```
Loaded configuration from file ksrsigner.yaml SHA-256 a3328b6c0449d88b05282a1b56b7a551885d3016d8f31e1
f9667703764003989 WORDS reform component obtuse handiwork adrift dinosaur stormy Medusa adult cellulo
se brickyard bravado egghead processor reindeer enchanting newborn filament chairlift bodyguard storm
y vertigo berserk businessman prefer graduate guidance consensus flytrap adroitness classroom matchma
ker
Loaded SKR from file skr-root-2025-q4.xml SHA-256 4df0896d6457ecba10220fa9ac0b19136073753d0b1de7f3516
5a67f5b8dbb09 WORDS dreadful upcoming nightbird hazardous flytrap Eskimo tumor puberty assume candida
te artist passenger ribcage armistice bedlamp barbecue facial hurricane indulge crucifix alone breaka
way transit vertigo drunken glossary rematch integrate erase microscope shamrock applicant
Previous SKR:
#  Inception           Expiration          ZSK Tags      KSK(CKA_LABEL)
1  2025-10-01T00:00:00 2025-10-22T00:00:00  46441,61809   20326(Klajeyz)/S,38696(Kmyv6jo)/P
2  2025-10-11T00:00:00 2025-11-01T00:00:00  61809         20326(Klajeyz)/S,38696(Kmyv6jo)/P
3  2025-10-21T00:00:00 2025-11-11T00:00:00  61809         20326(Klajeyz)/S,38696(Kmyv6jo)/P
4  2025-10-31T00:00:00 2025-11-21T00:00:00  61809         20326(Klajeyz)/S,38696(Kmyv6jo)/P
5  2025-11-10T00:00:00 2025-12-01T00:00:00  61809         20326(Klajeyz)/S,38696(Kmyv6jo)/P
6  2025-11-20T00:00:00 2025-12-11T00:00:00  61809         20326(Klajeyz)/S,38696(Kmyv6jo)/P
7  2025-11-30T00:00:00 2025-12-21T00:00:00  61809         20326(Klajeyz)/S,38696(Kmyv6jo)/P
8  2025-12-10T00:00:00 2025-12-31T00:00:00  61809         20326(Klajeyz)/S,38696(Kmyv6jo)/P
9  2025-12-20T00:00:00 2026-01-10T00:00:00  21831,61809   20326(Klajeyz)/S,38696(Kmyv6jo)/P
Loaded KSR from file ksr-root-2026-q1-0-d_to_d.xml SHA-256 ae2ad6f2b753731c5830591631776e8cee63880027
889e6248b35041196f894a WORDS robust chambermaid stockman vagabond seabird enterprise hockey Brazilian
 endorse commando endow bodyguard chatter inception goldfish megaton tycoon Galveston newborn adroitn
ess brackish maritime quiver gadgetry deadbolt pocketful drumbeat decadence bedlamp hemisphere nightb
ird direction
Validating KSR using request policy:
  acceptable_domains: ['.']
  approved_algorithms: ['RSASHA256']
  check_bundle_intervals: True
  check_bundle_overlap: True
  check_chain_keys: True
  check_chain_keys_in_hsm: True
  check_chain_overlap: True
  check_cycle_length: True
  check_keys_match_ksk_operator_policy: True
  check_keys_publish_safety: True
  check_keys_retire_safety: True
  dns_ttl: 172800
  enable_unsupported_ecdsa: False
  enable_unsupported_edwards_dsa: False
  keys_match_zsk_policy: True
  max_bundle_interval: 11 days, 0:00:00
  max_cycle_inception_length: 81 days, 0:00:00
  min_bundle_interval: 9 days, 0:00:00
  min_cycle_inception_length: 79 days, 0:00:00
  num_bundles: 9
  num_different_keys_in_all_bundles: 3
  num_keys_per_bundle: [2, 1, 1, 1, 1, 1, 1, 1, 2]
  rsa_approved_exponents: [65537]
  rsa_approved_key_sizes: [2048]
  rsa_exponent_match_zsk_policy: True
  signature_algorithms_match_zsk_policy: True
  signature_check_expire_horizon: True
  signature_horizon_days: 180
  signature_validity_match_zsk_policy: True
  validate_signatures: True
KSR-DOMAIN: Verified domain '.'
