

Comware V7 VLAN NETCONF XML API Configuration Reference

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VLAN

VLAN/VLANs

This table contains basic VLAN information.

XML structure

```
<VLAN>
  <VLANs>
    <VLANID>
      <ID></ID>
      <Description></Description>
      <Name></Name>
      <AccessPortList></AccessPortList>
      <Ipv4>
        <Ipv4Address></Ipv4Address>
        <Ipv4Mask></Ipv4Mask>
      </Ipv4>
    </VLANID>
  </VLANs>
</VLAN>
```

Table description

Item	Description
Feature name	VLAN
Table name	VLANs
Table type	Multi-instance table
Row name	VLANID
Restrictions	None
Support for row creation and deletion	Yes

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094.	N/A
Description	VLAN description	N/A	String.	Example: VLAN 0001.

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 255 characters. Default: VLAN <i>vlan-id</i> . The <i>vlan id</i> argument uses the four-digit form. If the VLAN ID has less than four digits, leading zeros are added.	
Name	VLAN name	N/A	String. Length: 1 to 32 characters. Default: VLAN <i>vlan-id</i> . The <i>vlan id</i> argument uses the four-digit form. If the VLAN ID has less than four digits, leading zeros are added.	Example: VLAN 0001.
AccessPortList	Access port list of the VLAN	N/A	Number string. It is a comma-separated list of port index items. An item can be an individual port index or a port index range. Use a hyphen (-) to separate the start and end port indexes of a range. The string cannot end with a comma or hyphen, or include any whitespace characters. By default, a VLAN does not have an access port list.	Example: 1,2,3,5-8,10-20. Available port indexes are in the PortIndex column in the Ifmgr/Interfaces table.
Ipv4	IPv4 address of the VLAN interface	Data structure	Members include: - Ipv4Address. - Ipv4Mask.	You must configure both the IP address and mask if the operation is merge , create , or replace . You can configure only the IP address if the operation is delete or remove .
Ipv4Address	IPv4 address of the VLAN interface	N/A	String, dotted decimal notation.	Example: 1.1.1.1. When you perform the merge , create , or replace operation, the system creates the VLAN interface automatically if the VLAN interface has not been created.
Ipv4Mask	IPv4 address	N/A	String, dotted decimal	Example: 55.255.255.0.

Column name	Column description	Column type	Data type and restrictions	Remarks
	mask		notation.	

VLAN/AccessInterfaces

This table contains information about Access ports.

XML structure

```
<VLAN>
  <AccessInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <PVID></PVID>
    </Interface>
  </AccessInterfaces>
</VLAN>
```

Table description

Item	Description
Feature name	VLAN
Table name	AccessInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.
Support for row creation and deletion	No

Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	Index	Unsigned integer.
PVID	Port VLAN ID	N/A	Value range: 1 to 4094.

VLAN/TrunkInterfaces

This table contains information about Trunk ports.

XML structure

```
<VLAN>
  <TrunkInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <PermitVlanList></PermitVlanList>
      <PVID></PVID>
    </Interface>
  </TrunkInterfaces>
</VLAN>
```

Table description

Item	Description
Feature name	VLAN
Table name	TrunkInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.
Support for row creation and deletion	No

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	N/A
PermitVlanList	List of permitted VLANs on the port	N/A	Number string. It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range. The string cannot end with a comma or hyphen, or include any whitespace characters.	Example: 1,2,3,5-8,10-20.
PVID	Port VLAN ID	N/A	Value range: 1 to 4094.	N/A

VLAN/HybridInterfaces

This table contains information about Hybrid ports.

XML structure

```
<VLAN>
  <HybridInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <UntaggedVlanList></UntaggedVlanList>
      <TaggedVlanList></TaggedVlanList>
      <PVID></PVID>
    </Interface>
  </HybridInterfaces>
</VLAN>
```

Table description

Item	Description
Feature name	VLAN
Table name	HybridInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.
Support for row creation and deletion	No

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	N/A
UntaggedVlanList	List of VLANs to which the port is assigned as an untagged VLAN member	N/A	Number string. It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range. The string cannot end with a comma or hyphen, or include any whitespace characters.	Example: 1,2,3,5-8,10-20. Do not specify a VLAN both in this column and the TaggedVlanList column.

