

Juniper SRX 日本語マニュアル

Hub-and-Spoke VPN の CLI 設定

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NETWORKS

Engineering
Simplicity

はじめに

Hub-and-Spoke VPN の CLI 設定方法について説明します。

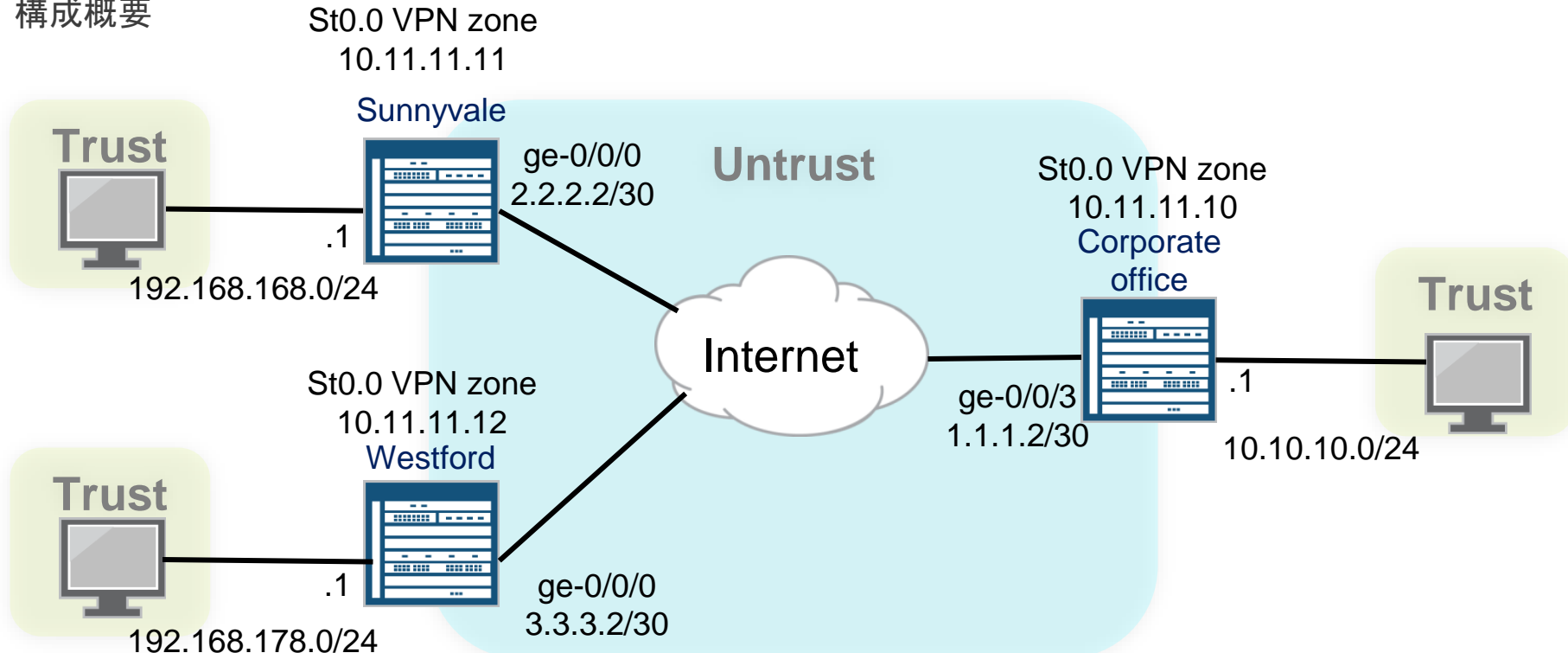
※手順内容は「SRX300」、JUNOS「19.4R3-S1」にて確認を実施しております。
実際の設定内容やパラメータは導入する環境や構成によって異なります。
各種設定内容の詳細は下記リンクよりご確認ください。

<https://www.juniper.net/documentation/>

2021年7月

Hub-and-Spoke VPN

構成概要



Hub-and-Spoke VPN (Corporate office)

- インタフェース設定

```
user@srx# set interfaces ge-0/0/0 unit 0 family inet address 10.10.10.1/24
user@srx# set interfaces ge-0/0/3 unit 0 family inet address 1.1.1.2/30
user@srx# set interfaces st0 unit 0 family inet address 10.11.11.10/24
```