KSR-ID: Will be checked later, when SKR is available
KSR-BUNDLE-UNIQUE: All 9 bundles have unique ids
KSR-BUNDLE-KEYS: All 3 unique keys in the bundles accepted by policy
KSR-BUNDLE-POP: All 9 bundles contain proof-of-possession
KSR-BUNDLE-COUNT: Number of bundles (9) accepted
KSR-BUNDLE-CYCLE-DURATION: The cycle length is in accordance with the KSK operator policy
KSR-POLICY-KEYS: Validated number of keys per bundle, and for all bundles
KSR-POLICY-ALG: All 1 ZSK operator signature algorithms accepted by policy
KSR-POLICY-SIG-OVERLAP: All bundles overlap in accordance with the stated ZSK operator policy
KSR-POLICY-SIG-VALIDITY: All 9 bundles have 21 days <= validity >= 21 days
KSR-POLICY-SIG-HORIZON: All signatures expire in less than 180 days
KSR-POLICY-BUNDLE-INTERVALS: All bundles intervals in accordance with the KSK operator policy
Request:
#  Inception           Expiration          ZSK Tags      KSK(CKA_LABEL)
1  2026-01-01T00:00:00 2026-01-22T00:00:00  21831,61809
2  2026-01-11T00:00:00 2026-02-01T00:00:00  21831
3  2026-01-21T00:00:00 2026-02-11T00:00:00  21831
4  2026-01-31T00:00:00 2026-02-21T00:00:00  21831
```

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5  2026-02-10T00:00:00 2026-03-03T00:00:00  21831
6  2026-02-20T00:00:00 2026-03-13T00:00:00  21831
7  2026-03-02T00:00:00 2026-03-23T00:00:00  21831
8  2026-03-12T00:00:00 2026-04-02T00:00:00  21831
9  2026-03-22T00:00:00 2026-04-12T00:00:00  54393,21831
Initializing PKCS#11 module aep using /opt/Keyper/PKCS11Provider/pkcs11.linux_gcc_4_1_2_glibc_2_5_x86
_64.so.5.02
HSM First slot:        ICANNKSK
HSM ManufacturerID:    Ultra Electronics AEP Networks
HSM Model:             Keyper 9860-2
HSM Serial:            H2110010
Initializing PKCS#11 module luna using /usr/safenet/lunaclient/lib/libCryptoki2_64.so
HSM First slot:        HSM9E_KSK-2024
HSM ManufacturerID:
HSM Model:             Luna G7
HSM Serial:            1658876115494
Checking coherence between SKR(n-1) and this KSR
KSR-CHAIN-KEYS: The last keys in SKR(n-1) matches the first keys in this KSR
KSR-CHAIN-OVERLAP: Overlap with last bundle in SKR(n-1) 9 days is in accordance with the KSR policy
KSR-CHAIN-KEYS: All 1 signatures in the last bundle of the last SKR were made with keys present in th
e HSM(s)
Signing 256 bytes with key key_label=Klajeyz RSA public_key=348 bytes, algorithm RSASHA256, mechanism
 CKM_RSA_X_509, hash using hsm=False
Signing 256 bytes with key key_label=Klajeyz RSA public_key=348 bytes, algorithm RSASHA256, mechanism
 CKM_RSA_X_509, hash using hsm=False
Signing 256 bytes with key key_label=Klajeyz RSA public_key=348 bytes, algorithm RSASHA256, mechanism
 CKM_RSA_X_509, hash using hsm=False
Signing 256 bytes with key key_label=Klajeyz RSA public_key=348 bytes, algorithm RSASHA256, mechanism
 CKM_RSA_X_509, hash using hsm=False
Signing 256 bytes with key key_label=Klajeyz RSA public_key=348 bytes, algorithm RSASHA256, mechanism
 CKM_RSA_X_509, hash using hsm=False
Signing 256 bytes with key key_label=Klajeyz RSA public_key=348 bytes, algorithm RSASHA256, mechanism
 CKM_RSA_X_509, hash using hsm=False
Signing 256 bytes with key key_label=Klajeyz RSA public_key=348 bytes, algorithm RSASHA256, mechanism
 CKM_RSA_X_509, hash using hsm=False
Signing 256 bytes with key key_label=Klajeyz RSA public_key=348 bytes, algorithm RSASHA256, mechanism
 CKM_RSA_X_509, hash using hsm=False
Signing 256 bytes with key key_label=Klajeyz RSA public_key=348 bytes, algorithm RSASHA256, mechanism
 CKM_RSA_X_509, hash using hsm=False
KSR-POLICY-SAFETY: PublishSafety validated
KSR-POLICY-SAFETY: RetireSafety validated
