicable to only Layer 3 interfaces.
ActualMTU	Actual MTU of an interface	N/A	Unsigned integer.	Applicable to only Layer 3 interfaces.
ConfigBandwidth	Configured bandwidth of an interface	N/A	Unsigned integer. Value range: 1 to 400000000.	0 means bandwidth is not configured.
ActualBandwidth	Actual bandwidth of an interface	N/A	Unsigned integer. Value range: 1 to 400000000.	Actual bandwidth is less than configured bandwidth.
SubPort	Whether the port is sub-interface.	N/A	Boolean: true	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			false	
ForceUP	Forcibly bring up an interface.	N/A	Boolean: - true - false	Applicable to only ethernet and POS interfaces.

Table 1 Interface operation status

Value	Operation status	Remarks
1	up	When the administration status of an interface changes to up, the operation status of the interface changes to up if the interface is ready to transmit and receive network traffic.
2	down	- When the administration status of an interface changes to up, the operation status of the interface remains in the down status if a fault prevents it from going to the up status. - When the administration status of an interface changes to down, the operation status of the interface changes to down.
3	testing	No operation packets can be transmitted or received through the interface.
4	unknown	The operation status of the interface cannot be determined.
5	dormant	When the administration status of an interface changes to up, the operation status of the interface changes to dormant if the interface is waiting for external actions (such as a serial line waiting for an incoming connection).
6	notPresent	When the administration status of an interface changes to up, the operation status of an interface remains in the notPresent status if the interface has missing components (typically hardware).
7	lowerLayerDown	The lower-layer interfaces are down.

Table 2 Interface extension types

Value	Interface type	Description
0	IF_COMMON_TYPE	General interface.
1	IF_AM_TYPE	Analog modem interface.
2	IF_ASY_TYPE	Asynchronous serial port.
3	IF_IMA_TYPE	IMA interface.
4	IF_ATM_TYPE	ATM interface.
5	IF_AUX_TYPE	AUX interface.
6	IF_BRI_TYPE	ISDN BRI interface.
7	IF_BVI_TYPE	Bridge-group virtual interface.
8	IF_CONSOLE_TYPE	Console interface.
9	IF_CPOS_TYPE	CPOS interface.
10	IF_DIALER_TYPE	Dialer interface.
11	IF_LOCAL_VA_TYPE	Local VA interface, bound to a physical interface.
12	IF_E1_TYPE	E1 interface.

Value	Interface type	Description
13	IF_E3_TYPE	E3 interface.
14	IF_INETH_TYPE	Internal Ethernet interface.
15	IF_INLOOPBACK_TYPE	Internal loopback interface.
16	IF_LOOPBACK_TYPE	Loopback interface.
17	IF_ENCRYPT_TYPE	Encryption interface.
18	IF_L2ETHERNET_TYPE	Layer 2 FE interface.
19	IF_L2GE_TYPE	Layer 2 GE interface.
20	IF_L2VE_TYPE	Layer 2 VE interface.
21	IF_L2XGE_TYPE	Layer 2 10-GE interface.
22	IF_L3ETHERNET_TYPE	Layer 3 FE interface.
23	IF_L3GE_TYPE	Layer 3 GE interface.
24	IF_L3VE_TYPE	Layer 3 VE interface.
25	IF_L3XGE_TYPE	Layer 3 10-GE interface.
26	IF_ME_TYPE	Management Ethernet interface.
27	IF_MFR_TYPE	MFR interface.
28	IF_MGE_TYPE	Management GE interface.
29	IF_MPGROUP_TYPE	MP-group interface.
30	IF_NULL_TYPE	Null interface.
31	IF_POS_TYPE	POS interface.
32	IF_RPR_POS_TYPE	RPR POS physical interface.
33	IF_RPR_XGE_TYPE	RPR 10-GE physical interface.
34	IF_RPR_GE_TYPE	RPR GE physical interface.
35	IF_SERIAL_TYPE	Serial interface.
36	IF_SUBSCRIBER_LINE_TYPE	Subscriber line interface.
37	IF_T1_TYPE	T1 interface.
38	IF_T3_TYPE	T3 interface.
39	IF_TUNNEL_TYPE	Tunnel interface.
40	IF_GLOBAL_VA_TYPE	Global VA interface, bound to a global logical interface.
41	IF_VLAN_TYPE	VLAN interface.
42	IF_VT_TYPE	VT interface.
43	IF_RADIO_DOT11_TYPE	WLAN-Radio interface.
44	IF_WLAN_ESS_TYPE	WLAN ESS interface.
45	IF_WLAN_DBSS_TYPE	WLAN DBSS interface.
46	IF_WLAN_BSS_TYPE	WLAN BSS interface.
47	IF_WLAN_ETH_TYPE	WLAN Ethernet interface.
48	IF_WLAN_TUN_TYPE	WLAN tunnel interface.

