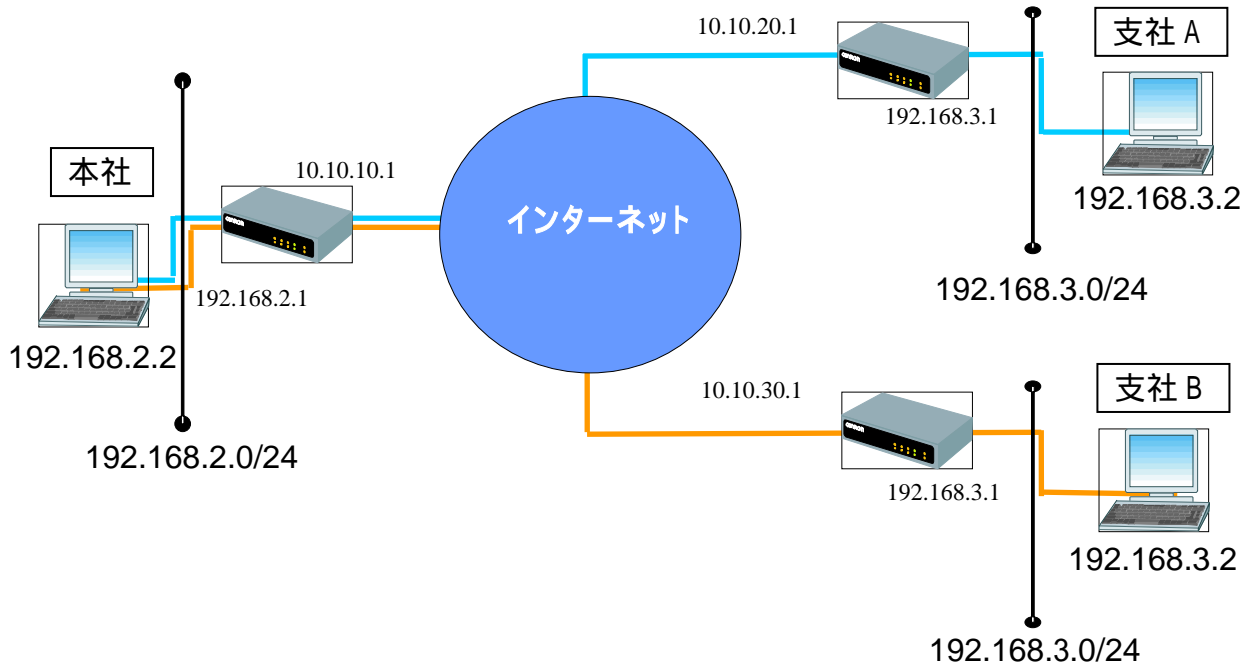


## NAT+IPN でのリモート接続



### 説明

リモート先のネットワークアドレスが他のリモート先のネットワークアドレスと同じ場合は、NAT+IPN の設定によって IPN 通信を行うことができます。

本社、支社 A 及び支社 B ともプロバイダーとの契約で固定 IP アドレスを使用しています。IPN 通信はルーターモードを使用します。

各支社で以下の NAT 変換を行います。

支社 A	: 192.168.3.1	192.168.3.5	192.168.20.1	192.168.20.5
支社 B	: 192.168.3.1	192.168.3.5	192.168.30.1	192.168.30.5

