

Chapter 31

DTD for IPSec Response Tags

This chapter contains the Extensible Markup Language (XML) document type definition (DTD) called `junos-ipsec.dtd`, which lists the JUNOS XML tags that contain IP Security (IPSec) information. The associated XML namespace is <http://xml.juniper.net/junos/9.4R1/junos-ipsec>. To review reference pages for the tags, see “Summary of IPSec Response Tags” on page 924.

```
<!-- Copyright (c) 2000-2008, Juniper Networks, Inc. -->
```

```
<!-- All rights reserved. -->
```

```
<!-- junos-ipsec.dtd -->
```

```
<!ELEMENT active-entries (#PCDATA)>
```

```
<!ELEMENT ah-authentication-failures (#PCDATA)>
```

```
<!ELEMENT ah-input-bytes (#PCDATA)>
```

```
<!ELEMENT ah-input-packets (#PCDATA)>
```

```
<!ELEMENT ah-output-bytes (#PCDATA)>
```

```
<!ELEMENT ah-output-packets (#PCDATA)>
```

```
<!ELEMENT ah-statistics (ah-input-bytes | ah-output-bytes | ah-input-packets |  
ah-output-packets)*>
```

```
<!ELEMENT alternate-subject (#PCDATA)>
```

```
<!ELEMENT alternate-subject-list (alternate-subject)*>
```

```
<!ELEMENT authorization-status (#PCDATA)>
```

```
<!ELEMENT auto-re-enrollment (auto-re-enrollment-status |  
auto-re-enrollment-next-trigger-time)*>
```

```
<!ELEMENT auto-re-enrollment-next-trigger-time (#PCDATA)>
```

```
<!ELEMENT auto-re-enrollment-status (#PCDATA)>
```

```
<!ELEMENT bad-headers (#PCDATA)>
```

```
<!ELEMENT bad-trailers (#PCDATA)>
```

```
<!ELEMENT ca-certificate-enroll (ca-subject | fingerprint)*>
```

```

<!ELEMENT ca-certificate-enroll-list (ca-certificate-enroll-msg | ca-certificate-enroll)*>

<!ELEMENT ca-certificate-enroll-msg (#PCDATA)>

<!ELEMENT ca-file (#PCDATA)>

<!ELEMENT ca-name (#PCDATA)>

<!ELEMENT ca-profile-name (#PCDATA)>

<!ELEMENT ca-subject (#PCDATA)>

<!ELEMENT cert-after (#PCDATA)>

<!ELEMENT cert-before (#PCDATA)>

<!ELEMENT cert-ca-load-status (cert-ca-profile)*>

<!ELEMENT cert-ca-manual-load (fingerprint)*>

<!ELEMENT cert-ca-profile (#PCDATA)>

<!ELEMENT cert-certificate-id (#PCDATA)>

<!ELEMENT cert-crl (#PCDATA)>

<!ELEMENT cert-flag-info (cert-flag-trust | cert-flag-root)*>

<!ELEMENT cert-flag-root (#PCDATA)>

<!ELEMENT cert-flag-trust (#PCDATA)>

<!ELEMENT cert-id (#PCDATA)>

<!ELEMENT cert-issuer (#PCDATA)>

<!ELEMENT cert-key-pair (cert-key-pair-name | cert-key-pair-size)*>

<!ELEMENT cert-key-pair-name (#PCDATA)>

<!ELEMENT cert-key-pair-size (#PCDATA)>

<!ELEMENT cert-load-status (cert-certificate-id)*>

<!ELEMENT cert-references (#PCDATA)>

<!ELEMENT cert-request-dump (cert-request-dump-msg | cert-request-dump-file |
fingerprint)*>

<!ELEMENT cert-request-dump-file (cert-request-dump-file-content)*>

<!ELEMENT cert-request-dump-file-content (#PCDATA)>

<!ELEMENT cert-request-dump-msg (#PCDATA)>

<!ELEMENT cert-root (#PCDATA)>