Value	Interface type	Description
49	IF_OLT_TYPE	OLT interface.
50	IF_ONU_TYPE	ONU interface.
51	IF_MTUNNEL_TYPE	M-Tunnel interface.
52	IF_CELLULAR_TYPE	Cellular interface.
53	IF_INASY_TYPE	Internal asynchronous serial interface.
54	IF_L2RPR_TYPE	Layer 2 RPR logical interface.
55	IF_L3RPR_TYPE	Layer 3 RPR logical interface.
56	IF_BAGG_TYPE	Layer 2 aggregate interface.
57	IF_REGISTER_TUNNEL_TYPE	Register-Tunnel interface.
58	IF_LOOPFE_TYPE	Loopback FE interface.
59	IF_LOOPGE_TYPE	Loopback GE interface.
60	IF_LOOPXGE_TYPE	Loopback 10-GE interface.
61	IF_MIRRORFE_TYPE	Mirroring FE interface.
62	IF_MIRRORGE_TYPE	Mirroring GE interface.
63	IF_MIRRORXGE_TYPE	Mirroring 10-GE interface.
64	IF_IDSFE_TYPE	IDS FE interface.
65	IF_IDSGE_TYPE	IDS GE interface.
66	IF_IDSXGE_TYPE	IDS 10-GE interface.
67	IF_RAGG_TYPE	Layer 3 aggregate interface.
68	IF_L2FGE_TYPE	Layer 2 40-GE interface.
69	IF_L2HGE_TYPE	Layer 2 100-GE interface.
70	IF_L3FGE_TYPE	Layer 3 40-GE interface.
71	IF_L3HGE_TYPE	Layer 3 100-GE interface.
72	IF_LOOPFGE_TYPE	Loopback 40-GE interface.
73	IF_LOOPHGE_TYPE	Loopback 100-GE interface.
74	IF_MIRRORFGE_TYPE	Mirroring 40-GE interface.
75	IF_MIRRORHGE_TYPE	Mirroring 100-GE interface.
76	IF_IDSFGGE_TYPE	IDS 40-GE interface.
77	IF_IDSHGE_TYPE	IDS 100-GE interface.
78	IF_FC_TYPE	FC interface.
79	IF_VFC_TYPE	VFC interface.
80	IF_FCB_TYPE	FC bundle interface.
81	IF_EVI_LINK_TYPE	EVI-link interface.
82	IF_SCHANNEL_TYPE	S-channel interface.
83	IF_FCM_TYPE	FCM interface.
84	IF_VPPP_TYPE	Virtual PPP interface.

Value	Interface type	Description
85	IF_TRILL_REMOTE_TYPE	Remote TRILL interface.
86	IF_HDLCBUNDLE_TYPE	HDLC bundle interface.
87	IF_GSCHANNEL_TYPE	Aggregate S-channel interface.
88	IF_L2TGE_TYPE	Layer 2 20-GE interface.
89	IF_L3TGE_TYPE	Layer 3 20-GE interface.
90	IF_LOOPTGE_TYPE	Loopback 20-GE interface.
91	IF_MIRRORTGE_TYPE	Mirroring 20-GE interface.
92	IF_IDSTGE_TYPE	IDS 20-GE interface.
93	IF_AC_TYPE	AC interface.
94	IF_UPW_TYPE	U-PW interface.
95	IF_NPW_TYPE	N-PW interface.
96	IF_TUNNEL_BUNDLE_TYPE	Tunnel bundle interface.
97	IF_EFM_TYPE	EFM interface.
98	IF_MAPPED_TYPE	Mapped interface.
99	IF_CBGE_TYPE	CBGE interface.
100	IF_CBXGE_TYPE	CBXGE interface.
101	IF_CBFGE_TYPE	CBFGE interface.
102	IF_CBHGE_TYPE	CBHGE interface.
103	IF_PEX_TYPE	PEX interface.
104	IF_VE_L2VPN_TYPE	L2VPN virtual Ethernet interface
105	IF_VE_L3VPN_TYPE	L3VPN virtual Ethernet interface
106	IF_BLADE_TYPE	Blade interface
107	IF_BLAGG_TYPE	Blade aggregation interface
108	IF_ETHCHANNEL_TYPE	
109	IF_BETH_TYPE	
110	IF_RETH_TYPE	
111	IF_CEM_TYPE	
128	IF_MAX_TYPE	N/A

Ifmgr/TrafficStatistics/Interfaces

This table contains interface traffic statistics during specific sampling periods.

