

ALMA MATER STUDIORUM UNIVERSITÀ DI BOLOGNA AREA SISTEMI E SERVIZI INFORMATICI

Internet access system through the Wireless Network ALMAWIFI MS-Windows 10-11 (last update al 19/03/2025)

The updated version of the document is always the one published online at <u>http://www.unibo.it/almawifi</u>

This document shows how to securely connect your Windows 10-11 device to the ALMAWIFI network of the University of Bologna.

A WPA2-Enterprise security access system has been implemented on every access point according to the requirements of WI-FI Alliance, which guarantees complete encryption of all the traffic flows.

During this process, you will be asked for your DSA (University Directory Service) institutional credentials, which will be checked by a centralized server (Radius Server); only after passing the checks, your computer will be automatically connected to the Internet.

This process must be done only the first time because subsequently your operating system will automatically pass both the configuration and the credentials.

We remind you that user credentials should be activated by setting a personal password via the following website: https://www.dsa.unibo.it

For further information about connection problems please consult FAQ ALMAWIFI at <u>http://www.unibo.it/almawifi</u>

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Previous profile removal

If you experience some problems due to a pre-existent connection or if you want to edit it, we suggest you to delete it before proceeding:

- select the icon 🄛 on the application bar •
- right click on ALMAWIFI ٠
- select Forget



create a new connection (see below). •

Automatic connection configuration

Click on the network management icon (\bigcirc or \bigcirc or \bigcirc) on the bottom right to open the available wifi networks (on Windows 11 you first have to click on the icon above **Connecting**) then select **ALMAWIFI**:

Windows 10:				Windows 11:
e ••••				← wi.ri
- AT LEMAN		45-	*	ALMANNER
A Protette	Disponibile	Modalità aereo	Luce notturna	a stress
A Protetto				
G DRICT-IN-INP M281 Lawrint	919	D	д,	ag blue
Prosetto Al educam Prosetto	Hotspot mobile	Assistente notifiche	Accessibilità	BIRECT-IS-HP M281 Laser/et
a whitehad Protetto		•		Galaxy S9a02d
- Restaural Pala			00	
Convectioned and a convection of the convection				Altre impostazioni Wi-H
A Fill Holder Annual Holder Holder		^ @	40 09:56 0	∧ #A 🐺 48 0916 15/01/2022

Click on Connect:

Windows 10:	Windows 11:
en ^{Aurtual}	← w.si
& ALMANNES	ALMANYI Protetto
Connetti automaticamenia	Connetti automaticamente
Covell	Convetti
of educan	🖓 edurcem
//k Mur Protecto	og the
Gre DRECT-IS-AP MOBI Lawrine Protectio	B DIRECT-1D#CuEB8F56C8G02m
Impostazioni Ante, e Internot Cante agentezioni al cassina testimania una contenziane in una cassina di astromania	After Importationi Wi-FI
	A 🚭 di 10450 🗊

Insert your credentials (@unibo.it or @studio.unibo.it) then click OK:

Windows 10:	Windows 11:
ALMAWIFI Secured Enter your username and password Use my Windows user account name.surname@unibo.it	WIFI MINIFI Connecting Enter your usemame and password
OK Cancel	name.surname@unibo.it ×
eduraam Secured	OK Cancel
Network, & Internet settings Dange settings, such as making a connection metered.	More Wi-Fi settings
et dj0 Mobile W/i Floph mode	л па 🕲 Фі 1007 100/12022

Now you have to check the certificate details to make sure that you're connecting to the right network and not to another wifi network with the same name. Click on **Show certificate details** and confront the **Server**

Internet access system through the Wireless Network ALMAWIFI – Windows 10/11

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thumbprint with the one below; Windows 11 also shows the information about the "Issued by" (must be **GEANT OV RSA CA4**) and "Issued to" (must be **wifi.unibo.it**); in both cases, the correct "Server Thumbprint" is:

