Instruction on connecting to VPN for Linux. VPN Helper UG

Installing root certificates using a script

To install root certificates using a script, follow these steps:

- 1. Download the script from the link.
- 2. In the terminal, navigate to the directory where the script was downloaded. Run the following command:

sudo sh ./ca-certs.sh

Installing root certificates in manual mode

To access the Internet in FireFox, navigate to Settings \rightarrow General \rightarrow Network Settings \rightarrow Connection Settings and select Auto-detect proxy settings for this network:

Connection Settings	×
Configure Proxy Access to the Internet	
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O Auto-detect proxy settings for this net <u>w</u> ork	
○ <u>U</u> se system proxy settings	
Manual proxy configuration	
o install root certificates, follow these steps:	
1. Download the archive with the certificates:	
wget https://vpnhelp.kaspersky.com/Applications/certificates.zip	
2. Unzip the archive and copy the contents to the destination folder:	
unzip certificates.zip -d certificates	
3. Navigate to the folder with the certificates:	

cd certificates

4. Change the certificate format to a compatible one:

for f in *.cer; do mv "\$f" "\${f%.cer}.crt"; done

5. Copy the resulting files to the system folder, set access rights to them and start the process of updating system certificates:

```
sudo cp * /usr/local/share/ca-certificates/
sudo chmod 664 /usr/local/share/ca-certificates/*.*
sudo update-ca-certificates
```

Installing and configuring tokens using a script

To install and set up eToken/ruToken using a script, follow these steps:

- 1. Depending on the OS version and token type, download the required version of the script:
 - SafeNet for eToken Ubuntu 20.04
 - SafeNet for eToken Ubuntu 22.04

- Minidriver for ruToken (Any OS version)
- 2. Insert the hardware token into the device.
- 3. Unzip the downloaded archive.
- 4. In the terminal, navigate to the unzipped directory.
- 5. Depending on which version of the script was downloaded, run one of the following commands:
 - For SafeNet for eToken Ubuntu 20.04:
 sudo sh ./SafeNet_20.04.sh
 For SafeNet for eToken Ubuntu 22.04:
 sudo sh ./SafeNet_22.04_2.sh
 For Minidriver for ruToken:

sudo sh ./ruToken.sh

Installing and configuring tokens in manual mode

To enable tokens of any type to work in the system, run the following command:

```
sudo apt install gnutls-bin libengine-pkcs11-openssl opensc
```

Installing and configuring eToken

- 1. Depending on Ubuntu version, download the driver for the eToken:
 - eToken driver for Ubuntu 20.04
 - eToken driver for Ubuntu 22.04
- 2. Unzip the downloaded archive.
- 3. Depending on Ubuntu version, run one of the following commands:
 - For Ubuntu 20.04:

sudo dpkg -i safenetauthenticationclient_10.8.28_amd64.deb

• For Ubuntu 22.04:

sudo dpkg -i safenetauthenticationclient_10.8.1050_amd64.deb

4. Run the following commands:

```
sudo mkdir -p /etc/pkcs11/modules/
```

echo 'module: /usr/lib/libeTPkcs11.so' | sudo tee -a /etc/pkcs11/modules/eToken.module

5. To allow the **p11tool** utility to access the token module, specify the path to the token module:

echo 'load=/usr/lib/libeTPkcs11.so' | sudo tee -a /etc/gnutls/pkcs11.conf

6. If the gnutis folder and the pkcs11.conf file have not been created, create them manually:



Installing and configuring ruToken

- 1. Download the latest version of the driver for ruToken from the link.
- 2. In the terminal, navigate to the folder with the driver and run the following command:

```
sudo dpkg -i librtpkcsllecp_{{ version }}_amd64.deb
```

3. Run the following commands:

```
sudo mkdir -p /etc/pkcs11/modules/
echo 'module: /usr/lib/librtpkcs11ecp.so' | sudo tee -a /etc/pkcs11/modules/ruToken.module
```