XML structure

```
<Ifmgr>
  <TrafficStatistics>
```

```

<Interfaces>
  <Interface>
    <IfIndex></IfIndex>
    <Name></Name>
    <Interval></Interval>
    <InPkts></InPkts>
    <OutPkts></OutPkts>
    <InOctets></InOctets>
    <OutOctets></OutOctets>
    <InBits></InBits>
    <OutBits></OutBits>
  </Interface>
</Interfaces>
</TrafficStatistics>
</Ifmgr>

```

Table description

Item	Description
Feature name	Ifmgr
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None

Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	Index	Unsigned integer.
Name	Full name of an interface	N/A	String. Length: 2 to 47 characters.
Interval	Sampling interval of an interface, in seconds	N/A	Unsigned integer.
InPkts	Number of inbound packets during a specific period	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$.
OutPkts	Number of outbound packets during a specific period	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$.
InOctets	Number of inbound bytes during a specific period	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$.
OutOctets	Number of outbound bytes during a specific period	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$.
InBits	Number of inbound bits	N/A	Unsigned integer.

Column name	Column description	Column type	Data type and restrictions
	during a specific period		Value range: 0 to $2^{64} - 1$.
OutBits	Number of outbound bits during a specific period	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$.

Ifmgr/TrafficStatistics/Interval

This table contains traffic sampling interval information of all interfaces.

XML structure

```

<Ifmgr>
  <TrafficStatistics>
    <Interval>
      <Configurable></Configurable>
      <Interval></Interval>
    </Interval>
  </TrafficStatistics>
</Ifmgr>

```

Table description

Item	Description
Feature name	Ifmgr
Table name	Interval
Table type	Single-instance table
Row name	None
Restrictions	None

Columns

Column name	Column description	Column type	Data type and restrictions
Configurable	Whether the sampling interval for all interfaces can be configured.	N/A	Boolean: • true • false
Interval	Sampling interval of all interfaces, in seconds.	N/A	Unsigned integer. It is valid only when "Configurable" above is true.

Ifmgr/Statistics

This table contains interface statistics.

XML structure

```
<Ifmgr>
  <Statistics>
    <Interface>
      <IfIndex></IfIndex>
      <Name></Name>
      <AbbreviatedName></AbbreviatedName>
      <InOctets></InOctets>
      <InUcastPkts></InUcastPkts>
      <InNUcastPkts></InNUcastPkts>
      <InDiscards></InDiscards>
      <InErrors></InErrors>
      <InUnknownProtos></InUnknownProtos>
      <OutOctets></OutOctets>
      <OutUcastPkts></OutUcastPkts>
      <OutNUcastPkts></OutNUcastPkts>
      <OutDiscards></OutDiscards>
      <OutErrors></OutErrors>
      <LastClear></LastClear>
    </Interface>
  </Statistics>
</Ifmgr>
```

Table description

Item	Description
Feature name	Ifmgr
Table name	Statistics
Table type	Multi-instance table
Row name	Interface
Restrictions	The statistics can be cleared.

Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index.	Index	Unsigned integer.
Name	Full name of an interface.	N/A	String. Length: 2 to 47 characters.

Column name	Column description	Column type	Data type and restrictions
AbbreviatedName	Abbreviated name of an interface.	N/A	String. Length: 2 to 47 characters.
InOctets	Number of inbound bytes on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$.
InUcastPkts	Number of inbound unicast packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$.
InNUcastPkts	Number of inbound non-unicast packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$.
InDiscards	Number of discarded inbound packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$.
InErrors	Number of errored inbound packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$.
InUnknownProtocols	Number of unsupported and unknown inbound packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$.
OutOctets	Number of outbound bytes on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$.
OutUcastPkts	Number of outbound unicast packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$.
OutNUcastPkts	Number of outbound non-unicast packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$.
OutDiscards	Number of discarded outbound packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$.
OutErrors	Number of errored outbound packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$.
LastClear	Local time when the statistics on an interface were cleared most recently.	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.