Generated SKR:
#  Inception           Expiration           ZSK Tags       KSK(CKA_LABEL)
1  2026-01-01T00:00:00 2026-01-22T00:00:00  21831,61809    20326(Klajeyz)/S,38696(Kmyv6jo)/P
2  2026-01-11T00:00:00 2026-02-01T00:00:00  21831          20326(Klajeyz)/S,38696(Kmyv6jo)/P
3  2026-01-21T00:00:00 2026-02-11T00:00:00  21831          20326(Klajeyz)/S,38696(Kmyv6jo)/P
4  2026-01-31T00:00:00 2026-02-21T00:00:00  21831          20326(Klajeyz)/S,38696(Kmyv6jo)/P
5  2026-02-10T00:00:00 2026-03-03T00:00:00  21831          20326(Klajeyz)/S,38696(Kmyv6jo)/P
6  2026-02-20T00:00:00 2026-03-13T00:00:00  21831          20326(Klajeyz)/S,38696(Kmyv6jo)/P
7  2026-03-02T00:00:00 2026-03-23T00:00:00  21831          20326(Klajeyz)/S,38696(Kmyv6jo)/P
8  2026-03-12T00:00:00 2026-04-02T00:00:00  21831          20326(Klajeyz)/S,38696(Kmyv6jo)/P
9  2026-03-22T00:00:00 2026-04-12T00:00:00  54393,21831    20326(Klajeyz)/S,38696(Kmyv6jo)/P
Wrote SKR to file skr-root-2026-q1-0-d_to_d.xml SHA-256 a47f9e1aa64de8d1c1a1cdaac7a9aea451e05369b773a
8e0dd1c4359771d6ce7 WORDS regain integrate quiver Bradbury rematch disruptive trauma scavenger snapli
ne outfielder spindle pedigree soybean passenger robust Pandora drunken tobacco dwelling guitarist se
abird hurricane retouch tobacco swelter Brazilian crucial examine involve breakaway glucose truncated
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Loaded configuration from file ksrsigner.yaml SHA-256 7f659b2d74bd53fce8415f7dbfa1a0a84c8e6b5fbc8a68e
fb4a4ff3931a536e1 WORDS lockup glossary puppy clergyman indoors quantity dwelling Wilmington trauma d
ecadence eyetooth insincere slingshot outfielder ragtime paramount drainage microwave glitter forever
 showgirl maverick frighten unravel scenic Pandora Zulu corporate chatter paperweight Christmas toler
ance
Loaded SKR from file skr-root-2025-q4.xml SHA-256 4df0896d6457ecba10220fa9ac0b19136073753d0b1de7f3516
5a67f5b8dbb09 WORDS dreadful upcoming nightbird hazardous flytrap Eskimo tumor puberty assume candida
te artist passenger ribcage armistice bedlamp barbecue facial hurricane indulge crucifix alone breaka
way transit vertigo drunken glossary rematch integrate erase microscope shamrock applicant
Previous SKR:
#  Inception           Expiration          ZSK Tags      KSK(CKA_LABEL)
1  2025-10-01T00:00:00 2025-10-22T00:00:00  46441,61809   20326(Klajeyz)/S,38696(Kmyv6jo)/P
2  2025-10-11T00:00:00 2025-11-01T00:00:00  61809         20326(Klajeyz)/S,38696(Kmyv6jo)/P
3  2025-10-21T00:00:00 2025-11-11T00:00:00  61809         20326(Klajeyz)/S,38696(Kmyv6jo)/P
4  2025-10-31T00:00:00 2025-11-21T00:00:00  61809         20326(Klajeyz)/S,38696(Kmyv6jo)/P
5  2025-11-10T00:00:00 2025-12-01T00:00:00  61809         20326(Klajeyz)/S,38696(Kmyv6jo)/P
6  2025-11-20T00:00:00 2025-12-11T00:00:00  61809         20326(Klajeyz)/S,38696(Kmyv6jo)/P
7  2025-11-30T00:00:00 2025-12-21T00:00:00  61809         20326(Klajeyz)/S,38696(Kmyv6jo)/P
8  2025-12-10T00:00:00 2025-12-31T00:00:00  61809         20326(Klajeyz)/S,38696(Kmyv6jo)/P
9  2025-12-20T00:00:00 2026-01-10T00:00:00  61809,21831   20326(Klajeyz)/S,38696(Kmyv6jo)/P
Loaded KSR from file ksr-root-2026-q1-1-d_to_c.xml SHA-256 b04640c63fad9e1a733c93e7fb1280558573227ecc
d82c14216f1b6c885dcea0 WORDS ruffled detergent crackdown responsive cowbell perceptive quiver Bradbur
y hockey crossover playhouse truncated watchword backwater merit equipment music hurricane blockade i
nsurgent spigot stupendous Burbank belowground blackjack hemisphere beeswax handiwork newborn filamen
t spyglass Orlando
Validating KSR using request policy:
  acceptable_domains: ['.']