Column name	Column description	Column type	Data type and restrictions	Remarks
TaggedVlanList	List of VLANs to which the port is assigned as a tagged VLAN member	N/A	Number string. It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range. The string cannot end with a comma or hyphen, or include any whitespace characters. By default, a port is not assigned to any VLANs as a tagged member.	Example: 1,2,3,5-8,10-20. Do not specify a VLAN both in this column and the UntaggedVlanList column.
PVID	Port VLAN ID	N/A	Value range: 1 to 4094.	N/A

VLAN/QinQ

This table contains QinQ information of all ports.

XML structure

```

<VLAN>
  <QinQ>
    <ServiceTPID></ServiceTPID>
    <CustomerTPID></CustomerTPID>
  </QinQ>
</VLAN>

```

Table description

Item	Description
Feature name	VLAN
Table name	QinQ
Table type	Single-instance table
Row name	None
Restrictions	None

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServiceTPID	TPID value in the service VLAN tag.	N/A	Unsigned integer. Value range: 0x0001 to 0xFFFF.	Excluding the reserved EtherType values listed in Table 1.
CustomerTPID	TPID value in the customer VLAN tag.	N/A	Unsigned integer. Value range: 0x0001 to 0xFFFF.	Excluding the reserved EtherType values listed in Table 1.

Table 1 Reserved EtherType values

Protocol type	Value
ARP	0x0806
PUP	0x0200
RARP	0x8035
IP	0x0800
IPv6	0x86DD
PPPoE	0x8863/0x8864
MPLS	0x8847/0x8848
IPX/SPX	0x8137
IS-IS	0x8000
LACP	0x8809
LLDP	0x88CC
802.1X	0x888E
802.1ag	0x8902
Cluster	0x88A7
Reserved	0xFFFD/0xFFFE/0xFFFF

VLAN/QinQPorts

This table contains QinQ information for a port.

XML structure

```
<VLAN>
  <QinQPorts>
    <Interface>
      <IfIndex></IfIndex>
```

```

    <QinQ></QinQ>
    <ServiceTPID></ServiceTPID>
    <CustomerTPID></CustomerTPID>
    <TransVlanList></TransVlanList>
  </Interface>
</QinQPorts>
</VLAN>

```

Table description

Item	Description
Feature name	VLAN
Table name	QinQPorts
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	N/A
QinQ	Whether QinQ is enabled on the port.	N/A	Boolean: true false	N/A
ServiceTPID	TPID value in the service VLAN tag on the port.	N/A	Unsigned integer. Value range: 0x0001 to 0xFFFF.	Excluding the reserved EtherType values listed in Table 1.
CustomerTPID	TPID value in the customer VLAN tag on the port.	N/A	Value range: 0x0001 to 0xFFFF.	Excluding the reserved EtherType values listed in Table 1.
TransVlanList	List of transparent VLANs on the port.	N/A	Number string. It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range. The string cannot end with a comma or hyphen, or include any whitespace characters.	Example: 1,2,3,5-8,10-20. This VLANs cannot exist in CustomerOuterVlan on table VLAN/VLANMapping.

VLAN/VLANMapping

This table contains VLAN mapping information.

XML structure

```
<VLAN>
  <VLANMapping>
    <Interface>
      <IfIndex></IfIndex>
      <Mapping>
        <CustomerOuterVlan></CustomerOuterVlan>
        <CustomerInnerVlan></CustomerInnerVlan>
        <ServiceOuterVlan></ServiceOuterVlan>
        <ServiceInnerVlan></ServiceInnerVlan>
        <Exclusive></Exclusive>
        <Nest></Nest>
      </Mapping>
      <NNI></NNI>
    </Interface>
  </VLANMapping>
</VLAN>
```

Table description

Item	Description
Feature name	VLAN
Table name	VLANMapping
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	N/A
Mapping	VLAN mapping information on the port.	Data structure	Members: • CustomerOuterVlan • CustomerInnerVlan • ServiceOuterVlan • ServiceInnerVlan • Exclusive	Multi-instance. • A VLAN cannot be mapped to itself. • CustomerOuterVlan cannot overlap each