Ifmgr/Ports

This table contains port information. such as all physical Ethernet interfaces, Layer 2 aggregate interface, Layer 2 VE interface, Layer 2 RPR logical interface, WLAN ESS interface, WLAN BSS interface, WLAN DBSS interface, WLAN tunnel interface, S-channel interface, Aggregate S-channel interface and other logical interfaces which are not Layer 2 Ethernet subinterfaces.

XML structure

```
<Ifmgr>
  <Ports>
    <Port>
      <PortIndex></PortIndex>
      <Name></Name>
      <IfIndex></IfIndex>
    </Port>
  </Ports>
</Ifmgr>
```

Table description

Item	Description
Feature name	Ifmgr
Table name	Ports
Table type	Multi-instance table
Row name	Port
Restrictions	None

Columns

Column name	Column description	Column type	Data type and restrictions
PortIndex	Port index	Index	Unsigned integer.
Name	Full name of an interface	N/A	String. Length: 2 to 47 characters.
IfIndex	Interface index	N/A	Unsigned integer.

Ifmgr/InterfaceCapabilities

This table contains port capability information.

XML structure

```
<Ifmgr>
  <InterfaceCapabilities>
    <Interface>
      <IfIndex></IfIndex>
      <Configurable></Configurable>
      <Shutdown></Shutdown>
      <Speed></Speed>
    </Interface>
  </InterfaceCapabilities>
</Ifmgr>
```

```

    <AutoSpeed></AutoSpeed>
    <Duplex></Duplex>
    <PortLayer></PortLayer>
    <Loopback></Loopback>
    <MDI></MDI>
    <Bandwidth></Bandwidth>
    <MinMTU></MinMTU>
    <MaxMTU></MaxMTU>
    <MinSubNum></MinSubNum>
    <MaxSubNum></MaxSubNum>
    <MaxCreateSubNum></MaxCreateSubNum>
    <ContextAllocType></ContextAllocType>
    <Removable></Removable>
    <Interval></Interval>
    <ForceUP></ForceUP>
    <LoopbackAutoStop></LoopbackAutoStop>
  </Interface>
</InterfaceCapabilities>
</Ifmgr>

```

Table description

Item	Description
Feature name	Ifmgr
Table name	InterfaceCapabilities
Table type	Multi-instance table
Row name	Interface
Restrictions	None

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	IfIndex
Configurable	Whether the interface is configurable.	N/A	Boolean: • true • false	N/A
Shutdown	Whether the interface can be shutdown manually.	N/A	Boolean: • true • false	N/A
Speed	Mode s of speed which can be configured.	N/A	Each bit represents a speed. As follows: • 1 —Auto	Example: 38 —Speed 10Mbps,

Column name	Column description	Column type	Data type and restrictions	Remarks
			• 2—10Mbps • 4—100Mbps • 8—155Mbps • 16—622Mbps • 32—1Gbps • 64—2Gbps • 128—2.5Gbps • 256—4Gbps • 512—8Gbps • 1024—10Gbps • 2048—16Gbps • 4096—20Gbps • 8192—40Gbps • 16384—100Gbps	100Mbps and 1Gbps are configurable.
AutoSpeed	Modes of auto-negotiation speed which can be configured.	N/A	Each bit represents a speed. As follows: • 1—10Mbps • 2—100Mbps • 4—1Gbps	Example: 6—auto-negotiation speed 100Mbps and 1Gbps are configurable.
Duplex	Modes of duplex which can be configured.	N/A	Each bit represents a kind of duplex mode. As follows: • 1—Full • 2—Half • 4—Auto	Applicable to only Ethernet interfaces. Example: 7—Duplex mode 'Full', 'Half' Auto 'Half' are configurable.
PortLayer	Whether the port layer can be changed.	N/A	Boolean: • true • false	Applicable to only Ethernet interfaces.
Loopback	Whether the loopback test can be configured.	N/A	Boolean: • true • false	Applicable to only Ethernet interfaces and AUX.
MDI	Types of MDI which can be configured.	N/A	Each bit represents a type of the line connected to the port. • 1: mdi (straight-through cable) • 2: mdix (crossover cable) • 4: automdix (auto-sensing)	Applicable to only Layer 2 Ethernet interfaces. Example: 7—'mdi', 'mdix' and 'automdix' are configurable.
Bandwidth	Whether the bandwidth can be configured.	N/A	Boolean: • true • false	N/A
MinMTU	The minimum MTU which can	N/A	Unsigned integer.	Applicable to only Layer 3 interfaces.