  approved_algorithms: ['RSASHA256']
  check_bundle_intervals: True
  check_bundle_overlap: True
  check_chain_keys: True
  check_chain_keys_in_hsm: True
  check_chain_overlap: True
  check_cycle_length: True
  check_keys_match_ksk_operator_policy: True
  check_keys_publish_safety: True
  check_keys_retire_safety: True
  dns_ttl: 172800
  enable_unsupported_ecdsa: False
  enable_unsupported_edwards_dsa: False
  keys_match_zsk_policy: True
  max_bundle_interval: 11 days, 0:00:00
  max_cycle_inception_length: 81 days, 0:00:00
  min_bundle_interval: 9 days, 0:00:00
  min_cycle_inception_length: 79 days, 0:00:00
  num_bundles: 9
  num_different_keys_in_all_bundles: 3
  num_keys_per_bundle: [2, 1, 1, 1, 1, 1, 1, 2]
  rsa_approved_exponents: [65537]
  rsa_approved_key_sizes: [2048]
  rsa_exponent_match_zsk_policy: True
  signature_algorithms_match_zsk_policy: True
  signature_check_expire_horizon: True
  signature_horizon_days: 180
  signature_validity_match_zsk_policy: True
  validate_signatures: True
KSR-DOMAIN: Verified domain '.'
KSR-ID: Will be checked later, when SKR is available
KSR-BUNDLE-UNIQUE: All 9 bundles have unique ids
KSR-BUNDLE-KEYS: All 3 unique keys in the bundles accepted by policy
KSR-BUNDLE-POP: All 9 bundles contain proof-of-possession
KSR-BUNDLE-COUNT: Number of bundles (9) accepted
KSR-BUNDLE-CYCLE-DURATION: The cycle length is in accordance with the KSK operator policy
KSR-POLICY-KEYS: Validated number of keys per bundle, and for all bundles
KSR-POLICY-ALG: All 1 ZSK operator signature algorithms accepted by policy
KSR-POLICY-SIG-OVERLAP: All bundles overlap in accordance with the stated ZSK operator policy
KSR-POLICY-SIG-VALIDITY: All 9 bundles have 21 days <= validity >= 21 days
KSR-POLICY-SIG-HORIZON: All signatures expire in less than 180 days
KSR-POLICY-BUNDLE-INTERVALS: All bundles intervals in accordance with the KSK operator policy
Request:
#  Inception           Expiration          ZSK Tags      KSK(CKA_LABEL)
1  2026-01-01T00:00:00 2026-01-22T00:00:00  61809,21831
2  2026-01-11T00:00:00 2026-02-01T00:00:00  21831
3  2026-01-21T00:00:00 2026-02-11T00:00:00  21831
4  2026-01-31T00:00:00 2026-02-21T00:00:00  21831
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5  2026-02-10T00:00:00 2026-03-03T00:00:00  21831
6  2026-02-20T00:00:00 2026-03-13T00:00:00  21831
7  2026-03-02T00:00:00 2026-03-23T00:00:00  21831
8  2026-03-12T00:00:00 2026-04-02T00:00:00  21831
9  2026-03-22T00:00:00 2026-04-12T00:00:00  54393,21831
Initializing PKCS#11 module aep using /opt/Keyper/PKCS11Provider/pkcs11.linux_gcc_4_1_2_glibc_2_5_x86
_64.so.5.02
HSM First slot:      ICANNKSK
HSM ManufacturerID:  Ultra Electronics AEP Networks
HSM Model:           Keyper 9860-2