```

```

<!ELEMENT cert-serial (#PCDATA)>

<!ELEMENT cert-subject (#PCDATA)>

<!ELEMENT cert-trust (#PCDATA)>

<!ELEMENT certificate-alternate-subject (#PCDATA)>

<!ELEMENT certificate-cache-entry (#PCDATA)>

<!ELEMENT certificate-dns (#PCDATA)>

<!ELEMENT certificate-information (certificates | total-entries | active-entries |
locked-entries | db-stats)*>
<!ATTLIST certificate-information junos:style CDATA #IMPLIED>

<!ELEMENT certificate-subject (#PCDATA)>

<!ELEMENT certificate-type (#PCDATA)>

<!ELEMENT certificates (cert-subject | cert-serial | cert-id | cert-references | cert-issuer |
cert-trust | cert-root | cert-crl | cert-before | cert-after | x509)*>

<!ELEMENT common-name (#PCDATA)>

<!ELEMENT country-name (#PCDATA)>

<!ELEMENT crl (cert-issuer | cert-id | cert-references | crl-list)*>

<!ELEMENT crl-information (crl)*>
<!ATTLIST crl-information junos:style CDATA #IMPLIED>

<!ELEMENT crl-issuer (#PCDATA)>

<!ELEMENT crl-issuer-alternate-subject (#PCDATA)>

<!ELEMENT crl-issuer-alternate-subject-list (crl-issuer-alternate-subject)*>

<!ELEMENT crl-issuer-detail (distinguished-name)*>

<!ELEMENT crl-list (serial | revocation-date)*>

<!ELEMENT crl-load-status (ca-profile-name)*>

<!ELEMENT crl-number (#PCDATA)>

<!ELEMENT crl-revocation-date (#PCDATA)>

<!ELEMENT crl-revocation-list (revoked-cert-serial-number | crl-revocation-date)*>

<!ELEMENT crl-validity (effective-date | next-update)*>

<!ELEMENT crl-version (#PCDATA)>

<!ELEMENT db-stats (#PCDATA)>

```

```

<!ELEMENT distinguished-name (organization-name | organizational-unit-name |
country-name | state-or-province-name | locality-name | common-name | email-address |
domain-component)*>

<!ELEMENT distribution-crl (#PCDATA)>

<!ELEMENT distribution-crl-list (distribution-crl)*>

<!ELEMENT domain-component (#PCDATA)>

<!ELEMENT effective-date (#PCDATA)>

<!ELEMENT email-address (#PCDATA)>

<!ELEMENT encoding (#PCDATA)>

<!ELEMENT error-statistics (ah-authentication-failures | replay-errors |
esp-authentication-failures | esp-decryption-failures | bad-headers | bad-trailers)*>

<!ELEMENT esp-authentication-failures (#PCDATA)>

<!ELEMENT esp-decrypted-bytes (#PCDATA)>

<!ELEMENT esp-decrypted-packets (#PCDATA)>

<!ELEMENT esp-decryption-failures (#PCDATA)>

<!ELEMENT esp-encrypted-bytes (#PCDATA)>

<!ELEMENT esp-encrypted-packets (#PCDATA)>

<!ELEMENT esp-statistics (esp-encrypted-bytes | esp-decrypted-bytes |
esp-encrypted-packets | esp-decrypted-packets)*>

<!ELEMENT fingerprint (fingerprint-hash-algorithm | fingerprint-content)*>

<!ELEMENT fingerprint-content (#PCDATA)>

<!ELEMENT fingerprint-hash-algorithm (#PCDATA)>

<!ELEMENT fips-pic-status (fpc-slot | pic-slot | serial-number | authorization-status)*>

<!ELEMENT fips-pic-status-information (fips-pic-status)*>

<!ELEMENT fpc-slot (#PCDATA)>

<!ELEMENT identifier (#PCDATA)>

<!ELEMENT ike-sa-algorithms (ike-sa-authentication-algorithm |
ike-sa-encryption-algorithm | ike-sa-prf-algorithm)*>

<!ELEMENT ike-sa-authentication-algorithm (#PCDATA)>

<!ELEMENT ike-sa-authentication-method (#PCDATA)>

<!ELEMENT ike-sa-encryption-algorithm (#PCDATA)>

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```

<!ELEMENT ike-sa-exchange-type (#PCDATA)>

<!ELEMENT ike-sa-flags (#PCDATA)>

<!ELEMENT ike-sa-initiator-cookie (#PCDATA)>

<!ELEMENT ike-sa-input-bytes (#PCDATA)>

<!ELEMENT ike-sa-input-packets (#PCDATA)>

<!ELEMENT ike-sa-lifetime (#PCDATA)>

<!ELEMENT ike-sa-local-address (#PCDATA)>

<!ELEMENT ike-sa-local-id (#PCDATA)>

<!ELEMENT ike-sa-local-port (#PCDATA)>

<!ELEMENT ike-sa-misc (ike-sa-flags | ike-sa-num-ipsec-sas-created |
ike-sa-num-ipsec-sas-deleted | ike-sa-num-phase2-negotiations)*>

<!ELEMENT ike-sa-msg-id (#PCDATA)>

<!ELEMENT ike-sa-num-ipsec-sas-created (#PCDATA)>

<!ELEMENT ike-sa-num-ipsec-sas-deleted (#PCDATA)>

<!ELEMENT ike-sa-num-phase2-negotiations (#PCDATA)>

<!ELEMENT ike-sa-output-bytes (#PCDATA)>

<!ELEMENT ike-sa-output-packets (#PCDATA)>

<!ELEMENT ike-sa-phase2-information (ike-sa-phase2-type | ike-sa-role | ike-sa-msg-id |
ike-sa-local-address | ike-sa-local-port | ike-sa-remote-address | ike-sa-remote-port |
ike-sa-local-id | ike-sa-remote-id | ike-sa-flags)*>

<!ELEMENT ike-sa-phase2-type (#PCDATA)>

<!ELEMENT ike-sa-prf-algorithm (#PCDATA)>

<!ELEMENT ike-sa-remote-address (#PCDATA)>

<!ELEMENT ike-sa-remote-id (#PCDATA)>

<!ELEMENT ike-sa-remote-port (#PCDATA)>

<!ELEMENT ike-sa-responder-cookie (#PCDATA)>

<!ELEMENT ike-sa-role (#PCDATA)>

<!ELEMENT ike-sa-state (#PCDATA)>

<!ELEMENT ike-sa-traffic-statistics (ike-sa-input-packets | ike-sa-output-packets |
ike-sa-input-bytes | ike-sa-output-bytes)*>

