



# VPN Server ??? L2TP/IPsec ??????????

SoftEther VPN ??????????????????IPsec ???IPsec ??????????????????

??????????

VPN Server ??????????????????????????????

**VPN ??????????????????????????????**

VPN ?????????????? (Windows ??????? GUI ??????????) ?? IPsec ?????????????? VPN Server ???  
??

[01.png](#)

????????????????????????????????????

[02.png](#)

IPsec ??? / ??????????????????

??

- **L2TP ?????? (L2TP over IPsec) ????**  
 iPhone?iPad?Android ?????????? Windows?Mac OS X ?????????? L2TP  
 VPN ??????? SoftEther VPN Server ??????????????????????????????
- **L2TP ?????? (????????? L2TP) ????**  
 ??????????L2TP ?????????? IPsec ?????????????????? SoftEther VPN Server ??????????  
 ??????????  
 ??????? VPN ???
- **EtherIP over IPsec ??????????**  
 NEC IX2015 ??? EtherIP ?????????? SoftEther VPN ?????? 2 VPN ??????????????????????  
 ??  
 ???[EtherIP ??????] ?????????????? EtherIP ????? ISAKMP (IKE) Phase 1 ID ??VPN Server ??  
 ? HUB ?????????????????????????????? (??)?
- **IPsec ??????**  
 IPsec ???????PSK (Pre-Shared Key)??vpn? (???? 3 ??) ??  
 ???IPsec VPN ?????????????????????????????

**vpn cmd ??? (Windows PC ?????????)**

VPN ?????????????????? (vpn cmd) ? IPsec ??????????[IPSecEnable](#) ??????????

?????????????????????IPSecEnable ??????????????????

**L2TP ??? (????????????????????????????)**

L2TP ?????????????? SoftEther VPN Server ? L2TP ?????? VPN ?????????? VPN ??????????  
 ?????????????????????????????????? HUB ??????????????????

?????SoftEther VPN Server ???HUB1???HUB2????? 2 ??? HUB ??????????????HUB1 ???  
 ??? jiro ??HUB2 ?????? yes ??????????????

?????jiro@hub1 ??? yas@hub2 ?????????????@?? HUB ?????? L2TP ?????????????????????  
 ???(????????? HUB ?????????????????????????)

????????????????????? HUB ??? ('@' ??????????????????) ?????????????? IPsec ?????????????????????  
 ?????????????? HUB ??????????

????????????????? HUB ??????HUB2????????????????????? yes ??yas????????????????? HUB ?????????  
 ??????

**L2TP ????????????????????????????? (RADIUS ????? NT ?????????????????)**

L2TP ?????????? SoftEther VPN Server ? L2TP ????? VPN ?????? VPN ?????????  
???????????????????????? HUB ?????????????????

????SoftEther VPN Server ??HUB1??HUB2???? 2 ??? HUB ?????????????HUB1 ??  
?? jiro ??HUB2 ?????? yas ?????????????

????hub1\jiro ?? hub2\yas ?????? HUB \???????? L2TP ?????????????????  
(???????? HUB ?????????????????????)

???????????????? HUB ?? (\ ??????????????) ????????? IPsec ?????????????  
???????? HUB ??????

???????????? HUB ???HUB2???????????????? yas ??yas???????????? HUB ??????  
?????

**L2TP ?????????????????????????**

L2TP ????????????????? L2TP VPN ????????????????????????? HUB ?????????????  
??????

????? HUB ?? L2TP VPN ??? (????????????  
????????? '\*' ??? Radius ??? Active Directory ??????????????????????????)

???????????????????? L2TP VPN ?????????????????????

**EtherIP / L2TPv3 ?????????????**

EtherIP / L2TPv3 ?????????EtherIP / L2TPv3 ?????? [????????????] ?????????EtherIP /  
L2TPv3 ?????? (????) ? VPN Server ??? IPsec ????????????????? ISAKMP (IKE) Phase  
1 ? ID ????????? HUB ?? HUB ?????????????????????????????

???????? ID ?????????\*? (?????) ????????????????????? ID ?????????????????

???

SoftEther VPN ? IPsec ??? IPsec / L2TP ??????????????
??
?? (?? IPsec / L2TP ??????) ???????????

SoftEther VPN ? IPsec / L2TP ??? (UDP 500, 4500, 1701) ??
??

?????Windows ???

??SoftEther VPN ? IPsec ??????????????????????????Windows ? IPsec ??? UDP ??????????????????
??????????????

**L2TP ????????????????? IP ?????????????????**

L2TP ?????? VPN ?????????? VPN ?????? IP ?????? (??) ????????VPN ??????????????????
???????

(Windows ?????? OS ?? L2TP ????????? IP ??????????????????????iPhone ? iPad ??????????? IP
?????????????????)

**L2TP VPN ?????????? HUB ????????????????? HUB ? Ethernet ????????? DHCP ????
????????????????????**

DHCP ?????L2TP VPN ????? IP ?????DNS ?????  
???? VPN ????? DHCP ?????VPN ????? HUB  
? Ethernet ????? DHCP ????? L2TP ?? VPN ?????

**DHCP ????? LAN (?? LAN ??) ????? VPN ?**  
**???? DHCP ?????SecureNAT ????? DHCP ??? (?? HUB ?????**  
**????) ?????**

### **NAT ?????**

VPN Server ????? NAT ?????

### **VPN ????? NAT ?????**

NAT (NAPT) ??? IPsec ????? VPN Server ????? IP ?????  
???? VPN Server ????? IP ????? (????) ??? NAT  
????

- **L2TP over IPsec?EtherIP over IPsec ?????**

UDP ??? 500?4500

- **L2TP (IPsec ??) ?????**

UDP ??? 1701

???? VPN Server ????? / ??? UDP ??  
????

- Windows ??? L2TP VPN ????? VPN Server ? NAT ?????  
????

[Windows XP / Server 2003 ?????](#)

[Windows Vista / 7 / Server 2008 / Server 2008 R2 ?????](#)

### **VPN ????? NAT ?????**

SoftEther VPN Server ????? IPsec ?????NAT ????? (RFC 3947 Negotiation  
of NAT-Traversal in the IKE) ?????

????VPN ????? NAT ????? NAT ?????

????UDP ??? 500?4500 ?? UDP ?????  
????