HSM Serial:          H2110010
Initializing PKCS#11 module luna using /usr/safenet/lunaclient/lib/libCryptoki2_64.so
HSM First slot:      HSM9E_KSK-2024
HSM ManufacturerID:
HSM Model:           Luna G7
HSM Serial:          1658876115494
Checking coherence between SKR(n-1) and this KSR
KSR-CHAIN-KEYS: The last keys in SKR(n-1) matches the first keys in this KSR
KSR-CHAIN-OVERLAP: Overlap with last bundle in SKR(n-1) 9 days is in accordance with the KSR policy
KSR-CHAIN-KEYS: All 1 signatures in the last bundle of the last SKR were made with keys present in th
e HSM(s)
Signing 256 bytes with key key_label=Klajeyz RSA public_key=348 bytes, algorithm RSASHA256, mechanism
 CKM_RSA_X_509, hash using hsm=False
Signing 256 bytes with key key_label=Klajeyz RSA public_key=348 bytes, algorithm RSASHA256, mechanism
 CKM_RSA_X_509, hash using hsm=False
Signing 256 bytes with key key_label=Klajeyz RSA public_key=348 bytes, algorithm RSASHA256, mechanism
 CKM_RSA_X_509, hash using hsm=False
Signing 256 bytes with key key_label=Klajeyz RSA public_key=348 bytes, algorithm RSASHA256, mechanism
 CKM_RSA_X_509, hash using hsm=False
Signing 256 bytes with key key_label=Klajeyz RSA public_key=348 bytes, algorithm RSASHA256, mechanism
 CKM_RSA_X_509, hash using hsm=False
Signing 256 bytes with key key_label=Klajeyz RSA public_key=348 bytes, algorithm RSASHA256, mechanism
 CKM_RSA_X_509, hash using hsm=False
Signing 256 bytes with key key_label=Klajeyz RSA public_key=348 bytes, algorithm RSASHA256, mechanism
 CKM_RSA_X_509, hash using hsm=False
Signing 256 bytes with key key_label=Klajeyz RSA public_key=348 bytes, algorithm RSASHA256, mechanism
 CKM_RSA_X_509, hash using hsm=False
Signing 256 bytes with key key_label=Klajeyz RSA public_key=348 bytes, algorithm RSASHA256, mechanism
 CKM_RSA_X_509, hash using hsm=False
KSR-POLICY-SAFETY: PublishSafety validated
KSR-POLICY-SAFETY: RetireSafety validated
Generated SKR:
#  Inception           Expiration           ZSK Tags       KSK(CKA_LABEL)
1  2026-01-01T00:00:00 2026-01-22T00:00:00  61809,21831    20326(Klajeyz)/S
2  2026-01-11T00:00:00 2026-02-01T00:00:00  21831          20326(Klajeyz)/S
3  2026-01-21T00:00:00 2026-02-11T00:00:00  21831          20326(Klajeyz)/S
4  2026-01-31T00:00:00 2026-02-21T00:00:00  21831          20326(Klajeyz)/S
5  2026-02-10T00:00:00 2026-03-03T00:00:00  21831          20326(Klajeyz)/S
6  2026-02-20T00:00:00 2026-03-13T00:00:00  21831          20326(Klajeyz)/S
7  2026-03-02T00:00:00 2026-03-23T00:00:00  21831          20326(Klajeyz)/S
8  2026-03-12T00:00:00 2026-04-02T00:00:00  21831          20326(Klajeyz)/S
9  2026-03-22T00:00:00 2026-04-12T00:00:00  54393,21831    20326(Klajeyz)/S
