

Comware V7 NQA NETCONF XML API Configuration Reference

Contents

NQA	1
NQA/Templates	1
XML structure	1
Table description	1
Columns	2
NQA/IcmpEchoTemplates	4
XML structure	5
Table description	5
Columns	5
NQA/UdpEchoTemplates	6
XML structure	6
Table description	7
Columns	7
NQA/TcpTemplates	8
XML structure	8
Table description	8
Columns	8
NQA/FtpTemplates	9
XML structure	9
Table description	9
Columns	10
NQA/SnmpTemplates(not supported)	10
XML structure	10
Table description	11
Columns	11
NQA/DnsTemplates(not supported)	11
XML structure	11
Table description	12
Columns	12
NQA/HttpTemplates	12
XML structure	12
Table description	13
Columns	13
NQA/ImapTemplates(not supported)	14
XML structure	14
Table description	15
Columns	15
NQA/Pop3Templates(not supported)	15
XML structure	15
Table description	16
Columns	16
NQA/RadiusTemplates(not supported)	16
XML structure	16
Table description	17
Columns	17
NQA/RtspTemplates(not supported)	17
XML structure	17
Table description	18
Columns	18

NQA/SipTemplates(not supported)	18
XML structure	18
Table description	19
Columns	19
NQA/SslTemplates(not supported)	19
XML structure	19
Table description	20
Columns	20

NQA

NQA/Templates

This table contains information about NQA templates.

XML structure

```
<NQA>
  <Templates>
    <Template>
      <Name></Name>
      <Type></Type>
      <Description></Description>
      <Frequency></Frequency>
      <ProbeTimeout></ProbeTimeout>
      <TTL></TTL>
      <ToS></ToS>
      <VRF></VRF>
      <URL></URL>
      <DstIP></DstIP>
      <DstPort></DstPort>
      <SrcIP></SrcIP>
      <SrcPort></SrcPort>
      <NextHop></NextHop>
      <TriggerPassCount></TriggerPassCount>
      <TriggerFailCount></TriggerFailCount>
    </Template>
  </Templates>
</NQA>
```

Table description

Item	Description
Feature name	NQA
Table name	Templates
Table type	Multi-instance table
Row name	Template
Restrictions	None
Support for row creation and deletion	Yes

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template Name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Type	Operation type	N/A	Enumeration: • 0—ICMP-echo. • 1—UDP-echo. • 2—TCP. • 3—DLSW • 4—FTP. • 5—DHCP • 6—SNMP. • 7—DNS. • 8—HTTP. • 9—UDP-jitter • 10—VOICE • 11—Path-jitter • 12—UDP-tracert • 13—ARP. • 14—IMAP. • 15—POP3. • 16—Radius. • 17—RTSP. • 18—SIP. • 19—SMTP. • 20—SSL.	Type DLSW, DHCP, UDP-jitter, VOICE, Path-jitter, UDP-tracert are not supported temporarily. You must specify a type when you create a template that does not exist. You cannot specify a type when you remove or delete a template. The type can not be modified.
Description	Template description	N/A	String, case-sensitive. Length: 1 to 200 characters.	By default, no description is specified for an NQA template.
Frequency	Probe interval in milliseconds	N/A	Unsigned integer. Value range: 0 to 604800000. Default: 5000.	If the operation is not completed when the interval expires, the next operation does not start.
ProbeTimeout	Probe timeout time in milliseconds	N/A	Unsigned integer. Default: 3000.	The value ranges of probe timeout depend on the Type column. • FTP/HTTP: 10 to 86400000. • ICMP-echo/UDP-echo/TCP/SNMP/DNS/ARP/IMAP/POP3/Radiu s/RTSP/SIP/SMTP/SSL: 10 to 3600000.
TTL	TTL for probe packets	N/A	Unsigned integer. Value range: 1 to 255.	Type ARP does not support this column.