```

```
<!ELEMENT ike-security-associations (ike-sa-role | ike-sa-state | ike-sa-initiator-cookie |
ike-sa-responder-cookie | ike-sa-exchange-type | ike-sa-authentication-method |
ike-sa-local-address | ike-sa-local-port | ike-sa-remote-address | ike-sa-remote-port |
ike-sa-lifetime | ike-sa-algorithms | ike-sa-traffic-statistics | ike-sa-misc |
ike-sa-phase2-information)*>
```

```
<!ELEMENT ike-security-associations-block (ike-sa-remote-address |
ike-security-associations)*>
```

```
<!ELEMENT ike-security-associations-information (ike-security-associations |
ike-sa-phase2-information | ike-security-associations-block)*>
<!ATTLIST ike-security-associations-information junos:style CDATA #IMPLIED>
```

```
<!ELEMENT ipsec-pic-redundancy (ipsec-redundancy-counter |
ipsec-redundancy-pic-no-information | ipsec-pic-redundancy-primary-interface |
ipsec-pic-redundancy-backup-interface | ipsec-redundancy-primary-state |
ipsec-redundancy-backup-state)*>
```

```
<!ELEMENT ipsec-pic-redundancy-backup-interface (#PCDATA)>
```

```
<!ELEMENT ipsec-pic-redundancy-information (ipsec-pic-redundancy)*>
```

```
<!ELEMENT ipsec-pic-redundancy-primary-interface (#PCDATA)>
```

```
<!ELEMENT ipsec-redundancy-backup-state (#PCDATA)>
```

```
<!ELEMENT ipsec-redundancy-counter (#PCDATA)>
```

```
<!ELEMENT ipsec-redundancy-pic-no-information EMPTY>
```

```
<!ELEMENT ipsec-redundancy-primary-state (#PCDATA)>
```

```
<!ELEMENT ipsec-redundancy-tunnel-no-information EMPTY>
```

```
<!ELEMENT ipsec-service-set-statistics (pic-name | service-set-name |
ipsec-statistics)*>
```

```
<!ELEMENT ipsec-statistics (local-gateway | remote-gateway | tunnel-index |
esp-statistics | ah-statistics | error-statistics | statistics-no-information)*>
```

```
<!ELEMENT ipsec-total-statistics (ipsec-service-set-statistics)*>
```

```
<!ELEMENT ipsec-total-statistics-information (ipsec-service-set-statistics)*>
<!ATTLIST ipsec-total-statistics-information junos:style CDATA #IMPLIED>
```

```
<!ELEMENT ipsec-tunnel-redundancy (sa-name | ipsec-redundancy-counter |
ipsec-redundancy-tunnel-no-information | ipsec-tunnel-redundancy-local-address |
ipsec-tunnel-redundancy-primary-remote-address |
ipsec-tunnel-redundancy-backup-remote-address | ipsec-redundancy-primary-state |
ipsec-redundancy-backup-state)*>
```

```
<!ELEMENT ipsec-tunnel-redundancy-backup-remote-address (#PCDATA)>
```

```
<!ELEMENT ipsec-tunnel-redundancy-information (ipsec-tunnel-redundancy)*>
```

```
<!ELEMENT ipsec-tunnel-redundancy-local-address (#PCDATA)>
```

