

CPU ?????????????????CPU ?????????????????VPN ??????????????????
VPN ???OS ??????????????????
Ubuntu 20.04 ????????? Linux ????????????????? x64 ??????????????????
OS ???RW Lock ?????????????? Mutex
Lock ???

- **?????????: SoftEther VPN 4.41 Build 9787 RTM (2023/03/14)**
???: PacketiX VPN 4.41 Build 9787 RTM
 - ? RTM ?????????????????? Beta ?????????????? RTM ??????
 - X.509 ???
- **?????????: SoftEther VPN 4.41 Build 9782 Beta (2022/11/17)**
???: PacketiX VPN 4.41 Build 9782 Beta
 - OpenSSL ??????? 3.0.7 ??????????????
 - VPN Client ???
 - Windows XP ????????? (Build 9772 ???) ?????????
 - OpenSSL ?????????????????????????????????????
 - VPN Client Manager ?????????????????????????????
 - Windows 11 ?????????????????????????
 - HttpSendNotImplemented ? HTTP ?????????????????????????????????
 - PKCS#11 ? DLL ??? (SafeNet?OpenSC?SHALO AUTH) ?????
- **?????????: SoftEther VPN 4.39 Build 9772 Beta (2022/04/26)**
???: PacketiX VPN 4.39 Build 9772 Beta
 - OpenSSL ??????? 3.0.2 ?????????????????? OpenSSL ? 1.x ??????????????
??OpenSSL ? 3.0.2 ??? SoftEther VPN
/ PacketiX VPN ???OpenSSL ?????????????
?? Beta ?????????????????? Beta ?????????
?? RTM ?????????? OpenSSL 3.x ??????????????
 - Windows 11 ??????????????????Windows 11 ? Windows 10 ?????????????????
????????????OS ??? VPN ?????????????????
????????????????????
 - Windows 11 ??????NetAdapterCx ???
 - ???
 - HttpSendNotImplemented ? Method ?????????????????????
 - ??????????????????V_ASN1_GENERALIZEDTIME ??????????????
- **?????????: SoftEther VPN 4.38 Build 9760 RTM (2021/08/17)**
???: PacketiX VPN 4.38 Build 9760 RTM
 - ? RTM ?????????????????????? Beta ??? Build 9754 ??? Build 9758 ??????
???? RTM ??????????Build 9758 ?????????????????????????????????????
 - ???
 - ?SoftEther VPN?/?PacketiX VPN???L2TP/IPsec??? IPsec VPN
?? (Pre-shared key) ?

?vpn?(3 ??????????) ??????????
???:

- ????????????????????? IP ????? IPsec VPN ?????????????
?????????????????????SoftEther VPN?????PacketiX VPN?????
IPsec ??? CPU????????????
????????????????????????? L2TP/IPsec ?????????????????????
???
- ????????????????????? IPsec VPN ?????????????? (????????????????
?????????????????) ??? IPsec ??????????????PacketiX VPN / SoftEther
VPN ?????????????????CPU???????????????????????????????????? VPN ??
?? CPU????????????????????????
????????????????????????
- L2TP/IPsec, EtherIP/IPsec ??? L2TPv3/IPsec ?????????????????????
????????????????2021 ? 8 ????????????????????? IPsec VPN ?????????????
???????????????????????????????????? VPN ?????????????????????????
???????????? Build 9758 (Beta ?) ????????????????????? RTM ?????????
???????????????????? RTM ?????????????????????????????????????
?????2021/08/16 ????????????? IP ? IPsec VPN ?????????????????
[?SoftEther VPN/?PacketiX VPN????????????????????????????????](#) ???
?????

• ?????????: **SoftEther VPN 4.37 Build 9758 Beta (2021/08/16)**

???: **PacketiX VPN 4.37 Build 9758 Beta**

- [2021/08/16 ????????????? IP ? IPsec VPN ?????????????????](#)
[?SoftEther VPN/?PacketiX VPN????????????????????????????????](#) ???
[????????????????????????](#)
- IPsec Informational Exchange ?????????????????????????????????
???????? IP ????? IPsec VPN ????????????????????????? IPsec ?????????
????????????????

• ?????????: **SoftEther VPN 4.36 Build 9754 Beta (2021/06/07)**

???: **PacketiX VPN 4.36 Build 9754 Beta**

- Linux ARM 64bit CPU ?? (Raspberry Pi 4 ?? ARM 64bit CPU ?????)
- OpenSSL ?????? 1.1.1k ???
- ????? (vpnsetup) ?????????? DLL ?????????
- ????? JPKI 64bit ??
- ?? SH4 CPU ??????????
- ?? DHCP ?????????????????????28????????????????????DHCP ?????? 255 ?
????????????????????????????????????

