

02.1X Wired Configuration on Ubuntu (Graphical Interface)

Introduction

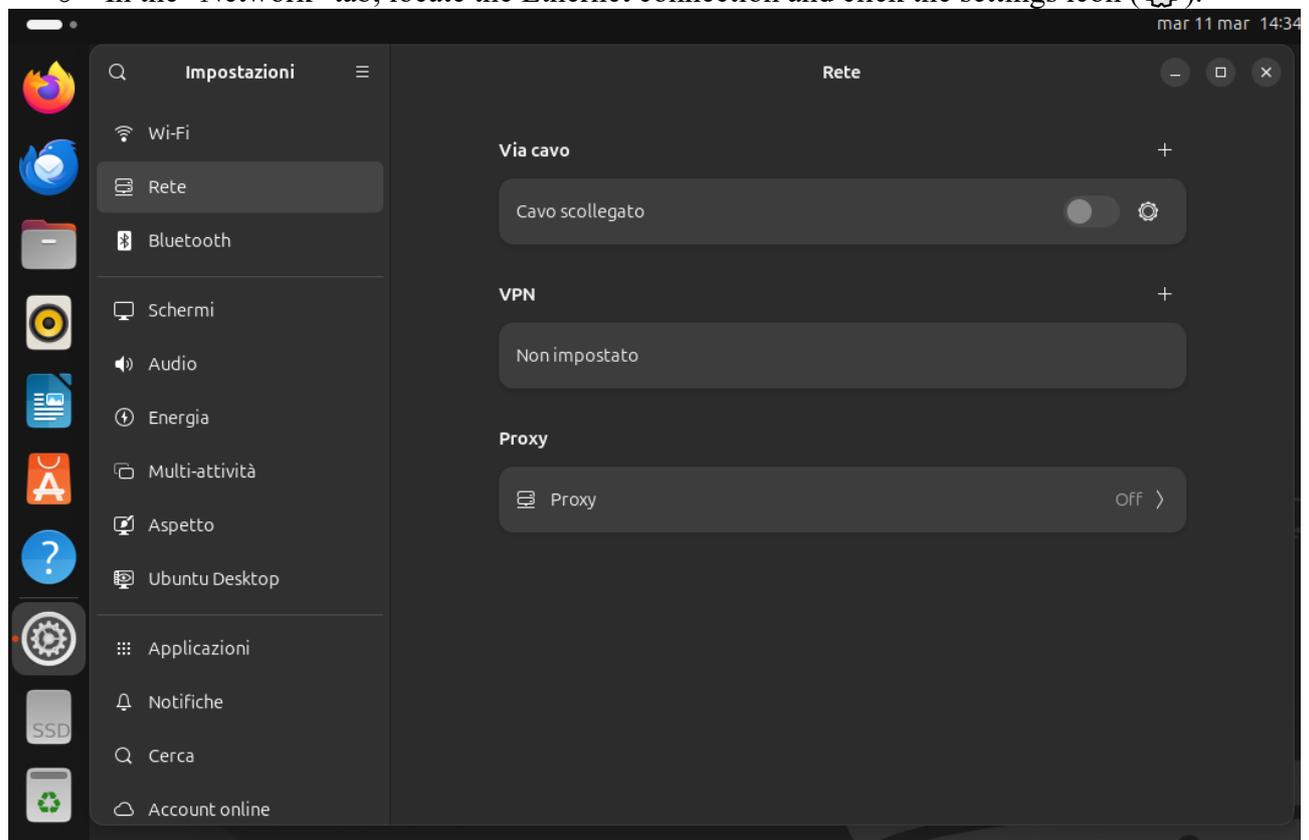
802.1X is a network authentication protocol that controls access to the network using EAP (Extensible Authentication Protocol)-based authentication. This tutorial explains how to configure a wired 802.1X connection on Ubuntu using the graphical interface.

Prerequisites

- An Ubuntu system (version 20.04 or later recommended)
- Administrative access
- GIA Account
- Verify that the computer's network port is blinking, indicating it is active. If the port shows no activity, contact IT services by opening a support issue on Portale Supporto at <https://myunivr.univr.it/MYDESK> using the category "Fault and Anomalies - Other".

Configuration via Graphical Interface

1. **Open Network Settings**
 - Click on the network icon in the top bar and select "Network Settings."
2. **Select the Wired Connection**
 - In the "Network" tab, locate the Ethernet connection and click the settings icon (⚙️).



3.

4. Configure 802.1X Authentication

- In the settings window, go to the "802.1X Security" tab.
- Enable the "Use 802.1X" option.