Windows 10: Windows 11: Connecting WiFi 0 location, go ahead and connect. Otherwise, it Continue connecting? may be a different network with the same If you expect to find ALMAWIFI in this location, name. go ahead and connect. Otherwise, it may be a Hide certificate details different network with the same name. Hide certificate details Issued to: wifi.unibo.it Server thumbprint: Issued by: GEANT OV RSA CA 4 Server thumbprint: Cancel fe eduroam More Wi-Fi settings ⇔ í. 10:08 \$ D) ~ ITA 12/01/2022

A5 58 53 7E B8 80 50 B7 24 31 58 69 91 60 7C 61 D2 57 0E B5

Wait for the connection to be established:

ALMAWIFI Connecting Checking network requi	rements	Connected, secured	
	Cancel		Disconnetti

Manual connection (for WINDOWS 10 only)

On the right side of your Windows taskbar, right click on the Network icon, and select **Open Network & Internet settings**:



Scroll down and select Network and Sharing Center:



Select Set up a new connection or network:



Select Manually connect to a wireless network, then click Next:

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Enter the values shown in the following picture, then click **Next**:

			-		\times
←	👰 Manually connect to a w	ireless network			
	Enter information for	the wireless network you want to add			
	Network name:	ALMAWIFI			
	Security type:	WPA2-Enterprise \checkmark			
	Encryption type:	AES 🗸			
	Security Key:	Hide chara	octers		
	Start this connection	automatically			
	Connect even if the r	etwork is not broadcasting			
	Warning: If you selec	t this option, your computer's privacy might be at ris	sk.		
		Γ	Next	Can	cel

Select Change connection settings:

	_		×
 Manually connect to a wireless network 			
Successfully added ALMAWIFI			
\rightarrow Change connection settings			
Open the connection properties so that I can change the settings.			
		Clo	ose

Select the **Security** tab.

Verify the settings as shown in the image below:

ALMAWIFI Wireless Net	work Properties		×
Connection Security			
Security type:	WPA2-Enterprise	\sim	
Encryption type:	AES	~	
Choose a network aut	hentication method:		
Microsoft: Protected	EAP (PEAP) 🗸 🗸	Settings	
Remember my cree time I'm logged on	dentials for this connect	ion each	
Advanced settings			
		OK Cano	cel

Select the **Settings** button.

In the **Protected EAP Properties** check the options as in the image below. In the "Connect to these servers" setting insert: **wifi.unibo.it** As "Trusted Root Certification Authorities" select: **USERTrust RSA Certification Authority**

$\fbox{\underline{\vee}} \underline{\underline{\vee}} erify the server's identity by validating the certificate$	
Connect to these servers (examples:srv1;srv2;.*\.srv3\.com	n):
<certificate_name></certificate_name>	_
Trusted Root Certification Authorities:	
Symantec Enterprise Mobile Root for Microsoft thawte Primary Root CA UNIBORootCA UNIBORootCA UNIBORootCA VeriSign Class 3 Public Primary Certification Authority - G5 VeriSign Universal Root Certification Authority	^
<pre></pre>	~
Notifications before connecting:	
Tell user if the server name or root certificate isn't specified	~
elect Authentication Method:	
Secured password (EAP-MSCHAP v2) V Configu	re.
Enable East Reconnect Disconnect if server does not present cryptobinding TLV Enable Identity Privacy	

Click the **Configure** button and verify the option as in the image below, unchecking **Automatically use my Windows logon name and password**:

EAP MSCHAPv2 Properties	×
When connecting:	
	а
password (and domain if any).	Ŭ
OK Cancel	

Select **OK** to close the EAP MSCHAPv2 Properties Select **OK** to close the Protected EAP Properties

In ALMAWIFI Wireless Network Properties select Advanced settings:

ALMAWIFI Wireless Net	work Properties		×
Connection Security			
Security type:	WPA2-Enterprise	~	
Encryption type:	AES	~	
Choose a network aut	hentication method:		
Microsoft: Protected	EAP (PEAP) V	Settings	
Remember my creative I'm logged on	lentials for this connecti	on each	
Advanced settings			
Advanced setungs			
	(OK Ca	ncel

In the Advanced settings window, select the Specify authentication mode menu and select User authentication then click on Save credentials button.