4. To allow the **p11tool** utility to access the token module, specify the path to the token module by running the following command:

e	echo 'load=/usr/lib/librtpkcsllecp.so'	sudo	tee	-a	/etc/gnutls/pkcsll.conf

Configuring a VPN connection using a script

To configure a VPN connection using a script, follow these steps:

- 1. Download the VPN connection setup script from the link.
- 2. Insert the hardware token into the device.
- 3. In the terminal, navigate to the directory where the script was downloaded. Run the following command:

sudo sh ./KLCiscoVPN.sh

Configuring a VPN connection in manual mode

To configure a VPN connection, follow these steps:

1. Set up the OpenConnect client:

sudo apt install network-manager-openconnect-gnome

2. Get your real UUID:

awk '/^UUID/ {print \$1;}' /etc/fstab | awk '{print substr(\$0,6)}' | sed '2d'

3. Get a URL for a user certificate and a key:

```
plltool --list-tokens | grep "pkcsll" | grep -v "MultiToken" | grep -v "pll-kit" | grep -v "/usr/lib" | sed "s|.*: ||g"
```

Or

```
plltool --list-token-urls
```

Copy the string that contains the last and first name.

Example

```
pkcs11:model=eToken;manufacturer=SafeNet%2c%20Inc.;serial=11111111;token=token=<Employee name>%
20<Employee Surname>'
```

4. Get a user certificate:

```
plltool --login --list-all <Result of the previous command from step 3> | grep "pkcsll" | grep
"type=cert" | sed "s|.*: ||g" | grep -v "MultiToken"| sed "s|.*: ||g"
```

Or

plltool --login --list-all <Result of the previous command from step 3>

Example

plltool --login --list-all 'pkcsl1:model=eToken;manufacturer=SafeNet%2c%20Inc.;serial=1111111; token=token=<Employee name>%20<Employee Surname>'

5. Get the Private Key of the token:

```
plltool --login --list-privkeys <Result of the previous command from step 3> | grep "pkcsll" | grep
"type=private" | sed "s|.*: ||g" | grep -v "MultiToken" | sed "s|.*: ||g"
```

Or

plltool --login --list-privkeys <Result of the previous command from step 3>

(i) Example

plltool --login --list-privkeys 'pkcsl1:model=eToken;manufacturer=SafeNet%2c%20Inc.;serial=1111111; token=token=<Employee name>%20<Employee Surname>'

6. Create the KLCVPN.nmconnection file and place it in /etc/NetworkManager/system-connections/:

sudo nano /etc/NetworkManager/system-connections/KLCVPN.nmconnection

- 7. Instead of the specified variables, specify your data in this file:
 - *a.* **UID** result of the command from step 2
 - b. KLRCA_PATH path to Kaspersky Root CA G3.crt (default path when installing using the current instructions: /usr/local/share/ca-certificates/Kaspersky_Root_CA_G3.crt)
 - c. TOKEN_USR_CERT result of the command from step 4
 - d. TOKEN_PRIV_KEY result of the command from step 5

[connection]
id=KLCVPN
uuid= <uid></uid>
type=vpn
permissions=
[vpn]
authtype=cert
autoconnect-flags=0
cacert= <klrca_path></klrca_path>
certsigs-flags=0
cookie-flags=2
enable_csd_trojan=no
gateway=cvpn.kaspersky.com
gateway-flags=2
gwcert-flags=2
lasthost-flags=0
pem_passphrase_fsid=no
usercert= <token_usr_cert></token_usr_cert>
userkey= <token_priv_key></token_priv_key>
xmlconfig-flags=0
service-type=org.freedesktop.NetworkManager.openconnect
[vpn-secrets]
lasthost=cvpn.kaspersky.com