Wrote SKR to file skr-root-2026-q1-1-d_to_c.xml SHA-256 6030684f3932de854fb137b9328a40b8d3ffb7713f374
c209f777ec2a1e9f778 WORDS facial commando frighten document classroom component tactics leprosy dropp
er photograph clamshell proximate checkup maverick crackdown provincial stapler Yucatan seabird hidea
way cowbell consensus drainage butterfat quota inception locale repellent ratchet ultimate virus indi
go
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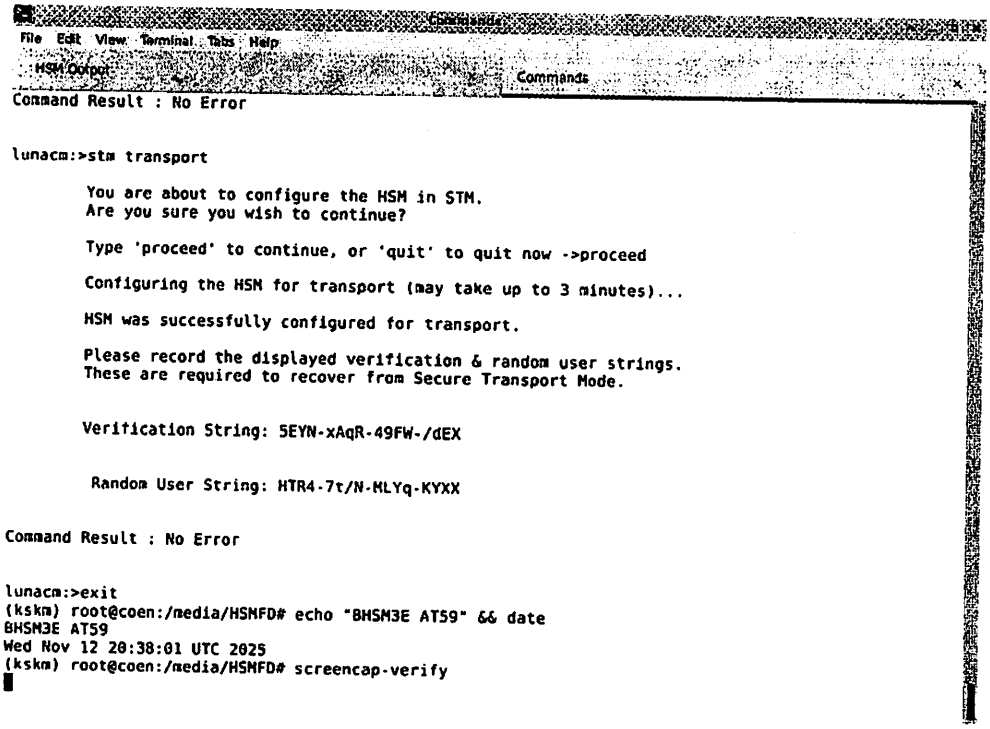
Loaded configuration from file ksrsigner.yaml SHA-256 0b39eba8309fca9c6cd74352afaca45cfe58e60fad9637d
a7e7727d2391b500b WORDS alone corporate trouble paramount chairlift opulent spellbind October glucose
 stethoscope crucial enrollment rocker penetrate regain fascinate woodlark everyday tracker atmospher
e ringbolt monument clamshell surrender locale inception brackish sensation classroom bravado drumbea
t armistice
Loaded SKR from file skr-root-2025-q4.xml SHA-256 4df0896d6457ecba10220fa9ac0b19136073753d0b1de7f3516
5a67f5b8dbb09 WORDS dreadful upcoming nightbird hazardous flytrap Eskimo tumor puberty assume candida
te artist passenger ribcage armistice bedlamp barbecue facial hurricane indulge crucifix alone breaka
way transit vertigo drunken glossary rematch integrate erase microscope shamrock applicant
Previous SKR:
#  Inception           Expiration          ZSK Tags      KSK(CKA_LABEL)
1  2025-10-01T00:00:00 2025-10-22T00:00:00  46441,61809   20326(Klajeyz)/S,38696(Kmyv6jo)/P
2  2025-10-11T00:00:00 2025-11-01T00:00:00  61809         20326(Klajeyz)/S,38696(Kmyv6jo)/P
3  2025-10-21T00:00:00 2025-11-11T00:00:00  61809         20326(Klajeyz)/S,38696(Kmyv6jo)/P
4  2025-10-31T00:00:00 2025-11-21T00:00:00  61809         20326(Klajeyz)/S,38696(Kmyv6jo)/P
5  2025-11-10T00:00:00 2025-12-01T00:00:00  61809         20326(Klajeyz)/S,38696(Kmyv6jo)/P
6  2025-11-20T00:00:00 2025-12-11T00:00:00  61809         20326(Klajeyz)/S,38696(Kmyv6jo)/P
7  2025-11-30T00:00:00 2025-12-21T00:00:00  61809         20326(Klajeyz)/S,38696(Kmyv6jo)/P
8  2025-12-10T00:00:00 2025-12-31T00:00:00  61809         20326(Klajeyz)/S,38696(Kmyv6jo)/P
9  2025-12-20T00:00:00 2026-01-10T00:00:00  21831,61809   20326(Klajeyz)/S,38696(Kmyv6jo)/P
Loaded KSR from file ksr-root-2026-q1-2-c_to_c.xml SHA-256 54189ba26cd1352a9e4d32f0a001cde2f91c76b773
adf47aa6a05b6aeaad9efc WORDS eating borderline puppy Pacific glucose scavenger chopper chambermaid qu
iver disruptive checkup upcoming ragtime adviser spindle tomorrow waffle Brazilian inverse processor
hockey perceptive upshot infancy rematch Orlando erase hamburger Trojan perceptive quiver Wilmington
Validating KSR using request policy:
  acceptable_domains: ['.']