- インタフェースをセキュリティゾーンにバインド

```
user@srx# set security zones security-zone untrust interfaces ge-0/0/3.0
user@srx# set security zones security-zone untrust host-inbound-traffic system-services ike
user@srx# set security zones security-zone trust interfaces ge-0/0/0.0
user@srx# set security zones security-zone trust host-inbound-traffic system-services all
user@srx# set security zones security-zone vpn interfaces st0.0
```

- ルーティング設定

```
user@srx# set routing-options static route 0.0.0.0/0 next-hop 1.1.1.1
user@srx# set routing-options static route 192.168.168.0/24 next-hop 10.11.11.11
user@srx# set routing-options static route 192.168.178.0/24 next-hop 10.11.11.12
```

Hub-and-Spoke VPN (Corporate office)

- アドレスブック設定

```
user@srx# set security address-book book1 address local-net 10.10.10.0/24
user@srx# set security address-book book1 attach zone trust
user@srx# set security address-book book2 address sunnyvale-net 192.168.168.0/24
user@srx# set security address-book book2 address westford-net 192.168.178.0/24
user@srx# set security address-book book2 attach zone vpn
```

- IKE (Phase1 接続 プロファイル・ポリシー・ゲートウェイ)設定

```
user@srx# set security ike proposal ike-phase1-proposal authentication-method pre-shared-keys
user@srx# set security ike proposal ike-phase1-proposal dh-group group2
user@srx# set security ike proposal ike-phase1-proposal authentication-algorithm sha1
user@srx# set security ike proposal ike-phase1-proposal encryption-algorithm aes-128-cbc
user@srx# set security ike policy ike-phase1-policy mode main
user@srx# set security ike policy ike-phase1-policy proposals ike-phase1-proposal
user@srx# set security ike policy ike-phase1-policy pre-shared-key ascii-text "$ABC123"
user@srx# set security ike gateway gw-westford external-interface ge-0/0/3.0
user@srx# set security ike gateway gw-westford ike-policy ike-phase1-policy
user@srx# set security ike gateway gw-westford address 3.3.3.2
user@srx# set security ike gateway gw-sunnyvale external-interface ge-0/0/3.0
user@srx# set security ike gateway gw-sunnyvale ike-policy ike-phase1-policy
user@srx# set security ike gateway gw-sunnyvale address 2.2.2.2
```

Hub-and-Spoke VPN (Corporate office)

- IPsec (Phase2 接続 プロポーサル・ポリシー・VPN) 設定

```
user@srx# set security ipsec proposal ipsec-phase2-proposal protocol esp
user@srx# set security ipsec proposal ipsec-phase2-proposal authentication-algorithm hmac-sha1-96
user@srx# set security ipsec proposal ipsec-phase2-proposal encryption-algorithm aes-128-cbc
user@srx# set security ipsec policy ipsec-phase2-policy proposals ipsec-phase2-proposal
user@srx# set security ipsec policy ipsec-phase2-policy perfect-forward-secrecy keys group2
user@srx# set security ipsec vpn vpn-westford ike gateway gw-westford
user@srx# set security ipsec vpn vpn-westford ike ipsec-policy ipsec-phase2-policy
user@srx# set security ipsec vpn vpn-westford bind-interface st0.0
user@srx# set security ipsec vpn vpn-sunnyvale ike gateway gw-sunnyvale
user@srx# set security ipsec vpn vpn-sunnyvale ike ipsec-policy ipsec-phase2-policy
user@srx# set security ipsec vpn vpn-sunnyvale bind-interface st0.0
user@srx# set interfaces st0 unit 0 multipoint
user@srx# set interfaces st0 unit 0 family inet next-hop-tunnel 10.11.11.11 ipsec-vpn vpn-sunnyvale
user@srx# set interfaces st0 unit 0 family inet next-hop-tunnel 10.11.11.12 ipsec-vpn vpn-westford
```

- TCP MSS 設定調整

※利用の環境に合わせて調整する必要あり

```
user@srx# set security flow tcp-mss ipsec-vpn mss 1350
```

Hub-and-Spoke VPN (Corporate office)