Column name	Column description	Column type	Data type and restrictions	Remarks
			Default: 20.	
ToS	ToS value in the IP packet header of probe packets	N/A	Unsigned integer. Value range: 0 to 255. Default: 0.	Type ARP does not support this column.
VRF	The VRF instance where the operation is performed.	N/A	String, case-sensitive. Length: 1 to 31 characters.	By default, no VRF is specified and the operation is performed on the public network.
URL	The URL of the destination server.	N/A	String. Length: 1 to 255 characters.	This column and the DstIP, DstPort column cannot be configured simultaneously. Only Type FTP and HTTP support this column. By default, no URL is specified for the destination server. The formats of URL depend on the Type column. - FTP. Enter the URL in one of the following formats: ftp://host/filename ftp://host:port/filename When performing the get operation, the file name is required. When performing the put operation, the filename argument does not take effect, even if it is specified. The file name for the put operation is determined by the filename command. - HTTP Enter the URL in one of the following formats: http://host/resource http://host:port/resource The “ ” can be instead of “%20” or “ +”
DstIP	Destination IPv4 or IPv6 address for the probe packets.	N/A	String, dotted decimal notation. Or Hexadecimal string, colon-separated. Length: 1 to 46 characters.	This column and the URL column cannot both be configured. Type FTP and HTTP do not support this column. By default, no destination address is specified. For example, 1.1.1.1, or 1:1::1:1.
DstPort	Destination	N/A	Unsigned integer.	This column and the URL column

Column name	Column description	Column type	Data type and restrictions	Remarks
	port number for the operation.		Value range: 1 to 65535.	cannot both be configured. Type ICMP-echo, ARP, FTP and HTTP do not support this column. The default value of destination port depend on the Type column. • UDP-echo: none • TCP: none • SNMP: 161. • DNS: 53. • IMAP: 143. • POP3: 110. • Radius: 1812. • RTSP: 554. • SIP: 5060(UDP) or 5061(TCP). • SMTP: 25. • SSL: none.
SrcIP	Source IPv4 or IPv6 address for the probe packets.	N/A	String, dotted decimal notation. Or Hexadecimal string, colon-separated. Length: 1 to 46 characters.	By default, no source IP address is specified. For example, 1.1.1.1, or 1:1::1:1. The source IP address must be the IP address of a local interface, and the interface must be up.
SrcPort	Source port number for the operation.	N/A	Unsigned integer. Value range: 1 to 65535.	Only type DNS supports this column.. By default, no source port number is specified.
NextHop	Next hop IP address	N/A	String. Length: 1 to 46 characters.	Type ARP does not support this column. For example, 1.1.1.1, or 1:1::1:1.
TriggerPass Count	The number of consecutive successful probes that lead to a successful operation.	N/A	Unsigned integer. Value range: 1 to 15. Default: 3.	N/A
TriggerFailCount	The number of consecutive probe failures that lead to an operation failure.	N/A	Unsigned integer. Value range: 1 to 15. Default: 3.	N/A

NQA/IcmpEchoTemplates

This table contains information about ICMP-Echo templates.

XML structure

```
<NQA>
  <IcmpEchoTemplates>
    <IcmpEchoTemplate>
      <Name></Name>
      <DataFill></DataFill>
      <DataSize></DataSize>
      <SrcIf></SrcIf>
    </IcmpEchoTemplate>
  </IcmpEchoTemplates>
</NQA>
```

Table description

Item	Description
Feature name	NQA
Table name	IcmpEchoTemplates
Table type	Multi-instance table
Row name	IcmpEchoTemplate
Restrictions	The row creation and deletion of this table is along with table Templates.
Support for row creation and deletion	No

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template Name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
DataFill	The string to be filled in the payload of each request.	N/A	String. Length: 1 to 200 characters.	By default, no datafill is specified and the payload of each request will be filled with hexadecimal number 00010203040506070809.
DataSize	The payload size in each request.	N/A	Unsigned integer. Value range: 20 to 8100. Default: 100.	N/A
SrcIf	Full name of an interface, including the interface type	N/A	String. Length: 2 to 47 characters.	By default, no source IP address is specified. The requests use the primary IP address of the outgoing

Column name	Column description	Column type	Data type and restrictions	Remarks
	and number. The IP address of the specified interface is the source IP address of ICMP echo requests.			interface as their source IP address. If both source ip and source interface are specified, the most recent configuration takes effect. The specified source interface must be up. The following types of interfaces can be configured as the source interface for the operation: • VLAN interface. • Layer 3 ethernet interface. • Layer 3 aggregate interface. • EFM interface. • Ethernet channel interface. • Management interface. • Layer 3 redundancy interface. Support for interface types depends on the device model.

NQA/UdpEchoTemplates

This table contains information about UDP-Echo templates.