xmlconfig=PD94bWwqdmVyc2lvbj0iMS4wIiBlbmNvZGluZz0iVVRGLTqiPz4NCjxBbnlDb25uZWN0UHJvZmlsZSB4bWxucz0ia HR0cDovL3NjaGVtYXMueGlsc29hcC5vcmcvZW5jb2RpbmcvIiB4bWxuczp4c2k9Imh0dHA6Ly93d3cudzMub3JnLzIwMDEvWE1M U2NoZW1hLW1uc3RhbmN1IiB4c2k6c2NoZW1hTG9jYXRpb249Imh0dHA6Ly9zY2h1bWFzLnhtbHNvYXAub3JnL2VuY29kaW5nLyB BbnlDb25uZWN0UHJvZmlsZS54c2QiPg0KCTxDbGllbnRJbml0aWFsaXphdGlvbj4NCgkJPFVzZVN0YXJ0QmVmb3JlTG9nb24gVX NlckNvbnRyb2xsYWJsZT0iZmFsc2UiPmZhbHNlPC9Vc2VTdGFydEJlZm9yZUxvZ29uPg0KCQk8QXV0b21hdGljQ2VydFNlbGVjd GlvbiBVc2VyQ29udHJvbGxhYmxlPSJ0cnVlIj50cnVlPC9BdXRvbWF0aWNDZXJ0U2VsZWN0aW9uPg0KCQk8U2hvd1ByZUNvbm51 Y3RNZXNzYWdlPmZhbHnlPC9TaG93UHJlQ29ubmVjdE1lc3NhZ2U+DQoJCTxDZXJ0aWZpY2F0ZVN0b3JlPlVzZXI8L0NlcnRpZml jYXRlU3RvcmU+DQoJCTxDZXJ0aWZpY2F0ZVN0b3J1TWFjPkxvZ2luPC9DZXJ0aWZpY2F0ZVN0b3J1TWFjPg0KCQk8Q2VydGlmaW NhdGVTdG9yZUxpbnV4PkFsbDwvQ2VydG1maWNhdGVTdG9yZUxpbnV4Pg0KCQk8Q2VydG1maWNhdGVTdG9yZU92ZXJyaWR1PmZhb HN1PC9DZXJ0aWZpY2F0ZVN0b3J1T3Z1cnJpZGU+DQoJCTxQcm94eVN1dHRpbmdzPk5hdG12ZTwvUHJveH1TZXR0aW5ncz4NCgkJ PEFsbG93TG9jYWxQcm94eUNvbm5lY3Rpb25zPnRydWU8L0FsbG93TG9jYWxQcm94eUNvbm5lY3Rpb25zPq0KCQk8QXV0aGVudG1 jYXRpb25UaW1lb3V0PjEyPC9BdXRoZW50aWNhdG1vblRpbWVvdXQ+DQoJCTxBdXRvQ29ubmVjdE9uU3RhcnQgVXNlckNvbnRyb2 xsYWJsZT0idHJ1ZSI+ZmFsc2U8L0F1dG9Db25uZWN0T25TdGFydD4NCgkJPE1pbmltaXp1T25Db25uZWN0IFVzZXJDb250cm9sb GFibGU9InRydWUiPnRydWU8L01pbmltaXplT25Db25uZWN0Pg0KCQk8TG9jYWxMYW5BY2N1c3MgVXNlckNvbnRyb2xsYWJsZT0i dHj1ZSI+dHj1ZTwvTG9jYWxMYW5BY2N1c3M+DQojCTxEaXNhYmx1Q2FwdG12ZVBvcnRhbERldGVjdG1vbiBVc2VyQ29udHjvbGx hYmxlPSJ0cnVlIj5mYWxzZTwvRGlzYWJsZUNhcHRpdmVQb3J0YWxEZXRlY3Rpb24+DQoJCTxDbGVhclNtYXJ0Y2FyZFBpbiBVc2 VyQ29udHJvbGxhYmx1PSJmYWxzZSI+dHJ1ZTwvQ2x1YXJTbWFydGNhcmRQaW4+DQoJCTxJUFByb3RvY29sU3VwcG9ydD5JUHY0P C9JUFByb3RvY29sU3VwcG9ydD4NCqkJPEF1dG9SZWNvbm51Y3OqVXN1ckNvbnRyb2xsYWJsZT0idHJ1ZSI+dHJ1ZO0KC0kJPEF1 dG9SZWNvbm5lY3RCZWhhdmlvciBVc2VyQ29udHJvbGxhYmxlPSJmYWxzZSI+UmVjb25uZWN0QWZ0ZXJSZXN1bWU8L0F1dG9SZWN VzcGVuZE9uQ29ubmVjdGVkU3RhbmRieT4NCgkJPEF1dG9VcGRhdGUgVXN1ckNvbnRyb2xsYWJsZT0iZmFsc2UiPnRydWU8L0F1d G9VcGRhdGU+DQoJCTxSU0FTZWN1cklESW50ZWdyYXRpb24gVXNlckNvbnRyb2xsYWJsZT0iZmFsc2UiPkF1dG9tYXRpYzwvUlNB 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v z s v z s v z s v z s v z s v z s v z s