• ?????????: **SoftEther VPN 4.34 Build 9745 RTM (2020/06/24)**

???: **PacketiX VPN 4.34 Build 9745 RTM**

- ?????????????????????
- **Build 9745 Beta** ????????????? RTM ?????????????

- ????????? Build 9745 Beta ?????????

- ?????????: SoftEther VPN 4.34 Build 9745 Beta (2020/04/05)

- **???: PacketiX VPN 4.34 Build 9745 Beta**

- ?????????: ?? HUB ?????????JSON-API (4.30 Build 9696 Beta ??) ????????? HUB ????????? HUB ?????????JSON-API ????????? HUB ????????? ????????? HUB ?????? JSON-API ????????? ?????????
?: ????? falms ?????????

- ?????????: SoftEther VPN 4.34 Build 9744 Beta (2020/03/21)

- **???: PacketiX VPN 4.34 Build 9744 Beta**

- ????: VPN Server ???OpenSSL ????????? SoftEther VPN (? 3.0 ??) ?????????
- ????: ??
- ????: VPN Server ???Tls_Disable1_3 ????????? true ?? ? TLS 1.3 ??????????
- ????: ??

- ?????????: SoftEther VPN 4.32 Build 9731 Beta (2020/01/01)

- **???: PacketiX VPN 4.32 Build 9731 Beta**

- ????: SecureNAT ????????? TCP ? ECN ??????????
- ????: ?? HUB ? FDB ??
- ????: OpenVPN ??
- ????: ?????????? URL ?????????????????????? URL ??????????????????????

- ?????????: SoftEther VPN 4.31 Build 9727 Beta (2019/11/18)

- **???: PacketiX VPN 4.31 Build 9727 Beta**

- **DisableIPsecAggressiveMode ?????????bool
DisableIPsecAggressiveMode true?????????IPsec Aggressive Mode ?
?????????????????????CVE-2002-1623 ??????????????**
- **L2TP/IPsec, SSTP ??? OpenVPN L3 ?????? MAC ?????????????????????
????????????????L3 VPN ?????????? VPN ?????????????????DHCP ??????
????????????? IP ?????????????????(?) 1)**

figure1.png

? 1

- L2TP/IPsec, SSTP ??? OpenVPN L3 ??? L3 VPN ??????
SoftEther VPN Server ??? HUB ? VPN ???????????? L2/L3 ??
???????????????????? L2/L3 ?????????????? MAC ???????????
???????????? SoftEther VPN ????? MAC ?????????????????????
????????????????????
- SoftEther VPN Ver 4.31 Build 9727 ?????L3 VPN ??????????
???????????? MAC ?????????????????? MAC ??????????????
????????????
 - 1. ?????????? (????????) ??????????????????????
?Note?(?) ?????????MAC:ae:00:00:00:01?????????
????????? L3 VPN ?????????????? MAC ??????????
MAC ????? 6 ??? 16 ?????????? 1 ?????ae?????????
????(? 2, ? 3)

figure2.png

? 2

figure3.png

? 3

- 2. RADIUS ?????????????RADIUS ??????RFC 3162 ?
??????? RADIUS Attribute?Framed-Interface-Id?(?:
96) ???MAC ????? ASCII ??????????????????????
RADIUS ????? 12 ?? 16 ?? ASCII ????? 6 ???
MAC ????? RADIUS ?????????????????????MAC ?????
????????????????? (-) ?????? (:) ??????????????????:
AE000000001, AE-00-00-00-00-01
??????? L2 VPN ?????????????L3 VPN ??????????
RADIUS ?????????????????????VPN Server ?? RADIUS

????????????????????RFC 2865 ??????? RADIUS
Attribute?Proxy-State?(?: 33) ? ASCII ?????? 3 ???
?L3:?? L3 VPN ??
??

- ??: ???VPN????????????? MAC ?????????????????????????????
????????????? MAC ?????????????????????????????????? VPN ?????
?????????????????
- ?????????????????? MAC ??????????????????LAN ?????????
DHCP ??? (Linux ? dhcpd ? Windows ? DHCP Service ??) ???
???? MAC ?????????????? IP ??????????????????IP ??????????
DHCP ??????????????IP ??????????????????IP ??????????????
????????? DHCP ??????????????????????
- ?????Linux ? dhcpd (isc-dhcp-server) ?????????????????????
 ▪ /etc/dhcp/dhcpd.conf ???:

 authoritative;
 subnet 10.111.0.0 netmask 255.255.255.0 {
 range 10.111.0.101 10.111.0.199;
 option subnet-mask 255.255.255.0;
 option broadcast-address 10.111.0.255;
 default-lease-time 3600;
 max-lease-time 3600;
 }