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<!ELEMENT ipsec-tunnel-redundancy-primary-remote-address (#PCDATA)>

<!ELEMENT issue-info (recipient | issued-by)*>

<!ELEMENT issued-by (#PCDATA)>

<!ELEMENT issuer (distinguished-name)*>

<!ELEMENT key (#PCDATA)>

<!ELEMENT key-contents (#PCDATA)>

<!ELEMENT key-usage (#PCDATA)>

<!ELEMENT key-usage-list (key-usage)*>

<!ELEMENT kmd-memory-usage (memory-block-type | memory-in-use)*>

<!ELEMENT kmd-memory-usage-information (kmd-memory-usage)*>
<!ATTLIST kmd-memory-usage-information junos:style CDATA #IMPLIED>

<!ELEMENT local-gateway (#PCDATA)>

<!ELEMENT locality-name (#PCDATA)>

<!ELEMENT locked-entries (#PCDATA)>

<!ELEMENT memory-block-type (#PCDATA)>

<!ELEMENT memory-in-use (#PCDATA)>

<!ELEMENT message (#PCDATA)>

<!ELEMENT next-update (#PCDATA)>

<!ELEMENT not-after (#PCDATA)>

<!ELEMENT not-before (#PCDATA)>

<!ELEMENT organization-name (#PCDATA)>

<!ELEMENT organizational-unit-name (#PCDATA)>

<!ELEMENT outside-service-interface-routing-instance (#PCDATA)>

<!ELEMENT pic-name (#PCDATA)>

<!ELEMENT pic-slot (#PCDATA)>

<!ELEMENT pki-scep (url | ca-name | ca-file | key | certificate-subject | certificate-dns |
certificate-alternate-subject | encoding | message)*>

<!ELEMENT public-key (public-key-algorithm | public-key-length |
public-key-verification-status)*>

<!ELEMENT public-key-algorithm (#PCDATA)>

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<!ELEMENT public-key-contents-list (key-contents)*>
<!ELEMENT public-key-length (#PCDATA)>
<!ELEMENT public-key-verification-status (#PCDATA)>
<!ELEMENT recipient (#PCDATA)>
<!ELEMENT remote-gateway (#PCDATA)>
<!ELEMENT replay-errors (#PCDATA)>
<!ELEMENT revocation-date (#PCDATA)>
<!ELEMENT revoked-cert-serial-number (#PCDATA)>
<!ELEMENT sa-anti-replay-service (#PCDATA)>
<!ELEMENT sa-authentication-algorithm (#PCDATA)>
<!ELEMENT sa-aux-spi (#PCDATA)>
<!ELEMENT sa-block-state (#PCDATA)>
<!ELEMENT sa-direction (#PCDATA)>
<!ELEMENT sa-encryption-algorithm (#PCDATA)>
<!ELEMENT sa-hard-lifetime (#PCDATA)>
<!ELEMENT sa-inside-interface (#PCDATA)>
<!ELEMENT sa-local-gateway (#PCDATA)>
<!ELEMENT sa-local-identity (#PCDATA)>
<!ELEMENT sa-mode (#PCDATA)>
<!ELEMENT sa-name (#PCDATA)>
<!ELEMENT sa-no-information EMPTY>
<!ELEMENT sa-protocol (#PCDATA)>
<!ELEMENT sa-remote-gateway (#PCDATA)>
<!ELEMENT sa-remote-identity (#PCDATA)>
<!ELEMENT sa-replay-window-size (#PCDATA)>
<!ELEMENT sa-rule-name (#PCDATA)>
<!ELEMENT sa-soft-lifetime (#PCDATA)>
<!ELEMENT sa-spi (#PCDATA)>
<!ELEMENT sa-state (#PCDATA)>
```