- セキュリティポリシー設定

```
user@srx# set security policies from-zone trust to-zone vpn policy local-to-spokes match source-address local-net
user@srx# set security policies from-zone trust to-zone vpn policy local-to-spokes match destination-address sunnyvale-net
user@srx# set security policies from-zone trust to-zone vpn policy local-to-spokes match destination-address westford-net
user@srx# set security policies from-zone trust to-zone vpn policy local-to-spokes match application any
user@srx# set security policies from-zone trust to-zone vpn policy local-to-spokes then permit
user@srx# set security policies from-zone vpn to-zone trust policy spokes-to-local match source-address sunnyvale-net
user@srx# set security policies from-zone vpn to-zone trust policy spokes-to-local match source-address westford-net
user@srx# set security policies from-zone vpn to-zone trust policy spokes-to-local match destination-address local-net
user@srx# set security policies from-zone vpn to-zone trust policy spokes-to-local match application any
user@srx# set security policies from-zone vpn to-zone trust policy spokes-to-local then permit
user@srx# set security policies from-zone vpn to-zone vpn policy spoke-to-spoke match source-address any
user@srx# set security policies from-zone vpn to-zone vpn policy spoke-to-spoke match destination-address any
user@srx# set security policies from-zone vpn to-zone vpn policy spoke-to-spoke match application any
user@srx# set security policies from-zone vpn to-zone vpn policy spoke-to-spoke then permit
```

Hub-and-Spoke VPN (Westford)

- インタフェース設定

```
user@srx# set interfaces ge-0/0/0 unit 0 family inet address 3.3.3.2/30
user@srx# set interfaces ge-0/0/3 unit 0 family inet address 192.168.178.1/24
user@srx# set interfaces st0 unit 0 family inet address 10.11.11.12/24
```

- インタフェースをセキュリティゾーンにバインド

```
user@srx# set security zones security-zone untrust interfaces ge-0/0/0.0
user@srx# set security zones security-zone untrust host-inbound-traffic system-services ike
user@srx# set security zones security-zone trust interfaces ge-0/0/3.0
user@srx# set security zones security-zone trust host-inbound-traffic system-services all
user@srx# set security zones security-zone vpn interfaces st0.0
```

- ルーティング設定

```
user@srx# set routing-options static route 0.0.0.0/0 next-hop 3.3.3.1
user@srx# set routing-options static route 10.10.10.0/24 next-hop 10.11.11.10
user@srx# set routing-options static route 192.168.168.0/24 next-hop 10.11.11.10
```


Hub-and-Spoke VPN (Westford)

- アドレスブック設定

```
user@srx# set security address-book book1 address local-net 192.168.178.0/24
user@srx# set security address-book book1 attach zone trust
user@srx# set security address-book book2 address corp-net 10.10.10.0/24
user@srx# set security address-book book2 address sunnyvale-net 192.168.168.0/24
user@srx# set security address-book book2 attach zone vpn
```

- IKE (Phase1 接続 プロファイル・ポリシー・ゲートウェイ) 設定

```
user@srx# set security ike proposal ike-phase1-proposal authentication-method pre-shared-keys
user@srx# set security ike proposal ike-phase1-proposal dh-group group2
user@srx# set security ike proposal ike-phase1-proposal authentication-algorithm sha1
user@srx# set security ike proposal ike-phase1-proposal encryption-algorithm aes-128-cbc
user@srx# set security ike policy ike-phase1-policy mode main
user@srx# set security ike policy ike-phase1-policy proposals ike-phase1-proposal
user@srx# set security ike policy ike-phase1-policy pre-shared-key ascii-text "$ABC123"
user@srx# set security ike gateway gw-corporate external-interface ge-0/0/0.0
user@srx# set security ike gateway gw-corporate ike-policy ike-phase1-policy
user@srx# set security ike gateway gw-corporate address 1.1.1.2
```

Hub-and-Spoke VPN (Westford)

- IPsec (Phase2 接続 プロポーサル・ポリシー・VPN) 設定

```
user@srx# set security ipsec proposal ipsec-phase2-proposal protocol esp
user@srx# set security ipsec proposal ipsec-phase2-proposal authentication-algorithm hmac-sha1-96
user@srx# set security ipsec proposal ipsec-phase2-proposal encryption-algorithm aes-128-cbc
user@srx# set security ipsec policy ipsec-phase2-policy proposals ipsec-phase2-proposal
user@srx# set security ipsec policy ipsec-phase2-policy perfect-forward-secrecy keys group2
user@srx# set security ipsec vpn vpn-corporate ike gateway gw-corporate
user@srx# set security ipsec vpn vpn-corporate ike ipsec-policy ipsec-phase2-policy
user@srx# set security ipsec vpn vpn-corporate bind-interface st0.0
```