 host ip1 {
 hardware ethernet ae:00:00:00:00:01;
 fixed-address 10.111.0.201;
 }

 host ip2 {
 hardware ethernet ae:00:00:00:00:02;
 fixed-address 10.111.0.202;
 }

- **OpenVPN ?????????????? <ca> ??????????????**
- **AEAD_CHACHA20POLY1305 ?????????? OpenSSL ??????????????**
??
- **"bool DisableJsonRpcWebApi true" ??????????????????????????????**
index.html ??????????????????????????????
- **OpenSSL ??????? 1.1.1d ??????????????**
- **DisableIPsecAggressiveMode ?????????????? "bool**
DisableIPsecAggressiveMode true" ???????IPsec Aggressive Mode
?????????????????????????CVE-2002-1623 ??????????????????

????????????Fabrizio Steiner ??????????????
Linux ?????????? ethtool ??????????????????????
SecureNAT ??????????????????????????????
UNIX ? OS ??? SingleInstance ??????????????????????
?????????
UNIX ? OS ??????????????????????????????
?????? 1970-01-01 ????????????????????

- [SoftEther VPN ?????? GPLv2 ?? Apache License 2.0 ?????????? \(2019/01/21\)](#)

- **????????: SoftEther VPN 4.28 Build 9669 Beta (2018/09/11)**
???: PacketiX VPN 4.28 Build 9669 Beta
Windows XP ?????????????? IPsec IKE MD5 ?????????????? VPN Server ???
????????????????????
Windows XP ?????????????? SHA-256 Authenticode ??????????????
VPN Server ??????????????????
SecureNAT ?????? TCP/IP ??????????????
VPN Client ??????????????????
Linux x86 ??? x64 ?????? Makefile ???Ubuntu 18.04 ??????????????????????
????"-no-pie" ??????????????????

- **????????: SoftEther VPN 4.27 Build 9668 Beta (2018/05/29)**
???: PacketiX VPN 4.27 Build 9668 Beta
Ubuntu Linux ??? make ?? "-fPIC" ??????????????????

- **????????: SoftEther VPN 4.27 Build 9666 Beta (2018/04/21)**
???: PacketiX VPN 4.27 Build 9666 Beta
Windows 10 Spring Creators Update (????? 1803) ?????LTE ??? 3G ??????????
????????????????VPN Client ??? LAN ??????????????????????(LTE ??? 3G ?
????????????????????VPN Client ? Build 9666 ?????????????? LAN ?????????
?????????????????)
?? LAN ???
?? LAN ?????????????????????????????? MAC ?????????? 00-AC-xx-xx-xx-xx ??
5E-xx-xx-xx-xx-xx ?????????? MAC ?????????????????????????????????????
????
Windows ? VPN ??????????LoadLibrary ? DLL ?????????????????????????????
??? DLL ?????????????????????????????
?????????????????????????????????????: ??????Herman Groeneveld, aka
Sh4d0wman ??????????????

- **????????: SoftEther VPN 4.25 Build 9656 RTM (2018/01/15)**
???: PacketiX VPN 4.25 Build 9656 RTM
????????????????????
[????????????????????](#) (Max Planck Institute for Molecular Genetics)

????PacketiX VPN ??????? SoftEther VPN ?????????????????????????????????
??
??
??
??
????

7 ???
??
??

- Buffer overread in ParseL2TPPacket()
- Memory corruption in IcmpParseResult
- Missing bounds check in ParseUDP() can lead to invalid memory access
- Out-of-bounds read in IPsec_PPP.c (unterminated string buffer)
- Overlapping parameters to memcpy() via StrToIp6()
- PACK ReadValue() crash vulnerability
- Potential use of uninitialized memory via IPToInAddr6()

4 ??????? (????????????????????) ?????????????????????????????????
??

- Memory leak in NnReadDnsRecord
- Memory leak in RadiusLogin()
- Memory leak via ParsePacketIPv4WithDummyMacHeader
- Remote memory leak in OpenVPN server code

??????:
?? X.509 ??????????????????Alternative Subject Name ?????? DNS ?????????????
?????
Windows ???