Column name	Column description	Column type	Data type and restrictions	Remarks
			Nest	other. CustomerOuterVlan cannot exist in TransVlanList on table VLAN/QinQPorts.
CustomerOuterVlan	Original outer VLAN of VLAN mapping on the port.	N/A	Number string. It is a comma-separated list of VLAN items. An item must be always an individual VLAN ID or always a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range. The string must not end with a comma or hyphen, or include any whitespace characters.	Example: 16,17. 5-8,10-20.
CustomerInnerVlan	Original outer VLAN of VLAN mapping on the port.	N/A	Unsigned integer. Value range: 1 to 4094.	N/A
ServiceOuterVlan	Translated outer VLAN of VLAN mapping on the port.	N/A	Unsigned integer. Value range: 1 to 4094.	N/A
ServiceInnerVlan	Translated outer VLAN of VLAN mapping on the port.	N/A	Unsigned integer. Value range: 1 to 4094.	You cannot specify this value when the label value of Nest is true.
Exclusive	Whether CustomerOuterVlan and ServiceOuterVlan are exclusive for this mapping on the port.	N/A	Boolean: - true - false	The true value means that only replacing one VLAN tag with another.
Nest	Whether VLAN mapping is only tags single-tagged packets with an outer VLAN tag or not.	N/A	Boolean: - true - false	N/A
NNI	Whether the network-side interface for VLAN mapping is enabled on the port.	N/A	Boolean: - true - false	N/A

VLAN/VoiceInfo

This table contains voice VLAN information.

XML structure

```
<VLAN>
  <VoiceInfo>
    <AgingTime></AgingTime>
    <LLDPTrack></LLDPTrack>
    <Mode></Mode>
  </VoiceInfo>
</VLAN>
```

Table description

Item	Description
Feature name	VLAN
Table name	VoiceInfo
Table type	Single-instance table
Row name	N/A
Restrictions	N/A

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AgingTime	Voice VLAN aging time.	N/A	Unsigned integer, in minutes. Value range: 5 to 43200 minutes.	By default, the aging time is 1440 minutes.
LLDPTrack	Whether LLDP is enabled for automatic IP phone discovery.	N/A	Boolean: - true - false	N/A
Mode	Voice VLAN security mode.	N/A	Enumeration: 1—Security. 2—Normal.	By default, the voice VLAN security mode is enabled.

VLAN/VoiceOUI

This table contains voice VLAN OUI address information.

XML structure

```
<VLAN>
  <VoiceOUI>
    <OUI>
      <Address></Address>
      <Mask></Mask>
      <Description></Description>
    </OUI>
  </VoiceOUI>
</VLAN>
```

Table description

Item	Description
Feature name	VLAN
Table name	VoiceOUI
Table type	Multi-instance table
Row name	OUI
Restrictions	This table does not support merge, replace, remove operations.

批注 [x1]: 目前 B45d015sp 分支有此限制，主线参考 201409010301 结论确认是否删除此限制

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Address	Source MAC address of voice traffic	Index	Six groups of two hexadecimal digits, hyphen-separated.	For example, 12-34-12-34-12-34.
Mask	Valid length of the OUI address by a mask.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	The mask contains consecutive 1s and 0s. For example, FF-FF-00-00-00-00.
Description	OUI address description.	N/A	Case-sensitive string of 1 to 30 characters.	N/A

VLAN/VoicePorts

This table contains voice VLAN information for a port.

XML structure

```
<VLAN>
  <VoicePorts>
```

```

<Interface>
  <IfIndex></IfIndex>
  <Vlan></Vlan>
  <Mode></Mode>
  <QoS>
    <Trust></Trust>
    <CoS></CoS>
    <DSCP></DSCP>
  </QoS>
</Interface>
</VoicePorts>
</VLAN>

```

Table description

Item	Description
Feature name	VLAN
Table name	VoicePorts
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	N/A
Vlan	Voice VLAN ID on the port.	N/A	Unsigned integer. Value range: 2 to 4094	Valid only on a hybrid or trunk port operating in automatic voice VLAN assignment mode.
Mode	Voice VLAN assignment mode on the port:.	N/A	Enumeration: 1—Automatic. 2—Manual.	By default, a port operates in automatic voice VLAN assignment mode.
QoS	QoS information of voice VLAN on the port.	N/A	Include: - Trust. - CoS. - DSCP.	N/A
Trust	Whether the QoS priority settings is trusted for incoming	N/A	Boolean: true	When a port trusts the QoS priority settings in incoming

Column name	Column description	Column type	Data type and restrictions	Remarks
	voice VLAN packets.		false	voice VLAN packets, the port does not modify their CoS and DSCP values.
CoS	CoS value for incoming voice VLAN packets on the port.	N/A	Unsigned integer. Value range: 0 to 7	Valid only when the Trust label above is false. The value is 6 by default.
DSCP	DSCP value for incoming voice VLAN packets on the port.	N/A	Unsigned integer. Value range: 0 to 63	Valid only when the Trust label above is false,. The value is 46 by default.