- TCP MSS 設定調整

```
user@srx# set security flow tcp-mss ipsec-vpn mss 1350
```

Hub-and-Spoke VPN (Westford)

- セキュリティポリシー設定

```
user@srx# set security policies from-zone trust to-zone vpn policy to-corporate match source-address local-net
user@srx# set security policies from-zone trust to-zone vpn policy to-corporate match destination-address corp-net
user@srx# set security policies from-zone trust to-zone vpn policy to-corporate match destination-address sunnyvale-net
user@srx# set security policies from-zone trust to-zone vpn policy to-corporate match application any
user@srx# set security policies from-zone trust to-zone vpn policy to-corporate then permit
user@srx# set security policies from-zone vpn to-zone trust policy from-corporate match source-address corp-net
user@srx# set security policies from-zone vpn to-zone trust policy from-corporate match source-address sunnyvale-net
user@srx# set security policies from-zone vpn to-zone trust policy from-corporate match destination-address local-net
user@srx# set security policies from-zone vpn to-zone trust policy from-corporate match application any
user@srx# set security policies from-zone vpn to-zone trust policy from-corporate then permit
```

Hub-and-Spoke VPN (Sunnyvale)

- インタフェース設定

```
user@srx# set interfaces ge-0/0/0 unit 0 family inet address 2.2.2.2/30
user@srx# set interfaces ge-0/0/3 unit 0 family inet address 192.168.168.1/24
user@srx# set interfaces st0 unit 0 family inet address 10.11.11.1/24
```

- インタフェースをセキュリティゾーンにバインド

```
user@srx# set security zones security-zone untrust interfaces ge-0/0/0.0
user@srx# set security zones security-zone untrust host-inbound-traffic system-services ike
user@srx# set security zones security-zone trust interfaces ge-0/0/3.0
user@srx# set security zones security-zone trust host-inbound-traffic system-services all
user@srx# set security zones security-zone vpn interfaces st0.0
```

- ルーティング設定

```
user@srx# set routing-options static route 0.0.0.0/0 next-hop 2.2.2.1
user@srx# set routing-options static route 10.10.10.0/24 next-hop 10.11.11.10
user@srx# set routing-options static route 192.168.178.0/24 next-hop 10.11.11.10
```

Hub-and-Spoke VPN (Sunnyvale)

- アドレスブック設定

```
user@srx# set security address-book book1 address local-net 192.168.168.0/24
user@srx# set security address-book book1 attach zone trust
user@srx# set security address-book book2 address corp-net 10.10.10.0/24
user@srx# set security address-book book2 address westford-net 192.168.178.0/24
user@srx# set security address-book book2 attach zone vpn
```

- IKE (Phase1 接続 プロファイル・ポリシー・ゲートウェイ) 設定

```
user@srx# set security ike proposal ike-phase1-proposal authentication-method pre-shared-keys
user@srx# set security ike proposal ike-phase1-proposal dh-group group2
user@srx# set security ike proposal ike-phase1-proposal authentication-algorithm sha1
user@srx# set security ike proposal ike-phase1-proposal encryption-algorithm aes-128-cbc
user@srx# set security ike policy ike-phase1-policy mode main
user@srx# set security ike policy ike-phase1-policy proposals ike-phase1-proposal
user@srx# set security ike policy ike-phase1-policy pre-shared-key ascii-text "$ABC123"
user@srx# set security ike gateway gw-corporate external-interface ge-0/0/0.0
user@srx# set security ike gateway gw-corporate ike-policy ike-phase1-policy
user@srx# set security ike gateway gw-corporate address 1.1.1.2
```

Hub-and-Spoke VPN (Sunnyvale)

- IPsec (Phase2 接続 プロポーサル・ポリシー・VPN) 設定

```
user@srx# set security ipsec proposal ipsec-phase2-proposal protocol esp
user@srx# set security ipsec proposal ipsec-phase2-proposal authentication-algorithm hmac-sha1-96
user@srx# set security ipsec proposal ipsec-phase2-proposal encryption-algorithm aes-128-cbc
user@srx# set security ipsec policy ipsec-phase2-policy proposals ipsec-phase2-proposal
user@srx# set security ipsec policy ipsec-phase2-policy perfect-forward-secrecy keys group2
user@srx# set security ipsec vpn vpn-corporate ike gateway gw-corporate
user@srx# set security ipsec vpn vpn-corporate ike ipsec-policy ipsec-phase2-policy
user@srx# set security ipsec vpn vpn-corporate bind-interface st0.0
```