```

<!ELEMENT sa-term-name (#PCDATA)>

<!ELEMENT sa-tunnel-index (#PCDATA)>

<!ELEMENT sa-tunnel-information (sa-rule-name | sa-term-name | sa-tunnel-index |
sa-local-gateway | sa-remote-gateway | sa-local-identity | sa-remote-identity |
sa-inside-interface | sa-tunnel-mtu | sa-no-information)*>

<!ELEMENT sa-tunnel-mtu (#PCDATA)>

<!ELEMENT sa-type (#PCDATA)>

<!ELEMENT security-associations (sa-direction | sa-spi | sa-aux-spi | sa-state | sa-mode
| sa-type | sa-protocol | sa-authentication-algorithm | sa-encryption-algorithm |
sa-soft-lifetime | sa-hard-lifetime | sa-anti-replay-service | sa-replay-window-size)*>

<!ELEMENT security-associations-block (sa-name | sa-block-state |
sa-tunnel-information | security-associations)*>

<!ELEMENT security-associations-information (security-associations-block |
sa-tunnel-information | security-associations)*>
<!ATTLIST security-associations-information junos:style CDATA #IMPLIED>

<!ELEMENT serial (#PCDATA)>

<!ELEMENT serial-number (#PCDATA)>

<!ELEMENT serial-number-list (serial-number-x509)*>

<!ELEMENT serial-number-x509 (#PCDATA)>

<!ELEMENT service-set-info (service-set-name | total-cert-entries)*>

<!ELEMENT service-set-name (#PCDATA)>

<!ELEMENT services-security-associations-block (svc-set-name |
outside-service-interface-routing-instance | sa-tunnel-information | security-associations
| tunnel-redundancy-extensive)*>

<!ELEMENT services-security-associations-information
(services-security-associations-block | sa-tunnel-information | security-associations |
tunnel-redundancy-extensive)*>
<!ATTLIST services-security-associations-information junos:style CDATA #IMPLIED>

<!ELEMENT signature-algorithm (#PCDATA)>

<!ELEMENT state-or-province-name (#PCDATA)>

<!ELEMENT statistics-no-information EMPTY>

<!ELEMENT status (#PCDATA)>

<!ELEMENT subject (distinguished-name)*>

<!ELEMENT svc-set-name (#PCDATA)>

```

```

<!ELEMENT total-cert-entries (#PCDATA)>

<!ELEMENT total-entries (#PCDATA)>

<!ELEMENT tunnel-index (#PCDATA)>

<!ELEMENT tunnel-redundancy-extensive (ipsec-redundancy-counter |
ipsec-redundancy-tunnel-no-information |
ipsec-tunnel-redundancy-primary-remote-address |
ipsec-tunnel-redundancy-backup-remote-address | ipsec-redundancy-primary-state |
ipsec-redundancy-backup-state)*>

<!ELEMENT url (#PCDATA)>

<!ELEMENT validity (not-before | not-after)*>

<!ELEMENT version (#PCDATA)>

<!ELEMENT x509 (x509-ip | x509-dns | x509-uri | x509-email)*>

<!ELEMENT x509-certificate-cache-info (service-set-info | cert-flag-info | issue-info |
serial-number-list | public-key | fingerprint | public-key-contents-list | alternate-subject-list
| key-usage-list | distribution-crl-list | signature-algorithm | identifier | validity | version |
certificate-cache-entry)*>
<!ATTLIST x509-certificate-cache-info junos:style CDATA #IMPLIED>

<!ELEMENT x509-certificate-cache-info-list (x509-certificate-cache-info)*>

<!ELEMENT x509-certificate-info (issue-info | serial-number-list | public-key | fingerprint |
public-key-contents-list | alternate-subject-list | key-usage-list | distribution-crl-list |
signature-algorithm | identifier | validity | version | auto-re-enrollment | certificate-type |
status | issuer | subject)*>
<!ATTLIST x509-certificate-info junos:style CDATA #IMPLIED>

<!ELEMENT x509-crl-information (crl-number | crl-revocation-list | crl-validity | crl-version
| crl-issuer | identifier | crl-issuer-alternate-subject-list | crl-issuer-detail)*>
<!ATTLIST x509-crl-information junos:style CDATA #IMPLIED>

<!ELEMENT x509-dns (#PCDATA)>

<!ELEMENT x509-email (#PCDATA)>

<!ELEMENT x509-ip (#PCDATA)>

<!ELEMENT x509-pki-certificate-info-list (x509-certificate-info)*>

<!ELEMENT x509-pki-crl-information-list (x509-crl-information)*>

<!ELEMENT x509-uri (#PCDATA)>

```