- **?????????: SoftEther VPN 4.24 Build 9652 Beta (2017/12/21)**
???: PacketiX VPN 4.24 Build 9652 Beta
Build 9647 ??? 9651 ?????????L2TP/IPsec ? Android Oreo ?????????????????
????????????????DNS ?????????????????????
- **?????????: SoftEther VPN 4.24 Build 9651 Beta (2017/10/23)**
???: PacketiX VPN 4.24 Build 9651 Beta
Build 9647 ?????????OpenVPN Server ?????????????????
- **?????????: SoftEther VPN 4.23 Build 9647 Beta (2017/10/18)**
???: PacketiX VPN 4.23 Build 9647 Beta
OpenSSL ??????? 1.0.2l ?????????
???????? OpenSSL 1.1.x ??????TLS 1.2 ????????????? DHE-RSA-
CHACHA20-POLY1305, ECDHE-RSA-CHACHA20-POLY1305 ??????(?????
????????????OpenSSL 1.1.x ?????????????????????
TrafficServer / TrafficClient ?? (?????) ?????????????RSS ?????? NIC ???
10Gbps ?????????????
SSL ????????????????? RC4-MD5 ?? AES128-SHA ???
TCP MSS Clamp ?????????????????????????????????????

SecureNAT ????????? NAT ?????? DHCP ??????????????????????
USB ?????????? CryptoID ?????????????????? DLL ?????????API?????????
??
Mac OS X ??????Select ???????? INFINITE ??? CPU ??????????????????
Syslog ?????? RFC3339 ?? StrictSyslogDatetimeFormat ???
ServerConfiguration ???
UI ??????????????

- [Using client parameter in function CtConnect](#)
- [Remove blank line at the start from init file \(Debian\)](#)
- [Stop Radius Delay from counting to next_resend](#)
- [Add DH groups 2048,3072,4096 to IPsec_IKE](#)
- [Add HMAC SHA2-256, HMAC SHA2-384, HMAC SHA2-512 support](#)
- [Openvpn extend ciphers](#)
- [Fixed RSA key bits wrong calculation for certain x509 certificate](#)
- [Added support for RuToken USB key PKCS#11](#)
- [OpenSSL 1.1 Port](#)

- **?????????: SoftEther VPN 4.22 Build 9634 Beta (2016/11/27)**

??? : PacketiX VPN 4.22 Build 9634 Beta
TLS 1.2 ????TLS 1.2 ??????????AES128-GCM-SHA256?AES128-SHA256?
AES256-GCM-SHA384?AES256-SHA256?DHE-RSA-AES128-GCM-
SHA256?DHE-RSA-AES128-SHA256?DHE-RSA-AES256-GCM-SHA384?
DHE-RSA-AES256-SHA256?ECDHE-RSA-AES128-GCM-SHA256?ECDHE-
RSA-AES128-SHA256?ECDHE-RSA-AES256-GCM-SHA384???ECDHE-
RSA-AES256-SHA384 ??????
??? TLS ???????? / ??????????????????????VPN Server ??????????
Tls_Disable1_0?Tls_Disable1_1 ??? Tls_Disable1_2 ?????????????????? TLS ?
????????????????????
OpenVPN ? TLS 1.2 ??????????????????????
OpenSSL ???????? 1.0.2j ??????????????
Windows Server 2016 ??????????
2038 ??????????????
???????? HTTPS ?????????????? SNI ??????????????????
RADIUS ?????????? "Called-Station-ID (30)" ?????? ?? HUB ??????????????????
????????
????? 3 ??????????????ARP ?????????? 1 ??????
Windows 10 ? VPN Server ??????????????????
????????????? RSA ?????? 4096 bit ??????????
USB ??????CryptoID?????????????
???? UI ??????????????????

- [Fix that ParseTcpOption doesn't work correctly](#)
- [Add LSB header](#)
- [Support Debian package build on aarch64 architecture](#)
- [Support Debian package build on ARMv7l architecture](#)
- [cppcheck issues](#)

?????????????) Win10Pcap ?????????????????????? Meysam Firozi ????????

- **?????????: SoftEther VPN 4.19 Build 9582 Beta (2015/10/06)**

??? : PacketiX VPN 4.19 Build 9582 Beta

YAMAHA ?? RTX ???????????? L2TPv3 over IPsec ????????????

[YAMAHA RTX ?????????????????????????????????](#)

Linux ????? SecureNAT ???????? NAT ?????????????????????????????Linux ??
???? (VM) ??????????Ethernet ????????????????????????????? (???)

Amazon EC2/AWS ? Windows Azure ??????????) ???SecureNAT ??????????????

?? TCP/IP ?????????????????????????????????SecureNAT ?????? RAW IP ??????????

???RAW IP ?????????????????????????Linux ??? VPN Server ? root ??????????????

???RAW IP ?????????????? NAT ???RAW IP ??????RAW IP ?????????????????????

???? TCP, UDP ??? ICMP ?????????????? NAT ?????????????????????? NAT ????

?????????RAW IP ??????????Linux ?????????? NAT ?????????????????????

iptables ????????????????????????????????? HUB ??????????

DisableIpRawModeSecureNAT ? 1 ??????RAW IP ?????????????????????