  approved_algorithms: ['RSASHA256']
  check_bundle_intervals: True
  check_bundle_overlap: True
  check_chain_keys: True
  check_chain_keys_in_hsm: True
  check_chain_overlap: True
  check_cycle_length: True
  check_keys_match_ksk_operator_policy: True
  check_keys_publish_safety: True
  check_keys_retire_safety: True
  dns_ttl: 172800
  enable_unsupported_ecdsa: False
  enable_unsupported_edwards_dsa: False
  keys_match_zsk_policy: True
  max_bundle_interval: 11 days, 0:00:00
  max_cycle_inception_length: 81 days, 0:00:00
  min_bundle_interval: 9 days, 0:00:00
  min_cycle_inception_length: 79 days, 0:00:00
  num_bundles: 9
  num_different_keys_in_all_bundles: 3
  num_keys_per_bundle: [2, 1, 1, 1, 1, 1, 1, 1, 2]
  rsa_approved_exponents: [65537]
  rsa_approved_key_sizes: [2048]
  rsa_exponent_match_zsk_policy: True
  signature_algorithms_match_zsk_policy: True
  signature_check_expire_horizon: True
  signature_horizon_days: 180
  signature_validity_match_zsk_policy: True
  validate_signatures: True
KSR-DOMAIN: Verified domain '.'
KSR-ID: Will be checked later, when SKR is available
KSR-BUNDLE-UNIQUE: All 9 bundles have unique ids
KSR-BUNDLE-KEYS: All 3 unique keys in the bundles accepted by policy
KSR-BUNDLE-POP: All 9 bundles contain proof-of-possession
KSR-BUNDLE-COUNT: Number of bundles (9) accepted
KSR-BUNDLE-CYCLE-DURATION: The cycle length is in accordance with the KSK operator policy
KSR-POLICY-KEYS: Validated number of keys per bundle, and for all bundles
KSR-POLICY-ALG: All 1 ZSK operator signature algorithms accepted by policy
KSR-POLICY-SIG-OVERLAP: All bundles overlap in accordance with the stated ZSK operator policy
KSR-POLICY-SIG-VALIDITY: All 9 bundles have 21 days <= validity >= 21 days
KSR-POLICY-SIG-HORIZON: All signatures expire in less than 180 days
KSR-POLICY-BUNDLE-INTERVALS: All bundles intervals in accordance with the KSK operator policy
Request:
#  Inception           Expiration          ZSK Tags      KSK(CKA_LABEL)
1  2026-01-01T00:00:00 2026-01-22T00:00:00  61809,21831
2  2026-01-11T00:00:00 2026-02-01T00:00:00  21831
3  2026-01-21T00:00:00 2026-02-11T00:00:00  21831
4  2026-01-31T00:00:00 2026-02-21T00:00:00  21831
5  2026-02-10T00:00:00 2026-03-03T00:00:00  21831
```

```
6  2026-02-20T00:00:00 2026-03-13T00:00:00  21831
7  2026-03-02T00:00:00 2026-03-23T00:00:00  21831
8  2026-03-12T00:00:00 2026-04-02T00:00:00  21831
9  2026-03-22T00:00:00 2026-04-12T00:00:00  21831,54393
Initializing PKCS#11 module aep using /opt/Keyper/PKCS11Provider/pkcs11.linux_gcc_4_1_2_glibc_2_5_x86
_64.so.5.02
HSM First slot:        ICANNKSK
HSM ManufacturerID:    Ultra Electronics AEP Networks
HSM Model:             Keyper 9860-2
HSM Serial:            H2110010
Initializing PKCS#11 module luna using /usr/safenet/lunaclient/lib/libCryptoki2_64.so
HSM First slot:        HSM9E_KSK-2024
HSM ManufacturerID:
HSM Model:             Luna G7
HSM Serial:            1658876115494
Checking coherence between SKR(n-1) and this KSR
KSR-CHAIN-KEYS: The last keys in SKR(n-1) matches the first keys in this KSR
KSR-CHAIN-OVERLAP: Overlap with last bundle in SKR(n-1) 9 days is in accordance with the KSR policy
KSR-CHAIN-KEYS: All 1 signatures in the last bundle of the last SKR were made with keys present in th