802 1X settings	002 11	
our settings	802.11 setungs	
Specify at	uthentication mode:	
User aut	hentication \checkmark	Save credentials
Delete	credentials for all user:	
Enable <u>s</u> ir	ngle sign on for this network	
Perfor	m immediately b <u>e</u> fore user	logon
O Perfor	m <mark>immediately a<u>f</u>ter user lo</mark>	gon
Maximum	i delay (seconds):	10
Allow sign o	additional dialogs to be disp n	layed during single
This n and us	etwork uses separate <u>v</u> irtua ser authentication	I LANs for machine

Insert your credentials:

Windows Security	×	Windows Security	×
Save credentials		Save credentials	
Saving your credentials allows your computer to connect to the network when you're not logged on (for example, to download updates).		Saving your credentials allows your computer to connect to the network when you're not logged on (for example, to download updates).	
name.surname@unibo.it ×		name.surname@studio.unibo.it ×	
Password		Password	
OK Cancel		OK Cancel	Ľ.

Select OK to close Windows Security.

In the Advanced Settings window click OK to close it:

Specify authentication mode:	
User authentication	✓ Save credentia
Delete credentials for all use	en
Enable <u>s</u> ingle sign on for this ne	etwork
Perform immediately before	e user logon
O Perform immediately after u	iser logon
Maximum delay (seconds):	10 🗘
Allow additional dialogs to b sign on	e displayed during single
This network uses separate and user authentication	virtual LANs for machine

Select the **OK** button to close the Wireless Network Properties window. Select the **Close** button for the manual wireless network windows.

Select the Network icon and select ALMAWIFI. Wait for the connection to be established:

Connecting Checking network requirements	ALMAWIFI Connected, secured <u>Proprietà</u>
Cancel	Disconnetti

If pre-existent ALMAWIFI profile wasn't removed you'll see an alert. By clicking on **Show certificate details** you can check the Server thumbprint, which must be:

A5 58 53 7E B8 80 50 B7 24 31 58 69 91 60 7C 61 D2 57 0E B5

Click Continue.

		G.	ALMAWIFI Connecting	
Continue connecting? If you expect to find AL location, go ahead and may be a different netw name. Show certificate details	MAWIFI in this connect. Otherwise, it ork with the same	Serve	Continue connecting? If you expect to find AL location, go ahead and may be a different netw name. Hide certificate details er thumbprint:	MAWIFI in this connect. Otherwise, it ork with the same
Connect	Cancel		Connect	Cancel

Wait for the connection to be established:

Checking network requireme	ALMAWIFI Connecting Checking network requirements		
	Cancel		Disconnetti

Limited or no connection / Internet not available

If the device is connected to ALMAWIFI but does not browse the Internet (message "limited or no connection", "no Internet access", "Internet not available, etc."), you need to check that both IP and DNS are automatic (DHCP active).

The DNS and TCP/IP tab is available, starting from the **Network and Sharing Center**, selecting the Network item and the connection currently in use:

Senerale	Configurazione alternativo	8				
È possibi rete sup richieder	le ottenere l'assegnazione a porta tale caratteristica. In e all'amministratore di rete l	automatic caso con le imposta	a de trari izion	de imp o, sarà i IP co	ostazioni i necessi mette.	IP se la ario
e Ott	ieni automaticamente un inc	drizzo IP				
OUN	izza il seguente indirizzo IP:					
Indira	20 IP;					
Subme	et mask:			1.4		
Gates	vay predefinito:			1		
e ott	ieni indrizzo server DNS au	tomatican	enti	e		
OUN	izza i seguenti indrizzi serve	r DNS:				
Serve	r DNS preferito:					
Serve	r DNS alternatives:		÷.	+		
C.	nvalida impostazioni all'	uscita			Avan	cate
			_		-	