本社から見える各支社のネットワークアドレスは、NAT 変換後のネットワークアドレスとなります。

show config 実行時と「管理コマンド・設定(設定メンテナンス)」で初期値のパラメータは表示していません。

ID 及びパスワードは実際に使用されるものとは異なります。

## 設定内容

本社

```
ip address 192.168.2.1/24
ip dhcp address 192.168.2.2/99
ip dhcp server on
ip filter 59 reject out * 169.254.0.0/16 * wanany
ip filter 60 reject dns qtype 6
ip filter 61 restrict out * * tcpfin * * wanany
ip filter 62 restrict out * * NETBIOS wanany
ip filter 63 restrict out * * tcp_udp 137-139 * wanany
ip filter 64 restrict out * * udp 137 53 wanany
ip rip off
ipn mode on
ipn 1 valid router
ipn 1 policy gateway 10.10.20.1
ipn 1 policy authgw 192.168.20.1
ipn 1 policy localip 192.168.2.0/24
ipn 1 policy remoteip 192.168.20.0/24
ipn 1 auth id xxxxxxxxxxxx
ipn 1 auth password zzzzzzzzzzzzzzzz
ipn 2 valid router
ipn 2 policy gateway 10.10.30.1
ipn 2 policy authgw 192.168.30.1
ipn 2 policy localip 192.168.2.0/24
ipn 2 policy remoteip 192.168.30.0/24
ipn 2 auth id yyyyyyyyyyyy
ipn 2 auth password wwwwwwwwwwwwwwww
ipv6 common filter 1 pass in * * NDP_NS ether1 nolog
ipv6 common filter 2 pass out * * NDP_NS ether1 nolog
ipv6 common filter 3 pass in * * NDP_NA ether1 nolog
ipv6 common filter 4 pass out * * NDP_NA ether1 nolog
ipv6 common filter 5 pass in * * NDP_NS ether2 nolog
ipv6 common filter 6 pass out * * NDP_NS ether2 nolog
ipv6 common filter 7 pass in * * NDP_NA ether2 nolog
ipv6 common filter 8 pass out * * NDP_NA ether2 nolog
ipv6 common filter 9 pass in * * NDP_NS ether3 nolog
ipv6 common filter 10 pass out * * NDP_NS ether3 nolog
ipv6 common filter 11 pass in * * NDP_NA ether3 nolog
ipv6 common filter 12 pass out * * NDP_NA ether3 nolog
ipv6 common filter 13 pass in * * NDP_RS ether1 nolog
ipv6 common filter 14 pass out * * NDP_RA ether1 nolog
ipv6 common filter 15 pass in * * NDP_RS ether2 nolog
ipv6 common filter 16 pass out * * NDP_RA ether2 nolog
ipv6 common filter 17 pass in * * NDP_RS ether3 nolog
ipv6 common filter 18 pass out * * NDP_RA ether3 nolog
remote 0 always on
remote 0 disconnect idle 0
remote 0 pppoe keepalive on
remote 0 send id XXXX@trinity-ss.com
remote 0 send password YYYY
```

## 支社 A

```
ip address 192.168.3.1/24
ip dhcp address 192.168.3.2/99
ip dhcp server on
ip filter 59 reject out * 169.254.0.0/16 * wanany
ip filter 60 reject dns qtype 6
ip filter 61 restrict out * * tcpfin * * wanany
ip filter 62 restrict out * * NETBIOS wanany
ip filter 63 restrict out * * tcp_udp 137-139 * wanany
ip filter 64 restrict out * * udp 137 53 wanany
ip rip off
ip nat 1 192.168.3.1-192.168.3.5/ALL 192.168.20.1-192.168.20.5 ipn 1
ipn mode on
ipn 1 valid router
ipn 1 policy gateway 10.10.10.1
ipn 1 policy authgw 192.168.2.1
ipn 1 policy localip 192.168.3.0/24
ipn 1 policy remoteip 192.168.2.0/24
ipn 1 auth id xxxxxxxxxxxxxx
ipn 1 auth password zzzzzzzzzzzzzzzz
ipv6 common filter 1 pass in * * NDP_NS ether1 nolog
ipv6 common filter 2 pass out * * NDP_NS ether1 nolog
ipv6 common filter 3 pass in * * NDP_NA ether1 nolog
ipv6 common filter 4 pass out * * NDP_NA ether1 nolog
ipv6 common filter 5 pass in * * NDP_NS ether2 nolog
ipv6 common filter 6 pass out * * NDP_NS ether2 nolog
ipv6 common filter 7 pass in * * NDP_NA ether2 nolog
ipv6 common filter 8 pass out * * NDP_NA ether2 nolog
ipv6 common filter 9 pass in * * NDP_NS ether3 nolog
ipv6 common filter 10 pass out * * NDP_NS ether3 nolog
ipv6 common filter 11 pass in * * NDP_NA ether3 nolog
ipv6 common filter 12 pass out * * NDP_NA ether3 nolog
ipv6 common filter 13 pass in * * NDP_RS ether1 nolog
ipv6 common filter 14 pass out * * NDP_RA ether1 nolog
ipv6 common filter 15 pass in * * NDP_RS ether2 nolog
ipv6 common filter 16 pass out * * NDP_RA ether2 nolog
ipv6 common filter 17 pass in * * NDP_RS ether3 nolog
ipv6 common filter 18 pass out * * NDP_RA ether3 nolog
remote 0 always on
remote 0 disconnect idle 0
remote 0 pppoe keepalive on
remote 0 send id XXXX@trinity-ss.com
remote 0 send password YYYY
```