XML structure

```

<NQA>
  <UdpEchoTemplates>
    <UdpEchoTemplate>
      <Name></Name>
      <DataFill></DataFill>
      <DataSize></DataSize>
      <ExpectData>
        <Data></Data>
        <Offset></Offset>
      </ExpectData>
    </UdpEchoTemplate>
  </UdpEchoTemplates>
</NQA>

```

Table description

Item	Description
Feature name	NQA
Table name	UdpEchoTemplates
Table type	Multi-instance table
Row name	UdpEchoTemplate
Restrictions	The row creation and deletion of this table is along with table Templates.
Support for row creation and deletion	No

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template Name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
DataFill	The string to be filled in the payload of each request.	N/A	String. Length: 1 to 200 characters.	By default, no datafill is specified and the payload of each request will be filled with hexadecimal number 00010203040506070809.
DataSize	The payload size in each request.	N/A	Unsigned integer. Value range: 20 to 8100. Default: 100.	N/A
ExpectData	Expected data.	Data structure	Members include: • Data. • Offset.	By default, no expected data is specified. The expected data is checked only when both data-fill and expect-data are specified. The members must both be specified.
Data	Expected response string.	N/A	String. Length: 1 to 200 characters	N/A
Offset	Offset in bytes after which the client starts to search the expected response string.	N/A	Unsigned integer. Value range: 0 to 1000. Default: 0	N/A

NQA/TcpTemplates

This table contains information about TCP templates.

XML structure

```
<NQA>
  <TcpTemplates>
    <TcpTemplate>
      <Name></Name>
      <DataFill></DataFill>
      <ExpectData>
        <Data></Data>
        <Offset></Offset>
      </ExpectData>
    </TcpTemplate>
  </TcpTemplates>
</NQA>
```

Table description

Item	Description
Feature name	NQA
Table name	TcpTemplates
Table type	Multi-instance table
Row name	TcpTemplate
Restrictions	The row creation and deletion of this table is along with table Templates.
Support for row creation and deletion	No

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template Name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
DataFill	The string to be filled in the payload of each request.	N/A	String. Length: 1 to 200 characters.	By default, no datafill is specified and the payload of each request will be filled with hexadecimal number 000102030405060708

Column name	Column description	Column type	Data type and restrictions	Remarks
				09.
ExpectData	Expected data.	Data structure	Members include: - Data. - Offset.	By default, no expected data is specified. The expected data is checked only when both data-fill and expect-data are specified. The members must both be specified.
Data	Expected response string.	N/A	String. Length: 1 to 200 characters	N/A
Offset	Offset in bytes after which the client starts to search the expected response string.	N/A	Unsigned integer. Value range: 0 to 1000.	N/A

NQA/FtpTemplates

This table contains information about FTP templates.

XML structure

```

<NQA>
  <FtpTemplates>
    <FtpTemplate>
      <Name></Name>
      <Operation></Operation>
      <UserName></UserName>
      <Password></Password>
      <FileName></FileName>
      <Mode></Mode>
    </FtpTemplate>
  </FtpTemplates>
</NQA>

```

Table description

Item	Description
Feature name	NQA
Table name	FtpTemplates
Table type	Multi-instance table

Row name	FtpTemplate
Restrictions	The row creation and deletion of this table is along with table Templates.
Support for row creation and deletion	No

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template Name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Operation	The FTP operation type.	N/A	Enumeration: 1—Get operation(default). 2—Put operation.	By default, the FTP operation type is get, which means obtaining files from the FTP server.
UserName	A login username.	N/A	String. Length: 1 to 32 characters.	By default, no FTP login username is specified.
Password	A login password.	N/A	String. Length : 1 to 32 characters.	By default, no FTP login password is specified.
FileName	The name of a file to be transferred.	N/A	String. Length: 1 to 200 characters.	This configuration is required for the put operation and does not take effect for the get operation. By default, no file is specified. The “/” is not supported in FileName.
Mode	The data transmission mode.	N/A	Enumeration: 0—Active mode(default). 1—Passitive mode.	N/A

NQA/SnmpTemplates(not supported)

This table contains information about SNMP templates.

XML structure

```

<NQA>
  <SnmpTemplates>
    <SnmpTemplate>
      <Name></Name>
      <Community></Community>
    </SnmpTemplate>
  </SnmpTemplates>
</NQA>

```

```

    </SnmpTemplates>
</NQA>

```

Table description

Item	Description
Feature name	NQA
Table name	SnmpTemplates
Table type	Multi-instance table
Row name	SnmpTemplate
Restrictions	The row creation and deletion of this table is along with table Templates.
Support for row creation and deletion	No

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template Name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Community	The community for the access of SNMP.	N/A	String. Length: 1 to 32 characters.	By default, the community is public.