v9yY2VtZW50Pq0KCQk8V2luZG93c1ZQTkVzdGFibGlzaG1lbnQ+QWxsb3dSZW1vdGVVc2VyczwvV2luZG93c1ZQTkVzdGFibGlza G11bn0+DOoJCTxMaW51eFZQTkVzdGFibGlzaG11bn0+OWxsb3dSZW1vdGVVc2VyczwvTGludXhWUE5Fc3RhYmxpc2htZW50Pq0K CQk8QXV0b21hdGljVlBOUG9saWN5PmZhbHNlPC9BdXRvbWF0aWNWUE5Qb2xpY3k+DQoJCTxQUFBFeGNsdXNpb24gVXNlckNvbnR yb2xsYWJsZT0iZmFsc2UiPkF1dG9tYXRpYw0KCQkJPFBQUEV4Y2x1c2lvblNlcnZlcklQIFVzZXJDb250cm9sbGFibGU9ImZhbH NlIj48L1BQUEV4Y2x1c2lvblNlcnZlcklQPg0KCQk8L1BQUEV4Y2x1c2lvbj4NCgkJPEVuYWJsZVNjcmlwdGluZyBVc2VyQ29ud HJvbGxhYmxlPSJmYWxzZSI+ZmFsc2U8L0VuYWJsZVNjcmlwdGluZz4NCgkJPENlcnRpZmljYXRlUGlubmluZz50cnVlDQoJCQk8 Q2VydGlmaWNhdGVQaW5MaXN0Pg0KCQkJCTxQaW4gU3ViamVjdD0iQ049S2FzcGVyc2t5IFNlcnZlciBBdXRoZW50aWNhdGlvbiB DQSBHMyxPPUthc3BlcnNreSxDPVJVIiBJc3N1ZXI9IkNOPUthc3BlcnNreSBSb290IENBIEczLE89S2FzcGVyc2t5LEM9UlUiPk U3RTU40UYxN0Q4MzQ5Mjg1QzA4NDI1M0RDMTg5RkYxRTgzMkJFNUNGRTI3QTY0NzUyOTc0ODcwRUI10DAzNzQ1QkI3MDE40TBEQ jMxNzQ0RkE2NjAwNzQyQzkzMEY1Q0UyQzAORjhBNThDNzQ4MkIzNzk4MDI3MEIxQkZGNkMxPC9QaW4+DQoJCQk8L0NlcnRpZmlj YXRlUGluTGlzdD4NCgkJPC9DZXJ0aWZpY2F0ZVBpbm5pbmc+DQoJCTxDZXJ0aWZpY2F0ZU1hdGNoPg0KCQkJPE1hdGNoT25seUN lcnRzV210aEVLVT50cnVlPC9NYXRjaE9ubHlDZXJ0c1dpdGhFS1U+DQoJCQk8TWF0Y2hPbmx5Q2VydHNXaXRoS1U+ZmFsc2U8L0 1hdGNoT25seUN1cnRzV210aEtVPg0KCQkJPEV4dGVuZGVkS2V5VXNhZ2U+DQoJCQkJPEV4dGVuZGVkTWF0Y2hLZXk+Q2xpZW50Q XV0aDwvRXh0ZW5kZWRNYXRjaEtleT4NCgkJCQk8Q3VzdG9tRXh0ZW5kZWRNYXRjaEtleT4xLjMuNi4xLjQuMS4zMTEuMjAuMi4y PC9DdXN0b21FeHRlbmRlZE1hdGNoS2V5Pg0KCQkJPC9FeHRlbmRlZEtleVVzYWdlPg0KCQkJPERpc3Rpbmd1aXNoZWROYW1lPg0 KCQkJCTxEaXN0aW5ndWlzaGVkTmFtZURlZmluaXRpb24gT3BlcmF0b3191kVxdWFsIiBXaWxkY2FyZD0iRW5hYmx1ZCIgTWF0Y2 hDYXN1PSJFbmFibGVkIj4NCgkJCQkJPE5hbWU+SVNTVUVSLUNOPC9OYW11Pg0KCQkJCQk8UGF0dGVybj5LYXNwZXJza3k8L1Bhd HRlcm4+DOoJCOkJPC9EaXN0aW5ndWlzaGVkTmFtZURlZmluaXRpb24+DOoJCOkJPERpc3Rpbmd1aXNoZWROYW11RGVmaW5pdGlv biBPcGVyYXRvcj0iTm90RXF1YWwiIFdpbGRjYXJkPSJFbmFibGVkIiBNYXRjaENhc2U9IkVuYWJsZWQiPg0KCQkJCQk8TmFtZT5 JU1NVRVItQ048L05hbWU+DQoJCQkJCTxQYXR0ZXJuPkNBIEVDQzwvUGF0dGVybj4NCgkJCQk8L0Rpc3Rpbmd1aXNoZWROYW11RG VmaW5pdGlvbj4NCgkJCQk8RGlzdGluZ3Vpc2hlZE5hbWVEZWZpbml0aW9uIE9wZXJhdG9yPSJOb3RFcXVhbCIgV2lsZGNhcmQ9I kVuYWJszWQiIE1hdGNoQ2FzzT0iRW5hYmx1ZCI+DQoJCQkJCTxOYW11Pk1TU1VFUi1DTjwvTmFtZT4NCgkJCQkJPFBhdHR1cm4+ RXh0ZXJuYWwgU2VydmljZXM8L1BhdHR1cm4+DQoJCQkJPC9EaXN0aW5ndWlzaGVkTmFtZUR1ZmluaXRpb24+DQoJCQk8L0Rpc3R pbmd1aXNoZWROYW11Pg0KCQk8L0N1cnRpZm1jYXR1TWF0Y2g+DQoJCTxFbmFibGVBdXRvbWF0aWNTZXJ2ZXJTZWx1Y3Rpb24gVX NlckNvbnRyb2xsYWJsZT0idHJ1ZSI+dHJ1ZQ0KCQkJPEF1dG9TZXJ2ZXJTZWx1Y3Rpb25JbXByb3Z1bWVudD4yMDwvQXV0b1Nlc nZlclNlbGVjdGlvbkltcHJvdmVtZW50Pg0KCQkJPEF1dG9TZXJ2ZXJTZWxlY3Rpb25TdXNwZW5kVGltZT40PC9BdXRvU2VydmVy U2VsZWN0aW9uU3VzcGVuZFRpbWU+DQoJCTwvRW5hYmx1QXV0b21hdGljU2VydmVyU2VsZWN0aW9uPq0KCQk8UmV0YW1uVnBuT25 Mb2dvZmY+ZmFsc2UNCgkJPC9SZXRhaW5WcG5PbkxvZ29mZj4NCgkJPENhcHRpdmVQb3J0YWxSZW11ZG1hdG1vbkJyb3dzZXJGYW lsb3Zlcj5mYWxzZTwvQ2FwdGl2ZVBvcnRhbFJlbWVkaWF0aW9uQnJvd3NlckZhaWxvdmVyPg0KCQk8QWxsb3dNYW51YWxIb3N0S W5wdXQ+ZmFsc2U8L0FsbG93TWFudWFsSG9zdElucHV0Pq0KCTwvQ2xpZW50SW5pdGlhbG16YXRpb24+DQoJPFN1cnZ1ckxpc3Q+ $\texttt{DQoJCTxIb3N0RW50cnk+DQoJCQk8SG9zdE5hbWU+QVBBQzwvSG9zdE5hbWU+DQoJCQk8SG9zdEFkZHJlc3M+Y3Zwbi5hcGFjLmt}{}$ 5iai5rYXNwZXJza3kuY29tPC9Ib3N0QWRkcmVzcz4NCgkJCTwvQmFja3VwU2VydmVyTGlzdD4NCgkJPC9Ib3N0RW50cnk+DQoJC TxIb3N0RW50cnk+DQoJCQk8SG9zdE5hbWU+Q05CSjwvSG9zdE5hbWU+DQoJCQk8SG9zdEFkZHJlc3M+Y3Zwbi5jbmJqLmthc3Bl cnNreS5jb208L0hvc3RBZGRyZXNzPq0KCQkJPEJhY2t1cFN1cnZlckxpc3Q+DQoJCQkJPEhvc3RBZGRyZXNzPmN2cG4uYXBhYy5 rYXNwZXJza3kuY29tPC9Ib3N0QWRkcmVzcz4NCgkJCTwvQmFja3VwU2VydmVyTGlzdD4NCgkJPC9Ib3N0RW50cnk+DQoJCTxIb3 N0RW50cnk+DQoJCQk8SG9zdE5hbWU+RVU8L0hvc3ROYW11Pg0KCQkJPEhvc3RBZGRyZXNzPmN2cG4uZXUua2FzcGVyc2t5LmNvb $\label{eq:constraint} TwvSG9zdEFkZHJlc3M+DQoJCQk8QmFja3VwU2VydmVyTGlzdD4NCgkJCQk8SG9zdEFkZHJlc3M+Y3Zwbi5zZGMua2FzcGVyc2t5$ $\label{eq:lmnvbTwvSG9zdEFkzHJlc3M+DQoJCQkJPEhvc3RBZGRyZXNzPmN2cG4ub2rjLmthc3BlcnNreS5jb208L0hvc3RBZGRyZXNzPg0 \end{tabular} \label{eq:lmnvbTwvSG9zdEFkzHJlc3M+DQoJCQkJPEhvc3RBZGRyZXNzPmN2cG4ub2rjLmthc3BlcnNreS5jb208L0hvc3RBZGRyZXNzPg0 \end{tabular} \label{eq:lmnvbTwvSG9zdEFkzHJlc3M+DQoJCQkJPEhvc3RBZGRyZXNzPmN2cG4ub2rjLmthc3BlcnNreS5jb208L0hvc3RBZGRyZXNzPg0 \end{tabular} \label{eq:lmnvbTwvSG9zdEFkzHJlc3M+DQoJCQkJPEhvc3RBZGRyZXNzPmN2cG4ub2rjLmthc3BlcnNreS5jb208L0hvc3RBZGRyZXNzPg0 \end{tabular} \label{eq:lmnvbTwvSG9zdEFkzHJlc3M+DQoJCQkJPEhvc3RBZGRyZXNzPmN2cG4ub2rjLmthc3BlcnNreS5jb208L0hvc3RBZGRyZXNzPg0 \end{tabular} \label{eq:lmnvbTwvSG9zdEFkzHJlc3M+DQoJCQkJPEhvc3RBZGRyZXNzPg0 \end{tabular} \label{eq:lmnvbTwvSG9zdEFkzHJlc3M+DQoJCQkJPEhvc3RBZGRyZXNzPg0 \end{tabular} \label{eq:lmnvbTwvSG9zdEFkzHJlc3M+DQoJCQkJPEhvc3RBZGRyZXNzPg0 \end{tabular} \end{tabular} \label{eq:lmnvbTwvSG9zdEFkzHJlc3M+DQoJCQkJPEhvc3RBZGRyZXNzPg0 \end{tabular} \label{eq:lmnvbTwvSG9zdEFkzHJlc3M+DQoJCQkJPEhvc3RBZGRyZXNzPg0 \end{tabular} \label{eq:lmnvbTwvSG9zdEFkzHJlc3M+DQoJCQkJPEhvc3RBZGRyZXNzPg0 \end{tabular} \label{eq:lmnvbTwvSG9zdEFkzHJlc3M+DQoJCQkJPEhvc3RBZGRyZXNzPg0 \end{tabular} \end{tabular} \label{eq:lmnvbTwvSG9zdEFkzHJlc3M+DQoJCQkJPEhvc3RBZGRyZXNzPg0 \end{tabular} \label{eq:lmnvbTwvSG9zdEFkzHJlc3M+DQoJCQkJPEhvc3RBZGRyZXNzPg0 \end{tabular} \end{tabular} \label{eq:lmnvbTwvSG9zdEFkzHJlc3M+DQoJCQkJPEhvc3RBZGRyZXNzPg0 \end{tabular} \end{tabular} \label{eq:lmnvbTwvSG9zdEFkzHJlc3M+DQoJCQkJPEhvc3RBZGRyZXNzPg0 \end{tabular} \end{tabular}$ KCQkJCTx1b3N0QWRkcmVzcz5jdnBuLmxkYy5rYXNwZXJza3kuY29tPC9Ib3N0QWRkcmVzcz4NCgkJCTwvQmFja3VwU2VydmVyTG $\label{eq:lddnCgkJPC9Ib3N0Rw50cnk+DQoJCTxIb3N0Rw50cnk+DQoJCQk8SG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+DQoJCQk8SG9zdE5hbWU+DQoJCQk8SG9zdE5hbWU+DQoJCQk8SG9zdE5hbWU+DQoJCQk8SG9zdE5hbWU+DQoJCQk8SG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+DQoJCQk8SG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+DQoJCQk8SG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+DQoJCQk8SG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+DQoJCQk8SG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+DQoJCQk8SG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdE5hbWU+SFEtTDwvSG9zdF5hbWU+SFEtTDwvSG9zdF5hbWU+SFEtTDwvSG9zdF5hbWU+SFEtTDwvSG9zdF5hbWU+SFEtTDwvSG9zdF5hbWU+SFEtTDwvSG9zdF5hbWU+SFEtTDwvSG9zdF5hbWU+SFEtTDwvSG9zdF5hbWU+SFEtTDwvSG9zdF5hbWU+SFEtTDwvSG9zdF5hbWU+SFEtTDwvSG9zdF5hbWU+SFEtTDwvSG9zdF5hbWU+SFEtTDwvSG9z0F5hbWU+SFEtTDwvSG9z0F5hbWU+SFEtTDwvSG9z0F5hbWU+SFEtTDwvSG9z0F5hbWU+SFEtTDwvSG9z0F5hbWU+SFEtTDwvSG9z0F5hbWU+SFEtTDwvSG9z0F5hbWU+SFEtTDwvSG9z0F5hbWU+SFEtTDwvSG9z0F5hbWU+SFEtTDwvSG9z0F5hbWU+SFEtTDWVSWF5hbWV+SFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF$ EFkZHJlc3M+Y3Zwbi5sZGMua2FzcGVyc2t5LmNvbTwvSG9zdEFkZHJlc3M+DOoJCOk8OmFja3VwU2VydmVyTGlzdD4NCqkJCOk8 SG9zdEFkZHJlc3M+Y3Zwbi5vZGMua2FzcGVyc2t5LmNvbTwvSG9zdEFkZHJlc3M+DQoJCQkJPEhvc3RBZGRyZXNzPmN2cG4uc2R