- TCP MSS 設定調整

```
user@srx# set security flow tcp-mss ipsec-vpn mss 1350
```

Hub-and-Spoke VPN (Sunnyvale)

- セキュリティポリシー設定

```
user@srx# set security policies from-zone trust to-zone vpn policy to-corporate match source-address local-net
user@srx# set security policies from-zone trust to-zone vpn policy to-corporate match destination-address corp-net
user@srx# set security policies from-zone trust to-zone vpn policy to-corporate match destination-address westford-net
user@srx# set security policies from-zone trust to-zone vpn policy to-corporate match application any
user@srx# set security policies from-zone trust to-zone vpn policy to-corporate then permit
user@srx# set security policies from-zone vpn to-zone trust policy from-corporate match source-address corp-net
user@srx# set security policies from-zone vpn to-zone trust policy from-corporate match source-address westford-net
user@srx# set security policies from-zone vpn to-zone trust policy from-corporate match destination-address local-net
user@srx# set security policies from-zone vpn to-zone trust policy from-corporate match application any
user@srx# set security policies from-zone vpn to-zone trust policy from-corporate then permit
```

Hub-and-Spoke VPN (Corporate office)

設定の確認 1

```
user@srx# show
security {
  ike {
    proposal ike-phase1-proposal {
      authentication-method pre-shared-keys;
      dh-group group2;
      authentication-algorithm sha1;
      encryption-algorithm aes-128-cbc;
    }
    policy ike-phase1-policy {
      mode main;
      proposals ike-phase1-proposal;
      pre-shared-key ascii-text "$9$XwZ-d4oaDqfFVbSgaJji.mfTn/Ap0IhSkPfFnCtu"; ##
      SECRET-DATA
    }
    gateway gw-westford {
      ike-policy ike-phase1-policy;
      address 3.3.3.2;
      external-interface ge-0/0/3.0;
    }
  }
}
```


Hub-and-Spoke VPN (Corporate office)

設定の確認 2

```
gateway gw-sunnyvale {
    ike-policy ike-phase1-policy;
    address 2.2.2.2;
    external-interface ge-0/0/3.0;
}
ipsec {
    proposal ipsec-phase2-proposal {
        protocol esp;
        authentication-algorithm hmac-sha1-96;
        encryption-algorithm aes-128-cbc;
    }
    policy ipsec-phase2-policy {
        perfect-forward-secrecy {
            keys group2;
        }
        proposals ipsec-phase2-proposal;
    }
}
```

Hub-and-Spoke VPN (Corporate office)

設定の確認 3

```
vpn vpn-westford {
  bind-interface st0.0;
  ike {
    gateway gw-westford;
    ipsec-policy ipsec-phase2-policy;
  }
}
vpn vpn-sunnyvale {
  bind-interface st0.0;
  ike {
    gateway gw-sunnyvale;
    ipsec-policy ipsec-phase2-policy;
  }
}
```

Hub-and-Spoke VPN (Corporate office)

設定の確認 4

```
address-book {
  book1 {
    address local-net 10.10.10.0/24;
    attach {
      zone trust;
    }
  }
  book2 {
    address sunnyvale-net 192.168.168.0/24;
    address westford-net 192.168.178.0/24;
    attach {
      zone vpn;
    }
  }
}
flow {
  tcp-mss {
    ipsec-vpn {
      mss 1350;
    }
  }
}
```

Hub-and-Spoke VPN (Corporate office)

設定の確認 5

```
zones {
  security-zone untrust {
    host-inbound-traffic {
      system-services {
        ike;
      }
    }
    interfaces {
      ge-0/0/3.0;
    }
  }
  security-zone trust {
    host-inbound-traffic {
      system-services {
        all;
      }
    }
    interfaces {
      ge-0/0/0.0;
    }
  }
}
```

Hub-and-Spoke VPN (Corporate office)

設定の確認 6

```
security-zone vpn {
  interfaces {
    st0.0;
  }
}
}
interfaces {
  ge-0/0/0 {
    unit 0 {
      family inet {
        address 10.10.10.1/24;
      }
    }
  }
  ge-0/0/3 {
    unit 0 {
      family inet {
        address 1.1.1.2/30;
      }
    }
  }
}
```

Hub-and-Spoke VPN (Corporate office)