5. Enter Authentication Parameters

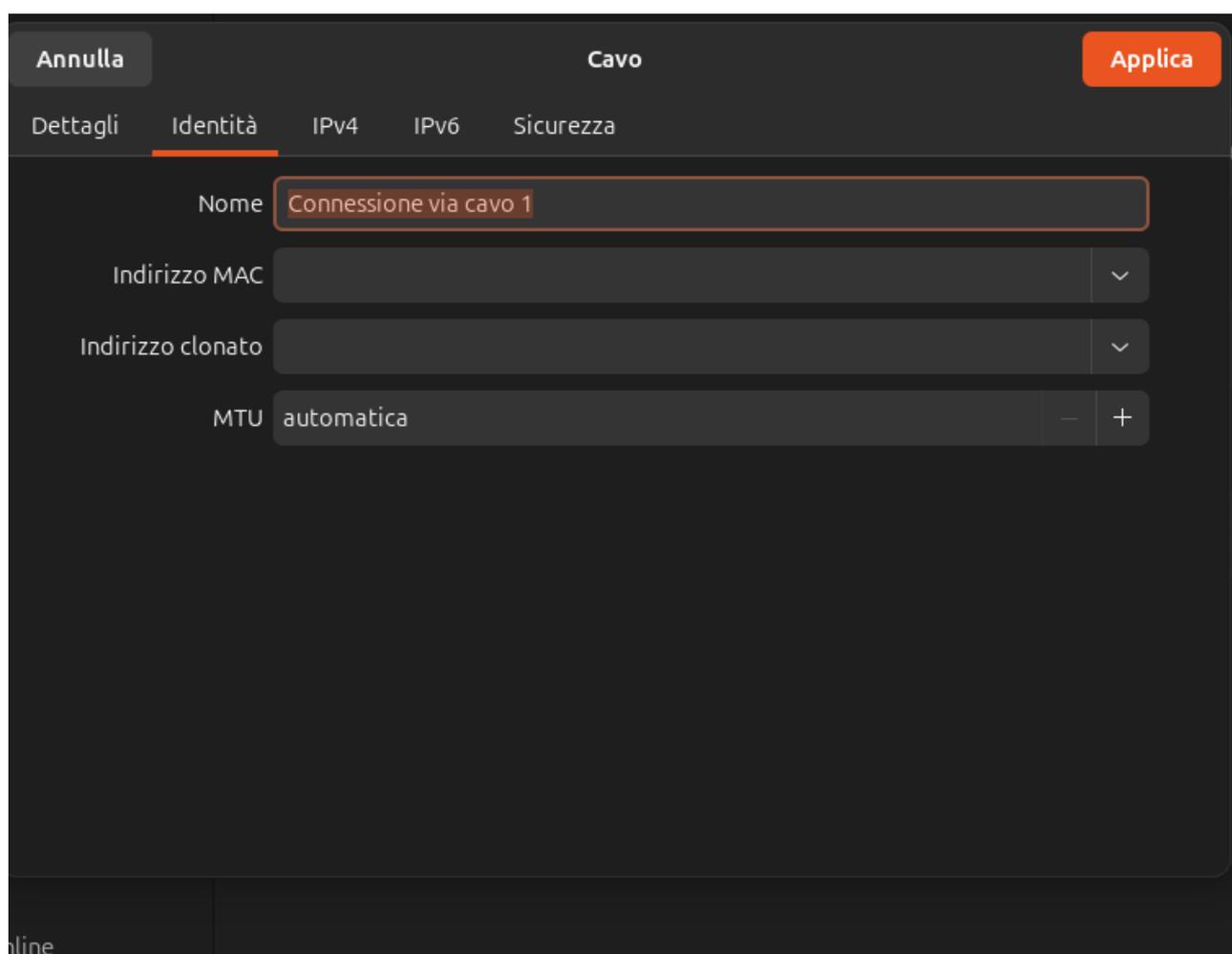
- **Authentication Method:** PEAP
- **CA Certificate:** Select the CA certificate
`/etc/ssl/certs/USERTrust_RSA_Certification_Authority.pem`
- **PEAP Version:** Automatic
- **Inner Authentication:** MSCHAPv2
- **Username:** GIA username
- **Password:** GIA password

6. Configure Additional Network Settings

- In the "Details" tab, ensure that the "Connect automatically" option is checked.
- In the "IPv4" tab, set **Method** to "Automatic (DHCP)" and **DNS** to "Automatic."

7. Save and Apply Changes

- Click "Save" and close the window.
- Restart the connection by disabling and re-enabling the Ethernet network.