jLmthc3BlcnNreS5jb208L0hvc3RBZGRyZXNzPg0KCQkJPC9CYWNrdXBTZXJ2ZXJMaXN0Pg0KCQk8L0hvc3RFbnRyeT4NCgkJPE hvc3RFbnRyeT4NCgkJCTxIb3N0TmFtZT5IUS1PPC9Ib3N0TmFtZT4NCgkJCTxIb3N0QWRkcmVzcz5jdnBuLm9kYy5rYXNwZXJza 3kuY29tPC9Ib3N0QWRkcmVzcz4NCgkJCTxCYWNrdXBTZXJ2ZXJMaXN0Pg0KCQkJCTxIb3N0QWRkcmVzcz5jdnBuLm9kYy5rYXNw ZXJza3kuY29tPC9Ib3N0QWRkcmVzcz4NCgkJCQk8SG9zdEFkZHJlc3M+Y3Zwbi5zZGMua2FzcGVyc2t5LmNvbTwvSG9zdEFkZHJ lc3M+DQoJCQk8L0JhY2t1cFN1cnZlckxpc3Q+DQoJCTwvSG9zdEVudHJ5Pg0KCQk8SG9zdEVudHJ5Pg0KCQkJPEhvc3ROYW11Pk hRLVM8L0hvc3ROYW11Pg0KCQkJPEhvc3RBZGRyZXNzPmN2cG4uc2RjLmthc3BlcnNreS5jb208L0hvc3RBZGRyZXNzPg0KCQkJP EJhY2t1cFN1cnZlckxpc3Q+DQoJCQkJPEhvc3RBZGRyZXNzPmN2cG4ubGRjLmthc3BlcnNreS5jb208L0hvc3RBZGRyZXNzPg0K CQkJCTxIb3N0QWRkcmVzcz5jdnBuLm9kYy5rYXNwZXJza3kuY29tPC9Ib3N0QWRkcmVzcz4NCgkJCTwvQmFja3VwU2VydmVyTG1 zdD4NCgkJPC9Ib3N0RW50cnk+DQoJCTxIb3N0RW50cnk+DQoJCQk8SG9zdE5hbWU+VVM8L0hvc3ROYW11Pg0KCQkJPEhvc3RBZG RyZXNzPmN2cG4udXMua2FzcGVyc2t5LmNvbTwvSG9zdEFkZHJ1c3M+DQoJCQk8QmFja3VwU2VydmVyTG1zdD4NCgkJCQk8SG9zd EFkZHJ1c3M+Y3Zwbi5ldS5rYXNwZXJza3kuY29tPC9Ib3N0QWRkcmVzcz4NCgkJCTwvQmFja3VwU2VydmVyTG1zdD4NCgkJPC9I b3N0RW50cnk+DQoJC9TZXJ2ZXJMaXN0Pg0KPC9Bbn1Db25uZWN0UHJvZmlsZT4NCg==