設定の確認 7

```
st0 {
  unit 0 {
    multipoint;
    family inet {
      next-hop-tunnel 10.11.11.11 ipsec-vpn vpn-sunnyvale;
      next-hop-tunnel 10.11.11.12 ipsec-vpn vpn-westford;
      address 10.11.11.10/24;
    }
  }
}
routing-options {
  static {
    route 0.0.0.0/0 next-hop 1.1.1.1;
    route 192.168.168.0/24 next-hop 10.11.11.11;
    route 192.168.178.0/24 next-hop 10.11.11.12;
  }
}
```

Hub-and-Spoke VPN (Westford)

設定の確認 1

```
user@srx# show
security {
  ike {
    proposal ike-phase1-proposal {
      authentication-method pre-shared-keys;
      dh-group group2;
      authentication-algorithm sha1;
      encryption-algorithm aes-128-cbc;
    }
    policy ike-phase1-policy {
      mode main;
      proposals ike-phase1-proposal;
      pre-shared-key ascii-text "$9$FWZa6/OB1ceW79Ct01ISyKvWL-Vs24ZDilMW7-wYg"; ##
SECRET-DATA
    }
    gateway gw-corporate {
      ike-policy ike-phase1-policy;
      address 1.1.1.2;
      external-interface ge-0/0/0.0;
    }
  }
}
```

Hub-and-Spoke VPN (Westford)

設定の確認 2

```
ipsec {
  proposal ipsec-phase2-proposal {
    protocol esp;
    authentication-algorithm hmac-sha1-96;
    encryption-algorithm aes-128-cbc;
  }
  policy ipsec-phase2-policy {
    perfect-forward-secrecy {
      keys group2;
    }
    proposals ipsec-phase2-proposal;
  }
  vpn vpn-corporate {
    bind-interface st0.0;
    ike {
      gateway gw-corporate;
      ipsec-policy ipsec-phase2-policy;
    }
  }
}
```


Hub-and-Spoke VPN (Westford)

設定の確認 3

```
address-book {
  book1 {
    address local-net 192.168.178.0/24;
    attach {
      zone trust;
    }
  }
  book2 {
    address corp-net 10.10.10.0/24;
    address sunnyvale-net 192.168.168.0/24;
    attach {
      zone vpn;
    }
  }
}
flow {
  tcp-mss {
    ipsec-vpn {
      mss 1350;
    }
  }
}
```

Hub-and-Spoke VPN (Westford)

設定の確認 4

```
policies {
  from-zone trust to-zone vpn {
    policy to-corporate {
      match {
        source-address local-net;
        destination-address [ corp-net sunnyvale-net ];
        application any;
      }
      then {
        permit;
      }
    }
  }
  from-zone vpn to-zone trust {
    policy from-corporate {
      match {
        source-address [ corp-net sunnyvale-net ];
        destination-address local-net;
        application any;
      }
      then {
        permit;
      }
    }
  }
}
```

Hub-and-Spoke VPN (Westford)

設定の確認 5

```
zones {
  security-zone untrust {
    host-inbound-traffic {
      system-services {
        ike;
      }
    }
    interfaces {
      ge-0/0/0.0;
    }
  }
  security-zone trust {
    host-inbound-traffic {
      system-services {
        all;
      }
    }
    interfaces {
      ge-0/0/3.0;
    }
  }
}
```

Hub-and-Spoke VPN (Westford)

設定の確認 6

```
security-zone vpn {
  interfaces {
    st0.0;
  }
}
interfaces {
  ge-0/0/0 {
    unit 0 {
      family inet {
        address 3.3.3.2/30;
      }
    }
  }
  ge-0/0/3 {
    unit 0 {
      family inet {
        address 192.168.178.1/24;
      }
    }
  }
}
```

Hub-and-Spoke VPN (Westford)

設定の確認 7

```
st0 {
  unit 0 {
    family inet {
      address 10.11.11.12/24;
    }
  }
}
routing-options {
  static {
    route 0.0.0.0/0 next-hop 3.3.3.1;
    route 10.10.10.0/24 next-hop 10.11.11.10;
    route 192.168.168.0/24 next-hop 10.11.11.10;
  }
}
```

Hub-and-Spoke VPN (Sunnyvale)

