

Comware V7 PKI NETCONF XML API Configuration Reference

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PKI

PKI/Domains

This table is used to configure PKI domains.

XML structure

```
<PKI>
  <Domains>
    <Domain>
      <Name></Name>
      <Entity></Entity>
      <CRLCheck></CRLCheck>
      <Usage>
        <IKE></IKE>
        <SSLServer></SSLServer>
        <SSLClient></SSLClient>
      </Usage>
    </Domain>
  </Domains>
</PKI>
```

Table description

Item	Description
Feature name	PKI
Table name	Domains
Table type	Multi-instance table
Row name	Domain
Restrictions	None
Support for row creation and deletion	Yes

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	PKI domain name	Index	String. Length: 1 to 31 characters. Case insensitive.	Can't include: "~", "*", "\", " ", ":", ".", "<", ">", " ", " "/".

Column name	Column description	Column type	Data type and restrictions	Remarks
Entity	Reference a PKI entity for the PKI domain	N/A	String. Case insensitive. Length: 1 to 31 characters.	N/A
CRLCheck	If check whether the certificate has been revoked by CRL	N/A	Boolean: • true—Enable. • false—Disable. Default value is false.	N/A
Usage	Certificate usage for requesting certificate	Data structure	Members include: • IKE • SSLServer • SSLClient.	Can include one or more certificate usage at the same time.
IKE	Use certificate as the IKE	N/A	Boolean: • true—Enable. • false—Disable.	N/A
SSLServer	Use certificate as the SSL server certificates	N/A	Boolean: • true—Enable. • false—Disable.	N/A
SSLClient	Use certificate as the SSL client certificates	N/A	Boolean: • true—Enable. • false—Disable.	N/A

PKI/DomainPubkeys

This table is used to reference the asymmetric keys for PKI domain.

XML structure

```

<PKI>
  <DomainPubkeys>
    <Pubkey>
      <Domain></Domain>
      <Type></Type>
      <Purpose></Purpose>
      <Name></Name>
      <Length></Length>
    </Pubkey>
  </DomainPubkeys>
</PKI>

```

Table description

Item	Description
Feature name	PKI
Table name	DomainPubkeys
Table type	Multi-instance table
Row name	Pubkey
Restrictions	None
Support for row creation and deletion	Yes

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Domain	PKI domain name	Index	String. Length: 1 to 31 characters. Case insensitive.	Can't include: "~", "*", "\", " ", ":", ";", "<", ">", "&", " "/".
Type	Type of algorithm	Index	Enumeration: • 1—RSA. • 2—DSA. • 3—ECDSA.	See table PKI/AuthorityAlgs for supported algorithm.
Purpose	Key purpose	Index	Enumeration: • 1—General • 2—Signature • 3—Encryption	ECDSA key and DSA key can be used for signature purpose, while RSA key can be used for all purpose.
Name	Key name	N/A	String. Length: 1 to 64 characters Case insensitive.	Only contain letters, number and ".".
Length	Length of public key	N/A	Unsigned integer.	See table PKI/AuthorityAlgs for supported length.

PKI/Entities

This table is used to configure the PKI entities.

XML structure

```
<PKI>
  <Entities>
```

```

<Entity>
  <EntityName></EntityName>
  <CommonName></CommonName>
  <Country></Country>
  <State></State>
  <Locality></Locality>
  <Organization></Organization>
  <OrganizationUnit></OrganizationUnit>
  <FQDN></FQDN>
  <IP>
    <Ipv4Address></Ipv4Address>
    <IfIndex></IfIndex>
  </IP>
</Entity>
</Entities>
</PKI>

```

Table description

Item	Description
Feature name	PKI
Table name	Entities
Table type	Multi-instance table
Row name	Entity
Restrictions	None
Support for row creation and deletion	Yes

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
EntityName	PKI entity name	Index	String. Length: 1 to 31 characters. Case insensitive.	N/A
CommonName	The common name	N/A	Text. Length: 1 to 63 characters. Case sensitive.	Comma can not be contained.
Country	The country code	N/A	Text. Length: 2 to 2 characters.	Country code is described in ISO 3166-1
State	The state name	N/A	Text. Length: 1 to 63 characters. Case sensitive.	Comma can not be contained.
Locality	The locality	N/A	Text.	Comma can not be

Column name	Column description	Column type	Data type and restrictions	Remarks
	name		Length: 1 to 63 characters. Case sensitive.	contained.
Organization	The organization name	N/A	Text. Length: 1 to 63 characters. Case sensitive.	Comma can not be contained.
OrganizationUnit	The unit name	N/A	Text. Length: 1 to 63 characters. Case sensitive.	Comma can not be contained.
FQDN	The FQDN name	N/A	String. Length: 1 to 255 characters Case sensitive.	N/A
IP	The IP address	Data structure	Members include: • Ipv4Address. • IfIndex..	Either Ipv4Address or IfIndex can be specified.
Ipv4Address	Ipv4 address	N/A	Ipv4Address	N/A
IfIndex	The index of interface	N/A	Unsigned integer.	Get the primary Ipv4 address of the interface.