SecureNAT ?????????????? SecureNAT ??????????

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

Cisco 800 ??? (?: Cisco 841M) ??? L2TPv3 over IPsec ?????????????????? Cisco ??

?? L2TPv3 ??????????????????SoftEther VPN Server ????????????????

EAP ??? PEAP ?????RADIUS ??????????RFC3579 (EAP) ??? Protected EAP

(PEAP) ??? MS-CHAPv2 ??????????????????????????L2TP VPN ??????? MS-

CHAPv2 ??????????????RADIUS ?????????????????????? EAP ??? PEAP ????????????

?????? HUB ??????????????????????MS-CHAPv2 ?????? EAP ??????????????????

vpn_server.config ???RadiusConvertAllMsChapv2AuthRequestToEap???true???

?????????MS-CHAPv2 ?????? PEAP ??????????????????????vpn_server.config ??

?RadiusConvertAllMsChapv2AuthRequestToEap?????

?RadiusUsePeapInsteadOfEap?????true?????????????

- **?????????: SoftEther VPN 4.19 Build 9578 Beta (2015/09/15)**

????????????? Windows 10 ?????????????????? ?????????????????????????????

- **?????????: SoftEther VPN 4.18 Build 9570 RTM (2015/07/26)**

??? : PacketiX VPN 4.18 Build 9570 RTM

[Windows 10 ??????????](#)

lang.config ????????????????????????????? VPN ?????????????????????????????

lang.config ???

- **?????????: SoftEther VPN 4.17 Build 9566 Beta (2015/07/16)**

??? : PacketiX VPN 4.17 Build 9566 Beta

Windows 10 ??????????????????
OpenSSL ??????????? 1.0.2d ???????????

- **?????????: SoftEther VPN 4.17 Build 9562 Beta (2015/05/30)**
???: PacketiX VPN 4.17 Build 9562 Beta
Windows 10 Technical Preview Build 10130 ???????
Ethernet ?????????? 1560 ?? 1600 ???????
????????? Windows ?????????????????????
??
PacketiX VPN Client 3.0 ?? PacketiX VPN Server 4.0 ?????????????????????
?????
VPN Client ? VPN ???
?????
Windows ?????????????????????? SHA-256 ?????????????????????????????????
- **?????????: SoftEther VPN 4.15 Build 9546 Beta (2015/04/05)**
???: PacketiX VPN 4.15 Build 9546 Beta
Windows 10 Technical Preview Build 10049 ? VPN Server / VPN Bridge ??????
????????????????????????????????
- **?????????: SoftEther VPN 4.15 Build 9539 Beta (2015/04/04)**
???: PacketiX VPN 4.15 Build 9539 Beta
VPN Client ????? Windows ?? VPN ?????????
??????
- **?????????: SoftEther VPN 4.15 Build 9538 Beta (2015/03/27)**
???: PacketiX VPN 4.15 Build 9538 Beta
Windows 10 Technical Preview Build 10041 ?????????????????????????????????
- **?????????: SoftEther VPN 4.15 Build 9537 Beta (2015/03/26)**
???: PacketiX VPN 4.15 Build 9537 Beta
?????? OpenSSL ??????? 0.9.8za ?? 1.0.2a ??????????????
???: ???
????????????????????
- **?????????: SoftEther VPN 4.14 Build 9529 Beta (2015/02/02)**
???: PacketiX VPN 4.14 Build 9529 Beta
???????????????????????????????? 4.13 (Beta) ?? L2TP ?????????????????????????? Build
9514 ? 9524 ????????????????????? (????????????????????) ?????????????????????
???????????????? 4.13 ??? L2TP ???
VPN ????????????????? IP ??? HUB ?????????
"NoPhysicalIPOnPacketLog" ??? "1" ?????????????????????????????
- **?????????: SoftEther VPN 4.13 Build 9524 Beta (2015/01/31)**
???: PacketiX VPN 4.13 Build 9524 Beta

Linux ? VPN Server ??? Ethernet ???
???? 1 ???
???? 1 ?????????????????????
?? HUB ??????????SecureNAT_RandomizeAssignIp???????????????????? 1 (??) ?????
SecureNAT ????????? DHCP ??????DHCP ????????????????? IP ????????? IP ???
??
?? HUB ??????????DetectDormantSessionInterval???????????????? 0 ?????????????
?????????? VPN ??????????????? (????) ??????????????????? VPN ???????????????
HUB ???
OpenSSL ? SHA() ?????????????????SHA() ??? C ?????????????????????????????
OpenSSL ? SHA() ???
Windows 10 Technical Preview ? OS ?????????????????????????????????