Annulla

Cavo

Applica

Dettagli

Identità

IPv4

IPv6

Sicurezza

Metodo IPv4

- Automatico (DHCP)
- Manuale
- Condivisa con altri computer
- Solo link-local
- Disabilita

DNS

Automatico

Separare gli indirizzi IP con virgole

Instradamenti

Automatico

Indirizzo	Netmask	Gateway	Metrica
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Usare questa connessione solo per risorse nella sua rete

online

Sicurezza 802.1x

Autenticazione **EAP Protetto (PEAP)** ▾

Identità anonima

Dominio

Certificato CA **USERTrust_RSA_Certification_Authority.pem** ▾

Password certificato CA

Mostra le password

Nessun certificato CA richiesto

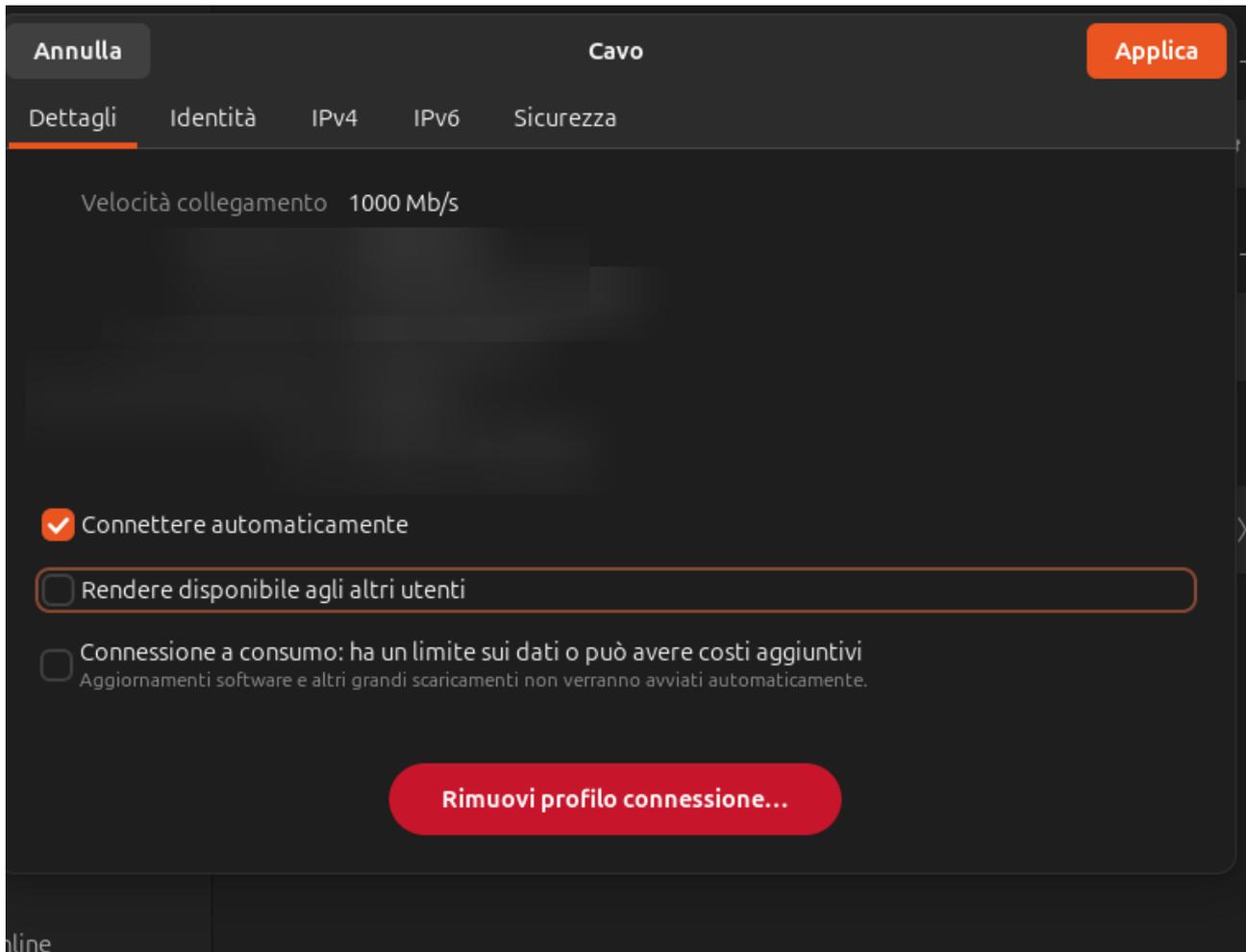
Versione PEAP **Automatico** ▾

Autenticazione interna **MSCHAPv2** ▾

Nome utente

Password 

Mostra la password



Connection Verification

- Check the connection status in the network notification area.
- Open a terminal and verify connectivity with:

```
nmcli connection show --active
```

Debugging and Troubleshooting

- If the connection does not work:
 - Ensure the credentials are correct.
 - Check the Network Manager logs:

```
journalctl -u NetworkManager --no-pager | tail -50
```
 - Reconfigure the settings, making sure to select the correct parameters.

Conclusion

By following these steps, you should be able to successfully configure a wired 802.1X connection on Ubuntu using the graphical interface. If you encounter any issues, contact IT services by opening a support issue on Portale Supporto at <https://myunivr.univr.it/> /MYDESK using the category “Fault and Anomalies - Other”.