NQA/DnsTemplates(not supported)

This table contains information about DNS templates.

XML structure

```

<NQA>
  <DnsTemplates>
    <DnsTemplate>
      <Name></Name>
      <ResolveTarget></ResolveTarget>
      <ResolveType></ResolveType>
      <ExpectIP></ExpectIP>
    </DnsTemplate>
  </DnsTemplates>
</NQA>

```

Table description

Item	Description
Feature name	NQA
Table name	DnsTemplates
Table type	Multi-instance table
Row name	DnsTemplate
Restrictions	The row creation and deletion of this table is along with table Templates.
Support for row creation and deletion	No

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template Name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
ResolveTarget	The domain name that needs to be translated.	N/A	String. Length: 1 to 255 characters.	By default, no domain name is specified.
ResolveType	The domain name resolution type.	N/A	Enumeration: • 1—Type A query(default). • 28—Type AAAA query.	A type A query resolves a domain name to a mapped IPv4 address, and a type AAAA query to a mapped IPv6 address.
ExpectIP	The IPv4 or IPv6 address that is expected to be returned.	N/A	String, dotted decimal notation. Or Hexadecimal string, colon-separated. Length: 1 to 46 characters.	For example, 1.1.1.1, or 1:1::1:1.

NQA/HttpTemplates

This table contains information about HTTP templates.

XML structure

```
<NQA>
  <HttpTemplates>
    <HttpTemplate>
      <Name></Name>
      <UserName></UserName>
```

```

    <Password></Password>
    <Operation></Operation>
    <Version></Version>
    <RawContent></RawContent>
    <ExpectStatus></ExpectStatus>
    <ExpectData>
        <Data></Data>
        <Offset></Offset>
    </ExpectData>
</HttpTemplate>
</HttpTemplates>
</NQA>

```

Table description

Item	Description
Feature name	NQA
Table name	HttpTemplates
Table type	Multi-instance table
Row name	HttpTemplate
Restrictions	The row creation and deletion of this table is along with table Templates.
Support for row creation and deletion	No

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template Name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
UserName	A login username.	N/A	String. Length: 1 to 32 characters.	By default, no HTTP login username is specified.
Password	A login password.	N/A	String. Length: 1 to 32 characters.	By default, no HTTP login password is specified.
Operation	HTTP operation type.	N/A	Enumeration: 1—Get operation(default). 2—Post operation. 3—Raw Operation.	By default, the HTTP operation type is get, which means obtaining files from the HTTP server. In the HTTP raw operation, use the raw-request command to specify the content of the GET request to be sent to the HTTP server.

Column name	Column description	Column type	Data type and restrictions	Remarks
Version	HTTP version	N/A	Enumeration: 0—Version 1.0(default). 1—Version 1.1.	N/A
RawContent	The content of an HTTP raw request.	N/A	String. Length: 1 to 1023 characters.	This step is required for the raw operation. By default, no contents are specified. The following formats are not supported: Xq/qu/qui/quitX 、XquitYaaaX 、Xr/re/ret/retu/retur/retur nX 、XreturnYaaaX(X represents 0 to n spaces、Y represents 1 to n spaces、aaa represents a character string without spaces.)
ExpectStatus	The list of expected status code.	N/A	Number string. It is a comma-separated list of status items. Length: 1 to 4000 characters.	For example: 200,300-400,500. By default, no expect status is specified.
ExpectData	Expected data.	Data structure	Members include: - Data. - Offset.	By default, no expected data is specified. The members must both be specified.
Data	Expected response string.	N/A	String. Length: 1 to 200 characters	N/A
Offset	Offset in bytes after which the client starts to search the expected response string.	N/A	Unsigned integer. Value range: 0 to 1000.	N/A

NQA/ImapTemplates(not supported)

This table contains information about IMAP templates.

XML structure

```
<NQA>
  <ImapTemplates>
    <ImapTemplate>
      <Name></Name>
```

```

    <UserName></UserName>
    <Password></Password>
    <Mailbox></Mailbox>
  </ImapTemplate>
</ImapTemplates>
</NQA>

```

Table description

Item	Description
Feature name	NQA
Table name	ImapTemplates
Table type	Multi-instance table
Row name	ImapTemplate
Restrictions	The row creation and deletion of this table is along with table Templates.
Support for row creation and deletion	No

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template Name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
UserName	A login username.	N/A	String. Length: 1 to 40 characters.	By default, no login username is specified.
Password	A login password.	N/A	String. Length: 1 to 40 characters.	By default, no login password is specified.
Mailbox	Operation mailbox name.	N/A	String. Length: 1 to 64 characters.	By default, no mailbox specified.