PKI/CertAccessPolicies

This table is used to configure the certificate access control policies.

XML structure

```

<PKI>
  <CertAccessPolicies>
    <Policy>
      <Name></Name>
    </Policy>
  </CertAccessPolicies>
</PKI>

```

Table description

Item	Description
Feature name	PKI
Table name	CertAccessPolicies
Table type	Multi-instance table
Row name	Policy
Restrictions	None

Support for row creation and deletion	Yes
---------------------------------------	-----

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	The name of certificate access control policy	Index	String. Length: 1 to 31 characters. Case insensitive.	N/A

PKI/CertAccessRules

This table is used to configure the rules of the certificate access control policy.

XML structure

```
<PKI>
  <CertAccessRules>
    <Rule>
      <Policy></Policy>
      <RuleID></RuleID>
      <Action></Action>
      <AttributeGroup></AttributeGroup>
    </Rule>
  </CertAccessRules>
</PKI>
```

Table description

Item	Description
Feature name	PKI
Table name	CertAccessRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Policy	The name of certificate access control policy	Index	String. Length: 1 to 31 characters. Case insensitive.	N/A
RuleID	Index of the rule in the access control policy.	Index	Unsigned integer. Value range: 1 to 16	The smaller the RuleID is, the higher the priority is.
Action	How to operate the certificate that match the rule	N/A	Enumeration: • 1—Permit • 2—Deny	N/A
AttributeGroup	The name of certificate attribute group	N/A	String. Length: 1 to 31 characters. Case insensitive.	N/A

PKI/CertAttributeGroups

This table is used to configure the certificate attribute groups.

XML structure

```
<PKI>
  <CertAttributeGroups>
    <Group>
      <Name></Name>
    </Group>
  </CertAttributeGroups>
</PKI>
```

Table description

Item	Description
Feature name	PKI
Table name	CertAttributeGroups
Table type	Multi-instance table
Row name	Group
Restrictions	None
Support for row creation and deletion	Yes

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	The name of certificate attribute group	Index	String. Length: 1 to 31 characters. Case insensitive.	N/A

PKI/CertAttributes

This table is used to configure the attributes of the certificate attribute groups.

XML structure

```
<PKI>
  <CertAttributes>
    <Attribute>
      <Group></Group>
      <AttributeID></AttributeID>
      <Object></Object>
      <Item></Item>
      <Operator></Operator>
      <Value></Value>
    </Attribute>
  </CertAttributes>
</PKI>
```

Table description

Item	Description
Feature name	PKI
Table name	CertAttributes
Table type	Multi-instance table
Row name	Attribute
Restrictions	None
Support for row creation and deletion	Yes

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Group	The name of certificate attribute group	Index	String. Length: 1 to 31 characters. Case insensitive.	N/A
AttributeID	Index of the attribute in the certificate attribute group	Index	Unsigned integer. Value range:1 to 16	The smaller the AttributeID is, the higher the priority is.
Object	The object which to be matched	N/A	Enumeration: • 1—alt-subject-name • 2—issuer-name • 3—subject-name	N/A
Item	The item in the object	N/A	Enumeration: • 1—DN • 2—FQDN • 3—IpAddress	It's can be each value when the object is subject-name or issuer-name, but only can be FQDN or IpAddress when the object is alt-subject-name.
Operator	How to operate the item	N/A	Enumeration: • 1—contain • 2—equal • 3—not contain • 4—not equal	N/A
Value	The value that be used to match with item.	N/A	String. Length: 1 to 255 characters. Case insensitive.	N/A

PKI/StoragePath

This table is used to configure the PKI storage path.

XML structure

```
<PKI>
  <StoragePath>
    <StorageCertPath></StorageCertPath>
    <StorageCRLPath></StorageCRLPath>
  </StoragePath>
</PKI>
```

Table description

Item	Description
Feature name	PKI
Table name	StoragePath
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
StorageCert Path	The PKI certificate storage path	N/A	String. Case sensitive.	The path can't begin with "/" or "../"
StorageCRLPath	The PKI CRL storage path	N/A	String. Case sensitive.	The path can't begin with "/" or "../"