- **?????????: SoftEther VPN 4.12 Build 9514 Beta (2014/11/17)**

????: PacketiX VPN 4.12 Build 9514 Beta
VLAN ID ?????????????????????IEEE802.1Q ??? VLAN ????????? L2 ?????????????
???? HUB ?????????????????VPN ??? VLAN ID ?????????
?????? VPN ????????????????????? RADIUS ????????????? RADIUS ????????? VLAN
?????????RADIUS ??????"Tunnel-Pvt-Group-ID" (ID = 81) ?????????????????????
?? HUB ?????????
?AssignVLANIdByRadiusAttribute???1????????????????????
vpn_server.config ????????? OpenVPNDefaultClientOption ?????????????????????????
?????????????OpenVPN Client ??????????????????????????????????????--enable-small ?????
???????????????????????????? OpenVPN Client ?????????????????????????????????
VPN Server ?????? OpenVPN Client ?????????????????????????????
?? DHCP ??? 255 ?????????????????????????????
??????
Linux ????????? resolv.conf ???
???????????????? VPN ?????????????????????????????????????
????? 3 ????????????????????????????? UDP ?????????????????????????????
NAT ????????????????????? (???????????????????? NAT ?????????????) ???????????

- **?????????: SoftEther VPN 4.11 Build 9506 Beta (2014/10/22)**

????: PacketiX VPN 4.11 Build 9506 Beta
[SSLv3 POODLE](#) ?????????????SoftEther VPN Server / PacketiX VPN Server ?
vpn_server.config ????????? "AcceptOnlyTls" ?????????SoftEther VPN Server /
PacketiX VPN Server ??? SSLv3 ?????????????????????????????????????
SSL/TLS ??? Perfect Forward Security (PFS) ?????????SoftEther VPN Server
/ PacketiX VPN Server ??DHE-RSA-AES128-SHA ??? DHE-RSA-
AES256-SHA ?????????????????????????????????????

- **?????????: SoftEther VPN 4.10 Build 9505 Beta (2014/10/03)**

????: PacketiX VPN 4.10 Build 9505 Beta
?? HUB ? MAC ??? MAC ?????
??

?? CPU ????? (?: ??? Linux ??) ??????????????????
????????????? DoNotDisableOffloading ?????????????????? Ethernet ???
??
Windows ?? Linux ??? IEEE802.1Q ??? VLAN ??????????????????????
?? VLAN ??????????????
FloodingSendQueueBufferQuota ??????????????
Linux ??? oom_adj ??????????????????????????????
????????????????????????????????????
64 ?????????????????????????????????????
vpngcmd ??? ConfigGet ??????? /CSV ??????????????Windows ????? API ??????
?????????
VPN Server ??? VPN Bidge ??? DisableSessionReconnect ??????????????????
???????????????????????????????????? VPN Server ????????? TCP ????????????????????? VPN
????????????????????????????????
???????????????? PrivacyFilterMode ?????????????????????
VPN Server ??? VPN Bridge ??? GlobalParams ?????????????????????????????
VPN Server ??? VPN Bridge ?????????????????????????????????????
?? HUB ?????????????? & ?????????????? ACL ?????????????????????????
Linux ?????????????????????
SecureNAT ???
VPN Server ??? VPN Bridge ? ServerLogSwitchType ??? LoggerMaxLogSize ?
????????????????????????????????????VPN Server ??? VPN Bridge ?????????????????????
??VPN Server ?????
"vpn_server_template.config" ?????VPN Bridge ?????
"vpn_server_template.config" ?????????VPN Server ??? VPN Bridge ?????????
??

- **?????????: SoftEther VPN 4.10 Build 9473 Beta (2014/07/12)**

???: PacketiX VPN 4.10 Build 9473 Beta
?? HUB ????????? "SuppressClientUpdateNotification" ?????????????????????
??VPN Client ???
???? HUB ? "SuppressClientUpdateNotification" ?????? "1" ??????????
???????????????????? root ????????????????????????????????? (UNIX ??)?
UNIX ?? SoftEther VPN Server ?????????????????????????????????????
????????? PKCS#11 DLL ??????????????: ePass 1000 ND / ePass 2000 / ePass
2003 / ePass 3000?
????????????
????????????????????????????????
Version 4.09 Build 9451 Beta ??? VPN Azure ?????????????????
???????????????????????????????????? VPN ????????????????????? VPN ?????????????????????
????????????????
SoftEther VPN ?????????????? Web ?????????????????????????? URL ?????????????
????????????? HTTP ?????????????????????????????????

???????????? Github ?????????? "[update debian packaging, install init script](#)" ????