[ipv4]

dns-search=

method=auto

[ipv6]

addr-gen-mode=stable-privacy

dns-search=

ip6-privacy=0

method=auto

[proxy]

8. Set 600 permissions on the /etc/NetworkManager/system-connections/KLCVPN.nmconnection file:

sudo chmod 0600 /etc/NetworkManager/system-connections/KLCVPN.nmconnection

9. Upload the file to Network Manager:

sudo nmcli connection load /etc/NetworkManager/system-connections/KLCVPN.nmconnection

sudo nmcli connection reload /etc/NetworkManager/system-connections/KLCVPN.nmconnection

10. Restart Network Manger:

sudo systemctl restart NetworkManager

11. Establish the connection:



12. In the window that opens, click **Connect.**

13. When connecting, enter the password for the token and select the Save Passwords checkbox.

🕝 Note

For the first connection, the selection of VPN node will not be available, on subsequent connections you will be able to select the desired node yourself.

[OPTIONAL] To disable the sudo password request when connecting to the VPN from other accounts, follow these steps:

1. Use the **policykit** integrated tools:

echo """

[Let all users modify system settings for network]

Identity=unix-user:*

Action=org.freedesktop.NetworkManager.settings.modify.system

ResultAny=no

ResultInactive=no

ResultActive=yes

""" | sudo tee /etc/polkit-1/localauthority/50-local.d/10-network-manager.pkla

2. Restart Network Manger:

sudo systemctl restart NetworkManager