e HSM(s)
Signing 256 bytes with key key_label=Klajeyz RSA public_key=348 bytes, algorithm RSASHA256, mechanism
 CKM_RSA_X_509, hash using hsm=False
Signing 256 bytes with key key_label=Klajeyz RSA public_key=348 bytes, algorithm RSASHA256, mechanism
 CKM_RSA_X_509, hash using hsm=False
Signing 256 bytes with key key_label=Klajeyz RSA public_key=348 bytes, algorithm RSASHA256, mechanism
 CKM_RSA_X_509, hash using hsm=False
Signing 256 bytes with key key_label=Klajeyz RSA public_key=348 bytes, algorithm RSASHA256, mechanism
 CKM_RSA_X_509, hash using hsm=False
Signing 256 bytes with key key_label=Klajeyz RSA public_key=348 bytes, algorithm RSASHA256, mechanism
 CKM_RSA_X_509, hash using hsm=False
Signing 256 bytes with key key_label=Klajeyz RSA public_key=348 bytes, algorithm RSASHA256, mechanism
 CKM_RSA_X_509, hash using hsm=False
Signing 256 bytes with key key_label=Klajeyz RSA public_key=348 bytes, algorithm RSASHA256, mechanism
 CKM_RSA_X_509, hash using hsm=False
Signing 256 bytes with key key_label=Klajeyz RSA public_key=348 bytes, algorithm RSASHA256, mechanism
 CKM_RSA_X_509, hash using hsm=False
Signing 256 bytes with key key_label=Klajeyz RSA public_key=348 bytes, algorithm RSASHA256, mechanism
 CKM_RSA_X_509, hash using hsm=False
KSR-POLICY-SAFETY: PublishSafety validated
KSR-POLICY-SAFETY: RetireSafety validated
Generated SKR:
#  Inception           Expiration           ZSK Tags       KSK(CKA_LABEL)
1  2026-01-01T00:00:00 2026-01-22T00:00:00  61809,21831    20326(Klajeyz)/S
2  2026-01-11T00:00:00 2026-02-01T00:00:00  21831          20326(Klajeyz)/S
3  2026-01-21T00:00:00 2026-02-11T00:00:00  21831          20326(Klajeyz)/S
4  2026-01-31T00:00:00 2026-02-21T00:00:00  21831          20326(Klajeyz)/S
5  2026-02-10T00:00:00 2026-03-03T00:00:00  21831          20326(Klajeyz)/S
6  2026-02-20T00:00:00 2026-03-13T00:00:00  21831          20326(Klajeyz)/S
7  2026-03-02T00:00:00 2026-03-23T00:00:00  21831          20326(Klajeyz)/S
8  2026-03-12T00:00:00 2026-04-02T00:00:00  21831          20326(Klajeyz)/S
9  2026-03-22T00:00:00 2026-04-12T00:00:00  21831,54393    20326(Klajeyz)/S
Wrote SKR to file skr-root-2026-q1-2-c_to_c.xml SHA-256 1e7de3d31099b4289d452093e2294176771df4241f64b
de2ba1ad10e6891ddf3 WORDS berserk insincere tissue sociable assume nebula scenic cellulose quadrant d
etector bison molasses tiger certify cranky impetus involve breakaway upshot Capricorn billiard getaw
ay skullcap tomorrow shadow Bradbury stairway Atlantic frighten miracle swelter vertigo
```


File Edit View Terminal Tabs Help
HSM Output
Commands
Command Result : No Error
lunacm:>stm transport
You are about to configure the HSM in STM.
Are you sure you wish to continue?
Type 'proceed' to continue, or 'quit' to quit now ->proceed
Configuring the HSM for transport (may take up to 3 minutes)...
HSM was successfully configured for transport.
Please record the displayed verification & random user strings.
These are required to recover from Secure Transport Mode.
Verification String: 5EYN-xAqR-49FW-/dEX
Random User String: HTR4-7t/N-MLYq-KYXX
Command Result : No Error
lunacm:>exit
(kskm) root@coen:/media/HSMFD# echo "BHSM3E AT59" && date
BHSM3E AT59
Wed Nov 12 20:38:01 UTC 2025
(kskm) root@coen:/media/HSMFD# screencap-verify