Column name	Column description	Column type	Data type and restrictions	Remarks
	be configured.			
MaxMTU	The maximum MTU which can be configured.	N/A	Unsigned integer.	Applicable to only layer 3 interfaces.
MinSubNum	Minimum sub-interface number.	N/A	Unsigned integer.	N/A
MaxSubNum	Maximum sub-interface number.	N/A	Unsigned integer.	N/A
MaxCreatesubNum	The total numbers of sub-interface which can be created.	N/A	Unsigned integer.	N/A
ContextAllocType	The allocation type of an interface for CONTEXT.	N/A	Each bit represents a allocation type. As follows: 1—The allocation type is shared. 2—The allocation type is exclusive.	Example: 3—The allocation types can be both shared and exclusive.
Removable	Whether the interface can be deleted.	N/A	Boolean: - true - false	N/A
Interval	Whether the sampling interval can be configured.	N/A	Boolean: true false	
ForceUP	Whether port force up can be configured.	N/A	Boolean: true false	Applicable to only ethernet and POS interfaces.
LoopbackAutoStop	Whether the loopback detection can be auto stop.	N/A	Boolean: true false	

Ifmgr/TypeCapabilities

This table contains interface type capability information.

XML structure

```
<Ifmgr>
  <TypeCapabilities>
```

```

    <Capability>
      <IfTypeExt></IfTypeExt>
      <MinNum></MinNum>
      <MaxNum></MaxNum>
      <MinSubNum></MinSubNum>
      <MaxSubNum></MaxSubNum>
      <MaxCreateNum></MaxCreateNum>
      <MaxCreateSubNum></MaxCreateSubNum>
      <MAC></MAC>
    </Capability>
  </TypeCapabilities>
</Ifmgr>

```

Table description

Item	Description
Feature name	Ifmgr
Table name	TypeCapabilities
Table type	Multi-instance table
Row name	Capability
Restrictions	None

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfTypeExt	Interface Type.	Index	Unsigned integer.	Refer to ifTypeExt object in table of Interfaces.
MinNum	Minimum interface number.	N/A	Unsigned integer.	N/A
MaxNum	Maximum interface number.	N/A	Unsigned integer.	N/A
MinSubNum	Minimum sub-interface number.	N/A	Unsigned integer.	Refer to MinSubNum in table of InterfaceCapabilities.
MaxSubNum	Maximum sub-interface number.	N/A	Unsigned integer.	Refer to MaxSubNum in table of InterfaceCapabilities.
MaxCreateNu	Total interface	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
m	numbers which can be created.			
MaxCreateSubNum	Total sub-interface numbers which can be created.	N/A	Unsigned integer.	Refer to MaxCreateSubNum in table of InterfaceCapabilities.
MAC	Check whether a MAC address can be configured.	N/A	Boolean: • true • false	N/A

Ifmgr/EthInterfaces

This table contains ethernet interface information.

XML structure

```

<Ifmgr>
  <EthInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Combo></Combo>
      <FlowControl></FlowControl>
      <AutoPowerDown></AutoPowerDown>
      <Jumboframe></Jumboframe>
      <BroadcastSuppression>
        <ConfigValue></ConfigValue>
        <ActualValue></ActualValue>
        <Unit></Unit>
      </BroadcastSuppression>
      <MulticastSuppression>
        <ConfigValue></ConfigValue>
        <ActualValue></ActualValue>
        <Unit></Unit>
      </MulticastSuppression>
      <UnknownUnicastSuppression>
        <ConfigValue></ConfigValue>
        <ActualValue></ActualValue>
        <Unit></Unit>
      </UnknownUnicastSuppression>
      <BPDUUDrop></BPDUUDrop>
      <EEE></EEE>
      <ConnectMode></ConnectMode>
    </Interface>
  </EthInterfaces>
</Ifmgr>

```

```

    </EthInterfaces>
  </Ifmgr>

```

Table description

Item	Description
Feature name	Ifmgr
Table name	EthInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	Applicable to only Ethernet interfaces.