設定の確認 1

```
user@srx# show
security {
  ike {
    proposal ike-phase1-proposal {
      authentication-method pre-shared-keys;
      dh-group group2;
      authentication-algorithm sha1;
      encryption-algorithm aes-128-cbc;
    }
    policy ike-phase1-policy {
      mode main;
      proposals ike-phase1-proposal;
      pre-shared-key ascii-text "$9$BjTREKvMxVYahcyeMW7NbwYgZUik.5z3dsYaZjHq"; ##
      SECRET-DATA
    }
    gateway gw-corporate {
      ike-policy ike-phase1-policy;
      address 1.1.1.2;
      external-interface ge-0/0/0.0;
    }
  }
}
```

Hub-and-Spoke VPN (Sunnyvale)

設定の確認 2

```
ipsec {
  proposal ipsec-phase2-proposal {
    protocol esp;
    authentication-algorithm hmac-sha1-96;
    encryption-algorithm aes-128-cbc;
  }
  policy ipsec-phase2-policy {
    perfect-forward-secrecy {
      keys group2;
    }
    proposals ipsec-phase2-proposal;
  }
  vpn vpn-corporate {
    bind-interface st0.0;
    ike {
      gateway gw-corporate;
      ipsec-policy ipsec-phase2-policy;
    }
  }
}
```

Hub-and-Spoke VPN (Sunnyvale)

設定の確認 3

```
address-book {
  book1 {
    address local-net 192.168.168.0/24;
    attach {
      zone trust;
    }
  }
  book2 {
    address corp-net 10.10.10.0/24;
    address westford-net 192.168.178.0/24;
    attach {
      zone vpn;
    }
  }
}
flow {
  tcp-mss {
    ipsec-vpn {
      mss 1350;
    }
  }
}
```


Hub-and-Spoke VPN (Sunnyvale)

設定の確認 4

```
policies {
  from-zone trust to-zone vpn {
    policy to-corporate {
      match {
        source-address local-net;
        destination-address [ corp-net westford-net ];
        application any;
      }
      then {
        permit;
      }
    }
  }
  from-zone vpn to-zone trust {
    policy from-corporate {
      match {
        source-address [ corp-net westford-net ];
        destination-address local-net;
        application any;
      }
      then {
        permit;
      }
    }
  }
}
```

Hub-and-Spoke VPN (Sunnyvale)

設定の確認 5

```
zones {
  security-zone untrust {
    host-inbound-traffic {
      system-services {
        ike;
      }
    }
    interfaces {
      ge-0/0/0.0;
    }
  }
  security-zone trust {
    host-inbound-traffic {
      system-services {
        all;
      }
    }
    interfaces {
      ge-0/0/3.0;
    }
  }
}
```

Hub-and-Spoke VPN (Sunnyvale)

設定の確認 6

```
security-zone vpn {
  interfaces {
    st0.0;
  }
}
}
interfaces {
  ge-0/0/0 {
    unit 0 {
      family inet {
        address 2.2.2.2/30;
      }
    }
  }
  ge-0/0/3 {
    unit 0 {
      family inet {
        address 192.168.168.1/24;
      }
    }
  }
}
```

Hub-and-Spoke VPN (Sunnyvale)

設定の確認 7

```
st0 {
  unit 0 {
    family inet {
      address 10.11.11.11/24;
    }
  }
}
routing-options {
  static {
    route 0.0.0.0/0 next-hop 2.2.2.1;
    route 10.10.10.0/24 next-hop 10.11.11.10;
    route 192.168.178.0/24 next-hop 10.11.11.10;
  }
}
```

Hub-and-Spoke VPN

VPN ステータスの確認 (Corporate office)

- Phase1

```
user@srx> show security ike security-associations
Index   State  Initiator cookie  Responder cookie  Mode           Remote Address
6765495 UP    e30463649227e8d7  6d67cd92ccca0c11  Main           2.2.2.2
6765496 UP    7f712a8eac2b687c  a277448f022795f5  Main           3.3.3.2
```

- Phase2

```
user@srx> show security ipsec security-associations
Total active tunnels: 2
ID      Algorithm          SPI              Life:sec/kb  Mon lsys  Port  Gateway
<131074 ESP:aes-cbc-128/sha1 f09b5702 3102/ unlim      - root   500   2.2.2.2
>131074 ESP:aes-cbc-128/sha1 ada7a01e 3102/ unlim      - root   500   2.2.2.2
<131073 ESP:aes-cbc-128/sha1 268b49 3102/ unlim      - root   500   3.3.3.2
>131073 ESP:aes-cbc-128/sha1 f9c640f8 3102/ unlim      - root   500   3.3.3.2
```