NQA/Pop3Templates(not supported)

This table contains information about POP3 templates.

XML structure

```

<NQA>
  <Pop3Templates>
    <Pop3Template>
      <Name></Name>
    </Pop3Template>
  </Pop3Templates>
</NQA>

```

```

    <UserName></UserName>
    <Password></Password>
  </Pop3Template>
</Pop3Templates>
</NQA>

```

Table description

Item	Description
Feature name	NQA
Table name	Pop3Templates
Table type	Multi-instance table
Row name	Pop3Template
Restrictions	The row creation and deletion of this table is along with table Templates.
Support for row creation and deletion	No

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template Name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
UserName	A login username.	N/A	String. Length: 1 to 40 characters.	By default, no login username is specified.
Password	A login password.	N/A	String. Length: 1 to 40 characters.	By default, no login password is specified.

NQA/RadiusTemplates(not supported)

This table contains information about RADIUS templates.

XML structure

```

<NQA>
  <RadiusTemplates>
    <RadiusTemplate>
      <Name></Name>
      <UserName></UserName>
      <Password></Password>
      <Key></Key>
    </RadiusTemplate>
  </RadiusTemplates>
</NQA>

```

```

    </RadiusTemplates>
</NQA>

```

Table description

Item	Description
Feature name	NQA
Table name	RadiusTemplates
Table type	Multi-instance table
Row name	RadiusTemplate
Restrictions	The row creation and deletion of this table is along with table Templates.
Support for row creation and deletion	No

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template Name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
UserName	A login username.	N/A	String. Length: 1 to 253 characters.	By default, no login username is specified.
Password	A login password.	N/A	String. Length: 1 to 40 characters.	By default, no login password is specified.
Key	Shared secret key.	N/A	String. Length: 1 to 64 characters.	N/A

NQA/RtspTemplates(not supported)

This table contains information about RTSP templates.

XML structure

```

<NQA>
  <RtspTemplates>
    <RtspTemplate>
      <Name></Name>
      <ExpectStatus></ExpectStatus>
    </RtspTemplate>
  </RtspTemplates>
</NQA>

```

Table description

Item	Description
Feature name	NQA
Table name	RtspTemplates
Table type	Multi-instance table
Row name	RtspTemplate
Restrictions	The row creation and deletion of this table is along with table Templates.
Support for row creation and deletion	No

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template Name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
ExpectStatus	The list of expected status code.	N/A	Number string. It is a comma-separated list of status items. Length: 1 to 4000 characters.	For example: 200,300-400,500. By default, no expect status is specified.

NQA/SipTemplates(not supported)

This table contains information about SIP templates.

XML structure

```
<NQA>
  <SipTemplates>
    <SipTemplate>
      <Name></Name>
      <ExpectStatus></ExpectStatus>
      <TransProtocol></TransProtocol>
    </SipTemplate>
  </SipTemplates>
</NQA>
```

Table description

Item	Description
Feature name	NQA
Table name	SipTemplates
Table type	Multi-instance table
Row name	SipTemplate
Restrictions	The row creation and deletion of this table is along with table Templates.
Support for row creation and deletion	No

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template Name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
ExpectStatus	The list of expected status code.	N/A	Number string. It is a comma-separated list of status items. Length: 1 to 4000 characters.	For example: 200,300-400,500. By default, no expect status is specified.
TransProtocol	Transport layer protocol.	N/A	Enumeration: • 6—TCP. • 17—UDP(default).	N/A.

NQA/SslTemplates(not supported)

This table contains information about SSL templates.

XML structure

```
<NQA>
  <SslTemplates>
    <SslTemplate>
      <Name></Name>
      <ClientPolicy></ClientPolicy>
    </SslTemplate>
  </SslTemplates>
</NQA>
```

Table description

Item	Description
Feature name	NQA
Table name	SslTemplates
Table type	Multi-instance table
Row name	SslTemplate
Restrictions	The row creation and deletion of this table is along with table Templates.
Support for row creation and deletion	No

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template Name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
ClientPolicy	SSL client policy	N/A	String, case-insensitive. Length: 1 to 31 characters.	By default, no SSL client policy is specified.