## 支社 B

```
ip address 192.168.3.1/24
ip dhcp address 192.168.3.2/99
ip dhcp server on
ip filter 59 reject out * 169.254.0.0/16 * wanany
ip filter 60 reject dns qtype 6
ip filter 61 restrict out * * tcpfin * * wanany
ip filter 62 restrict out * * NETBIOS wanany
ip filter 63 restrict out * * tcp_udp 137-139 * wanany
ip filter 64 restrict out * * udp 137 53 wanany
ip rip off
ip nat 1 192.168.3.1-192.168.3.5/ALL 192.168.30.1-192.168.30.5 ipn 1
ipn mode on
ipn 1 valid router
ipn 1 policy gateway 10.10.10.1
ipn 1 policy authgw 192.168.2.1
ipn 1 policy localip 192.168.3.0/24
ipn 1 policy remoteip 192.168.2.0/24
ipn 1 auth id yyyyyyyyyyyy
ipn 1 auth password wwwwwwwwwwww
ipv6 common filter 1 pass in * * NDP_NS ether1 nolog
ipv6 common filter 2 pass out * * NDP_NS ether1 nolog
ipv6 common filter 3 pass in * * NDP_NA ether1 nolog
ipv6 common filter 4 pass out * * NDP_NA ether1 nolog
ipv6 common filter 5 pass in * * NDP_NS ether2 nolog
ipv6 common filter 6 pass out * * NDP_NS ether2 nolog
ipv6 common filter 7 pass in * * NDP_NA ether2 nolog
ipv6 common filter 8 pass out * * NDP_NA ether2 nolog
ipv6 common filter 9 pass in * * NDP_NS ether3 nolog
ipv6 common filter 10 pass out * * NDP_NS ether3 nolog
ipv6 common filter 11 pass in * * NDP_NA ether3 nolog
ipv6 common filter 12 pass out * * NDP_NA ether3 nolog
ipv6 common filter 13 pass in * * NDP_RS ether1 nolog
ipv6 common filter 14 pass out * * NDP_RA ether1 nolog
ipv6 common filter 15 pass in * * NDP_RS ether2 nolog
ipv6 common filter 16 pass out * * NDP_RA ether2 nolog
ipv6 common filter 17 pass in * * NDP_RS ether3 nolog
ipv6 common filter 18 pass out * * NDP_RA ether3 nolog
remote 0 always on
remote 0 disconnect idle 0
remote 0 pppoe keepalive on
remote 0 send id XXXX@trinity-ss.com
remote 0 send password YYYY
```



支社 A

```
ip nat 1 192.168.3.1-192.168.3.5/ALL 192.168.20.1-192.168.20.5 ipn 1
```

192.168.3.1-5 から 192.168.20.1-5 への NAT 変換の設定

(インターフェースは ipn 1 を選択)

```
ipn mode on
```

IPN 機能を使用します

```
ipn 1 valid router
```

IPN ポリシー1 番をルーターモードで使用します (本社内用)

```
ipn 1 policy gateway 10.10.10.1
```

本社のリモートゲートウェイアドレス

```
ipn 1 policy authgw 192.168.2.1
```

本社の認証ゲートウェイアドレス

```
ipn 1 policy localip 192.168.3.0/24
```

ローカル IP アドレス (支社 A)

```
ipn 1 policy remoteip 192.168.2.0/24
```

リモート IP アドレス (本社)

```
ipn 1 auth id xxxxxxxxxxxxxx
```

本社内用の認証用 ID (0~9 及び A~F の半角英数字 12 文字)

```
ipn 1 auth password zzzzzzzzzzzzzzzzzzzzz
```

本社内用の認証用パスワード (半角英数字 1~16 文字まで)

支社 B

```
ip nat 1 192.168.3.1-192.168.3.5/ALL 192.168.30.1-192.168.30.5 ipn 1
```

192.168.3.1-5 から 192.168.30.1-5 への NAT 変換の設定

(インターフェースは ipn 1 を選択)

```
ipn mode on
```

IPN 機能を使用します

```
ipn 1 valid router
```

IPN ポリシー1 番をルーターモードで使用します (本社内用)

```
ipn 1 policy gateway 10.10.10.1
```

本社のリモートゲートウェイアドレス

```
ipn 1 policy authgw 192.168.2.1
```

本社の認証ゲートウェイアドレス

```
ipn 1 policy localip 192.168.3.0/24
```

ローカル IP アドレス (支社 B)

```
ipn 1 policy remoteip 192.168.2.0/24
```

リモート IP アドレス (本社)

```
ipn 1 auth id yyyyyyyyyyyyyy
```

本社内用の認証用 ID (0~9 及び A~F の半角英数字 12 文字)

```
ipn 1 auth password wwwwwwwwwwwwwwwwwwwww
```

本社内用の認証用パスワード (半角英数字 1~16 文字まで)

認証用 ID は対向で接続する機器間で同じ ID を使用してください。

認証用パスワードは接続する機器間で同じパスワードを使用してください。

異なる接続経路には異なる ID、パスワードを使用してください。