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	N/A
Combo	Combo mode of an interface	N/A	Enumeration: 1—fiber mode 2—copper mode	Applicable to only Ethernet interfaces.
FlowControl	Flow control information of an interface	N/A	Enumeration: 1—Enable flow control 2—Disable 3—Only enable flow control packet receiving	Applicable to only Physical interfaces.
AutoPowerDown	Port auto power down	N/A	Boolean: - true - false	Applicable to only Physical interfaces.
Jumboframe	Jumbo frame information of an interface	N/A	Unsigned integer, the value is 0 if jumbo frame is disable on an interface.	
BroadcastSuppression	Broadcast suppression information of an interface	N/A	Include: - Value - Unit	Applicable to only Layer 2 Ethernet interfaces.
ConfigValue	Configured broadcast suppression value of an interface	N/A	Unsigned integer. Value range: - ratio: 0 to 100 - pps: 0 to $1.4881 \times$ the maximum interface rate. kbps: 0 to the maximum interface rate	
ActualValue	Actual	N/A	Unsigned integer.	

Column name	Column description	Column type	Data type and restrictions	Remarks
Value	broadcast suppression value of an interface		Value range: • ratio: 0 to 100 • pps: 0 to 1.4881 × the maximum interface rate. • kbps: 0 to the maximum interface rate	
Unit	Broadcast suppression unit	N/A	Enumeration: • 1—ratio • 2—pps • 3—kbps	
MulticastSuppression	Multicast suppression information of an interface	N/A	Include: • Value • Unit	Applicable to only Layer 2 Ethernet interfaces.
ConfigValue	Configured multicast suppression value of an interface	N/A	Unsigned integer. Value range: • ratio: 0 to 100 • pps: 0 to 1.4881 × the maximum interface rate. • kbps: 0 to the maximum interface rate	
ActualValue	Actual multicast suppression value of an interface	N/A	Unsigned integer. Value range: • ratio: 0 to 100 • pps: 0 to 1.4881 × the maximum interface rate. • kbps: 0 to the maximum interface rate	
Unit	Multicast suppression unit	N/A	Enumeration: • 1—ratio • 2—pps • 3—kbps	
UnknownUnicastSuppression	UnknownUnicast suppression information of an interface	N/A	Include: • Value • Unit	Applicable to only Layer 2 Ethernet interfaces.
ConfigValue	Configured unknownUnicast suppression value of an interface	N/A	Unsigned integer. Value range: • ratio: 0 to 100 • pps: 0 to 1.4881 × the maximum interface rate. • kbps: 0 to the maximum interface rate	
ActualValue	Actual unknownUnicast	N/A	Unsigned integer. Value range:	

Column name	Column description	Column type	Data type and restrictions	Remarks
	st suppression value of an interface		• ratio: 0 to 100 • pps: 0 to $1.4881 \times$ the maximum interface rate. • kbps: 0 to the maximum interface rate	
Unit	UnknownUnicast suppression unit	N/A	Enumeration: • 1—ratio • 2—pps • 3—kbps	
BPDUDrop	Whether any type of IEEE BPDU is drop on the port.	N/A	Boolean: • true • false	Applicable to only Layer 2 Physical interfaces.
EEE	Whether energy efficient ethernet is enable on the port.	N/A	Boolean: • true • false	Applicable to only Physical interfaces.
ConnectMode	Port connection mode of an interface.	N/A	Enumeration: • 1—Normal connection mode • 2—Extend connection mode	Applicable to only Layer 2 10GE interfaces.

Ifmgr/EthInterfaceCapabilities

This table contains ethernet port capability information.

XML structure

```

<Ifmgr>
  <EthInterfaceCapabilities>
    <Interface>
      <IfIndex></IfIndex>
      <Combo></Combo>
      <StormConstrain></StormConstrain>
      <FlowControl></FlowControl>
      <AutoPowerDown></AutoPowerDown>
      <MinJumboframe></MinJumboframe>
      <MaxJumboframe></MaxJumboframe>
      <BPDUDrop></BPDUDrop>
      <EEE></EEE>
      <ConnectMode></ConnectMode>
    </Interface>
  </EthInterfaceCapabilities>
</Ifmgr>

```

Table description

Item	Description
Feature name	lfmgr
Table name	EthInterfaceCapabilities
Table type	Multi-instance table
Row name	Interface
Restrictions	Applicable to only Ethernet interfaces.