- **?????????: SoftEther VPN 4.09 Build 9451 Beta (2014/06/09)**
???: PacketiX VPN 4.09 Build 9451 Beta
??????? SecureNAT ?????????????????TCP_FIN ?????????????????????????????FTP
????????????????????????????

- **?????????: SoftEther VPN 4.08 Build 9449 (2014/06/08)**
???: PacketiX VPN 4.08 Build 9449
RSA 2048 bit ??????????????
vpncommand ?????????????????? MakeCert ?????? 1024 bit ?????? RSA ?????????????????????
2048 bit ? RSA ???MakeCert2048 ?????????????????????
????????????????????2048 bit ?????? RSA ?????????????????????

NAT ?????????????????????
TCP/IP ?????? UDP ????? NAT ??? (Ver 4.08) ???
VPN ????????????????????????????????? TCP ????? VPN Server ?????????????????????????????
?????NAT ?????????????????????????????NAT ????? VPN Server ?????????????????????????
??

?????? (Ver 4.07) ??????VPN Client ? VPN Server ??????????VPN Client ???
TCP/IP ?????????????????????????TCP ?????? 3 ????????????????????????????? TCP ?????
?? VPN ????????????????? 7 ?????????????????NAT ?????????????????????????????????????
????????????????????????TCP ??? 443 ????????????????? NAT ??????? VPN ???????????
????????????????????????????????????VPN Client ??? TCP ??? 443 ???????NAT ?? VPN
????????? (?? HTML ??????????????) ?????????????????????????????????

???????????????????? (Ver 4.08) ? VPN Client ?????????????????????????????????????
TCP ????? VPN Server ?????????????????????VPN ????????? NAT ?????????????????????
????????????????????NAT ?????????? VPN ?????????????????????????????
???: SoftEther VPN ?????????? NAT ?????????????????????????????NAT ????? VPN
Server ?????????????????????UDP ????? NAT ?????????????? NAT ?????????????????????
???????????????????? NAT ?????????? 1 ? UDP ?????????????????????????????????NAT ??
? VPN Server ?????????????????????NAT ?????????NAT ?????????????? VPN ?????????
?? IP ??????????VPN ?????????? (? : TCP ??? 443) ?????????????????????????????

- **?????????: SoftEther VPN 4.07 Build 9448 (2014/06/06)**
???: PacketiX VPN 4.07 Build 9448
????????? SSL ?????????????? OpenSSL 0.9.8za ??????????
?????? (6 ? 5 ?) ?????????????? [OpenSSL](#) ?????????????????????OpenSSL ??????
? OpenSSL 1.0.1 ??PacketiX
VPN / SoftEther VPN ?????????????????????????????????? **OpenSSL 0.9.8** ?????????
??OpenSSL 0.9.8za ??????????????????PacketiX
VPN / SoftEther VPN ?????????? OpenSSL ? 0.9.8za ?????????????????????????????

OpenSSL 0.9.8z
OpenSSL 0.9.8za
VPN Server
OpenSSL SSL (SSL/TLS MITM vulnerability, CVE-2014-0224) 2014 6 5
2014 4
OpenSSL 1.0 Heartbleed
(PacketiX VPN / SoftEther VPN ? OpenSSL 0.9.8)
SSL VPN PacketiX VPN / SoftEther VPN
OpenSSL 0.9.8 OpenSSL 0.9.z
Web <http://ccsinjection.lepidum.co.jp/ja.html>

???????????????? (??)

OpenVPN Connect for Android 1.1.14 SSL
(PolarSSL Error) OpenVPN Connect ?
PacketiX VPN Server / SoftEther VPN Server
1 VPN Server SSL ?
VPN Server Manager ? GUI vpngcmd ?
ServerCertRegenerate

VPN Server VeriSign?GlobalSign?RapidSSL CA (???)
"chain_certs" ?

VPN Server VeriSign?GlobalSign?RapidSSL CA (???)
OpenVPN .ovpn <ca> ?
(??)

VPN Server ? SSL

UI ?????????????????????????????????