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
lflindex	Interface index.	Index	Unsigned integer.	lflindex
Combo	Whether the fiber mode or copper mode can be activated.	N/A	Boolean: • true • false	
StormConstraint	Whether storm constrain can be configured.	N/A	Boolean: • true • false	Applicable to only L2 Ethernet interfaces.
FlowControl	Whether flow control can be configured.	N/A	Boolean: • true • false	Applicable to only physical interfaces.
AutoPowerDown	Whether auto power down can be configured.	N/A	Boolean: • true • false	Applicable to only physical interfaces.
MinJumboFrame	The minimum jumboframe which can be configured.	N/A	Unsigned integer.	Applicable to only physical interfaces.
MaxJumboFrame	The maximum jumboframe which can be configured.	N/A	Unsigned integer.	Applicable to only physical interfaces.
BPDUDrop	whether bpdu drop can be configured.	N/A	Boolean: • true • false	Applicable to only Layer 2 Physical interfaces.
EEE	whether energy efficient ethernet can be configured.	N/A	Boolean: • true • false	Applicable to only Physical interfaces.

Column name	Column description	Column type	Data type and restrictions	Remarks
ConnectMode	Whether port connection mode can be configured.	N/A	Boolean: • true • false	Applicable to only Layer 2 10GE interfaces.

Ifmgr/StormConstrain/Interfaces

This table contains interface storm constrain information.

XML structure

```

<Ifmgr>
  <StormConstrain>
    <Interfaces>
      <Interface>
        <IfIndex></IfIndex>
        <CtlMode></CtlMode>
        <Trap></Trap>
        <Log></Log>
        <Broadcast>
          <Upper></Upper>
          <Lower></Lower>
          <Unit></Unit>
          <Forward></Forward>
          <SwitchNum></SwitchNum>
        </Broadcast>
        <Multicast>
          <Upper></Upper>
          <Lower></Lower>
          <Unit></Unit>
          <Forward></Forward>
          <SwitchNum></SwitchNum>
        </Multicast>
        <UnknownUnitcast>
          <Upper></Upper>
          <Lower></Lower>
          <Unit></Unit>
          <Forward></Forward>
          <SwitchNum></SwitchNum>
        </UnknownUnitcast>
      </Interface>
    </Interfaces>
  </StormConstrain>
</Ifmgr>

```

Table description

Item	Description
Feature name	Ifmgr
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	Applicable to only Layer 2 physical Ethernet interfaces.

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	IfIndex
CtlMode	Storm constrain protective action	N/A	Enumeration: • 0—N/A • 1—Block • 2—Shutdown	
Trap	Event trap switch	N/A	Boolean: • true • false	
Log	Event log switch	N/A	Boolean: • true • false	
Broadcast	Broadcast storm constrain information of an interface	N/A	Include: • Upper • Lower • Unit • Forward • SwitchNum	
Upper	Broadcast upper threshold value	N/A	Unsigned integer.Value range: • pps: 1 to $1.4881 \times$ the maximum interface rate • ratio: 1 to 100 • kbps: 1 to the maximum interface rate	
Lower	Broadcast lower threshold value	N/A	Unsigned integer.Value range: • pps: 1 to $1.4881 \times$ the maximum interface rate • ratio: 1 to 100 • kbps: 1 to the maximum interface rate	

Column name	Column description	Column type	Data type and restrictions	Remarks
Unit	Broadcast threshold unit	N/A	Enumeration: 1—pps 2—ratio 3—kbps	
Forward	Broadcast traffic forwarding status	N/A	Enumeration: 0—Forwarding 1—Block 2—Shutdown	
SwitchNum	Number of broadcast traffic forwarding state changes	N/A	Unsigned integer.	
Multicast	Multicast storm constrain information of an interface	N/A	Include: - Upper - Lower - Unit - Forward - SwitchNum	
Upper	Multicast upper threshold value	N/A	Unsigned integer.Value range: - pps: 1 to $1.4881 \times$ the maximum interface rate - ratio: 1 to 100 - kbps: 1 to the maximum interface rate	
Lower	Multicast lower threshold value	N/A	Unsigned integer.Value range: - pps: 1 to $1.4881 \times$ the maximum interface rate - ratio: 1 to 100 - kbps: 1 to the maximum interface rate	
Unit	Multicast threshold unit	N/A	Enumeration: 1—pps 2—ratio 3—kbps	
Forward	Multicast traffic forwarding status	N/A	Enumeration: 0—Forwarding 1—Block 2—Shutdown	
SwitchNum	Number of multicast traffic forwarding state changes	N/A	Unsigned integer.	
UnknownUnitcast	Unknown-unitcast storm constrain information of an interface	N/A	Include: - Upper - Lower	

Column name	Column description	Column type	Data type and restrictions	Remarks
			- Unit - Forward - SwitchNum	
Upper	Unknown-unitcast upper threshold value	N/A	Unsigned integer.Value range: - pps: 1 to $1.4881 \times$ the maximum interface rate - ratio: 1 to 100 - kbps: 1 to the maximum interface rate	
Lower	Unknown-unitcast lower threshold value	N/A	Unsigned integer.Value range: - pps: 1 to $1.4881 \times$ the maximum interface rate - ratio: 1 to 100 - kbps: 1 to the maximum interface rate	
Unit	Unknown-unitcast unit	N/A	Enumeration: 1—pps 2—ratio 3—kbps	
Forward	Unknown-unitcast traffic forwarding status	N/A	Enumeration: 0—Forwarding 1—Block 2—Shutdown	
SwitchNum	Number of unknown-unitcast traffic forwarding state changes	N/A	Unsigned integer.	

Ifmgr/StormConstrain/Interval

This table contains storm constrain traffic collection interval information.

XML structure

```

<Ifmgr>
  <StormConstrain>
    <Interval>
      <Interval></Interval>
    </Interval>
  </StormConstrain>
</Ifmgr>

```

Table description

Item	Description
Feature name	Ifmgr
Table name	Interval
Table type	Single-instance table
Row name	N/A
Restrictions	

Columns

Column name	Column description	Column type	Data type and restrictions
Interval	Traffic statistics collection interval for storm constrain on all interfaces, in seconds	N/A	Unsigned integer. Value range: 1 to 300.

Ifmgr/PortIsolation/Groups

This table contains port isolation groups information.

XML structure

```
<Ifmgr>
  <PortIsolation>
    <Groups>
      <Group>
        <IsolatedGroupID></IsolatedGroupID>
        <InterfaceList></InterfaceList>
      </Group>
    </Groups>
  </PortIsolation>
</Ifmgr>
```

Table description

Item	Description
Feature name	Ifmgr
Table name	Groups
Table type	Multi-instance table
Row name	Group

Restrictions	Applicable to only Layer 2 interfaces of Ethernet and aggregation.
--------------	--

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IsolatedGroup ID	Isolation group ID.	Index	Unsigned integer.	
InterfaceList	Interface IfIndex list of an isolation group ID.	N/A	Number string. It is a comma-separated list of IfIndex items. An item can be an individual IfIndex or an IfIndex range. Use a hyphen (-) to separate the start and end IfIndexes of a range. The string must not end with a comma or hyphen, or include any whitespace characters.	Examples: 1,2,3,5-8,10-20 Example: 1,2,3,5-8,10-20. Available IfIndexes are in the IfIndex column in the Ifmgr/Interfaces table.

Ifmgr/PortIsolation/Interfaces

This table contains interface isolation information.

XML structure

```

<Ifmgr>
  <PortIsolation>
    <Interfaces>
      <Interface>
        <IfIndex></IfIndex>
        <IsolatedGroupID></IsolatedGroupID>
      </Interface>
    </Interfaces>
  </PortIsolation>
</Ifmgr>

```

Table description

Item	Description
Feature name	Ifmgr
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface

Restrictions	Applicable to only Layer 2 interfaces of Ethernet and aggregation.
--------------	--

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	IfIndex
IsolatedGroup ID	Port isolation group ID of an interface	N/A	Unsigned integer.	

Ifmgr/PortIsolation/Capabilities

This table contains port isolation groups capabilities on device.

XML structure

```
<Ifmgr>
  <PortIsolation>
    <Capabilities>
      <MaxGroupNum></MaxGroupNum>
    </Capabilities>
  </PortIsolation>
</Ifmgr>
```

Table description

Item	Description
Feature name	Ifmgr
Table name	Capabilities
Table type	Single-instance table
Row name	N/A
Restrictions	

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MaxGroupNum	The maximum port isolation group number.	N/A	Unsigned integer.	