- **?????????: SoftEther VPN 4.06 Build 9435 (Beta) (2014/03/26)**
???: PacketiX VPN 4.06 Build 9435 (Beta)
????????? VPN Client ???VPN Client ?????????? RPC (?????????????) ???
TCP ?????????? (TCP ??? 9999 ??? 9930) ?????????????????????????????????
??
 - **?????????: SoftEther VPN 4.06 Build 9433 (Beta) (2014/03/21)**
???: PacketiX VPN 4.06 Build 9433 (Beta)
???????????????????
?????? (Build 9432) ???UNIX ?????????????? VPN Server ? VPN Client ? NAT ??
??Unicode ??? (NAT ?
?????????????????????????????) ??????????????????Build 9433 ??????????????????????Build
9430 ??? 9432 ? UNIX ?????????????????????? Build 9433 ??????????????????
 - **???: PacketiX VPN 4.06 Build 9432 (Beta) (2014/03/20)**
?????? (Build 9430) ???RSA ???RSA ???
?????????????????? Build 9432 ?????????????????????????????
 - **?????????: SoftEther VPN 4.06 Build 9430 (Beta) (2014/03/20)**
???: PacketiX VPN 4.06 Build 9430 (Beta)
???????????????? (??????PacketiX VPN ??????):
- ?? VPN ?????????????????? IPv4 ??????????????????
?????????
- SecureNAT ??? DHCP ?????????????????????????????? DHCP ?????????????????????
VPN ???
- SecureNAT ??????????? DHCP ???
(RFC 3442)?
- ?????????? VPN ?????? (SoftEther VPN ???????OpenVPN ???????L2TP/IPsec
????????? MS-SSTP ??????) ???
- VPN ?????????? DDNS ?????????????????????????????????? DDNS ?????????????????
??
??? VPN ?????????????????????????????????? ARP ?????????????????????????????????????
??? ARP ?????????????????????????????????????
??? "DropBroadcastsInPrivacyFilterMode" ???
"DropArpInPrivacyFilterMode" ??? bool ??????????? HUB ?????????????????????????
??????
SHA-2 (SHA-256) ?????????????????? X.509 ?????? 3 ?????????????????????????????????
??????
????????????????????? Linux ?????? "vpnservice stop" ?????????????????????????????
?????SoftEther VPN ???
????????????????????? "killall -KILL vpnservice" ?????????????????????????????? (90 ?) ???

??????

VPN Client ?????????????? NAT ?????????????????????????????????

Added [Several Fixes for OS X](#).

Added [Improved Simplified Chinese UI resources](#).

Added [Workaround for when vpnserver hangs on stop on minor Linux environments](#).

- **?????????: SoftEther VPN 4.05 Build 9423 (Beta) (2014/02/18)**
???: PacketiX VPN 4.05 Build 9423 (Beta)
 Added [Files for building CentOS/RHEL RPM](#).
 Set the "VPN over DNS" and "VPN over ICMP" functions disabled by default on VPN Server / VPN Bridge.
- **?????????: SoftEther VPN 4.05 Build 9422 (Beta) (2014/02/17)**
???: PacketiX VPN 4.05 Build 9422 (Beta)
 Added [the supporting of /hostname and /password command-line arguments on VPN Client](#).
 Added the NSDI 6.x Lightweight Helper Kernel-mode Module for the local-bridge function. This kernel-mode driver runs only on Windows 8.1 / Windows Server 2012 R2 or later.
- **?????????: SoftEther VPN 4.05 Build 9416 (Beta) (2014/02/06)**
 ??: [the support for OpenBSD on the source code](#).
 ??: [the debian packaging on the source code](#).
 ??: [the adminip.txt CIDR support](#).
 ??: [the supporting VLAN for Mac OS X using TunTapOSX](#).
 ??: the .zip package with vpnsmgr.exe and vpncmd.exe for system administrators.
- **?????????: SoftEther VPN 4.04 Build 9412 (2014/01/15)**
 ??? UI ???
- **?????????: SoftEther VPN 4.03 Build 9411 (2014/01/07)**
 ?????????????????? 9408 ??????? C# ???
 BuildUtil ???
- **?????????: SoftEther VPN 4.03 Build 9408 (2014/01/04)**
 SoftEther VPN ??? 3.xx ?????
 PacketiX VPN ??? SoftEther VPN ?????????????
 4.xx ??????????
- **?????: SoftEther VPN 2.00 Build 9387 (2013/09/16)**
???: PacketiX VPN 4.02 Build 9387

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- **Ver 1.00 Build 9033 RC2 Fix7 (2013/03/22)**
?????????
- **Ver 1.00 Build 9030 RC2 Fix6 (2013/03/21)**
?????: L2TP/SSTP/OpenVPN ??????????????????????????????
- **Ver 1.00 Build 9029 RC2 Fix5 (2013/03/17)**
?????????????
- **Ver 1.00 Build 9027 RC2 Fix4 (2013/03/12)**
??????????
- **Ver 1.00 Build 9026 RC2 Fix3 (2013/03/10)**
?????: DDNS ??????????????????????
- **Ver 1.00 Build 9024 RC2 Fix2 (2013/03/09)**
?????: Windows ? VPN over DNS ??????????
- **Ver 1.00 Build 9023 RC2 Fix1 (2013/03/08)**
??????????
- **Ver 1.00 Build 9022 RC2 (2013/03/08)**
??????????